

## Publikationen, laufende Arbeiten und wissenschaftliche Veröffentlichungen

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### In Arbeit (in Revision oder Review)

- **Hartmann, M.**, Laengenhager, B., & Stocker, K. (in revision). Happiness feels light, sadness feels heavy: A new approach of using bodily sensation maps of emotions (BSMs) when assessing happiness, sadness, and depression.
- Rihs, M., Mast, F. W., & **Hartmann, M.** (in revision). God is up and devil is down: Mortality salience increases implicit spatial-religious associations. *Religion, Brain & Behavior*
- Gurtner, L., **Hartmann, M.**, & Mast, F. W. (under review). Eye movements during visual imagery and perception show spatial correspondence but have a unique temporal signature. *Cognition*
- Chiffi, K., Diana, L., **Hartmann, M.**, Cazzoli, D., Bassetti, C., Müri, R. M. (in review). Spatial asymmetries ("Pseudoneglect") in free visual exploration – modulation of age and relationship to line bisection. *Experimental Brain Research*.

### Artikel und Beiträge in der Fachpresse

- **Hartmann, M.**, Singer, S., Savic, B., Müri, R. M., & Mast, F. W. (2020). Anodal high-definition tDCS over the posterior parietal cortex modulates approximate mental arithmetic. *Journal of Cognitive Neuroscience*, 32, 862-876.
- **Hartmann, M.**, Martarelli, C., Reber, T., & Rothen, N. (2020). 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. *Consciousness and Cognition*, 103033.
- Palluel, E., Falconer, C. J., Lopez, C., Marchesotti, S., **Hartmann, M.**, Blanke, O., & Mast, F. W. (2020). Imagined paralysis alters somatosensory evoked-potentials. *Cognitive Neuroscience*, 11(4), 205-215.
- Klaus, M. P., Schöne, C. G., **Hartmann, M.**, Merfeld, D. M., Schubert, M. C., & Mast, F. W. (2020). Roll tilt self-motion direction discrimination training: First evidence for perceptual learning. *Attention, Perception, & Psychophysics*, 82, 1987-1999.
- **Hartmann, M.**, Sommer, N. R., Diana, L., Müri, R. M., & Eberhard-Moscicka, A. (2019) Further to the right: Viewing distance modulates attentional asymmetries ('pseudoneglect') during visual exploration. *Brain and Cognition*, 129, 40-48
- **Hartmann, M.**, Fischer, M. H., & Mast, F. W. (2019). Sharing a mental number line across individuals? The role of body position and empathy in joint numerical cognition. *Quarterly Journal of Experimental Psychology*, 72, 1732-1740
- Stocker, K. & **Hartmann, M.** (2019). Next Wednesday's meeting has been moved forward two days: The time-perspective question is ambiguous in Swiss German, but not in Standard German. *Swiss Journal of Psychology*, 78, 61-67.
- Stocker, K., Hasler, G., & **Hartmann, M.** (2019). The altered-state-of-consciousness (ASC) aspect of a feeling of lightness is reported to be associated with antidepressant benefits by depressed individuals receiving ketamine infusions: A systematic analysis of internet video testimonials. *Psychotherapy and Psychosomatics*, 88, 182-183.
- Stocker, K. & **Hartmann, M.** (2019). Clinical potential of ketamine-induced altered states of consciousness: some lessons for further psychometric development from internet video testimonials of depressed individuals receiving ketamine infusions. *Psychotherapy and Psychosomatics*, 88(suppl 1), 122
- Globig, L., **Hartmann, M.**, & Martarelli, C. (2019). Vertical head movements influence memory performance for words with emotional content. *Frontiers in Psychology*.

