

Curriculum Vitae — Dr. Gerrit Maus

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Work address

Department of Psychology
University of California Berkeley
3210 Tolman Hall
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Education

University of California Berkeley Postdoc, Department of Psychology Advisor: Dr. David Whitney	Jan 2010 – Sep 2013
University of California Davis Postdoc, Center for Mind and Brain Advisor: Dr. David Whitney	Nov 2008 – Dec 2009
University of Sussex, UK DPhil in Psychology, Department of Psychology Supervisor: Dr. Romi Nijhawan	Oct 2004 – Jun 2008
Hanse Institute for Advanced Studies, Delmenhorst, Germany European Diploma in Cognitive and Brain Sciences	Sep 2005 – Mar 2007
University of Osnabrück, Germany BSc in Cognitive Science, Institute of Cognitive Science	Oct 2001 – Sep 2004

Research Experience

University of California Berkeley Associate Research Specialist, Department of Psychology	since Sep 2013
Université Paris Descartes Visiting Scholar, Laboratoire Psychologie de la Perception Collaboration with Dr. Patrick Cavanagh	Oct – Nov 2014
Smith-Kettlewell Eye Research Institute, San Francisco, CA Research Fellow Eye movement project with Dr. Stephen Heinen	Jan – Mar 2013
University of Glasgow Visiting Scholar, Centre for Cognitive Neuroimaging fMRI project with Dr. Lars Muckli	Jul – Aug 2008

University of Sussex

Oct 2007 – May 2008

Research Assistant, Department of Psychology
Work with Dr. Jamie Ward on synaesthesia

Max Planck Institute for Brain Research

Jun – Aug 2005, Jul – Aug 2006

Visiting PhD student, Department of Neurophysiology
Training in fMRI in Prof. Wolf Singer's group

Teaching Experience

California State University, East Bay

Apr – Jun 2015

Lecturer for *Sensation & Perception* course.

University of California Davis & Berkeley

Nov 2008 – present

Mentoring of undergraduates, research assistants, and graduate students in research projects including instruction in fMRI and TMS.

University of California Davis & Berkeley

Nov 2008 – present

Science Outreach Program with presentations and demos on vision and perception science for local schools in socially and economically disadvantaged areas.

University of California Berkeley

Oct 2012

Guest Lecture on Visual Neuroscience for *Biological Psychology* course.

University of Sussex, UK

Oct 2007 – Jun 2008

Guest Lectures

- Multisensory Perception and Synaesthesia for *Biological Psychology* course.
- Motion Perception for *Perception and Attention* course.

University of Sussex, UK

Oct 2005 – Jun 2008

Associate Tutor. Seminar teaching for Psychology undergraduate courses

- *Cognitive Psychology*,
- *Perception and Attention*,
- *Introduction to Biological Psychology*.

University of Sussex, UK

Oct 2004 – Sep 2007

Graduate Teaching Assistant. Seminar teaching and supervision of practical sessions for Psychology undergraduate course *Research Methods*. Marking of lab reports and essays, assessment of students' oral contributions, co-supervision of student projects.

University of Osnabrück, Germany

Oct 2002 – Jul 2004

Tutor in Computer Science, tutoring small groups of students for Computer Science course *Object-oriented programming in Java*.

Publications

Maus, G.W., Potapchuk, E., Watamaniuk, S.N.J., & Heinen, S.J. (2015). Different time scales of motion integration for anticipatory smooth pursuit and perceptual adaptation. *Journal of Vision* 15(2), 16. doi:10.1167/15.2.16

