

# Silvia Klettner

PSYCHOLOGIST — RESEARCHER

TU Wien Research Division Cartography  
1040 Vienna, Austria  
+43 1 58801-12612  
silvia.klettner@tuwien.ac.at

## RESEARCH POSITIONS

### TU Wien Research Division Cartography

Vienna — *Researcher and Lecturer*

NOV 2016 – NOV 2020

Research, lecturing, theses supervision, project acquisition in the fields of environmental and cognitive psychology, emotion mapping, cartographic design & communication, critical cartography

### AIT Austrian Institute of Technology GmbH

Vienna — *Researcher*

JUNE 2013 – OCT 2016

Research, project acquisition, project management in the fields of human mobility research, pedestrian/crowd dynamics, focus on environmental influences on pedestrian perception and behavior

### TU Wien Research Division Cartography

Vienna — *Researcher*

MARCH 2011 – JUNE 2013

Research on urban emotions, human-centered navigation, and on the role of diversity and gender for contributing to volunteered geographic information

## EDUCATION

### TU Wien Research Division Cartography

Vienna — *PhD Studies*

ONGOING – Jan 2021 (expected)

Focus on cartosemiotics: on the influence of visual cartographic design on human cognition, emotion, and judgments

### University of Natural Resources and Life Sciences

Vienna — *BA in Landscape & Architectural Psychology*

OCT 2008 – MARCH 2011

Focus on urban design and well-being, human-environment interaction

### Vienna University

Vienna — *Mag. rer. nat. in Psychology*

OCT 2000 – JAN 2009

Focus on human cognition, visual perception, social psychology, environmental psychology

## EXPERTISE

### Interdisciplinary Research

Psychology, Cartography, Semiotics, Urban Design Research, Visual Design Research, Emotion Research

### User-centered methods

Qualitative and quantitative research methods

### Project acquisition

### Project management

National and international projects

### Languages

German: fluent

English: business fluent

## SCIENTIFIC REVIEWER

**Quality & Quantity - International Journal of Methodology** 2020 Springer

**ISPRS International Journal of Geo-Information** 2020 MDPI

## SCIENTIFIC AWARDS

### Karl Rinner Award 2019

Austrian Geodesy Commission

### Best Paper Award 2019

TU Wien - Dpt. of Geodesy & Geoinformation

## AFFILIATIONS & MEMBERSHIPS

**ICA Commission on Cognitive Issues in Geographic InfoViz** - Member since 2019

**MIT - Dpt. of Urban Studies and Planning**  
Research Affiliate 08/2016 – 01/2018

**Verein Psychologie und Umwelt e.V.**  
Board Member 12/2011 – 06/2018

## PUBLICATIONS

### Scientific journals

2020 **Klettner, S.**: "Form Follows Content: An Empirical Study on Symbol-Content (In)Congruences in Thematic Maps." *ISPRS International Journal of Geo-Information*, 9(12), 719.

2020 **Klettner, S.**: "Über die semiotischen Wirkebenen kartographischer Punktsignaturen." *VGI - Österreichischen Zeitschrift für Vermessung & Geoinformation*, 3, 105-112.

2020 **Klettner, S.**: "Affective Communication of Map Symbols: A Semantic Differential Analysis." *ISPRS International Journal of Geo-Information*, 9(5), 289.

2019 **Klettner, S.**: "Why Shape Matters - On the Inherent Qualities of Geometric Shapes for Cartographic Representations." *ISPRS International Journal of Geo-Information*, 8(5), 217.

2014 Huang, H., **Klettner, S.**, Schmidt, M., Gartner, G., Leitinger, S., Wagner, A. & Steinmann, R.: "AffectRoute—considering people's affective responses to environments for enhancing route-planning services." *International Journal of Geographical Information Science*, 28(12), 2456-2473.

2013 **Klettner, S.**, Huang, H., Schmidt, M. & Gartner, G.: "Crowdsourcing affective responses to space." *Journal of Cartography and Geographic Information*, 2(3), 66-72.

### Book chapters / Professional journals

2015 Bruderermann, T., Kelz, K., **Klettner, S.**, Röderer, K., Seebauer, S. & Wicher, M.: "Humans and Environment: Environmental Psychology Research in Austria." *Psychologie in Österreich* (2), 116-125.

2013 **Klettner, S.**, Huang, H., Schmidt, M., Orttag, F. & Gartner G.: "Smart citizens - the potential of humans in smart cities." In: *Smart City - Viennese Expertise based on Science and Research*, H. Widmann (Hrg.); Schmid-Verlag, Wien, ISBN: 978-3-900607-51-7, 194-199.

2012 **Klettner, S.**, Schmidt, M.: "Visualisierung von Emotionen im Raum." In: C. Reder (Ed.): *Kartographisches Denken*. Springer, Wien, 398 – 399, ISBN: 978-3-7091-0994-6.

### Reviewed conference papers

2020 **Klettner, S.**: "More than identifiers: Map symbols and their connotative meaning". In: "Abstracts of the ICA, Vol. 2: Central European Cartographic Conference and 68th German Cartography Congress - EuroCarto 2020", Sept. 21-25.

