

Lisette de Jonge-Hoekstra

Assistant Professor – Cognitive development and Complex Systems, Coordination Dynamics & Ecological Psychology

ACADEMIC POSITIONS

Developmental Psychology, University of Groningen

- *Assistant professor*

September 2021 - Current

My main research interests are cognitive development in children and creativity from a complex systems, coordination dynamics and ecological psychology perspective.

RESEARCH EXPERIENCE

Orthopedagogy, University of Groningen

- *Postdoctoral researcher*

April 2021 – August 2021

I worked on two projects: 1) Qualitative and process research to differentiation practices, intentions and attitudes of teachers in secondary education; 2) The development of a Dynamic Assessment instrument for the communication and language development of young children with visual impairment (together with professionals in the field).

Kentalis Academie, Royal Dutch Kentalis

- *Researcher*

February 2020 – March 2021

I worked on several research projects which built bridges between science and practice, to support people with deafblindness, complex communication needs and primary language disorder together with their environment and to create opportunities for development.

CESPA, University of Connecticut

- *Visiting scholar*

August 2018 – February 2019

Project: How do children coordinate their movements and speech together when they collaborate and how does this affect learning?

- collaboration with Dr Wim T.J.L. Pouw.

Supervisor: Prof James A. Dixon

Developmental Psychology, University of Groningen

- *Research assistant*

November 2012 – July 2013

Process-study onto an educational intervention involving coaching primary school teachers to elicit exploring and reasoning about STEM in (gifted) children.

Supervisors: Dr H.W. Steenbeek, Dr B. de Koning-Veenstra

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🐦 @Lisette_dJH

SKILLS

R, MATLAB, Python,

OpenSesame, SPSS, Excel,

OpenPose, Linux

Time series & network analyses

Analyzing multimodal behavior

Systematic reviews

Qualitative research

Participatory research

Science communication

HONOURS & AWARDS

Prins Bernhard Cultuurfonds:

grant (€ 5000,-) to do research at CESPA (2018).

Scholten-Cordes Fonds:

grant (€ 2500,-) to carry out PhD-related research (2016).

Groninger Alumnivereniging

Psychologie: Nomination (1 out of 3) for best Psychology master thesis (2012).

TEACHING EXPERIENCE

Developmental Psychology, University of Groningen

- *Teaching staff*

February 2014 – February 2020

I taught and coordinated undergraduate (honours) courses about research skills and science communication, and supervised bachelor theses and master theses, was a first year students' mentor, and supervised internships.

Psychology, University of Groningen

- *Student assistant*

November 2011 – January 2012

I supervised four groups who needed additional support to complete their reports.

EDUCATION

Developmental Psychology, University of Groningen

- *PhD (cum laude/with distinction)*

February 2014 – July 2021

PhD thesis: How hand movements and speech tip the balance in cognitive development: A story about children, complexity, coordination, and affordances. [doi:10.33612/diss.172252039](https://doi.org/10.33612/diss.172252039)

Supervisor: Prof Paul L.C. Van Geert

Daily supervisors: Dr Ralf F.A. Cox, Dr Steffie Van der Steen

Developmental Psychology, University of Groningen

- *MSc. (cum laude/with distinction)*

September 2011 – August 2012

Master thesis: Curious Minds: Children's Hands and their Scientific Understanding

Psychology, University of Groningen

- *BSc.*

September 2008 – July 2011

STUDENT SUPERVISION

PhD students

Ten Den, M., Developmental variability and Piaget's new theory.

- *Co-supervisor*

April 2023 – current

[to be hired], Language development during the transition to school.

- *Co-supervisor*

Starts in December 2023

MSc and BSc students

I supervised **22 MSc students** and **41 BSc students** during their graduation research project.