- Maus, G.W.**, Fischer, J., & Whitney, D. (2013). Motion-dependent representation of space in area MT+. *Neuron* 78(3), 554-562. doi:10.1016/j.neuron.2013.03.010
- Maus, G.W.**, Chaney, W., Liberman, A., & Whitney, D. (2013). The challenge of measuring long-term positive aftereffects. *Current Biology* 23(10), R438-439. doi:10.1016/j.cub.2013.03.024
- Maus, G.W.**, Ward, J., Nijhawan, R., & Whitney, D. (2013). The perceived position of moving objects: Transcranial magnetic stimulation of area MT+ reduces the flash-lag effect. *Cerebral Cortex* 23(1), 241-247. doi:10.1093/cercor/BHS021
- Kosovicheva, A.A., **Maus, G.W.**, Anstis, S., Cavanagh, P., Tse, P.U., & Whitney, D. (2012). The motion-induced shift in the perceived location of a grating also shifts its aftereffect. *Journal of Vision* 12(8), 7. doi:10.1167/12.8.7
- Maus, G.W.**, Fischer, J., & Whitney, D. (2011). Perceived positions determine crowding. *PLoS ONE* 6(5), e19796. doi:10.1371/journal.pone.0019796
- Maus, G.W.**, Weigelt, S., Nijhawan, R., & Muckli, L. (2010). Does area V3A predict positions of moving objects? *Frontiers in Psychology* 1, 186. doi:10.3389/fpsyg.2010.00186
- Maus, G.W.**, Khurana, B., & Nijhawan, R. (2010). History and theory of flash-lag: past, present, and future. In R. Nijhawan & B. Khurana (eds.) *Space and time in perception and action*. Cambridge, UK: Cambridge University Press. doi:10.1017/CBO9780511750540.027
- Banissy, M., Cohen Kadosh, R., **Maus, G.W.**, Walsh, V., & Ward, J. (2009). Prevalence and characteristics of mirror-touch synaesthesia. *Experimental Brain Research* 198(2-3), 261-272. doi:10.1007/s00221-009-1810-9.
- Maus, G.W.** & Nijhawan, R. (2009). Going, going, gone: Localizing abrupt offsets of moving objects. *Journal of Experimental Psychology: Human Perception and Performance*, 35(3), 611-626. doi:10.1037/a0012317.
- Maus, G.W.** & Nijhawan, R. (2008). Motion extrapolation into the blind spot. *Psychological Science*, 19(11), 1087-1091. doi:10.1111/j.1467-9280.2008.02205.x
- Maus, G.W.** (2007). Swimming with and against the stream: Does motor adaptation to lateral forces influence visual motion perception? *Journal of Neuroscience*, 27(49), 13367-13368. doi:10.1523/jneurosci.4545-07.2007.
- Maus, G.W.** & Nijhawan, R. (2006). Forward displacements of fading objects in motion: The role of transient signals in perceiving position. *Vision Research*, 46(26), 4375-4381. doi:10.1016/j.visres.2006.08.028.

Manuscripts in Preparation

- Maus, G.W.** & Whitney, D. (in preparation). Dynamic filling-in at the retinal blind spot. *Manuscript in preparation*.
- Maus, G.W.**, Ivry, RB, & Whitney, D. (in preparation). Impaired perceptual prediction in patients with cerebellar atrophy. *Manuscript in preparation*.

Maus, G.W. & Whitney, D. (in preparation). Asymmetrical attentional tracking causes spatial distortions of moving objects. *Manuscript in preparation.*

Invited Talks

– California State University Bakersfield	Mar 2015
– University of Cologne, Department of Psychology	Mar 2015
– Nanyang Technological University, Singapore	Feb 2015
– Smith-Kettlewell Eye Research Institute, San Francisco	Feb 2015
– University of California Davis, Department of Psychology	Nov 2014
– Ludwig-Maximilians-Universität Munich, Department of Psychology	Oct 2014
– University of Aberdeen, School of Psychology	Oct 2014
– University of Glasgow, Institute for Neuroscience and Psychology	Oct 2014
– Université Paris Descartes, Laboratoire Psychologie de la Perception	Oct 2014
– Bangor University, UK, School of Psychology	Jul 2014
– University of York, UK, Department of Biology	Jun 2014
– University of Nevada, Reno, Department of Psychology	Jan 2014
– California State University Channel Islands, Camarillo	Oct 2013
– Smith-Kettlewell Eye Research Institute, San Francisco	Apr 2013
– University of Kiel, Institute of Psychology	Oct 2012
– University of Bielefeld, Faculty of Biology	May 2012
– University of Münster, Department of Psychology	May 2012
– Swansea University, Department of Psychology	Feb 2012
– University of California Berkeley, Department of Psychology	Oct 2010
– University of California Davis, Center for Mind and Brain	Aug 2008
– University of Glasgow, Centre for Cognitive Neuroimaging	Jul 2008
– Universitat de Barcelona, Institute for Brain, Cognition and Behaviour	Jun 2008
– University of Sussex, Department of Psychology	Mar 2007
– Rank Prize Funds Mini-Symposium on Active Vision, Windermere, UK	Oct 2005
– University of Osnabrück, Institute of Cognitive Science	Apr 2004

Conference Contributions

Maus, G.W., Cavanagh, P., Collins, T., Duyck, M., Lisi, M., Wexler, M., & Whitney, D. (2015) Target displacements during blinks trigger corrective gaze adaptation. *Talk to be presented at VSS 2015 in St. Pete's Beach, FL.*

Chan, M.Z., Denison, R.D., Whitney, D., & **Maus, G.** (2015). Ambiguous filling-in at the blind spot resolved through perceptual rivalry. *Poster to be presented at VSS 2015 in St. Pete's Beach, FL.*

Cavanagh, P., Duyck, M., Eymond, C., **Maus, G.**, Schumann, F., Störmer, V., Veenemans, A., Whitney, D., & Wu, D. (2015). Feeling the future. *Abstract submitted to VSS 2015 in St. Pete's Beach, FL.*