2019 **Klettner, S.**: "Small Symbols With Big Effect? – A Cognitive-Affective Perspective on Map Symbolization on Small-Sized Displays." In: 15th International Conference on Location-Based Services.

2019 Wang, W., **Klettner, S.**, Gartner, G., Fian, T., Hauger, G., Angelini, A., Söllner, M., Florack, A., Skok M. & Past, M.: "Towards a User-Oriented Indoor Navigation System in Railway Stations." In: 15th International Conference on Location-Based Services.

2019 **Klettner, S.**: "The significance of shape in cartographic communication." *Abstracts of the ICA*, 1.

2016 Seitz M., Seer S., **Klettner S.**, Handel O. & Köster G.: "How do we wait? – Fundamentals, characteristics, and modelling implications". In: *Proceedings of the 11th Conference on Traffic and Granular Flow (TGF2015)*, Delft, The Netherlands, Sept. 28-30.

2015 **Klettner, S.**, Seer S., Roue, M. & Ratti C.: "On the influence of ambient stimuli on human movement behavior - an integrative review". *ECTRI - FEHRL - FERSI Young Researcher Seminar*, Rom, June 17-19.

2013 **Klettner, S.**, Huang, H., Schmidt, M. & Gartner G.: "Acquisition and Cartographic Applications of Subjective Geodata." In: *Proceedings of the 26th International Cartographic Conference*. ISBN: 978-1-907075-06-3. Paper-Nr. 652.

2013 **Klettner, S.**, Schmidt, M. & Steinmann, R.: "Barrieren und Motivatoren von VGI-Projekten aus Gender-Perspektive." In: *Geoinformationssysteme 2013*, Wichmann, ISBN: 978-3-87907-508-9; pages 217-226.

2013 Schmidt, M. & **Klettner, S.**: "Frauen in OpenStreetMap. Oder: Vielfältigere Gruppen für OSM begeistern." In: *Anwenderkonferenz für Freie & Open Source Software für Geoinformationssysteme, FOSSGIS e.V.* (Hrg.), pages 55-57.

2013 Schmidt, M. & **Klettner, S.**: "Gender and Experience-Related Motivators for Contributing to OSM." In: Online proceedings of the ACTIVITY workshop, AGILE, 4 pages.

2013 Schmidt, M., **Klettner, S.** & Steinmann, R.: "Barriers for Contributing to VGI Projects." In: Proceedings of the 26th International Cartographic Conference, ISBN: 978-1-907075-06-3; 7 pages.

2013 Steinmann, R., Häusler, E., **Klettner, S.**, Schmidt, M. & Lin, Y.: "Gender dimensions in UGC and VGI - a desk-based study." In: Angewandte Geoinformatik 2013, Wichmann, ISBN: 978-3-87907-533-1; S.355-364.

2012 **Klettner, S.** & Gartner G.: "Modelling Affective Responses to Space". In: Proceedings REAL CORP 2012, 485 – 491, ISBN: 978-3-9503110-3-7.

2012 **Klettner, S.**, Schmidt, M. & Huang, H.: "Emotions and Affective Qualities Experienced in Urban Space". In: Proceedings IAPS 22", ISBN: 978-0-94-764988-3; pages 145 - 146.

2011 **Klettner, S.**, Huang, H. & Schmidt, M.: "EmoMap - Considering Emotional Responses to Space for Enhancing LBS"; in: „8th International Symposium on Location-Based Services LBS 2011“, 4 pages.

2011 **Klettner, S.** & Schmidt, M.: "Emotionen zum Raum und deren Berücksichtigung in Navigationssystemen für FußgängerInnen (Projekt EmoMap)"; in D. Schwab, M. Strasser (Eds.): „Tagungsdokumentation zur 5. Österreichischen FußgängerInnen-Fachkonferenz“, pages 17 - 18.

2011 Schmidt, M. Ortag, F. & **Klettner, S.**: "OpenEmotionMap - Über die räumliche Erfassung von Emotionen"; Deutscher Kartographentag und INTERGEO 2011, Nürnberg.

## Reviewed conference posters

2019 Listabarth, J., **Klettner, S.** & Gartner, G.: "Maps as Storytellers of the Sustainable Development Goals"; International Symposium on Global Sustainable Development Goals in a Mediatized World, Austrian Academy of Sciences, Vienna, April 4 – 5, 2019.

2015 **Klettner, S.**, Seer, S., Roure, M. & Ratti C.: "We shape our environments and they shape us – but how?" In: Proceedings of the 11th Biennial Conference on Environmental Psychology. Groningen, Netherlands, Aug. 24 – 26, 2015.

2011 **Klettner, S.** & Rode, P.: "Evaluating User-Oriented Park Design". In: Proceedings of the 8th Biennial Conference on Environmental Psychology. Eindhoven, Netherlands, Sept. 26 – 28, 2011.

## Public Media

2013 **Klettner, S.**: "Herzklopfen auf der Landkarte"; Newspaper article by Nicole Kolisch. Kurier.at, Austria (25.05.2013).

2012 **Klettner, S.**: "Research project Emomap"; Television coverage at Newton ORF 1 - Austrian national TV station (17.03.2012).