

Dr. Igor Sedlár

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January 28, 2017

Personal Information

Born: 1 April 1983 in Šal'a, Slovakia
Nationality: Slovak

Current Positions

- Postdoctoral Researcher at the Institute of Computer Science of the Czech Academy of Sciences (Prague, Czech Republic), Department of Theoretical Computer Science (full-time, fixed-term position; 1 June 2016 – 31 May 2018)
- Researcher at the Institute of Philosophy of the Czech Academy of Sciences (Prague, Czech Republic), Department of Logic (part-time, fixed-term position; 1 April 2016 – 31 December 2018)

Research Areas

- *Specialization*: Applications of non-classical logics in epistemic and dynamic logic.
- *Competence*: Dynamic logic, Epistemic logic, Modal logic, Philosophy of logic, Substructural logic.

Previous Positions

- Assistant Professor at the Faculty of Arts of the Comenius University in Bratislava (Bratislava, Slovakia), Department of Logic and Methodology of Science (full-time, fixed-term position; 1 October 2009 – 31 August 2016)
- Researcher at the Institute of Philosophy of the Slovak Academy of Sciences (Bratislava, Slovakia), Department of Analytic Philosophy (part-time, fixed-term position; 14 January 2011 – 31 May 2016)

Education

- PhD. in Philosophy; Faculty of Arts of the Comenius University in Bratislava, Slovakia (2009)
- Mgr. in Philosophy (equivalent to M.A.); Faculty of Arts of the Comenius University in Bratislava, Slovakia (2006)

Key Publications

- Epistemic extensions of modal distributive substructural logics. *Journal of Logic and Computation*, 26(6): 1787–1813 (2016).
- Propositional dynamic logic with Belnapian truth values. In: L. Beklemishev, S. Demri, A. Máté (Eds.): *Advances in Modal Logic, volume 11*, pp. 503–519. London: College Publications (2016).
- Substructural epistemic logics. *Journal of Applied Non-Classical Logics*, 25, 256–285 (2015).
- Information, awareness and substructural logics. In: Libkin, L., Kohlenbach, U., de Queiroz, R. (Eds.): *Logic, Language, Information and Computation*, LNCS 8071, pp. 266–281. Berlin-Heidelberg: Springer (2013).
- Justifications, awareness and epistemic dynamics. In: S. Artemov and A. Nerode (Eds.): *Logical Foundations of Computer Science*. LNCS 7734, pp. 307–318. Berlin-Heidelberg: Springer. (2013).
- C. I. Lewis on possible worlds. *History and Philosophy of Logic* 30(3), 283–291 (2009).

Journal Publications

- [1] Igor Sedlár. Epistemic extensions of modal distributive substructural logics. *Journal of Logic and Computation*, 26(6): 1787–1813.
- [2] Igor Sedlár. Substructural epistemic logics. *Journal of Applied Non-Classical Logics*, 25(3): 256–285, 2015.
- [3] Igor Sedlár. The semantics of empirical unverifiability. *Organon F*, 22(3): 358–377, 2015.
- [4] Igor Sedlár. An outline of a substructural model of BTA-belief. *Organon F*, 20 (Suppl. Issue 2): 160–170, 2013.
- [5] Igor Sedlár. Neomylnost’ a logika (Infallibility and logic, in Slovak). *Organon F*, 19(1): 239–254, 2012.
- [6] Igor Sedlár. Moorean sentences in update semantics. *Organon F*, 18(2): 142–153, 2011.
- [7] Igor Sedlár. V čom sa nemôžete mýliť? (On what you cannot be wrong about, in Slovak). *Organon F*, 18(3): 351–362, 2011.
- [8] Igor Sedlár. C. I. Lewis on possible worlds. *History and Philosophy of Logic*, 30(3): 283–291, 2009.
- [9] Igor Sedlár. Implikácia a tri druhy obsahovej súvislosti (Implication and three kinds of meaning connection, in Slovak). *Filozofia*, 64(4): 339–345, 2009.
- [10] Igor Sedlár. Majú mená prirodzených druhov konotáciu? (Do natural kind terms connote? In Slovak) *Filozofia* 63(4): 297–300, 2008.
- [11] Igor Sedlár. Kant a Frege o analytickosti (Kant and Frege on analyticity, in Slovak). *Filozofia*, 62(4): 336–347, 2007.

Publications in Conference Proceedings

- [1] Igor Sedlár. Propositional dynamic logic with Belnapian truth values. In: L. Beklemishev, S. Demri, A. Máté (Eds.): *Advances in Modal Logic, volume 11*, pp. 503–519. London: College Publications, 2016.
- [2] Igor Sedlár. Action frames for weak relevant logics. P. Arazim and M. Dančák (Eds.): *The Logica Yearbook 2014*, pp. 267–279. London: College Publications, 2015.

