



Motor Control Lab,
Department of Psychology,
McGill University,
Montreal, Canada

@ftvugt 
f.t.vanvugt@gmail.com 
<http://www.florisvanvugt.com> 

FLORIS TIJMEN VAN VUGT PhD

education

- Ph.D., Neuroscience, [Lyon Neuroscience Research Center, UCBL Lyon-I](#), 2013.
Dissertation [Sounds on time: auditory feedback in motor learning, re-learning and over-learning of timing regularity](#).
Supervisors [Prof. Eckart Altenmüller](#) and [Prof. Barbara Tillmann](#).
Scientific collaborator at the [IMMM, University of Music and Drama Hannover](#).
Funded by [European Brain & Music Ph.D. Program \(Marie-Curie FP7 ITN\)](#).
- M.A., Theoretical Linguistics, [University of California Los Angeles \(UCLA\)](#), 2010.
- M.Sc., Cognitive Science, [University Descartes Paris-V](#), 2009.
Dissertation [Tracking the time course of processing spatial prepositions using response trajectories](#).
Supervisor [Prof. Patrick Cavanagh](#).
- Diploma of the [École Normale Supérieure](#), Paris, 2009.
- B.Sc., Liberal Arts & Sciences, [University College Utrecht](#), 2005. Cum Laude.
Dissertation [Independence of Variations to Kruskal's Theorem in ACA₀](#).
Supervisor [Prof. Andreas Weiermann](#).
Academic exchange to [Scuola Normale Superiore](#), Pisa, Italy.

work experience

- 2014–now. Post-doctoral research fellow, [Motor Control Lab, McGill University](#).
- 2010 summer. Programming assistant, [UCLA Linguistics Dept.](#)
Supervisors [Prof. Ed Stabler](#) and [Prof. Bruce Hayes](#)
Programming: tree drawing, CKY parsing of Minimalist grammars, tree-collection, [Pheatures educational software package](#)
- 2009 summer. Research associate, [Laboratoire Psychologie de la Perception, Paris](#).
- 2005–2007. Programming assistant, [Utrecht Institute of Linguistics \(UiL\), Utrecht University](#).

publications

- Journal articles
- van Vugt FT, Kaczyk T, Kuhn W, Rollnik JD, Tillmann B, & Altenmueller E. (in press) The role of auditory feedback in music-supported stroke rehabilitation: a single-blinded randomised controlled intervention. *Restorative Neurology and Neuroscience*.
- Vaquero L, Hartmann K, Ripolles P, Rojo N, Sierpowska J, Francois C, Camara E, van Vugt FT, Mohammadi B, Samii A, Muentz T, Rodriguez-Fornells A, and Altenmueller E (in press). Structural neuroplasticity in expert pianists depends on the age of musical training onset. *Neuroimage*. doi: [10.1016/j.neuroimage.2015.11.008](https://doi.org/10.1016/j.neuroimage.2015.11.008).

- Schultz BG, and van Vugt FT (in press). Tap Arduino: An Arduino microcontroller for low-latency auditory feedback in sensorimotor synchronization experiments. *Behavior Research Methods*. doi: [10.3758/s13428-015-0671-3](https://doi.org/10.3758/s13428-015-0671-3).
- van Vugt FT, & Tillmann B (2015). Auditory feedback in error-based learning of motor regularity. *Brain Research*. 1606, 54-67. doi: [10.1016/j.brainres.2015.02.026](https://doi.org/10.1016/j.brainres.2015.02.026).
- van Vugt FT, Furuya S, Vauth H, & Altenmueller E (2014). Playing beautifully when you have to be fast: spatial and temporal symmetries of movement patterns in skilled piano performance at different tempi. *Experimental Brain Research*. 232(11): 3555–3567. doi: [10.1007/s00221-014-4036-4](https://doi.org/10.1007/s00221-014-4036-4).
- van Vugt FT, Ritter J, Rollnik JD, & Altenmueller E (2014). Music-supported motor training after stroke reveals no superiority of synchronisation in group therapy. *Frontiers in Human Neuroscience*. 8:315. doi: [10.3389/fnhum.2014.00315](https://doi.org/10.3389/fnhum.2014.00315).
- van der Steen MC, van Vugt FT, Keller P, & Altenmueller E (2014). Basic timing abilities stay intact in patients with musician's dystonia. *PLoS ONE*. 9(3): e92906. doi: [10.1371/journal.pone.0092906](https://doi.org/10.1371/journal.pone.0092906).
- van Vugt FT, & Tillmann B (2014). Thresholds of Auditory-Motor Coupling Measured with a Simple Task in Musicians and Non-Musicians: Was the Sound Simultaneous to the Key Press? *PLoS ONE*. 9(2): e87176. doi: [10.1371/journal.pone.0087176](https://doi.org/10.1371/journal.pone.0087176).
- van Vugt FT, Boulet L, Jabusch HC, & Altenmueller (2014). Musician's dystonia in pianists: long-term evaluation of retraining and other therapies. *Parkinsonism & Related Disorders*. 20(1), 8-12. doi: [10.1016/j.parkreldis.2013.08.009](https://doi.org/10.1016/j.parkreldis.2013.08.009).
- van Vugt FT, Treutler K, Altenmueller E, & Jabusch HC (2013). The influence of chronotype on making music: Circadian fluctuations in pianists' fine motor skills. *Frontiers in Human Neuroscience*. 7:347. doi: [10.3389/fnhum.2013.00347](https://doi.org/10.3389/fnhum.2013.00347).
- van Vugt FT, Jabusch HC, & Altenmueller E (2013). Individuality that is unheard of: systematic temporal deviations in scale playing leave an inaudible pianistic fingerprint. *Frontiers in Psychology*. 4:134. doi: [10.3389/fpsyg.2013.00134](https://doi.org/10.3389/fpsyg.2013.00134)
- van Vugt FT, Schuepbach M, Altenmueller E, Bardinet E, Yelnik J, & Haelbig, TD (2013). Effects of dopaminergic and subthalamic stimulation on musical performance. *Journal of Neural Transmission*. 120(5), 755-759. doi: [10.1007/s00702-012-0923-7](https://doi.org/10.1007/s00702-012-0923-7)
- van Vugt FT, Jabusch HC, & Altenmueller E (2012). Fingers phrase music differently: trial-to-trial variability in piano scale playing and auditory perception reveal motor chunking. *Frontiers in Psychology*. 3:495. doi: [10.3389/fpsyg.2012.00495](https://doi.org/10.3389/fpsyg.2012.00495)
- van Vugt FT, & Cavanagh P (2012). Response trajectories reveal conflict phase in image-word mismatch. *Attention, Perception, & Psychophysics*. 74(2): 263-8. doi: [10.3758/s13414-011-0261-0](https://doi.org/10.3758/s13414-011-0261-0)

