Samuli Reijula (né Pöyhönen)

Theoretical Philosophy, PL 24 00014 University of Helsinki, Finland https://www.samulireijula.net/ samuli.reijula@helsinki.fi

PERSONAL INFORMATION

Date & Place of birth: 1980, Kuopio, Finland

ON Citizenship: Finland

Place of Residence: Helsinki, Finland

Orcid: 0000-0001-6968-5819

EXPERTISE

Areas of expertise: Philosophy of science (general, psychology, cognitive science, social science); Social epistemology of science; Collective intelligence; Philosophy of

evidence-based policy

Areas of competence: Philosophy of mind; Science of science; Metaphysics of sci-

ence; Conceptual change

EDUCATION

Docent (habilitation) in Practical Philosophy. University of Helsinki, Faculty of Social Sciences, 1/2020.

Doctor of Social Sciences. University of Helsinki, Social and Moral Philosophy, 9/2013.

Dissertation: Chasing Phenomena – Studies on classification and conceptual change in the human sciences.

Advisor: Petri Ylikoski; Opponent: Carl Craver; Grade: Laudatur

Master of Social Sciences. University of Helsinki, Social and Moral Philosophy, 12/2007.

Cognitive Science (MA program), University of Helsinki. 2007 → Kuopion Lyseo high school (Kuopion Lyseon Lukio) 2000. (6*Laudatur)

Professional training

7/2018: European Summer School for Scientometrics. University of Vienna, 3 ECTS 6/2013: Summer Institute on Bounded Rationality. Max Planck Institute for Human Development

7/2010: Second International Summer School in Cognitive Sciences and Semantics: Analytic Pragmatism, Semantic Inferentialism, and Logical Expressivism. University of Latvia

CURRENT POSITION

Academy research fellow, 2020-2025. University of Helsinki / Academy of Finland. University lecturer¹, 2019 \rightarrow , Theoretical philosophy, University of Helsinki (on research leave)

PREVIOUS APPOINTMENTS

University researcher, 2018-2019, Philosophy, University of Tampere. Academy of Finland research project Social and Cognitive Diversity in Science, #316695

Academy of Finland Postdoctoral Researcher. Social and Moral Philosophy, University of Helsinki. Sep 2015–Aug 2018

Visiting researcher (postdoc pool). Adaptive Rationality and Cognition, Max Planck Institute for Human Development, Berlin. Jul 2016–Jun 2017

Part-time lecturer (1-2 courses / academic year). Cognitive science, Faculty of Behavioural Sciences, University of Helsinki. 2009–2015

Postdoctoral researcher. TINT, Academy of Finland Centre of Excellence in the Philosophy of the Social Sciences, University of Helsinki. 2013–2015

 $\bf Doctoral\ student.$ Social and Moral Philosophy, University of Helsinki / Finnish doctoral programme of Philosophy. 2008–2012

Visiting doctoral student. Berlin School of Mind and Brain, Humboldt University. (Academic host: Prof. Michael Pauen). 4–9/2012

¹Roughly equivalent to associate professor, permanent position, non-tenure-track

Visiting doctoral student. Philosophy, University of Edinburgh (Academic host: Prof. Andy Clark). 2–5/2010

GRANTS & AWARDS

2022: Helsinki Institute for Social Sciences and Humanities Catalyst Grant 2023. Cognitive Architectures of Science workshop. 9000e.

2021: Faculty of Arts award 2021, University of Helsinki (in Finnish: "Kannustuspalkkio tunnustuksena erityisen ansiokkaasta työstä yliopiston ja yhteiskunnan hyväksi"), 3000e.