- [3] Igor Sedlár. Relating logics of justifications and evidence. In: V. Punčochář and M. Dančák (Eds.): *The Logica Yearbook 2013*, pp. 207–222. London: College Publications, 2014.
- [4] Igor Sedlár. Inter-model connectives and substructural logics. In: R. Ciuni, H. Wansing, C. Willkommen (Eds.): *Recent Trends in Philosophical Logic (Proceedings of Trends in Logic XI)*. Trends in Logic, volume 41, pp. 195–209. Berlin-Heidelberg: Springer, 2014.
- [5] Igor Sedlár. Information, awareness and substructural logics. In: Libkin, L., Kohlenbach, U., de Queiroz, R. (Eds.): *Logic, Language, Information and Computation*, LNCS 8071, pp. 266–281. Berlin-Heidelberg: Springer, 2013.
- [6] Igor Sedlár. From pair points to pairs of models. In: V. Punčochář and P. Švarný (Eds.): *The Logica Yearbook 2012*. London: College Publications, 2013.
- [7] Igor Sedlár. Justifications, awareness and epistemic dynamics. In: S. Artemov and A. Nerode (Eds.): *Logical Foundations of Computer Science*. LNCS 7734, pp. 307–318. Berlin-Heidelberg: Springer. 2013.
- [8] Igor Sedlár. Boxes are relevant. In: M. Peliš and V. Punčochář (Eds.): *The Logica Yearbook 2011*. London: College Publications, 2012.
- [9] Igor Sedlár. Prirodzená dedukcia, či analytické tably? (Natural deduction or analytic tableaux?, in Slovak) In: L. Dostálová (Ed.): *Organon VIII: Calculamus*, pp. 53–61. Pilsen: University of Western Bohemia Press, 2012.
- [10] Igor Sedlár and Juraj Podroužek. Logics of Moore’s paradox. In: M. Peliš, V. Punčochář (Eds.): *The Logica Yearbook 2010*. London: College Publications, 2011.
- [11] Igor Sedlár. Čo dokáže filozof? (Prove to be a philosopher, in Slovak) In: L. Dostálová (Ed.) *Organon VII aneb Nihil Novi*, pp. 23–29. Pilsen: University of Western Bohemia Press, 2011.
- [12] Igor Sedlár and Juraj Podroužek. Justification logic as dynamic epistemic logic? In: X. Arrazola, M. Ponte (Eds.): *Proceedings of the Second ILCLI International Workshop on Logic and Philosophy of Knowledge, Communication, and Action (LogKCA-10)*. Donostia/San Sebastian: The University of the Basque Country Press, 2010.
- [13] Igor Sedlár and Juraj Podroužek. A new notion of meaning connection and the logic of simple processes. In: M. Peliš (Ed.) *The Logica Yearbook 2009*. London: College Publications, 2010.
- [14] Igor Sedlár and Juraj Podroužek. Poznanie, verifikácia a logika jednoduchých procesov (Knowledge, verification and the logic of simple processes, in Slovak). In: M. Zouhar (Ed.): *Kontext a význam* (Context and Meaning). Bratislava: Aleph, 2010.
- [15] Igor Sedlár and Juraj Podroužek. Náčrt logiky jednoduchých procesov (An outline of the logic of simple processes, in Slovak). In: P. Sousedík (ed.): *Ozvěny Fregovy filosofie* (Echoes of Frege’s Philosophy), pp. 111–123.
- [16] Igor Sedlár. C. I. Lewis a sémantický prístup k modálnej logike (C.I. Lewis and the semantics of modal logic, in Slovak). In: M. Zouhar (Ed.): *Jednotliviny, veobecniny, významy* (Individuals, Universals and Meanings) pp. 173–178.

Chapters in Books

- [1] Igor Sedlár and Ján Šefránek. Logic and cognitive science. In: V. Kvasnička (Ed.): *Artificial Intelligence and Cognitive Science IV*. Bratislava: Slovak University of Technology Press, 2014.
- [2] Igor Sedlár. Spoznanie esencionality vlastností (How to know that a property is essential?, in Slovak). In: P. Ježík, D. Kamhal, I. Sedlár, P. Sýkora: *Saul Kripke a oživenie metafyziky*

(Saul Kripke and the Resurrection of Metaphysics, in Slovak). Pusté Úľany: Schola Philosophica, 2010.

