Collaborative meaning-making: the emergence of novel languages in humans, machines, and human-machine interactions

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Acknowledgements

Life as a PhD candidate is somewhat strange. Many bright minds surround you, but your quest is very personal: only you can do it. Interacting with people is thus paramount. Without them, I do not think there is a thing called a 'successful' dissertation. I want to thank some people with whom I frequently interacted and who helped making my life as a PhD candidate a success.

I was very fortunate to have Tessa Verhoef as my co-promoter. We shared many unforgettable moments: from Sushi, Macaques, and Ramen bowls in Japan, to nailing statistical analyses above the Atlantic Ocean, to hiking in Wisconsin, Bangkok, and Singapore. Tessa, thank you for your support and dedication, which allowed me to research what I am passionate about. I hope to share many more moments in the future.

Bram van Dijk and Max Peeperkorn, I have long thought about my acknowledgements to you, and to this moment, I still do not know how to do you justice. You have been my sparring partners, inspiration sources, and complaining buddies, I could go on for hours. But most importantly, you are *very* good friends. Bram, what started with coffee and a stroll around Leiden became true companionship. Besides your ever-listening ear and critical view, I dearly value our mutually grown hobby of introducing new things to each other, like Hans van Werven cigars, eating ramen with chopsticks, and slurping oysters. Max, our story also starts with a multitude of strolls, this time through Linz. Our weekly meetings, in which we discussed programming issues, paper writing, and simple chitchat, were something I always looked forward to. Beyond the Fridays, you were always available–no matter what time of day. Even to the point that Anniko once asked me whether I also helped you! I hope I did. Besides work, you are a true friend with whom I hope to spend more time in the future!

Initially, it seemed challenging to position my work between linguistics and computer science, but I believe that this has become one of its strengths. Thanks to my promotor Stephan Raaijmakers, I had the opportunity and freedom to settle between these fields. Roy de Kleijn, as my co-promotor, you helped set up experiments and were always there to listen, thank you. I know where to find you on October 2nd.

Max van Duijn, even though you had no formal role during my PhD, you were always interested, giving me the feeling that my work mattered. Besides, you taught me a great deal about the world of roasted beans. Thank you, Max. To learning from each other when we

collaborate in the future!

I am grateful to Kiana Shahrasbi, Koen Poortvliet, and Neval Kara for their help in conducting experiments during my PhD. Of course, I also want to thank all the participants; without you, there would be nothing to analyse. I hope you enjoyed taking part.

Thanks to all the people at the office, including (but not limited to) Bernard Hilpert, Dan Xu, Danica Mast, Evani Lachmansing, Koen Ponse, Marcello Gómez-Maureira, Matthias Müller-Brockhausen, Marianne Bossema, Peter van der Putten, Ramira van der Meulen, Rob Saunders, Ross Towns, and Sabijn Perdijk. You, in one way or another, contributed to a great social environment that cannot be underestimated when the rest of your work deals with anti-social computers that never laugh at your jokes. I want to thank some people in particular. Max van Haastrecht, thank you for co-organising the PhD seminar and for all the things you did for PhD candidates in general. Zane Kripe, we simply vibe. Thank you for your listening ears, your everlasting smile and our conversations. Michiel van der Meer, times are long and sweet. Singapore made me hungry for more, and I hope to travel to many more conferences together. Giulio Barbero, our squabble game keeps us, and perhaps everyone else, entertained, thanks! Lennard ('The Northerner') Froma, not a single day goes by without laughing to tears. To lots of jokes in the future. Felix Kleuker, I enjoyed our strolls, but I will never forgive you for throwing me under the bus twice during Werewolf. Lennard and Felix, if, after all, the life of an academic does not suit you, know that you can always pursue a career in tree chopping. Alice Mulder, it turns out that you are not only an incredible illustrator, but collaborative human-AI cover-making is also a piece of cake for you, thank you.