2021: Nordic Network for the Science of Science. A workshop series funded by the Nordic research councils in the Humanities and Social Sciences (NOS-HS). PI. Coapplicants: Analytis, Habinek, 43000e

2020: Academy Research Fellow 2020–2025. "Modeling the republic of science: Collaborative problem solving and collective rationality in scientific inquiry". The Academy of Finland, #332686, 438 874e

2018: Personal grant for postdoctoral research: "Institutional epistemology", Emil Aaltonen Foundation, 31500e

2015: Postdoctoral Researcher project 2015–2018, The Academy of Finland, #287388, 247284e

2015: Postdoc-pool mobility grant for research at MPI Berlin. Kone Foundation, 16000e. (2015–2016)

2009: Finnish Doctoral Programme of Philosophy. Four-year funding for doctoral research in philosophy. (2009–2012)

2008: Individual 3-year grant for doctoral research in philosophy. Finnish Cultural Foundation

LANGUAGES

Native language: Finnish

English $(\star \star \star)$; German $(\star \star)$; Swedish, French (\star)

Python $(\star \star \star)$; R, Javascript, Java, PHP, SQL, Spark $(\star \star)$

PUBLICATIONS Hormio, Säde and Samuli Reijula (2023). "Universities as anarchic knowledge institutions", Social Epistemology.

> Reijula, Samuli and Ralph Hertwig (2023). "Self-nudging and the citizen choice architect". In Sunstein & Reisch (eds.) Research Handbook on Nudges and Society, 263-291. (Originally published 2022 in Behavioral Public Policy)

> Rolin, Kristina, Inkeri Koskinen, Jaakko Kuorikoski and Samuli Reijula (2023). "Social and cognitive diversity in science: introduction", Synthese 202:36.

> Pesonen, Renne and Samuli Reijula (2023). "Älykästä paskapuhetta - tekoälymallit ihmisälyn peilinä (Fluent bullshit - AI models as a mirror to human intelligence)", Tieteessä Tapahtuu, 3/2023.

> Reijula, Samuli, Jaakko Kuorikoski, Miles MacLeod (2023). "The division of cognitive labor and the structure of interdisciplinary problems", Synthese 201:214.

> Reijula, Samuli and Jaakko Kuorikoski (2022). "Modeling cognitive diversity in group problem solving", COGSCI 2022: 44th Annual Conference of the Cognitive Science Society.

> Reijula, Samuli (2022). "Terapeuttinen puhe on kaikkialla" (Therapeutic discourse is everywhere; book review), Tieteessä Tapahtuu, 1/2022.

> Reijula, Samuli and Ralph Hertwig (2022). "Self-nudging and the citizen choice architect." Behavioral Public Policy, 6(1), 119–149.

> Reijula, Samuli and Jaakko Kuorikoski (2021). "The diversity-ability trade-off in scientific problem solving." Philosophy of Science, 88, 894–905.

> Reijula, Samuli (2021). "Social categories in the making: construction or recruitment?" Synthese, 199, 12315–12330.

> Aydinonat, Emrah, Samuli Reijula and Petri Ylikoski (2021). "Argumentative landscapes: the functions of models in social epistemology." Synthese, 199, 369–395.

> Reijula, Samuli (2021). "Ian Hacking", Routledge Encyclopedia of Philosophy Online.

Reijula, Samuli and Petri Ylikoski (2020). "Tutkijan vapaus institutionaalisen tietoteorian näkökulmasta", in ed. K. Ekholm, E. Väliverronen: *Tieteen vapaus & tutkijan sananvapaus*. Vastapaino, Finland.

Kuorikoski, Jaakko, Samuli Reijula and Susanne Uusitalo (2020). "Neuroscience of autonomy and paternalistic policies." In Harbecke, J. & Herrmann-Pillath, C. (eds.). Social Neuroeconomics: Mechanistic Integration of the Neurosciences and the Social Sciences. London: Routledge, 221–235.

Reijula, Samuli and Jaakko Kuorikoski (2019). "Modeling epistemic communities", in M. Fricker, P.J. Graham, D. Henderson, N. Pedersen, J. Wyatt (eds.) *The Routledge Handbook of Social Epistemology*, 240–249.