Reviews

- [1] Igor Sedlár. J. Dejnožka, The Concept of Relevance and the Logic Diagram Tradition (Review). *Organon F*, 21(1): 126 – 130, 2014.

Presentations

- [1] Weak negation in public announcement logic. *Prague Seminar on Non-Classical Logic*. Prague, Czech Republic. 1 February 2017.
- [2] Paraconsistent PDL. *51st Mathematical Logic Group Seminar*. Hakone, Japan. 27 - 30 October 2016.
- [3] Paraconsistent epistemic logic (joint work with O. Majer). *Workshop on Non-Classical Logic*. Kyoto, Japan. 26 October 2016.
- [4] Propositional dynamic logic with Belnapian truth values. *Fall Logic Seminar of the Department of Logic, Charles University*. Špindlerův Mlýn, Czech Republic. 27 September 2016.
- [5] Substructural logics with a reflexive transitive closure modality. *SEGA Project Kickoff Workshop*. Prague, Czech Republic. 20 September 2016.
- [6] Hyperintensional propositional logics for everyone. *XX. Czechoslovak Symposium on Analytic Philosophy*. Prague, Czech Republic. 15 September 2016.
- [7] Propositional dynamic logic with Belnapian truth values. *Advances in Modal Logic 2016*. Budapest, Hungary. 31 August 2016.
- [8] Non-classical PDL on the cheap. *Logica 2016*. Hejnice, Czech Republic. 21 June 2016.
- [9] Impossible worlds in epistemic logic. *Issues on the (Im)Possible III*. Bratislava, Slovakia. 16 September 2015.
- [10] Epistemic logic with strong negation. *XIX. Czechoslovak Symposium on Analytic Philosophy*. Bratislava, Slovakia. 10 September 2015.
- [11] Substructural epistemic logics. *Workshop on Logics for Resource-Bounded Agents (ESSLLI 2015)*. Barcelona, Spain. 13 August 2015.
- [12] Modal logics of abstract explanation frameworks (joint work with J. Halas). *15th Congress on Logic, Methodology, and Philosophy of Science*. Helsinki, Finland. 6 August 2015.
- [13] Awareness and epistemic access. *Logica 2015*. Hejnice, Czech Republic. 16 June 2015.
- [14] Substructural negation in epistemic logic. *Prague Gathering of Logicians, Third Issue*. Prague, Czech Republic. 14 February 2015.
- [15] Dynamic logic, implicit knowledge and analytic methods. *XVIII. Czechoslovak Symposium on Analytic Philosophy*. Prague, Czech Republic. 9 September 2014.
- [16] Term-modal logics of evidence. *Epistemic Logic for Individual, Social, and Interactive Epistemology (ESSLLI 2014)*. Tuebingen, Germany. 14 August 2014.
- [17] Extended dynamic models, partial correctness and substructural logics (Short presentation). *Advances in Modal Logic 2014*. Groningen, The Netherlands. 5-8 August 2014.
- [18] Action frames for weak relevant logics. *Logica 2014*. Hejnice, Czech Republic. 17 June 2014.

