

Thomas Bart Tienkamp

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Employment History

- 2024 – present 📌 **Guest researcher** - Department of Head and Neck Oncology and Surgery, Netherlands Cancer Institute-Antoni van Leeuwenhoek, Amsterdam, The Netherlands.
- 2022 – present 📌 **Guest researcher** - Department of Oral and Maxillofacial Surgery, University Medical Centre Groningen, Groningen, The Netherlands.
- 2021 – present 📌 **PhD Candidate** - Centre for Language and Cognition Groningen, University of Groningen, Groningen, The Netherlands.
Thesis project: *Speech flexibility following oral cancer treatment: Acoustic and kinematic explorations. The SPOKE study*
Thesis advisors: prof. dr. Martijn Wieling, prof. dr. Max Witjes, dr. Defne Abur, and dr. Sebastiaan de Visscher

Education

- 2019 – 2021 📌 **MA (res) Linguistics** - University of Amsterdam. (GPA: 8.7)
Thesis title: *The influence of lexical frequency and working memory on relative clause processing in Dutch*
Thesis advisors: dr. Evy Visch-Brink, dr. Laura Bos, and dr. Ileana Grama
- 2016 – 2019 📌 **BA English Language and Culture** - University of Groningen. (GPA 7.5)
Thesis title: *'Sad you said that!': The development of the /e/ and /ae/ lexical sets among Dutch secondary school students*
Thesis advisor: prof. dr. Merel Keijzer

Academic Output

Peer-reviewed publications in scientific journals

- 1 Rebernik, T., Jacobi, J., Buurke, R., **Tienkamp, T. B.**, Tsiwah, F., Oud, S., ... Wieling, M. (In revision). Mobile laboratory spraaklab: Technical specifications, practical experiences, and a validation study. *Behavior Research Methods*.
- 2 **Tienkamp, T. B.**, Rebernik, T., D'Cruz, R. A., van Son, R. J. J. H., Wieling, M., Witjes, M. J. H., ... Abur, D. (Under review). Articulatory-kinematic changes in speech following surgical treatment for oral or oropharyngeal cancer: A systematic review. *International Journal of Language and Communication Disorders*.
- 3 **Tienkamp, T. B.**, Rebernik, T., Halpern, B. M., van Son, R. J. J. H., Wieling, M., Witjes, M. J. H., ... Abur, D. (In prep). Associations between acoustic, kinematic, self-reported and perceptual measures of speech in individuals surgically treated for oral cancer. *Journal of Speech Language and Hearing Research*.
- 4 **Tienkamp, T. B.**, Rebernik, T., Halpern, B. M., van Son, R. J. J. H., Wieling, M., Witjes, M. J. H., ... Abur, D. (2024). Quantifying articulatory working space in individuals surgically treated for oral cancer with electromagnetic articulography. *Journal of Speech Language and Hearing Research*, 67(2), 384–399.
🔗 doi:10.1044/2023_JSLHR-23-00111

- 5 **Tienkamp, T. B.**, van Son, R. J. J. H., & Halpern, B. M. (2023). Objective speech outcomes after surgical treatment for oral cancer: An acoustic analysis of a spontaneous speech corpus containing 32.850 tokens. *Journal of Communication Disorders*, 101, 106292. [doi:10.1016/j.jcomdis.2022.106292](https://doi.org/10.1016/j.jcomdis.2022.106292)
- 6 Van den Berg, F., Brouwer, J., **Tienkamp, T. B.**, Verhagen, J., & Keijzer, M. (2022). Language entropy relates to behavioral- and pupil indices of executive control in young adult bilinguals. *Frontiers in Psychology*. [doi:10.3389/fpsyg.2022.864763](https://doi.org/10.3389/fpsyg.2022.864763)
- 7 **Tienkamp, T. B.** (2020). Help or hindrance? the influence of dutch on the acquisition of english phrasal verbs. *Linguistics in Amsterdam*, 13, 24–42.

