

WIM POUW, Ph.D.

Research Fellow

📍 Amsterdam

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AFFILIATIONS

Donders Center for Brain, Cognition and Behaviour, Radboud University Nijmegen

EDUCATION

Doctoral studies // 10.2012 – 06.2016

Experimental Psychology, Rotterdam University Rotterdam

Master of Science // 09.2011 – 09.2012

Theoretical Psychology, VU University Amsterdam

Master of Science (research master) // 09.2009 – 09.2011

Social psychology, VU University Amsterdam

Bachelor of Arts // 09.2006-09.2009

Psychology, VU University Amsterdam

TECHNICAL SKILLS

R & Rmarkdown

Python & Jupyter Notebooks

HTML5 & CSS

High Dimensional Data Visualisation

Time Series Analysis

Multimodal Signal Processing

Motion Tracking & Analysis Of Communicative Body Movements

Acoustic Analysis Speech

Natural Language Processing

RESEARCH IMPACT



Google scholar

h index: **19**

i-10: **27**

Citations: **1401**

ACADEMIC EXPERIENCE

Research Fellow

Donders Center for Brain, Cognition and Behaviour, Nijmegen. Netherlands // 09.2021-current-03.2026

Visiting Researcher

Leibniz-Zentrum Allgemeine Sprachwissenschaft, Berlin, Germany // 9.2021-current-12.2021

Host: Dr. Susanne Fuchs

Donders Postdoctoral Fellow

Donders Center for Brain, Cognition and Behaviour, Nijmegen. Netherlands // 11.2019-09.2021

Supervisor: Asli Ozyurek

Postdoctoral Fellow

University of Connecticut, Storrs, USA // 09.2017-09.2019

Supervisor: James A. Dixon

Postdoctoral Fellow

Institute of Psychology, Erasmus University, Rotterdam, The Netherlands // 06.2016-09.2017

Visiting Associate Fellow

Early Start Institute, University of Wollongong, Wollongong, Australia

Supervisors: Fred Paas

PhD Candidate

Institute of Psychology, Erasmus University, Rotterdam, The Netherlands

Supervisors: Tamara van Gog, Rolf Zwaan, Fred Paas

Dutch Royal Academy Candidate Student Assistant

Department of Sociology, VU University, Amsterdam, The Netherlands // 09.2010-09.2012

Supervisors: Jacqueline van Stekelenburg

AD-HOC REVIEW EXPERIENCE

Acta Psychologica; Advances in Cognitive Psychology; Behavior & Information Technology; Behavior Research Methods; British Journal of Psychology; Cognitive Neuroscience; Cognitive Science; Ecology and Evolution; Educational Psychologist; Educational Psychology Review; Frontiers in Cognition; Gesture; International Journal of Child-Computer Interaction; Journal of Computer Assisted Learning; Journal of Experimental Psychology: Human Perception and Performance; Journal of Experimental Psychology: Learning, Memory and Cognition; Journal of Non-verbal Behavior; Journal of Numerical Cognition; Journal of Speech, Language, and Hearing Research; Journal of the Acoustical Society of America; Learning and Instruction; Methods in Psychology; Psychonomic Bulletin and Review; Psychophysiology; Personality and Social Psychology Bulletin; Scientific Reports; Theory & Psychology

GRANTS & FELLOWSHIPS

ViCom research grant (435,487 euros) // 2022 (PIs Fuchs, Cwieck, Pouw)
German Research Council

VENI research grant (250.000 euros) // 2016 (PI Wim Pouw)
Dutch Research Council

Donders Research Fellowship 2 years

Rubicon research grant (134.764 euros) // 2016 (PI Wim Pouw)
Dutch Research Council

RESEARCH FOCII

OPEN SCIENCE

PRE-REGISTRATIONS

COMPUTATIONAL REPRODUCIBILITY

MULTIMODAL COGNITION

MOVEMENT SCIENCE

DATA SCIENCE

THEORY AND METHODS IN
COMPLEXITY SCIENCE

INVITED & RECORDED TALKS (SELECTED)

Mind, Technology, & Society Lecture Series University of California Merced, USA // 10.19 // *Multimodal Language Production* (Pouw)
Recording: <https://www.youtube.com/watch?v=bUnHV95juqU>

EVOLANG2021 // 10.2021 // *Biomechanics as the primordial basis of co-speech gesture* (Pouw & Fuchs)
Recording: <https://www.youtube.com/watch?v=nllGmnV76dA>