Beyond academia, I want to thank the friends who kept me from losing myself in the world of academia. Thank you Annelotte Mulder, Bjorn de Jong, Bob van Brussel, Boris van Hattum, De Collectie, Freek Boelders, Fábio Matos da Costa, Janneke van Oirschot, Jurre van Rijswijck, Lara Kluts, Luuk Hopman, Mark Snoek, Nicole de Groot, Paulien Elfring, Roomburg Heren 1, Ties Eigenhuis, Tania Sluckin, and Willeke Verduijn.

Thanks to Anita Israel, Kristian Vinke, Noor Janssen, and Xander Janssen for always keeping the door open in Zeeland. Perhaps we will experience some self-driving in seafaring; only time will tell.

Pursuing a research career was only possible because my lovely family always supported me. Seeing you feels like a small getaway where all that matters is simply being together. Thank you dearly Susan Kouwenhoven, Mylène Rutten, Huub Kouwenhoven, Caroline Schippers, and Grégory Dianzenza. I care a great deal about you.

Finally, I want to express my deepest gratitude to Anniko Janssen. You bring me joy, laughter, craziness, love, and many more things that are much more valuable and go far beyond the positives science can offer. No matter the activity—be it cooking, travelling, or dancing—being together always makes it fun. Life with you is like a gift that keeps on giving.

List of publications

Asterisks denote equal contributions.

1 **Kouwenhoven, T.**, Towns, R., Verhoef, T. (2022). Modelling the emergence of vocal grooming. In Ravignani, A., Asano, R., Valente, D., Ferretti, F., Hartmann, S., Hayashi, M., Jadoul, Y., Martins, M., Oseki, Y., Rodrigues, E. D., Vasileva, O., & Wacewicz, S., editors, *Proceedings of the Joint Conference on Language Evolution (JCoLE)* pages 434-436. Max Planck Institute for Psycholinguistics.

2 **Kouwenhoven, T.**, Verhoef, T., De Kleijn, R., and Raaijmakers, S. (2022). Emerging grounded shared vocabularies between human and machine, inspired by human language evolution. *Frontiers in Artificial Intelligence*, 5:886349

3 **Kouwenhoven, T.**, de Kleijn, R.E., Raaijmakers, S.A., Verhoef, T.(2023). Need for Structure and the Emergence of Communication. In J. Culbertson, A. Perfors., H. Rabagliati. & V. Ramenzoni., editors, *Proceedings of the Annual Meeting of the Cognitive Science Society*, Volume 44, pages 549-555. Cognitive Science Society.

4 **Kouwenhoven, T.**, Verhoef, T., Raaijmakers, S.A., de Kleijn, R.E. (2023). Modelling Human Sequential Behaviour with Deep Learning Neural Networks in Emergent Communication. In M. Goldwater., F. K. Anggoro., B. K. Hayes., & D. C. Ong., editors, *Proceedings of the Annual Meeting of the Cognitive Science Society*, Volume 44, pages 549-555. Cognitive Science Society.

5 Van Duijn, M.J.*, Van Dijk, B.M.A.*, **Kouwenhoven, T.***, De Valk, W.M., Spruit, M.R., and Van Der Putten, P.W.H. (2023). Theory of Mind in Large Language Models: Examining Performance of 11 State-of-the-Art Models vs. Children Aged 7-10 on Advanced Tests. In Jiang, J., Reitter, D., and Deng, S., editors, *Proceedings of the 27th Conference on Computational Natural Language Learning*, pages 389-402, Singapore. Association for Computational Linguistics.