PUBLICATIONS

Published

De Jonge-Hoekstra, L., Cox, R.F.A., Van der Steen, S., & Dixon, J.A. (2021). Easier said than done? Task difficulty's influence on temporal alignment, semantic similarity, and complexity matching between gestures and speech. *Cognitive Science*, 45(6). [doi:10.1111/cogs.12989](https://doi.org/10.1111/cogs.12989)

Pouw, W., **De Jonge-Hoekstra, L.**, Harrison, S. J., Paxton, A., & Dixon, J. A. (2021). Gesture-speech physics in fluent speech and rhythmic upper limb movements. *Annals of the New York Academy of Sciences*. [doi:10.1111/nyas.14532](https://doi.org/10.1111/nyas.14532)

De Jonge-Hoekstra, L., Van der Steen, S., & Cox, R. F. A. (2020). Movers and shakers of cognition: Hand movements, speech, task properties and variability. *Acta Psychologica*, 211(103187). [doi:10.1016/j.actpsy.2020.103187](https://doi.org/10.1016/j.actpsy.2020.103187)

De Jonge-Hoekstra, L., Van der Steen, S., Van Geert, P., & Cox, R. F. A. (2016). Asymmetric Dynamic Attunement of Speech and Gestures in the Construction of Children's Understanding. *Frontiers in Psychology*, 7, 1–19. [doi:10.3389/fpsyg.2016.00473](https://doi.org/10.3389/fpsyg.2016.00473)

Cox, R. F. A., van der Steen, S., Guevara, M., **de Jonge-Hoekstra, L.**, & van Dijk, M. (2016). Chromatic and Anisotropic Cross-Recurrence Quantification Analysis of Interpersonal Behavior. *Recurrence Plots and Their Quantifications: Expanding Horizons*, 209–225. [doi:10.1007/978-3-319-29922-8_11](https://doi.org/10.1007/978-3-319-29922-8_11)

Preprints

Pouw, W., **De Jonge-Hoekstra, L.**, & Dixon, J.A. (2018). Stabilizing speech production through gesture-speech coordination. [doi:10.31234/osf.io/arzne](https://doi.org/10.31234/osf.io/arzne)

For professionals in the field

Hoekstra, L., De Koning, B. & Wetzels, A. F. M. (2013). Hoe kunnen leerkrachten excellente kinderen ondersteunen tijdens Wetenschap & Techniek-lessen? *Betapunt Noord Magazine*, 14-15.

De Koning-Veenstra, B., **Hoekstra, L.**, Wetzels, A. F. M., Fraiquin, M. C. & Oldersma, F. (2013). *Excellentie en Wetenschap & Techniek-onderwijs in de bovenbouw van het basisonderwijs: Materialen voor leerkrachten en trainers*. Rijksuniversiteit Groningen, TalentenKracht en Platform Bèta Techniek.

Blog posts

De Jonge-Hoekstra, L. (2019). Doing science at the weekend of science. <https://mindwise-groningen.nl/doing-science-at-the-weekend-of-science/>

Van der Steen, S. & **De Jonge-Hoekstra, L.** (2019). Coordination in development: Caregiver-child synchrony <https://mindwise-groningen.nl/coordination-in-development-caregiver-child-synchrony/>

De Jonge-Hoekstra, L. (2018). How do you like your noise? <http://mindwise-groningen.nl/how-do-you-like-your-noise/>

De Jonge-Hoekstra, L. (2016). Gestures and speech – a balanced couple? <http://mindwise-groningen.nl/gestures-and-speech-a-balanced-couple/>