Dartmouth Social Sciences Meeting // 01.2021 // *Movements of signification: From physical origins to symbols.*

RECORDED CODING TUTORIALS

GESPIN 2019 // 11.19
Using video-based motion tracking to quantify speech-gesture synchrony. doi: [10.17605/OSF.IO/RXB8J](https://doi.org/10.17605/OSF.IO/RXB8J)

ENVISION BOOTCAMP // 11.19
Envision Toolbox: Multimodal (Signal) Processing and Analysis in Communication. <https://github.com/WimPouw/EnvisionBootcamp2021>

PUBLICATIONS (10 SELECTED FROM 44 PUBLICATIONS)

Pouw, W., Proksch, S., Drijvers, L., Gamba, M., Holler, J., Kello, C., Scheafer, R., Wiggins, G. (2021). Multilevel rhythms in multimodal communication. *Philosophical Transactions of the Royal Society B: Biological Sciences*. doi: [10.1098/rstb.2020.0334](https://doi.org/10.1098/rstb.2020.0334)

Brown, A. **Pouw, W.**, Brentari, D., Goldin-Meadow, S. (2021). When hands are used to communicate they are less susceptible to illusion than when they are used to estimate. *Psychological Science*. doi: [10.1098/rstb.2020.0334](https://doi.org/10.1098/rstb.2020.0334) (✓OPEN DATA, ✓OPEN CODE)

Pouw, W. & Fuchs (2022). Origins of vocal-entangled gesture. *Neuroscience and Biobehavioral Reviews*. doi: [10.1016/j.neubiorev.2022.104836](https://doi.org/10.1016/j.neubiorev.2022.104836)

Pouw, W. & de Wit, J., Bögels, S., Rasenberg, M., Milivojevic, B., Ozyurek, A. (2021). Semantically related gestures move alike: Towards a distributional semantics of gesture kinematics. In: Duffy V.G. (eds) *Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management. Human Body, Motion and Behavior. HCII 2021. Lecture Notes in Computer Science*, vol 12777. Springer, Cham. doi: [10.1007/978-3-030-77817-0_20](https://doi.org/10.1007/978-3-030-77817-0_20) (✓OPEN DATA, ✓OPEN CODE)

Pouw, W., Harrison, S. J. & Dixon, J. A. (2019). Gesture-speech physics: The biomechanical basis for the emergence of gesture-speech synchrony. *Journal of Experimental Psychology: General*. doi: [10.1037/xge0000646](https://doi.org/10.1037/xge0000646) (✓PRE-REGISTRATION, ✓OPEN DATA, ✓OPEN CODE)

Pouw, W., de Jonge-Hoekstra, L., Harrison, S., J., Paxton, A., & Dixon, J. A. (2020). Gesture-speech physics in fluent speech and rhythmic upper limb movements. *Annals of the New York Academy of the Sciences*. doi: [10.1111/nyas.14532](https://doi.org/10.1111/nyas.14532) (✓OPEN DATA, ✓RMARKDOWN, ✓OPEN CODE))

Pouw, W., Harrison, S. J., Esteve-Gibert, N., Dixon, J.A. (2020). Energy flows in gesture-speech physics: The respiratory-vocal system and its coupling with hand gestures. *The Journal of the Acoustical Society of America*, doi: [10.1121/10.0001730](https://doi.org/10.1121/10.0001730) (✓OPEN DATA, ✓OPEN CODE, ✓PRE-REGISTRATION)

Pouw, W., Dingemanse, M., Motamedi, Y., Ozyurek, A (2021). A systematic investigation of gesture kinematics in evolving manual languages in the lab. *Cognitive Science*. doi: [10.1111/cogs.13014](https://doi.org/10.1111/cogs.13014) (✓OPEN DATA, ✓RMARKDOWN)

Pouw, W., Paxton, A., Harrison, S. J., & Dixon, J. A. (2020). Acoustic information about upper limb movement in voicing. *Proceedings of the National Academy of Sciences*. doi: [10.1073/pnas.2004163117](https://doi.org/10.1073/pnas.2004163117) (✓OPEN DATA, , ✓PRE-REGISTRATION)

Pouw, W.*, W., Trujillo*, J.P., & Dixon, J.A. (2020). The quantification of gesture-speech synchrony: An overview and validation of video-based motion tracking. *Behavior Research Methods*. doi: [10.3758/s1342](https://doi.org/10.3758/s1342) (✓OPEN DATA, ✓OPEN CODE)