Publications in conference proceedings (full papers)

- 1 Halpern, B. M., **Tienkamp, T. B.**, Violeta, L. P., Huang, W.-C., Rebernik, T., de Visscher, S. A. H. J., ... Toda, T. (Accepted). Quantifying the effect of speech pathology on automatic and human speaker verification. Paper accepted to Interspeech 2024. [doi:10.48550/arXiv.2406.06208](https://doi.org/10.48550/arXiv.2406.06208)
- 2 Hao, Y., Amooie, R., de Vries, W., **Tienkamp, T. B.**, van Noord, R. I. K., & Wieling, M. (Accepted). Exploring self-supervised speech representations for cross-lingual acoustic-to-articulatory inversion. Paper accepted to Interspeech 2024.
- 3 Hoekzema, N., Rebernik, T., **Tienkamp, T. B.**, Chaboksavar, S., Ciot, V., Gleichman, A., ... Abur, D. (2024). Assessing differences in articulatory-acoustic vowel space in parkinson's disease by sex and phenotype. (pp. 69–72). 13th International Seminar on Speech Production. Available [here](#).
- 4 **Tienkamp, T. B.**, Rebernik, T., Buurke, R., Polsterer, K., van Son, R. J. J. H., Wieling, M. B., ... Abur, D. (2024). The effect of speaking style on the articulatory-acoustic vowel space in individuals with tongue cancer before and after surgical treatment. (pp. 65–68). 13th International Seminar on Speech Production. Available [here](#).
- 5 **Tienkamp, T. B.**, Rebernik, T., Jacobi, J., Wieling, M., & Abur, D. (2024). The impact of electromagnetic articulography sensors on the articulatory-acoustic vowel space in speakers with and without parkinson's disease. (pp. 61–64). 13th International Seminar on Speech Production. Available [here](#).
- 6 Rebernik, T., **Tienkamp, T. B.**, Polsterer, K., Abur, D., Buurke, R., Hukker, V., ... Wieling, M. (2023). 5-minute formant adaptation in dutch children. (pp. 923–928). 20th International Congress of the Phonetic Sciences. Available [here](#).

Pre-prints

- 1 Halpern, B. M., Rebernik, T., **Tienkamp, T. B.**, van Son, R., van den Brekel, M., Wieling, M., ... Scharenborg, O. (2022). Manipulation of oral cancer speech using neural articulatory synthesis. [doi:10.48550/arXiv.2203.17072](https://doi.org/10.48550/arXiv.2203.17072)
- 2 **Tienkamp, T. B.**, Rebernik, T., Abur, D., van Son, R. J. J. H., de Visscher, S. A. H. J., Witjes, M. J. H., & Wieling, M. (2022). Preregistered protocol for: Articulatory changes in speech following treatment for oral or oropharyngeal cancer: A systematic review. [doi:10.48550/arXiv.2209.06521](https://doi.org/10.48550/arXiv.2209.06521)




Conference contributions: Posters

- 1 Vos, J. Y., **Tienkamp, T. B.**, Rebernik, T., van Son, R. J. J. H., Wieling, M., Witjes, M. J. H., ... Abur, D. (Accepted). Assessing the size of tongue movements before and after surgery for lateral tongue tumors. Poster accepted at TABU Dag 2024.
- 2 Polsterer, K., Hoekzema, N., Yang, X., **Tienkamp, T. B.**, Rebernik, T., Sekeres, H., ... Abur, D. (2024). Auditory vowel discrimination in middle childhood compared to adulthood. 13th International Seminar on Speech Production.


