

Curriculum Vitae



Nicolas Rothen, Prof. Dr.

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Education

- 11/2016 **Habilitation in Psychology**, University of Bern, Switzerland
Defense "Sensorische Substitution: können fehlende / verlorene Sinne durch Technologie ersetzt werden?" [Sensory substitution: is it possible to replace missing / lost senses with technology?] | defense: 21/11/2016
- 11/2006 – 10/2009 **PhD in Psychology**, University of Bern, Switzerland
Thesis "Synästhesie: Ursachen, Folgen und assoziierte Eigenschaften" [Synaesthesia: causation, consequences and associated characteristics] | advisor: Prof. Dr. Beat Meier | defense: 05/10/2009
- 10/2001 – 11/2006 **Licenciate (MSc equivalent) in Psychology**, University of Bern, Switzerland
Thesis "Der Einfluss von Synästhesie auf grundlegende Lernprinzipien" [The influence of synaesthesia on basic principles of learning] | advisor: Prof. Dr. Beat Meier | date: 17/11/2006
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Work Experience

- 08/2025 – ongoing Rector, UniDistance Suisse, Switzerland
- 02/2024 – 07/2025 Rector (ad interim), UniDistance Suisse, Switzerland
- 03/2023 – 12/2024 Vice-Rector for Research, UniDistance Suisse, Switzerland
- 02/2020 – ongoing Associate Professor (Extraordinarius, tenured)
Faculty of Psychology, UniDistance Suisse, Switzerland
- 01/2018 – 01/2020 Assistant Professor (tenure track)
Faculty of Psychology, UniDistance Suisse, Switzerland

05/2015 – 11/2018	Swiss National Science Foundation “Ambizione” Fellow (Postdoc) Institute of Psychology, University of Bern, Switzerland
01/2011 – 04/2015	Visiting Research Fellow (advisors: Prof. Dr. Jamie Ward, Prof. Dr. Anil Seth) Swiss National Science Foundation (2011, 2013, 2014, 2015); Holcim Foundation (2012); Additional support: Dr Mortimer & Theresa Sackler Foundation (2011-2012) School of Psychology, Sackler Centre for Consciousness Studies, University of Sussex, Brighton, United Kingdom
09/2005 – 12/2010	Postdoc: Research and Teaching Assistant (2009-2010); PhD student: Research and Teaching Assistant (2007-2009); MSc student: Research Assistant (2005-2007); (advisor: Prof. Dr. Beat Meier) Institute of Psychology, University of Bern, Switzerland
08/2008 – 01/2009	Research and Teaching Assistant (advisor: Prof. Dr. Beat Meier) Faculty of Psychology, UniDistance Suisse, Switzerland
10/2006 – 10/2007	Research Assistant in the Swiss National Science Foundation project: “The Relationship between the Prospective and the Retrospective Components in Prospective Memory Tests.” (PI: Prof. Dr. Beat Meier) Institute of Psychology, University of Bern, Switzerland

Institutional Responsibilities and Related Networks

09/2020 – 09/2024	Member of salary classification committee at UniDistance Suisse, Switzerland
06/2024 – 12/2024	President of the search committee for the Vice-Rector for Research (ad interim) at UniDistance Suisse, Switzerland
04/2024 – ongoing	Member of the working group for the cantonal university law of the Canton of Valais
02/2024 – 04/2024	President of the search committee for the Vice-Rector for Teaching at UniDistance Suisse, Switzerland
02/2024 – 02/2024	President of the working group for salary classifications of professors at UniDistance Suisse, Switzerland
10/2023 – 01/2024	Member of the working group for salary classifications of professors at UniDistance Suisse, Switzerland
05/2023 – ongoing	Member of the recruitment committee for a professor for digital teaching and learning at UniDistance Suisse, Switzerland
01/2023 – ongoing	President of the tenure-track committee of Assistant Prof. Dr. Michael Kurschilgen (Faculty of Economy) at UniDistance Suisse, Switzerland

01/2023 – ongoing	President of the tenure-track committee of Assistant Prof. Dr. Manuel Grieder (Faculty of Economy) at UniDistance Suisse, Switzerland
02/2022 – 01/2023	Study program director of the German Bachelor and Master of Science in Psychology at UniDistance Suisse, Switzerland
11/2021 – 06/2023	Member of the recruitment committee for two professors in mathematics, UniDistance Suisse, Switzerland
10/2021 – 05/2022	Member of the working group for the development of a marketing and communication strategy, UniDistance Suisse, Switzerland
05/2020 – 02/2023	Local node leader of the Swiss Reproducibility Network (SwissRN) at UniDistance Suisse, Switzerland
03/2020 – 11/2020	Member of the recruitment committee for a professor in economy, UniDistance Suisse, Switzerland
02/2019 – 02/2023	Full voting member of the Kommission für das Psychologiestudium an Schweizer Hochschulen (KPSYCH; engl. Commission for the Study of Psychology at Swiss Universities)
11/2018 – 05/2021	Member of the academic council, UniDistance Suisse, Switzerland
01/2018 – 01/2022	Study program co-director of the German Master of Science in Psychology at UniDistance Suisse, Switzerland

Funding

Competitive Funding

09/2022 – 08/2026	Swiss National Science Foundation (CHF 484'164) project grant: Co-Investigator Scheme Project: "Do the same cognitive systems support perception and memory? A healthy special populations perspective" Principal investigator: Nicolas Rothen Co-investigator: Prof. Dr. Jamie Ward
05/2015 – 05/2018	Swiss National Science Foundation (CHF 600'000) career grant: Ambizione Fellowship Project: "Natural Foundations of Enhanced Memory" Principal investigator: Nicolas Rothen
02/2013 – 02/2015	Swiss National Science Foundation (CHF 108'880) career grant: late postdoc Grant for advanced postdocs. Project: "Perceptual functioning and memory performance: What is the link?" Principal investigator: Nicolas Rothen
01/2012 – 01/2013	Holcim Foundation (CHF 46'920) career grant Research grant. Project: "How Synaesthesia Affects Different Memory Systems – Part 2"

Principal investigator: Nicolas Rothen

01/2011 – 01/2012 **Swiss National Science Foundation (CHF 42'600)** | career grant: early postdoc
Grant for early postdocs. Project: "How Synaesthesia Affects Different Memory Systems"
Principal investigator: Nicolas Rothen

Non-Competitive Funding (Mandates)

10/2019 – 09/2022 **Swiss Canton of Valais (CHF 1'606'600)** | project grant
Project: "Entwicklung und neurokognitive Evaluation einer digitalen Lernhilfe für den Sprachunterricht im Kanton Wallis" [Development and Neurocognitive Evaluation of a Digital Tool for Language Classes in the Canton of Valais]
Principal investigator: Nicolas Rothen together with Prof. Dr. Thomas Reber

Prizes and Awards

Highly Cited Research Award received from Journal of Neuroscience Methods (2017, January) for the following publication: **Rothen, N.**, Seth, A. K., Witzel, C., & Ward, J. (2013). Diagnosing synaesthesia with online colour pickers: Maximising sensitivity and specificity. Journal of Neuroscience Methods, 215(1), 156–160.