Marchionni, Caterina and Samuli Reijula (2019). "What is mechanistic evidence, and why do we need it for evidence-based policy?" Studies in History and Philosophy of Science A, 73, 54-63

(equal contributions from both authors)

Kyanoush Seyed Yahosseini, Samuli Reijula, Lucas Molleman and Mehdi Moussaid (2018). "Social information can undermine individual performance in exploration-exploitation tasks." COGSCI 2018: 40th Annual Conference of the Cognitive Science Society, 2470–2475.

Reijula, Samuli; Timo Ehrig; Konstantinos Katsikopoulos; Jaakko Kuorikoski; Shyam Sunder (2018). "Nudge, Boost or Design? Limitations of behavioral policy under social interaction." The Journal of Behavioral Economics for Policy, 2(1), 99–105.

Pöyhönen², Samuli (2017). "Value of cognitive diversity in science". Synthese, 194, 4519–4540.

Reijula, Samuli (2017). "How could a rational analysis model explain?" COGSCI 2017, Proceedings of the 39th Annual Conference of the Cognitive Science Society, 2975–2980

Pöyhönen, Samuli (2016). Psykologia tieteenalana ja asiakastyönä (Vesa Talvitie, Arkipsykologiasta aivotutkimukseen – kysymyksiä psykologian filosofiasta). $Niin~\mathcal{E}$ $N\ddot{a}in~3/16,~132–134.$

Pöyhönen, Samuli (2015). "Memory as a cognitive kind. Brains, remembering dyads and exograms", in C. Kendig (ed.), *Natural Kinds and Classification in Scientific Practice*. London: Pickering & Chatto, 145–156.

Kuorikoski, Jaakko and Samuli Reijula (forthcoming). "Kokeellinen yhteiskuntatiede" (Experimental social science), in Kaidesoja, T; Kankainen, T; and Ylikoski, P (eds.) Syistä Selityksiin - Kausaliteetti ja selittäminen yhteiskuntatieteissä

Ylikoski, Petri and Samuli Pöyhönen (2015). "Addiction-as-a-kind hypothesis", *International Journal of Addiction and Drug Research*, 4(1), 21–25.

Pöyhönen, Samuli (2014). "Explanatory power of extended cognition", *Philosophical Psychology*, 27, 735–759.

Pöyhönen, Samuli (2014). "Intentional concepts in cognitive neuroscience", *Philosophical Explorations*, 17, 93–109.

Pöyhönen, Samuli (2014). "Natural kinds and concept eliminativism", in V. Karakostas and D. Dieks (eds.), *EPSA11 Perspectives and Foundational Problems in Philosophy of Science*, The European Philosophy of Science Association Proceedings 2, 167–179.

Kuorikoski, Jaakko and Samuli Pöyhönen (2013). "Understanding non-modular functionality. Lessons from genetic algorithms", *Philosophy of Science*, 80, 637–649. (equal contributions from both authors)

Pöyhönen, Samuli (2013). "Carving the mind by its joints – Natural kinds and social construction in psychiatry", in Milkowski, M. and Talmont-Kaminsky, K. (eds.) Regarding Mind, Naturally. Cambridge Scholars Publishing, 30–48.

Kuorikoski, Jaakko and Pöyhönen, Samuli (2013). "Evolution and Modularity: The limits of mechanistic explanation", COGSCI 2013, Proceedings of the annual meeting of the cognitive science society, 840–845.

²Last name changed to Reijula from Pöyhönen in 2016

Kuorikoski, Jaakko and Samuli Pöyhönen (2012). "Looping kinds and social mechanisms", *Sociological Theory*, 30(3): 187–205.

(equal contributions)

Rusanen, Anna-Mari and Samuli Pöyhönen (2012). "Concepts in change", $Science~\mathcal{C}~Education,~22,~1389–1403$

(equal contributions)

INVITED TALKS 12/2023: "The many functions of diversity in scientific problem solving." Workshop on Computational Models in Social Epistemology. Ruhr University Bochum.

12/2023: "Self-nudging and the citizen choice architect." Mini-conference & book launch - Research Handbook on Nudge and Society. El-Erian Institute, University of Cambridge. (w/ Ralph Hertwig)

12/2023: "The division of cognitive labor and the structure of interdisciplinary problems." The Theoretical Foundations of Interdisciplinarity Symposium, Collegium for Advanced Studies, University of Helsinki.