- 3 Polsterer, K., Rebernik, T., **Tienkamp, T. B.**, Sekeres, H., Wieling, M., & Abur, D. (2024). Responses to gradual auditory perturbations of vowel formant across age. 22nd biennial Motor Speech Conference, San Diego, CA, United States of America.
- 4 Polsterer, K., **Tienkamp, T. B.**, Rebernik, T., Sekeres, H., Valentin, L., Wieling, M., & Abur, D. (2024). Auditory-motor adaptation of vowels across adulthood. 13th International Seminar on Speech Production.
- 5 Rebernik, T., Tiede, M., **Tienkamp, T. B.**, Abur, D., & Wieling, M. (2024). Lingual motor learning based on real-time visual feedback in individuals with and without parkinson's disease. 13th International Seminar on Speech Production.
- 6 Rebernik, T., **Tienkamp, T. B.**, Chaboksavar, S., Hoekzema, N., Ciot, V., Gleichman, A., ... Abur, D. (2024). Kinematic and acoustic contributors to formant perturbation responses in individuals with and without parkinson's disease. 22nd biennial Motor Speech Conference, San Diego, CA, United States of America.
- 7 **Tienkamp, T. B.**, Rebernik, T., Halpern, B. M., van Son, R. J. J. H., Wieling, M. B., Witjes, M. J. H., ... Abur, D. (2024). Associations between acoustic, kinematic, self-reported and perceptual based measures of speech in individuals surgically treated for oral cancer. 22nd biennial Motor Speech Conference, San Diego, CA, United States of America.
- 8 Wieling, M., Rebernik, T., Jacobi, J., **Tienkamp, T. B.**, Tsiwah, F., & Abur, D. (2024). Spraaklab: Mobile laboratory to collect high-quality speech data. 13th International Seminar on Speech Production.
- 9 Wilschut, T., Polsterer, K., **Tienkamp, T. B.**, van Rijn, H., Sibert, C., & Abur, D. (2024). Association between speech motor learning and model-based estimates of memory retrieval. 13th International Seminar on Speech Production.
- 10 Ciot, V., Rebernik, T., **Tienkamp, T. B.**, Jonkers, R., Noiray, A., Wieling, M., & Abur, D. (2023). Acoustic measures of voice quality in dutch speakers with and without parkinson's disease. Poster presented at TABU Dag 2023.
- 11 Ciot, V., Rebernik, T., **Tienkamp, T. B.**, Polsterer, K., Sekeres, H., Bacque, A., ... Abur, D. (2023). The impact of an altered auditory feedback task on articulatory-acoustic vowel space. Poster presented at TABU Dag 2023.
- 12 D'Cruz, R., **Tienkamp, T. B.**, & Abur, D. (2023). Impact of age on acoustic and perceptual measures of voice quality in italian speakers. Poster presented at TABU Dag 2023.
- 13 Hoekzema, N., Rebernik, T., **Tienkamp, T. B.**, Jonkers, R., Noiray, A., Rofes, A., ... Abur, D. (2023). The relation between lexical retrieval, cognition, and articular coordination in persons with parkinson's disease. Poster presented at TABU Dag 2023.
- 14 Polsterer, K., Rebernik, T., **Tienkamp, T. B.**, Sekeres, H., Bacque, A., Wieling, M., & Abur, D. (2023). Impact of typical aging on auditory-motor learning. Poster presented at TABU Dag 2023.
- 15 Wilschut, T., Polsterer, K., **Tienkamp, T. B.**, van Rijn, H., & Abur, D. (2023). Speaking the mind: Investigating the association between speech motor control and model-based estimations of forgetting rate. Poster presented at TABU Dag 2023.
- 16 Monen, J. S. C., Haplern, B. M., Rebernik, T., **Tienkamp, T. B.**, van Son, R. J. J. H., Verkhodanova, V., ... Wieling, M. B. (2022). Automatic detection and severity estimation for oral cancer speech. poster presentation. YFRSW 2022, Incheon, South-Korea, September 17.
- 17 Wildenburg, K., Haplern, B. M., Rebernik, T., **Tienkamp, T. B.**, van Son, R. J. J. H., Verkhodanova, V., ... Wieling, M. B. (2022). Automatic speech recognition and error analyses of dutch oral cancer speech. poster presentation. YFRSW 2022, Incheon, South-Korea, September 17.