Editorial Tasks and Reviewing Activities

2021 – current Editor in Chief: Swiss Psychology Open: Journal of the Swiss Psychological Society
2019 – 2020 Editor in Chief: Swiss Journal of Psychology
2015 – 2018 Associate Editor: Swiss Journal of Psychology
2014 – 2015 Guest Editor: Frontiers in Human Neuroscience

Ad hoc reviewer for journals: Acta Psychologica / Aging and Psychology / Annals of Neurology / Behavioural Brain Research / Cognition / Cognitive Neuroscience / Consciousness and Cognition / Current Biology / Encyclopedia of Human Behaviour - 2nd Edition / European Journal of Cognitive Ageing / Frontiers in Cognitive Science / Frontiers in Human Neuroscience / Frontiers in Perception Science / Frontiers in Psychology / Human Brain Mapping / iPerception / Journal of Articles in Support of the Null Hypothesis / Journal of Experimental Psychology: Human Perception & Performance / Journal of Experimental Psychology: Learning, Memory, and Cognition / Journal of Neuropsychology / Journal of Visualized Experiments / Perception / Memory / Memory & Cognition / Neuropsychologia / Philosophical Transactions B / PLoS one / Psychology and Aging / Psychopharmacology / Quarterly Journal of Experimental Psychology / Science

Ad hoc reviewer for funding bodies: Swiss National Science Foundation (SNSF) / Deutsche Forschungsgemeinschaft (DFG) / The Israel Science Foundation

Active Memberships

since 2019 Swiss Psychological Society (SPS)
since 2016 Fellow of the Psychonomic Society (PsyS)
since 2013 European Society for Cognitive Psychology (ESCoP)
since 2008 United Kingdom Synaesthesia Association (UKSA)

Supervision and Thesis Committees (since 2015)

Ongoing

Postdocs: Ms Chhavi Sachdeva, Mr Michael Rihs, Mr Rémy Lachelin

PhDs: Mr Tobias Kühlwein (PhD at University of Heidelberg, Germany; with Prof. Dr. Jan Rummel), Ms Mariela Mihaylova (PhD at University of Geneva, Switzerland; with Prof. Dr. Matthias Kliegel), Ms Sandy Marca (co-supervision together with Prof. Dr. Thomas Reber | PhD at University of Geneva, Switzerland; with Prof. Dr. Marina Laganaro), Ms Nicole Skieresz (co-supervision together with Prof. Dr. Thomas Reber | PhD at University of Lausanne, Switzerland; with Prof. Dr. Micah Murray), Ms Emily Whelan (co-referee | University of Sussex, UK)

MA: Ms Noger Franziska

Research and teaching assistants: Ms Martina Kälin (MSc)

Completed

Postdocs: Ms Alodie Rey-Mermet (Prof. at Vinzenz Pallotti University, Germany), Ms Mirela Dubravac, Mr Simon Gorin (co-supervision together with Prof. Dr. Thomas Reber)

PhDs: Ms Rebecca Ovalle Fresa, Mr Teofile Ciobanu (external expert in thesis committee | University of Lausanne, Switzerland), Ms Esther Brill (co-referee | University of Bern, Switzerland)

MA: Mr Felix Häsler, Mr Christopher Ritter, Mr Sinan Arif Uslu, Ms Eleonora Balbi, Ms Esther Brill, Mr Dieter Studer, Mr Olivier Bais (co-referee | University of Amsterdam, Netherlands), Ms Carmen Schreier, Ms Stephanie Fink

BA: Ms Adriana Frei, Mr Simon Aebli, Ms Annika Wyss, Ms Laura Schmid

Research and teaching assistants: Ms Stephanie Tangeten (MSc), Mr Daniel Fitze (MSc), Ms Elisabeth Schoch (MSc), Mr Simon Marmet (Dr.), Ms Annika Wyss (Dr.)

Teaching (since 2015)

Lernen und Gedächtnis [Learning and Memory] (bachelor module, UniDistance Suisse, Switzerland): autumn term 2021, autumn term 2022, autumn term 2023, autumn term 2024

Experimentelle Übungen [Experimental Practice] (bachelor module, UniDistance Suisse, Switzerland): autumn term 2020, autumn term 2021, autumn term 2022, autumn term 2023, autumn term 2024

Wissenschaftliches Arbeiten [Scientific Practice] (master module, UniDistance Suisse, Switzerland): spring term 2019, spring term 2020, spring term 2021, spring term 2022, spring term 2023, spring term 2024

Neurokognition [Cognitive Neuroscience] (master module, UniDistance Suisse, Switzerland): spring term 2018, spring term 2019, spring term 2020, spring term 2021, spring term 2022, spring term 2023, spring term 2024

Datenanalyse mit R [Data Analysis with R] (summer course, University of Bern, Switzerland): summer 2018

Lernen und Gedächtnis [Learning and Memory] (lecture on bachelor level, University of Bern, Switzerland): spring term 2018

Computergestützte Versuchsdurchführung [Computer Assisted Data Collection] (master course, University of Bern, Switzerland): autumn term 2016, spring term 2017, autumn term, 2017, spring term 2018

Publications

H-index = 30; citations 2436 (source: Google Scholar; March 2025)

67 peer-reviewed publications, 2 book chapters and 1 book since 2007

For a full list see: <https://scholar.google.com/citations?user=Qu04IAcAAAAJ>

Journal Articles

- [1] Mariela Mihaylova, Matthias Kliegel, and **Nicolas Rothen**. “Does Retrieval Practice Protect Memory against Stress? A Meta-Analysis”. In: *Peer Community in Registered Reports* 1 (2024/04/03, in-principle acceptance).
- [2] Chhavi Sachdeva, Emily Whelan, Rebecca Ovalle-Fresa, Alodie Rey-Mermet, Jamie Ward, and **Nicolas Rothen**. “How Perceptual Ability Shapes Memory: An Investigation in Healthy Special Populations”. In: *Peer Community in Registered Reports* 1 (2024/12/21, in-principle acceptance).
- [3] Emily Whelan, Chhavi Sachdeva, Rebecca Ovalle-Fresa, **Nicolas Rothen**, and Jamie Ward. “Synaesthesia as a Model for Assessing Individual Differences in Visual Perception and Memory Performance”. In: *Peer Community in Registered Reports* 1 (2024/12/20, in-principle acceptance).
- [4] Mirela Dubravac, Chhavi Sachdeva, and **Nicolas Rothen**. “Levels of Processing Effects on Memory for Color-Object Associations”. In: *Journal of Cognition* 8.1 (2025). DOI: 10.5334/joc.437.
- [5] Angelo Belardi, Leila Chaieb, Juergen Fell, **Nicolas Rothen**, and Thomas P. Reber. “Effects of 5 Hz Auditory Beat Stimulation on Mind Wandering and Sustained Attention in an Online Experiment”. In: *Journal of Cognitive Enhancement* 8.3 (2024), pp. 206–219. DOI: 10.1007/s41465-024-00290-5.
- [6] Vincent Weber, Simon Ruch, Nicole H. Skieresz, **Nicolas Rothen**, and Thomas P. Reber. “Correlates of Implicit Semantic Processing as Revealed by Representational Similarity Analysis Applied to EEG”. In: *iScience* 27.11 (2024), p. 111149. DOI: 10.1016/j.isci.2024.111149.
- [7] Alodie Rey-Mermet and **Nicolas Rothen**. “The Interplay of Time-of-day and Chronotype Results in No General and Robust Cognitive Boost”. In: *Collabra: Psychology* 9.1 (2023), p. 88337. DOI: 10.1525/collabra.88337.
- [8] David J. Schwartzman, Ales Oblak, **Nicolas Rothen**, Daniel Bor, and Anil K Seth. “Extensive Phenomenological Overlap Between Training-Induced and Naturally-Occurring Synaesthetic Experiences”. In: *Collabra: Psychology* 9.1 (2023), p. 73832. DOI: 10.1525/collabra.73832.