11/2023: "Self-nudging and the citizen choice architect." Design matters. Conference on Emerging Technologies and Behavioural-driven Designs. Erasmus University, Rotterdam.

12/2023: "The division of cognitive labor and the structure of interdisciplinary problems." Strategic Organization Design, University of Southern Denmark.

7/2023: "The division of cognitive labor and the structure of interdisciplinary problems." International Society for Scientometrics and Informetrics workshop "Reflecting on Interdisciplinary Teams"

5/2023: "Science studies as a social science." Nordic Network for the Science of Science, DIAS, University of Southern Denmark. (w/ Petri Ylikoski)

5/2023: "Modeling cognitive diversity in group problem solving." Philosophy of Cognitive Science seminar, University of Warsaw.

7/2022: "Computational methods." Models & Methods: Summer School of the Vienna Doctoral School of Philosophy, University of Vienna.

3/2022: "Social kinds in the making – construction or recruitment?" Lógica, Historia y Filosofía de la Ciencia. UNED, Madrid.

 $1/2020\colon$ "Do Bayesian models help us to understand the human mind?" Mind and Matter workshop, University of Helsinki.

10/2019: *Learning from field experiments.* Workshop, Behavioural insights in designing public policy & interventions, University of Helsinki.

8/2019: "AI in scientific research." Panel discussion (chair), Methods Festival, Tampere University.

3/2019: "What has modeling taught us about cognitive diversity?" Agent-Based Models in Philosophy: Prospects and Limitations, Bochum.

11/2018: A workshop on Ron Mallon's "The Construction of Human Kinds.", University of Copenhagen.

10/2018: "Why aren't we all addicts", Concept Formation in the Natural and Social Sciences, University of Zurich.

2/2018: "The philosophy of computational social science", University of Tampere. Invited lecture.

10/2017: AI and Philosophy, Finnish Philosophical association and Cognitive Science joint event: AI and Philosophy. University of Helsinki. Chair and presenter.

10/2017: "Research funding for the best – or to maverick scientists? Models and simulations as research tools in science studies." (in Finnish) Edistyksen Päivät, Helsinki. Public lecture.

1/2017: "What, when and how do rational analysis models explain?", MCMP Munich

1/2016: "Classification, knowledge, identity" (in Finnish). Mikkeli Academy. Public

lecture.

11/2015: "Social heuristics", Action, cognition and sociology (graduate course), University of Turku. Invited lecture

9/2015: "Will psychiatry become clinical neuroscience?" Philosophy of Psychiatry Summer Symposium, University of Helsinki.

TEACHING

Academic teaching experience.

University-level courses taught: 31 (detailed information on my personal web page)

Thesis supervision

PhD theses: Blanco Sequeiros $(2019 \rightarrow)$

PhD (2nd supervisor): Nuotio (2023 \rightarrow), Skog Pirinen (2023 \rightarrow), Wuokko (2022 \rightarrow), Turunen (2020), Tolvanen (2020 \rightarrow), Teräväinen (2016 \rightarrow), Seppälä (2019 \rightarrow), Weckström (2019 \rightarrow)

Master's theses: Hyyryläinen (2022), Lassila (2021 \rightarrow), Metsälampi (2021 \rightarrow), Kanervo (2021), Hartonen (2019), Jylhä (2019 \rightarrow)

Master's (2nd supervisor): Kuokkanen (2018), Mäki-Tuuri (2014)

Bachelor's theses: Vuontisjärvi (2022), Päivänen (2021), Vaahtoranta (2020), Järvinen (2020), Punamäki (2019), Nuotio (2018)

Training in university pedagogy.

Basic studies in university pedagogy, 25 ECTS, University of Helsinki, completed 2024.