- [19] Substructural epistemic logics: Homogeneous models and common knowledge. *4th Prague Workshop on Non-Classical Epistemic Logics*. Prague, Czech Republic. 13 June 2014.
- [20] Impossible worlds, actions, and partial correctness. *Issues on the (Im)Possible Warm-Up*. Bratislava, Slovakia. 29 May 2014.
- [21] Epistemic logic and theories of justification. *XVII. Czechoslovak Symposium on Analytic Philosophy*. Trenčianske Teplice, Slovakia. 13 September 2013.
- [22] Information, awareness and substructural logics. *Workshop on Logic, Language, Information and Computation 2013 (WoLLIC 2013)*. Darmstadt, Germany. 23 August 2013.
- [23] Substructural epistemic logics. *Prague Workshop on Non-Classical Epistemic Logics*. Prague, Czech Republic. 22 June 2013.
- [24] A general framework for logics of justifications and evidence. *Logica 2013*. Hejnice, Czech Republic. 18 June 2013.
- [25] Information models and substructural epistemic logics. *Workshop on Substructural Epistemic Logic*. Munich, Germany. 2 February 2013.
- [26] Justifications, awareness and epistemic dynamics. *Symposium on Logical Foundations of Computer Science 2013 (LFCS 2013)*. San Diego, U.S.A.. 6 January 2013.
- [27] Quantification and the Preface paradox. *XVI. Czechoslovak Symposium on Analytic Philosophy*. Třešt', Czech Republic. 20 September 2012.
- [28] From pair points to pairs of models. *Logica 2012*. Hejnice, Czech Republic. 19 June 2012.
- [29] A substructural approach to epistemic logic. *Prague Workshop on Non-Classical Epistemic Logics*. Prague, Czech Republic. 15 June 2012.
- [30] Inter-model connectives and substructural logics. *Trends in Logic XI: Advances in Philosophical Logic*. Bochum, Germany. 4 June 2012.
- [31] Prirodzená dedukcia, či analytické tably? (Natural deduction or analytic tableaux?) *Organon VIII: Calculemus*. Telč, Czech Republic. 4 February 2012.
- [32] Awareness and the Preface paradox. *Corvinus Game Theory Seminar*. Budapest, Hungary. 16 November 2011.
- [33] Sebaoptvrdujúce presvedčenia (Self-fulfilling beliefs) *XV. Czechoslovak Symposium on Analytic Philosophy*. Vrútky, Slovakia. 14 September, 2011.
- [34] Boxes are relevant. *Logica 2011*. Hejnice, Czech Republic. 22 June 2011.
- [35] Collectors and reasoners: Notes on an extension of justification logic. *Prague Workshop on Epistemic Logic*. Prague, Czech Republic. 17 June 2011.
- [36] Logika a presvedčenie (Logic and belief). *Logic, Semantics, and Dialectics*. Prague, Czech Republic. 28-30 April 2011.
- [37] Justification logic as dynamic epistemic logic? *Second ILCLI Workshop on Logic and Philosophy of Knowledge, Communication and Action (LogKCA 10)*. Donostia/San Sebastian, November 2010.
- [38] Negace v ORGANONu. (Negation in the ORGANON software; joint work with M. Benediktovej). *Organon VII: Nihil Novi*. Olomouc, Czech Republic. 23 - 26 September 2010.
- [39] Mooreovské vety a sémantika updatov. (Moorean sentences and update semantics). *XIV. Czechoslovak Symposium on Analytic Philosophy*. Prague, Czech Republic. 21 September 2010.
- [40] The logics of Moore's Paradox (joint work with J. Podroužek). *Logica 2010*. Hejnice, Czech Republic. 23 June 2010.

- [41] The scope of Moore's Paradox (joint work with J. Podroužek). *PhD's in Logic II*. Tilburg, The Netherlands. February 2010.
- [42] Ked' verit' je absurdné (Absurd beliefs; joint work with J. Podroužek). *Workshop on Wittgenstein*. Pilsen, Czech Republic. November 2009.
- [43] Poznanie, verifikácia a logika jednoduchých procesov. (Knowledge, verification and the logic of simple processes; joint work with J. Podroužek). *XIII. Czechoslovak Symposium on Analytic Philosophy*. Smolenice, Slovakia. 21 September 2009.
- [44] A new notion of meaning connection and the logic of simple processes (joint work with J. Podroužek). *Logica 2009*. Hejnice, Czech Republic. 25 June 2009.
- [45] Implikácia a tri druhy obsahovej súvislosti. (Implication and three kinds of meaning connection). *Young Philosophy 2009*. Bratislava, Slovakia. January 2009.
- [46] Náčrt logiky striktných procesov. (An outline of the logic of strict processes; joint work with J. Podroužek). *XII. Czechoslovak Symposium on Analytic Philosophy*. Třešť, Czech Republic. September 2008.
- [47] Majú mená prirodzených druhov konotáciu? (Do natural-kind terms connote?). *Young Philosophy 2008*. Bratislava, Slovakia. January 2008.
- [48] C. I. Lewis a sémantika modálnej logiky. (C. I. Lewis and the semantics of modal logic) *XI. Czechoslovak Symposium on Analytic Philosophy*. Stará Lesná, Slovakia. September 2007.
- [49] Ku Quinovej kritike striktnej implikácie. (On Quine's criticism of strict implication). *Young Philosophy 2007*. Bratislava, Slovakia. January 2007.

Research Stays

- Munich Center for Mathematical Philosophy, LMU Munich (October – November 2013)
- Department of Logic, Charles University in Prague (February – April 2007)

Awards and Scholarships

- Scholarship of the Jan Hus Educational Foundation, 2010
- Scholarship of the National Scholarship Programme of the Slovak Republic, 2007

Grants and Membership in Grant Teams

- *Reasoning with Incomplete and Inconsistent Information*. Principal Investigator (2017). [ISR-17-09 and ISR-17-10; Czech–Israeli mobility project funded by the Czech Academy of Sciences].
- *SEGA: From Shared Evidence to Group Attitudes*. Team member (2016–2018). [16-07954J; co-funded by the German Science Foundation (DFG) and the Czech Science Foundation (GA ČR)].
- *CE-ITI: Center of Excellence - Institute of Theoretical Computer Science*. Team member (2016–2018). [GBP202/12/G061; Czech Science Foundation (GA ČR)].
- *Nonclassical Mathematics Based on Fuzzy, Paraconsistent and Substructural Logics*. Team member (2016–2018). [Joint research project of the Japanese Society for the Promotion of Science (JSPS) and the Academy of Sciences of the Czech Republic].
- *Fictionalism in Philosophy and Science*. Team member (2016) [2/0049/16; Scientific Grant Agency of the Slovak Republic (VEGA)].