- [9] Angelo Belardi, Leila Chaieb, Alodie Rey-Mermet, Florian Mormann, **Nicolas Rothen**, Juergen Fell, and Thomas P. Reber. "On the Relationship between Mind Wandering and Mindfulness". In: *Scientific Reports* 12.1 (1 2022), p. 7755. DOI: 10.1038/s41598-022-11594-x.
- [10] Corinna S. Martarelli, Rebecca Ovalle-Fresa, Deian Popic, Laura K. Globig, and **Nicolas Rothen**. "Reinstating Location Improves Mnemonic Access but Not Fidelity of Visual Mental Representations". In: *Cortex* 156 (2022), pp. 39–53. DOI: 10.1016/j.cortex.2022.08.003.
- [11] Mariela Mihaylova, Simon Gorin, Thomas P. Reber, and **Nicolas Rothen**. "A Meta-Analysis on Mobile-Assisted Language Learning Applications: Benefits and Risks". In: *Psychologica Belgica* 62.1 (1 2022), pp. 252–271. DOI: 10.5334/pb.1146.
- [12] Simon Schwab, Perrine Janiaud, Michael Dayan, Valentin Amrhein, Radoslaw Panczak, Patricia M. Palagi, Lars G. Hemkens, Meike Ramon, **Nicolas Rothen**, Stephen Senn, Eva Furrer, and Leonhard Held. "Ten Simple Rules for Good Research Practice". In: *PLOS Computational Biology* 18.6 (2022), e1010139. DOI: 10.1371/journal.pcbi.1010139.
- [13] Angelo Belardi, Salome Pedrett, **Nicolas Rothen**, and Thomas P. Reber. "Spacing, Feedback, and Testing Boost Vocabulary Learning in a Web Application". In: *Frontiers in Psychology* 12 (2021), p. 5072. DOI: 10.3389/fpsyg.2021.757262.
- [14] Nathanael S. Jost, Sina L. Jossen, **Nicolas Rothen**, and Corinna S. Martarelli. "The Advantage of Distributed Practice in a Blended Learning Setting". In: *Education and Information Technologies* (2021). DOI: 10.1007/s10639-020-10424-9.
- [15] Laura Lungu, **Nicolas Rothen**, and Devin B. Terhune. "The Time Course of Synaesthetic Colour Perception". In: *Cortex* 141 (2021), pp. 322–330. DOI: 10.1016/j.cortex.2021.04.018.
- [16] Rebecca Ovalle-Fresa, Sophie Ankner, and **Nicolas Rothen**. "Enhanced Perception and Memory: Insights from Synesthesia and Expertise". In: *Cortex* 140 (2021), pp. 14–25. DOI: 10.1016/j.cortex.2021.01.024.
- [17] Rebecca Ovalle-Fresa, Arif Sinan Uslu, and **Nicolas Rothen**. "Levels of Processing Affect Perceptual Features in Visual Associative Memory". In: *Psychological Science* 32.2 (2021), pp. 267–279. DOI: 10.1177/0956797620965519.
- [18] **Nicolas Rothen**, Michael Burtscher, Fernand Gobet, Gregory Mantzouranis, Julien Mayor, Angelo Pirrone, Sabine Raeder, Meike Ramon, and Jérôme Rossier. "The Beginning of a New Era". In: *Swiss Psychology Open* 1.1 (1 2021), p. 1. DOI: 10.5334/spo.27.
- [19] Matthias Hartmann, Corinna S. Martarelli, Thomas P. Reber, and **Nicolas Rothen**. "Does a Smartphone on the Desk Drain Our Brain? No Evidence of Cognitive Costs Due to Smartphone Presence in a Short-Term and Prospective Memory Task". In: *Consciousness and Cognition* 86 (2020), p. 103033. DOI: 10.1016/j.concog.2020.103033.
- [20] Jörg Jewanski, Julia Simner, Sean A. Day, **Nicolas Rothen**, and Jamie Ward. "Recognizing Synesthesia on the International Stage: The First Scientific Symposium on Synesthesia (at The International Conference of Physiological Psychology, Paris, 1889)". In: *Journal of the History of the Neurosciences* 0.0 (2020), pp. 1–28. DOI: 10.1080/0964704X.2020.1747866.
- [21] Jörg Jewanski, Julia Simner, Sean A. Day, **Nicolas Rothen**, and Jamie Ward. "The "Golden Age" of Synesthesia Inquiry in the Late Nineteenth Century (1876–1895)". In: *Journal of the History of the Neurosciences* 29.2 (2020), pp. 175–202. DOI: 10.1080/0964704X.2019.1636348.
- [22] Jörg Jewanski, Julia Simner, Sean A. Day, **Nicolas Rothen**, and Jamie Ward. "The Evolution of the Concept of Synesthesia in the Nineteenth Century as Revealed through the History of Its Name". In: *Journal of the History of the Neurosciences* 29.3 (2020), pp. 259–285. DOI: 10.1080/0964704X.2019.1675422.
- [23] Matthias Kliegel and **Nicolas Rothen**. "The End of an Era". In: *Swiss Journal of Psychology* 79.3-4 (2020), pp. 87–88. DOI: 10.1024/1421-0185/a000244.
- [24] **Nicolas Rothen**, Christopher J. Berry, Anil K. Seth, Sabine Oligschläger, and Jamie Ward. "A Single System Account of Enhanced Recognition Memory in Synaesthesia". In: *Memory & Cognition* 48.2 (2020), pp. 188–199. DOI: 10.3758/s13421-019-01001-8.