UP3.1: "Academic supervision", 5 ECTS, 2024

UP2.2: "Assessment of Learning and Giving Feedback", 5 ECTS, 2023

UP2.1: "Constructive alignment in course design", 5 ECTS, 2021

UP1: "Learning in higher education", 5 ECTS, 2020

UP5: "Development of teaching and practical training." 5 ECTS, 2015

Facilitation training (7h workshop), University of Helsinki, 2020.

ACADEMIC SERVICE

Peer review of funding applications

Panel member and reviewer of project applications for a national science center in the EU (2022) (*2).

Peer review of applications for a Finnish foundation funding scientific research (2020).

Peer review for publishers

Philosophical Quarterly; British Journal for the Philosophy of Science; Nous; Philosophy of Science; Behavioural Public Policy; Synthese; Erkenntnis; Studies in History and Philosophy of Science; Journal of Economic Methodology; Social Epistemology; European Journal for Philosophy of Science; Philosophical Psychology; Theory & Psychology; International Studies in the Philosophy of Science; Journal of Social Ontology; CogSci2020-2023; Theoria; Review of Behavioral Economics; Tiede & Edistys; Ajatus

Cambridge University Press (book manuscript); MIT Press (book manuscript); Gaudeamus (book manuscript).

Organized events

Architecture of scientific cognition workshop (ASC), Kilpisjärvi, Finland. Organizer. 2023.

Institutional epistemology workshop, Helsinki. Organizer. 2023, 2022.

Nordic Network for the Science of Science, Helsinki, Athens, Odense (three workshops). Organizer. 2022-2023.

ENPOSS23 - Program committee member. 2023.

 ${\it EPSA21}$ - Program committee member. 2021.

CLMPS – 15th Congress of Logic, Methodology and Philosophy of Science, Helsinki.

Webmaster. 8/2015

 ${
m EPSA13-4th}$ conference of the European Philosophy of Science Association, Helsinki. Local organizing committee. 8/2013

Models and Simulations 5, Helsinki. Local organizing committee. 6/2012

Editorial work

Guest editor for Journal of Economic Methodology special issue: "Diversity in the Philosophy of Economics" 2023.

Guest editor for Synthese topical collection: "Social and Cognitive Diversity in Science" 2021

Book series editor. Philosophical Studies from the University of Helsinki (2020→)

Positions of trust

Faculty representative ("custos") at PhD defense and evaluation committee member, University of Helsinki, 2022-2023 (*2)

Faculty board (deputy member), Faculty of Arts, UH (2022-2025)

Responsible teacher, entrance examinations in philosophy. UH (2020)

Job search committee for university lecturer in theoretical philosophy (Swedish), UH. 1/2020

Department council member. Political and Economic Studies, UH. 1/2014–12/2017

SOCIETAL IMPACT

Media

2024-01: Radio interview on Kulttuuriykkönen, Yle (national broadcasting company)

2023-03: Interview on the effects of positionality statements in science. Helsingin Sanomat (national newspaper)

2022-09: Interview on the nature of basic research. Tekniikan Maailma.

2021-4: Interview on method, diversity, and ideology in science. Helsingin Sanomat ³

2020-09: Tahdonvoimalle tukea. Yliopisto-lehti 6/2020.

2020-08: Giving People The Tools To Nudge Themselves. The Decision Lab⁴

2020-06: What is 'self-nudging'? A simple trick to make healthier choices. NBC Today 5 2019-07: Interview on behaviorally informed policy. Les Échos 6

2014-10: Interview on looping effects of classifications in the social sciences, in Helsingin Sanomat (national newspaper)

Full CV at https://www.samulireijula.net

 $³_{\rm https://www.hs.fi/kulttuuri/art-2000007917387.html}$

 $^{4\\ \}text{https://thedecisionlab.com/insights/innovation/giving-people-the-tools-to-nudge-themselves/}$

 $^{^{5} \}rm https://www.today.com/health/what-self-nudging-simple-trick-make-healthier-choices-t184571$

 $^{^{6} \}rm https://www.lesechos.fr/idees-debats/sciences-prospective/les-sciences-comportementales-au-service-des-politiques-publiques-1128551$