- *Analytic Methods in Social Sciences and Humanities*. Team member (2013–2016) [APVV-0149-12; Slovak Research and Development Agency (APVV)].
- *Evidence in Semantics*. Team member (2014–2016) [1/0221/14; Scientific Grant Agency of the Slovak Republic (VEGA)].
- *Language and Meaning in Communication*. Team member (2012–2015) [2/0019/12; Scientific Grant Agency of the Slovak Republic (VEGA)].
- *Semantic Models, Their Explanatory Power and Applications*. Team member (2011–2013) [1/0064/11; Scientific Grant Agency of the Slovak Republic (VEGA)].
- *Language, Semantics, and Context*. Team member (2011) [2/0162/09; Scientific Grant Agency of the Slovak Republic (VEGA)].
- *Belief, Justification, and Logic*. Principal investigator (2011) [Comenius University Grant for Young Researchers no. 510/2011].
- *Logic of Strict Processes*. Principal investigator (2009) [Comenius University Grant for Young Researchers 101/2009].
- *Process Semantics and its Applications*. Principal investigator. [Comenius University Grant for Young Researchers no. 84/2008].

Teaching

University Courses Taught

- Logika 3 (Logic 3 – Introduction to Non-Classical Logic), Lectures and Seminars, Faculty of Arts, Comenius University in Bratislava (2010 – 2016)
- Filozofická logika (Philosophical Logic), Lectures and Seminars, Faculty of Arts, Comenius University in Bratislava (2011 – 2016)
- Logika pre žurnalistov (Logic for Journalists – Informal Logic), Lectures and Seminars, Faculty of Arts, Comenius University in Bratislava (2011 – 2016)
- Poznanie, presvedčenie a logika (Knowledge, Belief, and Logic – An Introduction to Epistemic Logic), Lectures and Seminars, Faculty of Arts, Comenius University in Bratislava (2010 – 2016)
- Modálna logika 1 (Modal Logic 1 – An Introduction to Modal Logic), Lectures and Seminars, Faculty of Arts, Comenius University in Bratislava (2010 – 2016)
- Modálna logika 2 (Modal Logic 2 – First-Order Modal Logic), Lectures and Seminars, Faculty of Arts, Comenius University in Bratislava (2010 – 2016)
- Úvod do logiky (Introduction to Classical Logic), Lectures and Seminars, Faculty of Arts, Comenius University in Bratislava (2011)
- Logika 1 (Logic 1 – Classical Propositional Logic), Seminars, Faculty of Arts, Comenius University in Bratislava (2010 – 2011)
- Logika 2 (Logic 2 – Classical Predicate Logic), Seminars, Faculty of Arts, Comenius University in Bratislava (2010 – 2011)

Thesis Supervision

- N. Kuruczová, Problém logicky dokonalého poznania. (The Logical Omniscience Problem) B.A. Thesis, Faculty of Arts, Comenius University in Bratislava (2012)

Membership in Degree Examination Committees

- Faculty of Arts, Comenius University in Bratislava

Membership in Thesis Committees

- Faculty of Arts, Charles University in Prague
- Faculty of Arts, Comenius University in Bratislava
- Faculty of Mathematics, Physics and Informatics, Comenius University in Bratislava

Service to the Profession

Referee for Journals

- Studia Logica
- Notre Dame Journal of Formal Logic
- Journal of Multiple-Valued Logic and Soft Computing
- Logique et Analyse
- Filosofický časopis
- Organon F
- Filozofia

Organisation

Membership in Program Committees

- XVII. Czechoslovak Symposium on Analytic Philosophy. Trenčianske Teplice, Slovakia, 2013.

Membership in Organising Committees

- Topology, Algebra and Categories in Logic (TACL 2017). Prague, Czech Republic, 2017.

Languages and Other Skills

Languages (CEFR)

- Slovak (C2), Czech (C1), English (C1), German (B2).

Other Skills

- LaTeX, XeLaTeX, HTML

References

Dr. Petr Cintula

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