- [25] Rebecca Ovalle-Fresa and **Nicolas Rothen**. "Development of Synaesthetic Consistency: Repeated Autonomous Engagement with Graphemes and Colours Leads to Consistent Associations". In: *Consciousness and Cognition* 73 (2019), p. 102764. DOI: 10.1016/j.concog.2019.102764.
- [26] Rebecca Ovalle-Fresa and **Nicolas Rothen**. "Training Enhances Fidelity of Color Representations in Visual Long-Term Memory". In: *Journal of Cognitive Enhancement* 3.3 (2019), pp. 315–327. DOI: 10.1007/s41465-019-00121-y.
- [27] David J. Schwartzman, Daniel Bor, **Nicolas Rothen**, and Anil K. Seth. "Neurophenomenology of Induced and Natural Synaesthesia". In: *Philosophical Transactions of the Royal Society B: Biological Sciences* 374.1787 (2019), p. 20190030. DOI: 10.1098/rstb.2019.0030.
- [28] Thomas P. Reber and **Nicolas Rothen**. "Educational App-Development Needs to Be Informed by the Cognitive Neurosciences of Learning & Memory". In: *Science of Learning* 3.1 (2018), p. 22. DOI: 10.1038/s41539-018-0039-4.
- [29] **Nicolas Rothen** and Beat Meier. "Spontaneous Retrieval Reveals Right-Ear Advantage in Prospective Memory". In: *Quarterly Journal of Experimental Psychology* 71.4 (2018), pp. 940–948. DOI: 10.1080/17470218.2017.1307867.
- [30] **Nicolas Rothen**, David J. Schwartzman, Daniel Bor, and Anil K. Seth. "Coordinated Neural, Behavioral, and Phenomenological Changes in Perceptual Plasticity through Overtraining of Synesthetic Associations". In: *Neuropsychologia* 111 (2018), pp. 151–162. DOI: 10.1016/j.neuropsychologia.2018.01.030.
- [31] **Nicolas Rothen**, Anil K. Seth, and Jamie Ward. "Synesthesia Improves Sensory Memory, When Perceptual Awareness Is High". In: *Vision Research* 153 (2018), pp. 1–6. DOI: 10.1016/j.visres.2018.09.002.
- [32] **Nicolas Rothen**, Gergely Bartl, Anna Franklin, and Jamie Ward. "Electrophysiological Correlates and Psychoacoustic Characteristics of Hearing-Motion Synaesthesia". In: *Neuropsychologia* 106 (2017), pp. 280–288. DOI: 10.1016/j.neuropsychologia.2017.08.031.
- [33] **Nicolas Rothen** and Beat Meier. "Time-of-Day Affects Prospective Memory Differently in Younger and Older Adults". In: *Aging, Neuropsychology, and Cognition* 24.6 (2017), pp. 600–612. DOI: 10.1080/13825585.2016.1238444.
- [34] Jamie Ward, **Nicolas Rothen**, Acer Chang, and Ryota Kanai. "The Structure of Inter-Individual Differences in Visual Ability: Evidence from the General Population and Synaesthesia". In: *Vision Research. Individual Differences as a Window into the Structure and Function of the Visual System* 141 (2017), pp. 293–302. DOI: 10.1016/j.visres.2016.06.009.
- [35] Andy D. Meador, Julia Simner, **Nicolas Rothen**, Duncan A. Carmichael, and Jamie Ward. "Different Dimensions of Cognitive Style in Typical and Atypical Cognition: New Evidence and a New Measurement Tool". In: *PLoS ONE* 11.5 (2016), e0155483. DOI: 10.1371/journal.pone.0155483.
- [36] **Nicolas Rothen**, Kristin Jünemann, Andy D. Meador, Vera Burckhardt, and Jamie Ward. "The Sensitivity and Specificity of a Diagnostic Test of Sequence-Space Synesthesia". In: *Behavior Research Methods* 48.4 (2016), pp. 1476–1481. DOI: 10.3758/s13428-015-0656-2.
- [37] **Nicolas Rothen** and Beat Meier. "Time of Day Affects Implicit Memory for Unattended Stimuli". In: *Consciousness and Cognition* 46 (2016), pp. 1–6. DOI: 10.1016/j.concog.2016.09.012.
- [38] Beat Meier, Katrin Lunke, and **Nicolas Rothen**. "How Mirror-Touch Informs Theories of Synesthesia". In: *Cognitive Neuroscience* 6.2-3 (2015), pp. 42–44. DOI: 10.1080/17588928.2015.1057484.
- [39] Beat Meier, Alodie Rey-Mermet, and **Nicolas Rothen**. "Turning Univalent Stimuli Bivalent: Synesthesia Can Cause Cognitive Conflict in Task Switching". In: *Cognitive Neuroscience* 6.2-3 (2015), pp. 48–55. DOI: 10.1080/17588928.2015.1017449.
- [40] Beat Meier and **Nicolas Rothen**. "Developing Synaesthesia: A Primer". In: *Frontiers in Human Neuroscience* 9 (2015), p. 211. DOI: 10.3389/fnhum.2015.00211.

- [41] Daniel Bor, **Nicolas Rothen**, David J. Schwartzman, Stephanie Clayton, and Anil K. Seth. "Adults Can Be Trained to Acquire Synesthetic Experiences". In: *Scientific Reports* 4.7089 (2014), pp. 1–8. DOI: 10.1038/srep07089.
- [42] Beat Meier, **Nicolas Rothen**, and Stefan Walter. "Developmental Aspects of Synaesthesia across the Adult Lifespan". In: *Frontiers in Human Neuroscience* 8 (2014), p. 129. DOI: 10.3389/fnhum.2014.00129.
- [43] Gaby Pfeifer, **Nicolas Rothen**, Jamie Ward, Dennis Chan, and Natasha Sigala. "Associative Memory Advantage in Grapheme-Color Synesthetes Compared to Older, but Not Young Adults". In: *Frontiers in Psychology* 5 (2014), p. 696. DOI: 10.3389/fpsyg.2014.00696.
- [44] **Nicolas Rothen** and Beat Meier. "Acquiring Synaesthesia: Insights from Training Studies". In: *Frontiers in Human Neuroscience* 8 (2014), p. 109. DOI: 10.3389/fnhum.2014.00109.
- [45] **Nicolas Rothen** and Beat Meier. "Psychophysiology of Prospective Memory". In: *Memory* 22.7 (2014), pp. 867–880. DOI: 10.1080/09658211.2013.847106.
- [46] Beat Meier, Alodie Rey-Mermet, **Nicolas Rothen**, and Peter Graf. "Recognition Memory across the Lifespan: The Impact of Word Frequency and Study-Test Interval on Estimates of Familiarity and Recollection". In: *Frontiers in Psychology* 4 (2013), p. 787. DOI: 10.3389/fpsyg.2013.00787.
- [47] Beat Meier and **Nicolas Rothen**. "Grapheme-Color Synaesthesia Is Associated with a Distinct Cognitive Style". In: *Frontiers in Psychology* 4 (2013), p. 632. DOI: 10.3389/fpsyg.2013.00632.
- [48] Jamie Pritchard, **Nicolas Rothen**, Daniel Coolbear, and Jamie Ward. "Enhanced Associative Memory for Colour (but Not Shape or Location) in Synaesthesia". In: *Cognition* 127.2 (2013), pp. 230–234. DOI: 10.1016/j.cognition.2012.12.012.
- [49] **Nicolas Rothen** and Beat Meier. "Why Vicarious Experience Is Not an Instance of Synesthesia". In: *Frontiers in Human Neuroscience* (2013), p. 128. DOI: 10.3389/fnhum.2013.00128.
- [50] **Nicolas Rothen**, Danko Nikolić, Uta Maria Jürgens, Aleksandra Mroczko-Wąsowicz, Josephine Cock, and Beat Meier. "Psychophysiological Evidence for the Genuineness of Swimming-Style Colour Synaesthesia". In: *Consciousness and Cognition* 22.1 (2013), pp. 35–46. DOI: 10.1016/j.concog.2012.11.005.
- [51] **Nicolas Rothen**, Ryan B. Scott, Andy D. Meador, Daniel J. Coolbear, Vera Burckhardt, and Jamie Ward. "Synesthetic Experiences Enhance Unconscious Learning". In: *Cognitive Neuroscience* 4.3-4 (2013), pp. 231–238. DOI: 10.1080/17588928.2013.847077.
- [52] **Nicolas Rothen**, Anil K. Seth, Christoph Witzel, and Jamie Ward. "Diagnosing Synaesthesia with Online Colour Pickers: Maximising Sensitivity and Specificity". In: *Journal of Neuroscience Methods* 215.1 (2013), pp. 156–160. DOI: 10.1016/j.jneumeth.2013.02.009.
- [53] **Nicolas Rothen**, Elias Tsakanikos, Beat Meier, and Jamie Ward. "Coloured Letters and Numbers (CLaN): A Reliable Factor-Analysis Based Synaesthesia Questionnaire". In: *Consciousness and Cognition* 22.3 (2013), pp. 1047–1060. DOI: 10.1016/j.concog.2013.07.005.
- [54] Devin B. Terhune, **Nicolas Rothen**, and Roi Cohen Kadosh. "Correcting Misconceptions about Synaesthesia". In: *Neurobiology of Learning and Memory* 103 (2013), pp. 1–2. DOI: 10.1016/j.nlm.2013.02.004.
- [55] Jamie Ward, Peter Hovard, Alicia Jones, and **Nicolas Rothen**. "Enhanced Recognition Memory in Grapheme-Color Synaesthesia for Different Categories of Visual Stimuli". In: *Frontiers in Psychology* 4 (2013), p. 762. DOI: 10.3389/fpsyg.2013.00762.
- [56] **Nicolas Rothen**, Beat Meier, and Jamie Ward. "Enhanced Memory Ability: Insights from Synaesthesia". In: *Neuroscience & Biobehavioral Reviews* 36.8 (2012), pp. 1952–1963. DOI: 10.1016/j.neubiorev.2012.05.004.
- [57] **Nicolas Rothen** and Devin B. Terhune. "Increased Resting State Network Connectivity in Synesthesia: Evidence for a Neural Basis of Synesthetic Consistency". In: *The Journal of Neuroscience* 32.40 (2012), pp. 13641–13643. DOI: 10.1523/JNEUROSCI.3577-12.2012.