PRESENTATIONS

Conferences & Symposia

- 2022
- De Jonge-Hoekstra, L.**, Kupers, W.E., Bakker, A. De Boer, A., Minnaert, A.E.M.G., & Vermunt, J.D.H.M. (2022). Implementatie van differentiatie in het vmbo: de rol van de schoolcontext. Presentation at Onderwijs Research Dagen 2022, Jul. 6-8, 2022.
- De Jonge-Hoekstra, L.**, Pouw, W., Van der Steen, S., Dixon, J.A., & Cox, R.F.A. (2022). Children's multimodal coordination, collaboration & performance during dyadic problem solving. Presentation at VNOP 2022 conference, May 24-25, 2022.
- 2020
- De Jonge-Hoekstra, L.**, Janssen, H.J.M., Cox, R.F.A., & Van Nuunen, T. (2020). Can you feel my rhythm? Interpersonal coordination between a child with deafblindness and their mentor. Poster presentation at Many Paths to Language Workshop, Max Planck Institute for Psycholinguistics, Oct. 22-23, 2020.
- 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. Gesture and Speech in Interaction (GESPIN) 2020, Sept. 7-9, 2020.
- De Jonge-Hoekstra, L.** & Repgen, M.H. (2020). I like to move it, move it: Package for social scientists who want to use OpenPose. Poster presentation and release of package at Interdisciplinary Inspiration BSS Symposium, Jan. 21, 2020. (<https://osf.io/6s73d/>)
- 2019
- De Jonge-Hoekstra, L.**, Van der Steen, S., Dixon, J.A. & Cox, R.F.A. (2019). Complexity matching between gestures and speech in easy and difficult tasks. Presentation at International Conference on Perception and Action (ICPA), July 6, 2019.
- De Jonge-Hoekstra, L.**, Pouw, W., Abney, D.H., Borjon, J.I., & Trujillo, J. (2019). Symposium: Becoming one: How hand movements and vocalizations emerge together. Organizer of symposium at International Conference on Perception and Action (ICPA), July 6, 2019.
- De Jonge-Hoekstra, L.**, Pouw, W., Dixon, J.A., Van der Steen, S. & Cox, R.F.A. (2019). Team up! How do children move and speak when they work together? Poster presentation at International Conference on Perception and Action (ICPA), July 4-6, 2019.
- De Jonge-Hoekstra, L.**, Pouw, W., Dixon, J.A., Van der Steen, S. & Cox, R.F.A. (2019). Team up! How do children move and speak when they work together? Poster presentation at Heymans Symposium, April 10, 2019.
- 2018
- De Jonge-Hoekstra, L.**, Cox, R.F.A., & Van der Steen, S. (2018). Gestures, learning, and task properties. Poster presentation at 15th European Workshop on Ecological Psychology, June 12, 2018.
- De Jonge-Hoekstra, L.**, Cox, R.F.A., Van der Steen, S., & Van Geert, P.L.C. (2018). Task properties and children's gestures and speech. Presentation at the Jean Piaget Society Conference, June 2, 2018.
- De Jonge-Hoekstra, L.**, Adolph, K., Özyürek, A., Abney, D.H., & Bakker, A. (2018). Discussion session: How do children learn with their hands? Organizer and host of Discussion session at the Jean Piaget Society Conference, May 31, 2018.
- De Jonge-Hoekstra, L.**, Cox, R.F.A., & Van der Steen, S. (2018). Gestures, learning, and task properties. Poster presentation at Heymans Symposium, April 12, 2018.
- 2017