- Reinert, R. M., **Hartmann, M.**, Huber, S., & Moeller, K. (2019). Unbounded number line estimation as a measure of numerical estimation. *PLOS ONE*, 14(3): e0213102
- **Hartmann, M.**, Laubrock, J., & Fischer, M. H. (2018). The visual number world: A dynamic approach to study the mathematical mind. *Quarterly Journal of Experimental Psychology*, 71, 28-36.
- Faulkenberry, T. J., Witte, M., & **Hartmann, M.** (2018). Tracking the continuous dynamics of numerical processing: A brief review and editorial. *Journal of Numerical Cognition*, 4, 271- 285.
- **Hartmann, M.** (2017). Non-musicians also have a piano in the head: Evidence for spatial-musical associations from line bisection tracking. *Cognitive Processing*, 18, 75-80.
- Martarelli, C., Mast, F. W., & **Hartmann, M.** (2017). Time in the eye of the beholder: Gaze position reveals spatial-temporal associations during encoding and memory retrieval of future and past. *Memory & Cognition*, 45, 40-48.
- **Hartmann, M.**, Mast, F. W. (2017). Loudness counts: interactions between number magnitude, loudness, and space. *Quarterly Journal of Experimental Psychology*, 70, 1305-1322.
- **Hartmann, M.**, & Fischer, M. H. (2016). Exploring the numerical mind by eye-tracking: a special issue. *Psychological Research*, 80, 325-333.
- **Hartmann, M.**, Mast, F., & Fischer, M. H. (2016). Counting is a spatial process: Evidence from eye movements. *Psychological Research*, 80, 399-409
- Stocker, K., **Hartmann, M.**, Martarelli, C., & Mast, F. W. (2016). Eye movements reveal mental looking through time. *Cognitive Science*, 40, 1648-1670.
- Moser, I., Grabherr, L., **Hartmann, M.**, Mast, F. W. (2015). Self-motion direction discrimination in the visually impaired. *Experimental Brain Research*, 11, 3221-3230.
- **Hartmann, M.** (2015). Numbers in the eye of the beholder: What do eye movements reveal about numerical cognition? *Cognitive Processing*, 16, 245-248.
- **Hartmann, M.**, Mast, F. W., & Fischer, M. H. (2015). Spatial biases during mental arithmetic: Evidence from eye movements on a blank screen. *Frontiers in Psychology*, 6:12
- Fischer, M. H., & **Hartmann, M.** (2014). Pushing forward in embodied cognition: May we mouse the mathematical mind? *Frontiers in Psychology*, 5:1315.
- **Hartmann, M.**, Martarelli, C., Mast, F. W. (2014). Eye movements during mental time travel follow a diagonal line. *Consciousness and Cognition*, 30, 201-209.
- **Mast, F.W.**, **Preuss, N.**, **Hartmann, M.** & Grabherr, L. (2014). Spatial cognition, body representation and affective processes: The role of vestibular information beyond ocular reflexes and control of posture, *Frontiers in Integrative Neuroscience*, 8:44.
- **Hartmann, M.**, & Fischer, M. H. (2014). Pupillometry: The eyes shed fresh light on the mind. *Current Biology*, 24, R281-R282.
- **Hartmann, M.**, Gashaj, V., Stahnke, A., & Mast, F. W. (2014). There is more than «more is up»: Hand and foot responses reverse the vertical association of number magnitudes. *Journal of Experimental Psychology: Human Perception and Performance*, 40, 1401-1414.
- **Hartmann, M.**, Haller, K., Moser, I., Hossner, E.-J. & Mast, F.W. (2014). Direction detection thresholds of passive self-motion in artistic gymnasts. *Experimental Brain Research*, 232, 1249-1258.
- **Hartmann, M.**, Furrer, S., Herzog, M. H., Merfeld, D. M., & Mast, F. W. (2013). Self-motion perception training: Thresholds improve in the light but not in the dark. *Experimental Brain Research*, 226, 231-240.
- **Hartmann, M.**, & Mast, F. W. (2012). Moving along the mental time line influences the processing of future related words. *Consciousness and Cognition*, 21, 1558-1562.
- **Hartmann, M.**, Farkas, R., & Mast, F. W. (2012). Self-motion perception influences number processing: evidence from a parity task. *Cognitive Processing*, 13, 189-192.
- Lobmaier, J. S., **Hartmann, M.**, Volz, A. J., & Mast, F. W. (2012). Emotional expression affects the accuracy of gaze perception. *Motivation and Emotion*, 8, 573-577.
- **Hartmann, M.**, Grabherr, L., & Mast, F. W. (2012). Moving along the mental number line: Interactions between whole-body motion and numerical cognition. *Journal of Experimental Psychology: Human Perception and Performance*, 38, 1416-1427.
- **Hartmann, M.**, Falconer, C., & Mast (2011). Imagined paralysis impairs embodied spatial transformations. *Cognitive Neuroscience*, 2, 155-162.
- Nyffeler, T., **Hartmann, M.**, Hess, C.W., & Müri, R.M. (2008). Visual vector inversion during memory antisaccades - a TMS study. *Progress in Brain Research*, 171, 429-432.