- [58] Beat Meier, Philipp von Wartburg, Sibylle Matter, **Nicolas Rothen**, and Rolf Reber. "Performance Predictions Improve Prospective Memory and Influence Retrieval Experience." In: *Canadian Journal of Experimental Psychology/Revue canadienne de psychologie expérimentale* 65.1 (2011), pp. 12–18. DOI: 10.1037/a0022784.
- [59] Danko Nikolić, Uta M. Jürgens, **Nicolas Rothen**, Beat Meier, and Aleksandra Mroczko. "Swimming-Style Synesthesia". In: *Cortex* 47.7 (2011), pp. 874–879. DOI: 10.1016/j.cortex.2011.02.008.
- [60] **Nicolas Rothen**, Andrea-Laura Wantz, and Beat Meier. "Training Synaesthesia". In: *Perception* 40.10 (2011), pp. 1248–1250. DOI: 10.1068/p6984.
- [61] **Nicolas Rothen** and Beat Meier. "Grapheme–Colour Synaesthesia Yields an Ordinary Rather than Extraordinary Memory Advantage: Evidence from a Group Study". In: *Memory* 18.3 (2010), pp. 258–264. DOI: 10.1080/09658210903527308.
- [62] **Nicolas Rothen** and Beat Meier. "Higher Prevalence of Synaesthesia in Art Students". In: *Perception* 39.5 (2010), pp. 718–720. DOI: 10.1068/p6680.
- [63] **Nicolas Rothen**, Thomas Nyffeler, Roman von Wartburg, René Müri, and Beat Meier. "Parieto-Occipital Suppression Eliminates Implicit Bidirectionality in Grapheme-Colour Synaesthesia". In: *Neuropsychologia* 48.12 (2010), pp. 3482–3487. DOI: 10.1016/j.neuropsychologia.2010.07.032.
- [64] Sylvia Frey, Silvia Balu, Sarah Greusing, **Nicolas Rothen**, and Christian Cajochen. "Consequences of the Timing of Menarche on Female Adolescent Sleep Phase Preference". In: *PLoS ONE* 4.4 (2009), e5217. DOI: 10.1371/journal.pone.0005217.
- [65] Beat Meier and **Nicolas Rothen**. "Training Grapheme-Colour Associations Produces a Synaesthetic Stroop Effect, but Not a Conditioned Synaesthetic Response". In: *Neuropsychologia* 47.4 (2009), pp. 1208–1211. DOI: 10.1016/j.neuropsychologia.2009.01.009.
- [66] **Nicolas Rothen** and Beat Meier. "Do Synesthetes Have a General Advantage in Visual Search and Episodic Memory? A Case for Group Studies". In: *PLoS ONE* 4.4 (2009), e5037. DOI: 10.1371/journal.pone.0005037.
- [67] Beat Meier and **Nicolas Rothen**. "When Conditioned Responses "Fire Back": Bidirectional Cross-Activation Creates Learning Opportunities in Synesthesia". In: *Neuroscience* 147.3 (2007), pp. 569–572. DOI: 10.1016/j.neuroscience.2007.04.008.

Books

- [68] **Nicolas Rothen** and Alodie Rey-Mermet. *Wissenschaftliches Arbeiten Und Kommunizieren [Scientific Practice and Communication]*. 1st ed. Self-publishing, 2024. 145 pp. DOI: 10.17605/OSF.IO/4VFUQ. URL: <https://wissarbkom.bitbucket.io/>.

Book Chapters

- [69] Giorgia Cona and **Nicolas Rothen**. "Neuropsychological and Physiological Correlates of Prospective Memory". In: *Prospective Memory*. Ed. by Jan Rummel and Mark McDaniel. 1st ed. New York, NY, USA: Routledge, 2019, pp. 95–115. ISBN: 978-1-138-54580-9.
- [70] Beat Meier and **Nicolas Rothen**. "Synaesthesia and Memory". In: *Oxford Handbook of Synaesthesia*. Ed. by Julia Simner and Edward M Hubbard. Oxford, UK: Oxford University Press, 2013, pp. 692–706.

Presentations

Invited Talks

- [71] **Nicolas Rothen**. "Introduction to Open Science". Invited talk. 5th Annual Meeting of the Swiss Society for Early Childhood Research (SSECR) (St.Gallen, Switzerland). 2024.

- [72] **Nicolas Rothen**. "Design and Synesthesia: Perspective of a Memory Researcher". Invited talk. Art in Conversation Seminar 3: Design (Virtual talk: University of St. Andrews, St. Andrews, UK). 2023.
- [73] **Nicolas Rothen**. "Foundations of Enhanced Memory". Invited talk. 1st Winter Congress of the International Psychology Students Initiative (University of Zurich, Zurich, Switzerland). 2023.
- [74] **Nicolas Rothen**. "Foundations of Enhanced Memory". Invited talk (University of Southampton, Southampton, UK). 2023.
- [75] **Nicolas Rothen**. "Advantages and Challenges of Open Access Publishing / Foundations of Enhanced Memory". Invited talk (Virtual talk: University of Stirling, Stirling, UK). 2022.
- [76] **Nicolas Rothen**. "Distant Learning: Lehr- und Lernformen in der heutigen Unterrichtspraxis [Distant Learning: Forms of Teaching and Learning in Today's Teaching Practice]". Invited talk (University of Basel, Basel, Switzerland). 2021.
- [77] **Nicolas Rothen**. "Foundations of Enhanced Memory". Invited talk (Virtual talk: Donders Centre for Cognition, Nijmegen, Netherlands). 2020.
- [78] **Nicolas Rothen**. "How Individual Differences in Perception Affect Memory". Invited talk (University of Heidelberg, Heidelberg, Germany). 2017.
- [79] **Nicolas Rothen**. "On the Links between Perception and Memory". Invited talk (University of Giessen, Giessen, Germany). 2017.
- [80] **Nicolas Rothen**. "Training-Induced Synaesthesia: A Special Case of Expertise?" Invited talk (University of Chinese Academy of Science's, Yanqihu, China). 2017.
- [81] **Nicolas Rothen**. "Memory and Neural Plasticity: What We Can Learn from Synaesthesia Research". Invited talk (Centre de Recherche Cerveau et Cognition (CerCo), Toulouse, France). 2016.
- [82] **Nicolas Rothen**. "Perceptual Functioning and Memory Performance: How Synaesthesia Can Inform Theories in Cognitive Science". Invited talk (University of Amsterdam, Amsterdam, Netherlands). 2014.
- [83] **Nicolas Rothen**. "Synaesthetic Experiences Enhance Unconscious Learning". Invited talk (Universitätsklinikum Hamburg-Eppendorf, Hamburg, Germany). 2014.
- [84] **Nicolas Rothen**. "Synaesthesia: Memory Advantages, Implicit Bidirectionality, and Training of Synaesthetic Experiences". Invited talk (University of Amsterdam, Amsterdam, Netherlands). 2009.