- De Jonge-Hoekstra, L.,** Van der Steen, S., Cox, R. & Van Geert, P. (2017). Asymmetric coupling between gestures and speech during reasoning. Presentation at European Conference for Developmental Psychology, August 30, 2017. 2016
- De Jonge-Hoekstra, L.,** Van der Steen, S., Cox, R. & Van Geert, P. (2016). Asymmetric dynamic attunement of speech and gestures as children learn: competing synergies? Presentation at 14th European Workshop on Ecological Psychology, July 8, 2016.
- De Jonge-Hoekstra, L.,** Van der Steen, S., Cox, R. & Van Geert, P. (2016). Asymmetric dynamic attunement of speech and gestures in the construction of children's understanding. Presentation at VNOP conference, May 17, 2016. 2015
- Hoekstra, L.,** Cox, R. & Janssen, M. (2015). Feel the rhythm: Embedded & embodied communication of a deafblind girl. Poster presentation at Heymans Symposium, April 8, 2015. 2014
- Hoekstra, L.,** Van der Steen, S., Cox, R. & Van Geert, P. (2014). Exploring the dynamics of gestures in the construction of cognitive understanding. Poster presentation at VNOP conference, May 20, 2014.
- Hoekstra, L.,** Van der Steen, S., Cox, R. & Van Geert, P. (2014). Exploring the dynamics of gestures in the construction of cognitive understanding. Poster presentation at Heymans Symposium, April 3, 2014.
- Invited talks**
- 2022
- De Jonge-Hoekstra, L.** (2022). Coding of vocalization and movement tracking. Workshop at the VNOP lab visit, University of Groningen, September 29, 2022.
- De Jonge-Hoekstra, L.** (2022). Using MF-DFA to investigate Complexity Matching between Gestures and Speech. Presentation at the Workshop on Nonlinear Methods, Leuphana University of Lüneburg, July 27, 2022. 2021
- De Jonge-Hoekstra, L.** (2021). Complexity matching and synchronization between gestures and speech. Presentation at the Lund University Humanities Lab, Centre for Languages and Literature, Lund University, December 6, 2021.
- De Jonge-Hoekstra, L.** (2021). Multiscale multimodal coordination between collaborating children. Presentation at the Precision Psychiatry and Social Physiology laboratory, University of Montréal, November 12, 2021.
- De Jonge-Hoekstra, L.** (2021). Complexity matching and synchronization between gestures and speech. Presentation at the Complexity Matters-podcast (<https://www.youtube.com/watch?v=IMb-So8wKS8&t=3204s>). April 20, 2021. 2019
- De Jonge-Hoekstra, L.** (2019). Movers and shakers of cognition: Hand movements, task properties, and variability. Presentation at Nijmegen Gesture Center, Max Planck Institute of Psycholinguistics, Radboud University Nijmegen, October 1, 2019.
- De Jonge-Hoekstra, L.** (2019). Using automated video analysis to investigate interactions in deafblindness from moment to moment. Presentation/Demonstration at Opening UG Institute for Deafblindness, University of Groningen, September 27, 2019.

De Jonge-Hoekstra, L. (2019). Extending RQA: Using chromatic and anisotropic RQA to study asymmetric dynamic attunement of speech and gestures. Presentation at Complexity Methods for Behavioural Science: A toolbox for studying change, Radboud University Nijmegen, July 12, 2019.

De Jonge-Hoekstra, L. (2019). Measuring attunement and movement synchronization. Presentation/Workshop at Assisting Better Communication-workshop, University of Groningen, July 2, 2019.

2018

De Jonge-Hoekstra, L. (2018). Hand movements, task properties, and variability: Exploring data and theory. Presentation at the Cognitive Development Lab, Indiana University, December 7, 2018.

De Jonge-Hoekstra, L. (2018). Hand movements, task properties, and variability. Presentation at Infant Action Lab, New York University, November 7, 2018.

De Jonge-Hoekstra, L. (2018). Gestures, learning, and the environment: A study and considerations for fostering cognitive development. Presentation at Developmental Brownbag series, University of Connecticut, October 5, 2018.

De Jonge-Hoekstra, L. (2018). Gestures-speech (de)coupling and the environment. Presentation at Perception-Action-Workshop at CESPA, University of Connecticut, September 28, 2018.

2014

Hoekstra, L. (2014). Blogging: Scientific Storytelling. Workshop at VNOP PhD day, November 25, 2014.

2013

Hoekstra, L. (2013). TalentenKracht: Handen van Kinderen en hun Wetenschappelijk Begrip: De constructie van een codeersysteem voor gebaren en handelen met materiaal en een exploratieve casestudy. Presentation at the GAP-Alumnidag 2013, March 23, 2013.

SCIENCE COMMUNICATION

In the media

Van der Schier, M. (2021). 'Handen en gebaren zijn belangrijk bij ontwikkeling kinderen'. Interview in Algemeen Dagblad – Gezin.