## Konferenzen

### Mündliche Beiträge (Auswahl)

- 9/2019: "Summing up: What eye movements tell us about spatial-numerical associations in mental arithmetic". Talk at Swiss Psychological Society Conference (SPS-SGP), Bern, Switzerland
- 9/2016: «Spatial-numerical associations in mental arithmetic – evidence from eye movements». Talk at the German Psychology Society (DGP), Leipzig, Germany
- 1/2016: «The role of body and eye movements in numerical and temporal cognition». Invited talk at the German Sport University, Cologne, Germany
- 9/2015: «Eye movements during number processing». Talk at the International Conference on Spatial Cognition (ICSC) 2015, Rome
- 3/2015: «Moving in space = Moving in mind? Interaction between body motion and abstract cognition». Invited talk at the Sport Motorik Tagung, Munich, Germany
- 09/2013: «Visual and auditory working memory training: Comparing near transfer effects». Invited talk at the 13th Congress of the Swiss Psychological Society, University of Basel.
- 03/2013: «The influence of self-motion on the processing of spatially associated words». Invited talk at the TEAP, University of Vienna.

### Posterpräsentationen (Auswahl)

- 8/2019: «Power-large and precision-small: Decoding affordance effects during visual search by eye movements analysis». Poster presented at the European Conference on Eye Movements, Alicante, Spain.
- 1/2019: «Does tDCS over the parietal cortex improve approximate mental arithmetic? » Poster presented at the European Workshop of Cognitive Neuropsychology, Bressanone, Italy
- 9/2017: «Positive is up: Random word generation». Poster presented at SSP/SGP Conference, Lausanne, Switzerland.
- 3/2015: «Spatial bias during mental arithmetic – evidence from eye movements on a blank screen». Poster presented at the International Convention of Psychological Science ICPS, Amsterdam, the Netherlands
- 10/2014: «Eye movements during mental arithmetic». Poster presented at the Educational Neuroscience of Mathematics Workshop (Satellite Workshop at the KogWis 2014), Tübingen, Germany
- 12/2012: «Allocentric frame of reference in pseudoneglect – evidence from eye movements». Poster presented at the Clinical Neuroscience Meeting, Bern.
- 09/2012: «Self-motion perception influences number processing». Poster presented at the 5th International Conference on Spatial Cognition (ICSC), Rome.
- 11/2011: «Whole-body motion modulates the perception of temporal intervals». Poster presented at the Clinical Neuroscience Meeting, Bern.

## Übriges

- Organisation des Symposiums «Eye movements during number processing» an der International Conference on Spatial Cognition, Rom, IT, 2015
- Organisation/Editor einer Spezialausgabe (special issue) zum Thema Zahlenverarbeitung und Augenbewegungen in den internationalen Fachzeitschriften
  - «Psychological Research» (2016) und
  - «Journal of Numerical Cognition» (2018).