Conference Symposia

- [85] **Nicolas Rothen** and Beat Meier. "Neural Basis of Prospective Memory". Symposium. ICOM, 6th International Conference on Memory (Budapest, Hungary). 2016.
- [86] **Nicolas Rothen** and Jennifer Rusted. "Current Methods and Advances in Prospective Memory Research". Symposium. ESCOP, 19th Meeting of the European Society for Cognitive Psychology (Paphos, Cyprus). 2015.
- [87] **Nicolas Rothen**, Stefan Walter, and Beat Meier. "Prospective Memory: Psychology of the Future". Symposium. SPS, 14th Conference of the Swiss Psychological Society (Geneva, Switzerland). 2015.
- [88] **Nicolas Rothen** and Jamie Ward. "Synaesthesia: How Unusual Perception Can Inform Normal Cognition". Symposium. ESCOP, 18th Meeting of the European Society for Cognitive Psychology (Budapest, Hungary). 2013.
- [89] Beat Meier and **Nicolas Rothen**. "Memory and Synaesthesia". Symposium. ICOM, 5th International Conference on Memory (York, UK). 2011.

Conference Talks

- [90] Tobias Kühlwein, Chhavi Sachdeva, Jan Rummel, and **Nicolas Rothen**. "Do Prospective Memory and Working Memory Share Common Processes? Evidence from a Color Matching Task". Talk. TeaP, 67th Conference of Experimental Psychologists (Frankfurt, Germany). 2025.

- [91] **Nicolas Rothen**, Mirela Dubravac, Chhavi Sachdeva, and Rebecca Ovalle-Fresa. "Levels of Processing Effects on Visual Associative Memory for Basic Perceptual Features". Talk. TeaP, 67th Conference of Experimental Psychologists (Frankfurt, Germany). 2025.
- [92] Niels Kempkens, **Nicolas Rothen**, and Alodie Rey-Mermet. "The AX-CPT Is Not the New Task to Measure Attentional Control: Challenges in Reliability and Validity". Talk. TeaP, 66th Conference of Experimental Psychologists (Regensburg, Germany). 2024.
- [93] Alodie Rey-Mermet and **Nicolas Rothen**. "Extracting Attentional Control from Working-Memory Tasks: Not a Solution". Talk. TeaP, 66th Conference of Experimental Psychologists (Regensburg, Germany). 2024.
- [94] Chhavi Sachdeva, Emily Whelan, Rebecca Ovalle-Fresa, Jamie Ward, and **Nicolas Rothen**. "How Perceptual Ability Shapes Memory". Talk. TeaP, 66th Conference of Experimental Psychologists (Regensburg, Germany). 2024.
- [95] Chhavi Sachdeva, Emily Whelan, **Nicolas Rothen**, and Jamie Ward. "Synaesthesia as a Model for Assessing Individual Differences in Visual Perception and Memory Performance". Talk. 2024 UKSA / ASA Synaesthesia Conference (Oxford, UK). 2024.
- [96] A. Rey-Mermet and **Nicolas Rothen**. "The Cognitive Boost at the Peak of Circadian Arousal Is Not as General as Previously Thought!". Talk. TEAP, 65th Conference of Experimental Psychologists (Trier, Germany). 2023.
- [97] Alodie Rey-Mermet and **Nicolas Rothen**. "Attentional Control Can Be Extracted at the Latent-Variable Level from Working-Memory Tasks – But This Finding Is Not Replicated across Datasets". Talk. ESCOP, 22nd Meeting of the European Society for Cognitive Psychology (Porto, Portugal). 2023.
- [98] **Nicolas Rothen**. "Chronotype and Time-of-Day: No Evidence for Differential Effects on Controlled and Automatic Processes at Memory Retrieval". Talk. ESCOP, 22nd Meeting of the European Society for Cognitive Psychology (Porto, Portugal). 2023.
- [99] **Nicolas Rothen**. "No Evidence for Differential Effects of Chronotype and Time of Day on Controlled and Automatic Processes at Memory Retrieval". Talk. TeaP, 65th Conference of Experimental Psychologists (Trier, Germany). 2023.
- [100] **Nicolas Rothen** and Alodie Rey-Mermet. "The Impact of Circadian Arousal on Cognition Is Not as General as Previously Thought". Talk. ESCOP, 21st Meeting of the European Society for Cognitive Psychology (Lille, France). 2022.
- [101] Alodie Rey-Mermet and **Nicolas Rothen**. "The Synchrony Effect Is Not as General and Robust as Previously Thought! Evidence from a Latent-Variable Analysis". Talk. Psychonomics, 62nd Annual Meeting of the Psychonomic Society (Virtual Meeting). 2021.
- [102] **Nicolas Rothen** and Rebecca Ovalle Fresa. "Synaesthesia and Expertise Share Common Cognitive Profiles". Talk. ESCOP, 21st Conference of the European Society for Cognitive Psychology (Tenerife, Spain). 2019.
- [103] Rebecca Ovalle Fresa and **Nicolas Rothen**. "Training Improves Recall Precision for Colours of Novel Objects". Talk. TEAP, 60th Conference of Experimental Psychologists (Marburg, Germany). 2018.
- [104] **Nicolas Rothen** and Rebecca Ovalle Fresa. "Enhanced Colour Perception and Memory for Colours in Grapheme-Colour Synaesthetes and Colour Experts". Talk. TEAP, 60th Conference of Experimental Psychologists (Marburg, Germany). 2018.
- [105] **Nicolas Rothen** and Beat Meier. "Time-of-Day Affects Prospective Memory Differently in Younger and Older Adults". Talk. TEAP, 59th Conference of Experimental Psychologists (Dresden, Germany). 2017.
- [106] **Nicolas Rothen**, David J. Schwartzman, Daniel Bor, and Anil K. Seth. "Neural, Behavioural, and Phenomenological Changes in Training-Induced Synaesthesia". Talk. ESCOP, 20th Meeting of the European Society for Cognitive Psychology (Potsdam, Germany). 2017.