Book chapters

Bonnay D, & van Vugt FT (2015). [Groundedness, Truth and Dependence](#). in: Achourioti T, Galinon H, Fujimoto K and Martinez-Fernandez J (eds). *Logic, Epistemology, and the Unity of Science*: 36. Springer. [doi:10.1007/978-94-017-9673-6_18](https://doi.org/10.1007/978-94-017-9673-6_18)

- funding awards**
- 2015–2017. Vanier-Banting NSERC Postdoctoral Fellowship, CAD 140,000.
 - 2009–2010. Fulbright scholarship, USD 12,500.
 - 2009–2010. A. Richard Diebold Jr., Graduate Fellowship Endowment in Humanities, USD 43,000 (2y).
 - 2009–2010 Andrew W. Mellon Fellowship of Distinction, UCLA Humanities Dept., USD 47,000 (2y).
 - 2008–2009 Scholarship from EDF (French Electricity Co.) for research in visual perception, EUR 4,600.
 - 2007–2008 Descartes Excellence Scholarship (French Government, BGF), EUR 9,204.
 - 2004–2005 Socrates scholarship for international exchange (to Pisa, Italy). EUR 1,200.
- teaching**
- 2013 summer. Co-lecturer, Università degli Studi di Pavia. Course topic: Music Cognition (graduate level).
 - 2011 spring. Lecturer, Python for Scientific Purposes course, [IMMM HMTMH](#).
 - 2010–2013. Co-teacher, Neuroscience of Music Seminar, [IMMM HMTMH](#).
 - 2010–2011. Co-teacher, Practical music physiology, [HMTM Hannover](#).
 - 2009 spring. Lecturer, [Paris-1 Université Sorbonne](#).
Teacher of 2nd year undergraduate course Philosophical Logic.
 - 2010–now. Student supervision: 2 medical PhD students, 4 undergraduate psychology students.
- honours**
- 2012. Elected Student Representative for the EBRAMUS ITN Network.
 - 2005. Class Valedictorian of University College Utrecht (Cum Laude).
 - 2002. Japan cultural exchange scholarship with [Youth for Understanding](#).
- media coverage**
- Drösser, C. [Die persönliche Note](#). Die Zeit (German edition of Time magazine). 30/201327, July 2013. Reporting my [pianistic fingerprint paper](#).
- service to the profession**
- Appointed Review Editor for Frontiers in Psychology.
 - Regular reviewer for various journals (e.g., Brain Research, Psychonomic Bulletin & Review).
 - Open-source software packages.
 - [TapArduino](#), a software package to measure finger tapping and deliver auditory feedback (collaboration with Dr. Benjamin Schultz).
 - [PythonMLP](#), a python implementation of the Maximum Likelihood Procedure for psychophysical threshold detection.
 - [pyTDMS](#), a package for reading NI TDMS files in Python

skills

Languages: Dutch, English, French (C2 scores on TEFaQ), German, Italian, written classical Tibetan, Basic Japanese.

Neuroimaging: AFNI (“AFNI Boot Camp”, October 2014), SPM MEG/EEG (course Lyon April 2012).

Programming languages: R (course “Advanced Statistics in R”, Lyon July 2012/July 2013, K.Knoblauch), Python, Tcl/Tk, Octave/MatLab (esp. Machine Learning), OCaml, Java, HTML/CSS, (my)SQL, C/C++, PHP, OpenGL, LaTeX.

Activities: Music (oboe and piano), Tibetan Buddhism, Squash, Aikido, Sailing .