Cavanagh, P., Duyck, M., Eymond, C., **Maus, G.**, Schumann, F., Störmer, V., Veenemans, A., Whitney, D., & Wu, D. (2014). Feeling the future. *Presented at GDR Vision Meeting in Lyon, France.*

Maus, G.W. & Whitney, D. (2014). Motion-dependent filling-in at the blind spot. *Journal of Vision* 14(10), 1331. *Talk presented at VSS 2014 in St. Pete's Beach, FL.* doi:10.1167/14.10.1331

- Chaney, W., Fischer, J., **Maus, G.W.**, & Whitney, D. (2014). Spatial attention reduces correlated noise in the fMRI response. *Journal of Vision* 14(10), 620. *Poster presented at VSS 2014 in St. Pete's Beach, FL.* doi:10.1167/14.10.620
- Maus, G.W.**, Ivry, R.B., & Whitney, D. (2013). Impaired perceptual prediction in patients with cerebellar atrophy. *Poster presented at the Neuropsychology workshop 2013 at the University of Leuven, Belgium.*
- Maus, G.W.**, Potapchuk, E., Watamaniuk, S.N.J., & Heinen, S.J. (2013). Opposite effects of adaptation and priming: Speed discriminations during smooth pursuit. *Perception* 42 ECVF Abstract Supplement, 184. *Poster presented at ECVF 2013 in Bremen, Germany.* doi:10.1068/v130276
- Maus, G.W.**, Ivry, R.B., & Whitney, D. (2012). The flash-lag effect is reduced in patients with cerebellar atrophy. *Journal of Vision* 12(9), 155. *Poster presented at VSS 2012 in Naples, FL.* doi:10.1167/12.9.155
- Bulakowski, P.F., **Maus, G.W.**, Wurnitsch, N., & Whitney, D. (2012). Shifting perceptual biases in auditory-visual temporal order judgments. *Poster presented at APS Annual Convention 2012 in Chicago, IL.*
- Maus, G.W.** & Whitney, D. (2011). Visual crowding is based on perceived positions. *Talk presented at CSAIL in Hood River, OR.*
- Maus, G.W.**, Li, J., & Whitney, D. (2011). Asymmetrical spatial distortions of moving objects. *Journal of Vision* 11(11), 735. *Poster presented at VSS 2011 in Naples, FL.* doi:10.1167/11.11.735
- Kosovicheva, A.A., **Maus, G.W.**, Anstis, S., Cavanagh, P., Tse, P.U., & Whitney, D. (2011). The motion-induced shift of the perceived location of a grating also shifts its aftereffect. *Journal of Vision* 11(11), 754. *Poster presented at VSS 2011 in Naples, FL.* doi:10.1167/11.11.754
- Wurnitsch, N., **Maus, G.W.**, Bulakowski, P.F., & Whitney, D. (2011). Collisions are seen before they are heard. *Journal of Vision* 11(11), 736. *Poster presented at VSS 2011 in Naples, FL.* doi:10.1167/11.11.736
- Maus, G.W.**, Fischer, J., & Whitney, D. (2010). Crowded by drifting Gabors: Is crowding based on physical or perceived stimulus position? *Journal of Vision* 10(7), 1349. *Talk presented at VSS 2010 in Naples, FL.* doi:10.1167/10.7.1349
- Maus, G.W.**, Fischer, J., & Whitney, D. (2009). Dragging it out: motion-sensitive areas code perceived positions in the motion-induced flash mislocalization illusion. *Poster presented at SfN 2009 in Chicago, IL.*
- Maus, G.W.**, Fischer, J., & Whitney, D. (2009). Motion distorts position coding of flashes in primary visual cortex. *Perception* 38, ECVF Abstract supplement, 123. *Poster presented at ECVF 2009 in Regensburg, Germany.*
- Maus, G.W.**, Hutton, S.B., Nijhawan, R., Whitney, D., & Ward, J. (2009). Reduction of the flash-lag effect with TMS over MT/V5. *Journal of Vision* 9(8), 646. *Talk presented at VSS 2009 in Naples, FL.* doi:10.1167/9.8.646