- [107] Rebecca Ovalle Fresa and **Nicolas Rothen**. “Evidence for a Perception Memory Continuum: An EEG Study in a Healthy Population”. Talk. ICOM, 6th International Conference on Memory (Budapest, Hungary). 2016.
- [108] **Nicolas Rothen** and Beat Meier. “Right Ear Advantage in Prospective Memory: The Retrieval Strategy Makes the Difference”. Talk. ICOM, 6th International Conference on Memory (Budapest, Hungary). 2016.
- [109] **Nicolas Rothen**, David J. Schwartzman, Daniel Bor, and Anil K. Seth. “Neural, Behavioural, and Phenomenological Changes in Training-Induced Synaesthesia”. Talk. UKSA, 9th Conference of the UK Synaesthesia Association (Dublin, UK). 2016.
- [110] **Nicolas Rothen** and Beat Meier. “Automatic and Controlled Processes in Prospective Memory Retrieval, Age, and Time of Day”. Talk. TEAP, 57th Conference of Experimental Psychologists (Hildesheim, Germany). 2015.
- [111] **Nicolas Rothen**, Yoko Nagai, and Jennifer Rusted. “Psychophysiology of Prospective Memory: The Effects of Autonomic Arousal and Cue- Focality on Prospective Memory Retrieval”. Talk. ESCOP, 19th Meeting of the European Society for Cognitive Psychology (Paphos, Cyprus). 2015.
- [112] **Nicolas Rothen**, Yoko Nagai, and Jennifer Rusted. “Psychophysiology of Prospective Memory: The Effects of Autonomic Arousal and Cue-Focality on Prospective Memory Retrieval”. Talk. SPS, 14th Conference of the Swiss Psychological Society (Geneva, Switzerland). 2015.
- [113] **Nicolas Rothen** and Beat Meier. “Attention Affects Prospective Memory Performance in Dichotic Listening Paradigm”. Talk. SGP, 49th Conference of the German Psychological Society (Bochum, Germany). 2014.
- [114] **Nicolas Rothen**, David J. Schwartzman, Paolo Canal, and Jamie Ward. “Neurophysiological Basis of Enhanced Memory in Synaesthesia”. Talk. UKSA, 8th Conference of the UK Synaesthesia Association (London, UK). 2014.
- [115] **Nicolas Rothen** and Jamie Ward. “Memory: Insights from Grapheme-Colour Synaesthesia”. Talk. ESCOP, 18th Meeting of the European Society for Cognitive Psychology (Budapest, Hungary). 2013.
- [116] **Nicolas Rothen**, Beat Meier, and Jamie Ward. “Enhanced Memory Ability: Insights from Synaesthesia”. Talk. IMRF, 13th International Multisensory Research Forum (Oxford, UK). 2012.
- [117] **Nicolas Rothen**, Anil K. Seth, and Jamie Ward. “How Synaesthesia Affects Different Memory Systems and Processes”. Talk. UKSA, 7th Conference of the UK Synaesthesia Association (Oxford, UK). 2012.
- [118] **Nicolas Rothen** and Uta Maria Jürgens. “Swimming-Style Synaesthesia”. Talk. UKSA, 6th Conference of the UK Synaesthesia Association (London, UK). 2011.
- [119] **Nicolas Rothen** and Beat Meier. “Grapheme-Colour Synaesthesia Yields an Ordinary Rather than Extraordinary Memory Advantage, Evidence from a Group Study”. Talk. ICOM, 5th International Conference on Memory (York, UK). 2011.
- [120] **Nicolas Rothen** and Beat Meier. “Do Synaesthetes Have General Memory Advantages?” Talk. ArteCita, 3rd International Conference on Synaesthesia, Science and Art (Granada, Spain). 2010.
- [121] **Nicolas Rothen** and Beat Meier. “Psychophysiological Signature of Prospective Memory and Emotional Reactions”. Talk. TEAP, 52th Conference of Experimental Psychologists (Saarbrücken, Germany). 2010.
- [122] **Nicolas Rothen**, Thomas Nyffeler, Roman von Wartburg, René Müri, and Beat Meier. “The Synaesthetic Conditioning Task Reveals That Parieto-Occipital Suppression Eliminates Implicit Bidirectionality in Grapheme-Colour Synaesthesia”. Talk. UKSA, 5th Conference of the UK Synaesthesia Association (Brighton, UK). 2010.
- [123] **Nicolas Rothen** and Beat Meier. “Do Synaesthetes Have General Memory Advantages?” Talk. PSYCHO, 6th National Conference for Psychology Students (Kandersteg, Switzerland). 2009.

- [124] **Nicolas Rothen** and Beat Meier. "Do Synaesthetes Have a General Advantage in Visual Search and Episodic Memory?" Talk. UKSA, 4th Conference of the UK Synaesthesia Association (Edinburgh, UK). 2008.
- [125] **Nicolas Rothen** and Beat Meier. "Do Synaesthetes Have a General Advantage in Visual Search and Episodic Memory? A Case for Group Studies". Talk. PSYCHO, 5th National Conference for Psychology Students (Vaumarcus, Switzerland). 2008.

Conference Posters

- [126] Chhavi Sachdeva, Emily Whelan, Rebecca Ovalle-Fresa, Alodie Rey-Mermet, Jamie Ward, and **Nicolas Rothen**. "How Perceptual Ability Shapes Memory". Poster. TeaP, 67th Conference of Experimental Psychologists (Frankfurt, Germany). 2025.
- [127] Tobias Kühlwein, Jan Rummel, and **Nicolas Rothen**. "Do Prospective Memory and Working Memory Share a Common Processes? Evidence from a Color Matching Task". Poster. TeaP, 66th Conference of Experimental Psychologists (Regensburg, Germany). 2024.
- [128] Niels Kempkens, **Nicolas Rothen**, and Alodie Rey-Mermet. "The Split-Half Reliability in the AX-CPT Is as Questionable as in Other Tasks Used to Assess Attentional Control". Poster. ESCOP, 22nd Meeting of the European Society for Cognitive Psychology (Porto, Portugal). 2023.
- [129] **Nicolas Rothen**, Sophie Ankner, and Rebecca Ovalle-Fresa. "Enhanced Perception and Memory: Insights from Synaesthesia and Expertise". Poster. Symposium on Human Sensory Perception (Brighton, UK). 2023.
- [130] Simon Gorin, **Nicolas Rothen**, and Thomas P. Reber. "Learning a Second Language with an App: What Learning Principles Are the Most Effective?" Poster. SPS, 17th Conference of the Swiss Psychological Society (Zurich, Switzerland). 2022.
- [131] Simon Gorin, Nicole Skieresz, Sandy Marca, Thomas P. Reber, and **Nicolas Rothen**. "Learning Second Language Vocabulary with a Mobile Application: What Role for Working Memory and Rhythm Production?" Poster. ESCOP, 21st Meeting of the European Society for Cognitive Psychology (Lille, France). 2022.
- [132] Mariela Mihaylova, Alodie Rey-Mermet, and **Nicolas Rothen**. "Does Retrieval Practice Protect Memory against Test Anxiety?" Poster. SPS, 17th Conference of the Swiss Psychological Society (Zurich, Switzerland). 2022.
- [133] Mariela Mihaylova, Alodie Rey-Mermet, and **Nicolas Rothen**. "Does Retrieval Practice Protect Memory against Test Anxiety?" Poster. ESCOP, 21st Meeting of the European Society for Cognitive Psychology (Lille, France). 2022.
- [134] Rebecca Ovalle-Fresa, Sarah V. Di Pietro, Thomas P. Reber, and **Nicolas Rothen**. "Standardized Database of Abstract Stimuli". Poster. SPS, 17th Conference of the Swiss Psychological Society (Zurich, Switzerland). 2022.
- [135] Alodie Rey-Mermet, Rebecca Ovalle-Fresa, Thomas P. Reber, and **Nicolas Rothen**. "Can We Report How We Perceive? Limited Evidence for Assessing Low Level Visual Processing via First Person Report". Poster. SPS, 17th Conference of the Swiss Psychological Society (Zurich, Switzerland). 2022.
- [136] Alodie Rey-Mermet and **Nicolas Rothen**. "The Cognitive Boost at the Peak of Circadian Arousal Is Not as Robust and General as Previously Thought!" Poster. SPS, 17th Conference of the Swiss Psychological Society (Zurich, Switzerland). 2022.
- [137] Nicole Skieresz, Sandy Marca, Simon Gorin, Thomas Reber, and **Nicolas Rothen**. "The N400 as a Neurophysiological Marker of Second-Language Learning". Poster. FENS Forum, Federation of European Neuroscience Societies Forum (Paris, France). 2022.
- [138] Simon Gorin, Nicole Skieresz, Sandy Marca, Thomas P. Reber, and **Nicolas Rothen**. "Mobile-Based Language Learning in Adults: What Promotes Learning Performance the Best?" Poster. Psychonomics, 62nd Annual Meeting of the Psychonomic Society (Virtual Meeting). 2021.