6 van Dijk, B., **Kouwenhoven, T.**, Spruit, M., and van Duijn, M. J. (2023a). Large language models: The need for nuance in current debates and a pragmatic perspective on understanding. In Bouamor, H., Pino, J., and Bali, K., editors, *Proceedings of the 2023 Con-*

ference on Empirical Methods in Natural Language Processing, pages 12641–12654, Singapore. Association for Computational Linguistics

7 Peeperkorn, M., **Kouwenhoven, T.**, Brown, D., and Jordanous, A. (2024). Is temperature the creativity parameter of large language models? In Grace, K., Llano, M. T., Martins, P., and Hedblom, M. M., editors, *Proceedings of the 15th International Conference on Computational Creativity*, pages 226–235. Association for Computational Creativity

8 **Kouwenhoven, T.**, Peeperkorn, M., Van Dijk, B., and Verhoef, T. (2024). The curious case of representational alignment: Unravelling visio-linguistic tasks in emergent communication. In Kuribayashi, T., Rambelli, G., Takmaz, E., Wicke, P., and Oseki, Y., editors, *Proceedings of the Workshop on Cognitive Modeling and Computational Linguistics*, pages 57–71, Bangkok, Thailand. Association for Computational Linguistics

9 Verhoef, T.*, Shahrasbi, K., and **Kouwenhoven, T***. (2024). What does kiki look like? cross-modal associations between speech sounds and visual shapes in vision-and-language models. In Kuribayashi, T., Rambelli, G., Takmaz, E., Wicke, P., and Oseki, Y., editors, *Proceedings of the Workshop on Cognitive Modeling and Computational Linguistics*, pages 199–213, Bangkok, Thailand. Association for Computational Linguistics

10 **Kouwenhoven, T.**, Peeperkorn, M., and Verhoef, T. (2025b). Searching for structure: Investigating emergent communication with large language models. In Rambow, O., Wanner, L., Apidianaki, M., Al-Khalifa, H., Eugenio, B. D., and Schockaert, S., editors, *Proceedings of the 31st International Conference on Computational Linguistics*, pages 9977–9991, Abu Dhabi, UAE. Association for Computational Linguistics

11 **Kouwenhoven, T.**, Peeperkorn, M., de Kleijn, R., and Verhoef, T. (2025a). Shaping shared languages: Human and large language models' inductive biases in emergent communication. In Kwok, J., editor, *Proceedings of the Thirty-Fourth International Joint Conference on Artificial Intelligence*, IJCAI-25, International Joint Conferences on Artificial Intelligence Organization. Human-Centred AI

12 Peeperkorn, M., **Kouwenhoven, T.**, Brown, D., and Jordanous, A. (2025). Mind the gap: Conformative decoding to improve output diversity of instruction-tuned large language models. *Preprint*

12 Pitta, E., **Kouwenhoven, T.**, Verhoef, T. (2025). Probing Vision-Language Understanding through the Visual Entailment Task: promises and pitfalls. In Henrique, L.C., Rui, S., Koponen, M., Pareja-Lora, A., editors, *Proceedings of the Second LUHME Workshop*, Bologna, Spain.

13 **Kouwenhoven, T***., Shahrasbi, K., Verhoef, T.* (2025). Cross-modal Associations in Vision and Language Models: Revisiting the bouba-kiki effect. *Preprint*

included in this dissertation.

Curriculum Vitae

Tom Kouwenhoven was born on January 26, 1995, in Nijmegen, the Netherlands. He graduated in 2013 with a VWO-plus diploma from the Kandinsky College in Nijmegen, Gelderland. From 2014 to 2017, Tom pursued a bachelor's degree in Lifestyle Informatics (now known as Artificial Intelligence) at the Vrije Universiteit in Amsterdam. During this time, he completed a minor in Computation Arts at Concordia University in Montréal, Canada. He obtained his master's degree in 2020 from the University of Leiden, where he completed the Media Technology program.

In 2021, Tom started as a PhD candidate at the Leiden Institute for Advanced Computer Science, which he successfully completed in 2025. During his doctoral studies, he collaborated with researchers from various (inter)national institutions – most notably with Max Peeperkorn. One of these collaborations, exploring the effect of large language models' temperature parameter on their creative writing abilities, received the Best Student Paper Award at the 2024 International Conference on Computational Creativity in Jönköping, Sweden. Alongside his research, Tom completed training in transferable skills, including communication for science, presenting skills for PhDs, and scientific conduct. Since May 2025, Tom has been working as a postdoctoral researcher at Leiden University, affiliated with the Hybrid Intelligence consortium.

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