<https://www.ad.nl/gezin/handen-en-gebaren-zijn-belangrijk-bij-ontwikkeling-kinderen~af556f2f/?fbclid=IwAR1kNzMmxMrEftlggh320fWBnscUYW2JBRgdstrju3AJkOgYqe9BFka4Dpg>

De Jonge-Hoekstra, L. (2021). Sterke koppeling tussen handbewegingen en spraakontwikkeling. Article in Vakblad VROEG.

<https://www.vakbladvroeg.nl/sterke-koppeling-tussen-handbewegingen-en-spraakontwikkeling/>

De Jonge-Hoekstra, L. (2019). Hoe kunnen kinderen goed samenwerken? Interview at Dutch radio.

<https://www.nporadio1.nl/radio-focus/onderwerpen/485640-hoe-werken-kinderen-goed-samen>

De Jonge-Hoekstra, L. (2019). RUG heeft enige alfa-faculteit tijdens Weekend van de Wetenschap.

Contribution to video report by Oogtv (<https://www.youtube.com/watch?v=Ipkc3bwuz-E>, 02:16).

Living Lab (combine science communication with actual research)

The Living Lab, Connecticut Science Center, Hartford

- *Experiment: How do children move and speak when they work together?*

January 2019

Weekend of Science, University of Groningen, Groningen

- *Experiment: Body language* (Promotion-video: <https://twitter.com/i/status/1176762584340586496>)

October 2019

Podcast

Grow with the flow

- *Host*

April 2019 – Current

<https://anchor.fm/lisette-de-jonge-hoekstra>

Blogging

Mindwise, the Groningen Psychology blog

- *Editorial board*

September 2014 – February 2020

<http://mindwise.groningen.nl>

COURSES

Designing Successful Blended Courses, Center for Information Technology, University of Groningen

September – October 2021

Introduction to Systematic Review and Meta-Analysis, John Hopkins University (online course)

February – March 2020

Marie Curie Master Class, Aarhus Universitet

May 2019

Writing your grant like a pro, Rijksuniversiteit Groningen

February – March 2019

Basiskwalificatie Onderwijs (BKO), Center for Information Technology, Rijksuniversiteit Groningen

December 2014 – February 2016

Introduction to Complexity, Santa Fe Institute (online course)

December 2014

Basisvaardigheden Onderwijs, Center for Information Technology, Rijksuniversiteit Groningen

September - November 2014

University Teaching 101, John Hopkins University (online course)

March - April 2014

Introduction to Dynamical Systems and Chaos, Santa Fe Institute (online course)

January – March 2014

REVIEWING AND EDITORIAL EXPERIENCE

Editorial activities

Development in Infancy, Frontiers in Developmental Psychology – Review Editor

August 2023 – Current

Reviewing activities

I reviewed papers for the following journals:

Topics in Cognitive Science – topiCS

Journal of Cognitive Engineering and Decision Making

VOLUNTEERING EXPERIENCE

Parent council, Kinderwoud kinderopvang, location de Barte

November 2022 – Current

Within the parent council, we advise the board of Kinderwoud about policy and organize related activities.

Reading assistant, reading project Humanitas

September 2014 – May 2015

I provided assistance to a young boy who had learning difficulties with reading and math.

Teaching assistant, primary school for special needs education “It Heechhof”

November 2011 – December 2012

I provided assistance to teachers in Kindergarten and first grade.

COMMITTEE EXPERIENCE

Young Enthusiastic Social Scientists of Behavioural and Social Sciences (YESS BSS), University of Groningen

- *Chair*

September 2022 - Current

- Working groups: Visibility & Valorization; Open Science; Stress in academia; Diversity

September 2021 – Current

Website committee, Psychology, University of Groningen

September 2021 – Current

PhD day, Vereniging Nederlandse Ontwikkelingspsychologie (VNOP)

September – November 2014

LANGUAGES

Dutch (native), **English** (full professional fluency).