- [139] **Nicolas Rothen**, Alodie Rey-Mermet, Rebecca Ovalle-Fresa, and Thomas P. Reber. "Limited Evidence for Individual Differences in Low-Level Visual Perceptual Processing Preferences". Poster. Psychonomics, 62nd Annual Meeting of the Psychonomic Society (Virtual Meeting). 2021.
- [140] Mariela Mihaylova, Simon Gorin, Thomas P. Reber, and **Nicolas Rothen**. "A Meta-Analysis on Mobile-Assisted Language Applications Reveals Moderate Learning Benefit and Significant Publication Bias." Poster. Psychonomics, 61st Annual Meeting of the Psychonomic Society (Virtual Meeting). 2020.
- [141] Rebecca Ovalle Fresa and **Nicolas Rothen**. "Development of Synaesthetic Consistency: Repeated Engagement with Graphemes and Colours Leads to Consistent Associations". Poster. ESCOP, 21st Conference of the European Society for Cognitive Psychology (Tenerife, Spain). 2019.
- [142] Rebecca Ovalle Fresa and **Nicolas Rothen**. "Enhancing Visual Mental Representations: A Training Study". Poster. CNB, Clinical Neuroscience Bern - 13th Annual Meeting (Bern, Switzerland). 2018.
- [143] Rebecca Ovalle Fresa and **Nicolas Rothen**. "Training Can Enhance Precision of Color-Representations in Visual Long-Term Memory". Poster. International Meeting of the Psychonomic Society (Amsterdam, Netherlands). 2018.
- [144] **Nicolas Rothen**. "From Perception to Memory: A Comparison of Colour Experts and Colour Synaesthetes". Poster. Royal Society Discussion Meeting "Bridging Senses: New Developments in Synaesthesia" (London, UK). 2018.
- [145] **Nicolas Rothen** and Rebecca Ovalle Fresa. "Colour Perception and Colour Memory in Colour Synaesthetes and Colour Experts: A Comparison". Poster. International Meeting of the Psychonomic Society (Amsterdam, Netherlands). 2018.
- [146] **Nicolas Rothen** and Rebecca Ovalle Fresa. "Comparable Benefits in Perception and Memory for Colour Synaesthetes and Colour Experts". Poster. CNB, Clinical Neuroscience Bern - 13th Annual Meeting (Bern, Switzerland). 2018.
- [147] Rebecca Ovalle Fresa and **Nicolas Rothen**. "Fine Grained Visual Representations Contribute to the Content of Visual Long-Term Memory". Poster. ESCOP, 20th Meeting of the European Society for Cognitive Psychology (Potsdam, Germany). 2017.
- [148] Rebecca Ovalle Fresa and **Nicolas Rothen**. "Evidence for a Perception Memory Continuum: An EEG Study in a Healthy Population". Poster. CNB, Clinical Neuroscience Bern - 11th Annual Meeting (Bern, Switzerland). 2016.
- [149] **Nicolas Rothen**, Anil K. Seth, and Jamie Ward. "How Synaesthesia Affects Different Memory Systems and Processes". Poster. ASSC, 16th Conference of the Association for the Scientific Study of Consciousness (Brighton, UK). 2012.
- [150] **Nicolas Rothen**, Danko Nikolić, Uta M. Jürgens, Aleksandra Mroczko-Wąsowicz, Josephine Cock, and Beat Meier. "Swimming-Style Colour Synaesthesia: Genuine or Acquired through Training?" Poster. UKSA, 6th Conference of the UK Synaesthesia Association (London, UK). 2011.
- [151] **Nicolas Rothen** and Beat Meier. "Psychophysiological Signature of Prospective Memory". Poster. TEAP, 52th Conference of Experimental Psychologists (Saarbrücken, Germany). 2010.
- [152] **Nicolas Rothen**, Thomas Nyffeler, Roman von Wartburg, René Müri, and Beat Meier. "Parieto-Occipital Suppression Eliminates Implicit Bidirectionality in Grapheme-Colour Synaesthesia". Poster. CNB, Clinical Neuroscience Bern - 6th Annual Meeting (Bern, Switzerland). 2010.
- [153] **Nicolas Rothen** and Beat Meier. "Grapheme-Colour Synaesthesia Yields an Ordinary Rather than Extraordinary Memory Advantage". Poster. CNB, Clinical Neuroscience Bern - 5th Annual Meeting (Bern, Switzerland). 2009.
- [154] **Nicolas Rothen**, Thomas Nyffeler, Roman von Wartburg, René Müri, and Beat Meier. "Does Synesthesia Work Bi-Directionally? A TMS Study". Poster. CNB, Clinical Neuroscience Bern - 4th Annual Meeting (Bern, Switzerland). 2008.
- [155] **Nicolas Rothen** and Beat Meier. "Current Issues and a New Paradigm in Synaesthesia Research". Poster. SPS, 10th Conference of the Swiss Psychological Society (Zurich, Switzerland). 2007.

- [156] **Nicolas Rothen** and Beat Meier. "Psychophysiological Signature of Prospective Memory and Emotional Reactions". Poster. CNB, Clinical Neuroscience Bern - 3rd Annual Meeting (Bern, Switzerland). 2007.
- [157] **Nicolas Rothen** and Beat Meier. "Synaesthesia Creates Opportunities for Emotional Learning". Poster. CNB, Clinical Neuroscience Bern - 2nd Annual Meeting (Bern, Switzerland). 2006.

Other Forms of Scientific Communication

Workshops

- [158] Michael Burtscher and **Nicolas Rothen**. "Writing and Publishing". 3rd Early Career Researcher Day of the Swiss Psychological Society (University of Bern, Bern, Switzerland). 2022.
- [159] **Nicolas Rothen** and Beat Meier. "Measuring Skin Conductance Response in Cognitive Neuroscience". Workshop. CNB, Clinical Neuroscience Bern - 5th Annual Meeting (University of Bern, Bern, Switzerland). 2009.

Public Outreach

- [160] **Nicolas Rothen**. "Gedächtnisleistungen optimieren [Optimizing Memory]". Talk. Uni 60+ (Brig, Switzerland). 2023.
- [161] **Nicolas Rothen**. "Verknüpfung der Sinne als Grundlage von Kreativität [Linking of the Senses as Basis for Creativity]". Talk. Podiumsdiskussion zu Ausstellung Musik aufs Auge (Württembergische Landesbibliothek, Stuttgart, Germany). 2023.
- [162] **Nicolas Rothen**. "Bildung im digitalen Zeitalter - Kosten und Nutzen? [Education in Digital Times - Costs and Benefits?]" Talk. OCOM EVENT: Maximal digital? Schule der Zukunft (Brig, Switzerland). 2019.

Media Coverage & Interviews (selection)

- [163] Thomas Sennhauser. "Das sind eure frühesten Kindheitserinnerungen". In: *20 Minuten* (2024).
- [164] Christian Zürcher. "Das Wallis lässt sich seine Fern-Uni etwas kosten". In: *Tages-Anzeiger* (2024).
- [165] Walter Bellwald. "Synästhesie: Eine ganz besondere Form der Wahrnehmung". In: *Rhone Zeitung* (2018).
- [166] Stephanie Schnydrig. "Reizüberflutung: Synästhetiker sehen Töne und schmecken Farben". In: *Blick* (2018).
- [167] Jack Dutton. "The Surprising World of Synaesthesia". In: *The Psychologist* (2015).
- [168] Helen Massy-Beresford. "How We All Could Benefit from Synaesthesia". In: *The Observer* (2014).
- [169] **Nicolas Rothen**. "Can You Learn to Taste and Smell the Letter B?" In: *The Conversation* (2014).