- Maus, G.W.**, Weigelt, S., Nijhawan, R., & Muckli, L. (2008). Activity in area V3A predicts positions of moving objects. *Perception* 37, ECVF Abstract supplement, 83. *Talk presented at ECVF 2008 in Utrecht, Netherlands.*
- Ward, J., **Maus, G.W.**, Meijer, P., & Strahl, S. (2008). Helping the blind to see with sound: A man-made synaesthesia. *Talk presented at the Annual General Meeting 2008 of the UK Synaesthesia Association in Edinburgh, UK.*
- Maus, G.W.** & Nijhawan, R. (2008). Motion into and out of the blind spot: Evidence for spatial extrapolation of moving objects. *Perception* 37(2), 308. *Talk presented at the AVA Christmas meeting 2007 in Birmingham, UK.* doi:10.1068/ava07
- Maus, G.W.** & Nijhawan, R. (2007). Competition for perception: Internal models vs retinal transients in perceiving positions of moving objects [Abstract]. *Journal of Vision* 7(9), 987. *Poster presented at VSS 2007 in Sarasota, FL.* doi:10.1167/7.9.987
- Maus, G.W.** & Nijhawan, R. (2007). Sudden disappearance of moving objects overrides motion extrapolation. *Perception* 36(2), 308. *Poster presented at the AVA Christmas meeting 2006 in Birmingham, UK.* doi:10.1068/ava06
- Nijhawan, R. & **Maus, G.W.** (2006). Movement of invisible limbs distorts visual space. *Talk presented at ASSC10 in Oxford, UK.*
- Maus, G.W.** (2005). The role of visual transients in perceiving the final position of moving objects. *Invited talk at a Rank Prize Funds Mini-Symposium on 'Active Vision' in Windermere, UK.*
- Maus, G.W.** & Nijhawan, R. (2005). Transient signals mask extrapolated position information of moving objects. *Talk presented at ASSC9 in Pasadena, CA.*
- Maus, G.W.** & Nijhawan, R. (2004). Final position of a gradually disappearing moving object is spatially extrapolated. *Perception* 33, ECVF Abstract supplement, 162c. *Poster presented at ECVF 2004 in Budapest, Hungary.*

Press Coverage (selected)

- **AAAS Science Update** Radio News Feature: “Tracking fastballs” Oct 2013
<http://www.scienceupdate.com/2013/10/ball/>
- **CBC “Quirks & Quarks”** Radio Interview: “Seeing faster than the eye can follow” May 2013
<http://www.cbc.ca/quirks/episode/2013/05/11/may-11-2013/#6>
- **NBC News Science**: “How our brains can track a 100 mph fastball” May 2013
http://science.nbcnews.com/_news/2013/05/08/18129836-how-our-brains-can-track-a-100-mph-fastball
- **Los Angeles Times**: “Your brain on baseball: How hitters see a 95-mph fastball” May 2013
<http://touch.latimes.com/#section/-1/article/p2p-75846143/>
- **San Jose Mercury News**: “UC Berkeley scientists pinpoint how brain tracks fast-moving baseball pitches and tennis serves” May 2013
http://www.mercurynews.com/science/ci_23201778/

Grant Writing Experience

Pending Grants

- NIH **R01** Research Project Grant “Cerebellar mechanisms for predictive perceptual and oculomotor localization”

Previously submitted Grants

- NIH **K99/R00** Pathway to Independence Award, received an Impact/Priority score of 20
- France-Berkeley Fund
- Larry L. Hillblom Foundation
- Human Frontiers Science Program

Grant-writing Assistance

I assisted with the preparation of **three NIH R01 grants** on functional neuroimaging projects in the lab of Dr. David Whitney at UC Berkeley.

Reviewing Activity

Journals

- Attention, Perception, and Psychophysics
- Biology Letters
- Brain Structure and Function
- Cerebral Cortex
- Cognitive Science
- Consciousness and Cognition
- Experimental Brain Research
- Frontiers in Consciousness Research
- Frontiers in Perception Science
- Journal of Cognitive Neuroscience
- Journal of Experimental Psychology: Human Perception and Performance
- Journal of Neurophysiology
- Journal of Vision
- NeuroImage
- Perception
- PLoS ONE
- Psychological Bulletin
- Psychophysiology
- Vision Research
- Visual Cognition

Grant Agencies

- Helmholtz Association

Honors and Awards

European Conference on Visual Perception (ECVP) Student Travel Support Award	2008
Applied Vision Association (AVA) Geoffrey J. Burton Memorial Award	2007
Experimental Psychology Society (EPS) Grindley Travel Grant	2005
University of Sussex Graduate Teaching Assistantship Competitively awarded funding for doctoral studies in exchange for teaching services.	2004 - 2007
German National Academic Foundation Undergraduate scholarship	2002 - 2003

Administrative Experience

University of Sussex, UK
Postgraduate Representative, Department of Psychology

Oct 2005 – Sep 2007

University of Osnabrück, Germany
Student Representative, Institute of Cognitive Science

Oct 2002 – Sep 2003

Memberships

- Applied Vision Association, UK (AVA)
- German Academic International Network (GAIN)
- Society for Neuroscience (SfN)
- Vision Sciences Society (VSS)

References

Postdoc Advisor
Dr. David Whitney
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University of California, Berkeley
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PhD Supervisor
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School of Psychology
University of Sussex
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University of California, Berkeley
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Collaborator
Dr. Stephen Heinen
Senior Scientist
Smith-Kettlewell Eye Research Institute
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