- 18 Rebernik, T., Halpern, B. M., **Tienkamp, T. B.**, Jonkers, R., Noiray, A., van Son, R. J. J. H., ... Wieling, M. B. (2022). The effect of masking noise on oral cancer speech acoustics and kinematics. poster presentation. 8th International Conference on Speech Motor Control, Groningen, The Netherlands, August 24-27.
- 19 **Tienkamp, T. B.**, Rebernik, T., Halpern, B. M., Abur, D., van Son, R. J. J. H., de Visscher, S. A. H. J., ... Wieling, M. B. (2022). Quantifying changes in articulatory working space following oral cancer treatment. poster presentation. 8th International Conference on Speech Motor Control, Groningen, The Netherlands, August 24-27.
- 20 Van den Berg, F., **Tienkamp, T. B.**, Brouwer, J., Verhagen, J., & Keijzer, M. (2022). Investigating language entropy as a predictor of cognitive control in bilinguals using pupillometry. poster presentation. ISBPAC 2022, Tromsø, Norway, August 4-5.
- 21 **Tienkamp, T. B.**, Van den Berg, F., Brouwer, J., Verhagen, J., & Keijzer, M. (2021a). Investigating language entropy as a predictor of cognitive control in bilinguals using pupillometry. poster presentation. International Symposium on Bilingualism Warsaw, Poland, July 9-14.
- 22 **Tienkamp, T. B.** (2021). En parlant du passé: Past-reference in (semi-) spontaneous french aphasic speech. poster presentation. TABU Dag 41, Groningen, The Netherlands, June 10-11.
- 23 **Tienkamp, T. B.**, Van den Berg, F., Brouwer, J., Verhagen, J., & Keijzer, M. (2021b). Investigating language entropy as a predictor of cognitive control in bilinguals using pupillometry. poster presentation. Anéla juniorendag, Groningen, The Netherlands, April 23.


Research Experience

- Feb 2021 – July 2021  **Erasmus Medical Centre** - Rotterdam
 Project: *TAXS*
 Description: Recruiting, screening, testing of participants, using self-paced-reading. Construction of relative clause exercises that are included in a new syntactic therapy programme for mild aphasia types. Published by Bohn Stafleu in 2022.
 Supervisors: dr. Evy Visch-Brink, dr. Laura Bos, and dr. Ileana Grama
- Sep 2020 – Mar 2021  **Bilingualism and Aging Lab** - Groningen
 Project: *Language entropy as a predictor of cognitive flexibility in bilinguals using pupillometry*
 Description: Recruiting, screening, testing of participants for a study using RT and pupillometry methodologies. Results of the internship are published in *Frontiers in Psychology*.
 Supervisors: Prof. dr. Merel Keijzer and dr. Josje Verhagen
- Feb 2020 – July 2020  **Netherlands Cancer Institute** - Amsterdam
 Project: *Objective speech outcomes after oral cancer treatment*
 Description: Phonemic transcription of a large speech corpus and performing acoustic analyses. Results of the internship are published in the *Journal of Communication Disorders*.
 Supervisors: dr. Rob van Son and Bence Halpern

Skills

- Languages  Dutch (native), English (C2), French (B1), German (B1)
- Programmes  R (data wrangling, visualisation, and statistical modelling), \LaTeX , Praat, ELAN, Audacity


Skills (continued)

- Statistics  (generalised) linear mixed effects regression, dimensionality reduction (PCA), rudimentary knowledge of generalised additive modelling (GAMs), and basic machine learning techniques (random forests, xgboost, and LASSO)


Supervision

- 2023-2024  **Ilse Verbree** - MA research project, University of Groningen.
Project: *Assessing the effect of electromagnetic articulography sensors on vowel and sibilant production in individuals treated for tongue carcinomas*
Thijs Seubring - MA research project, University of Groningen.
Project: *Acoustic analysis of voiceless plosives in individuals before and after surgical treatment for tongue carcinomas.*
Maggy Vink - MA research project, University of Groningen.
Project: *Acoustic analysis of corner vowels in individuals before and after surgical treatment for tongue carcinomas.*
Anna den Reijer - MA research project, University of Groningen.
Project: *An acoustic analysis of /s/ before and after surgical treatment for tongue carcinomas*
Jiske Yonne Vos - MA research project, University of Groningen.
Project: *Investigating CV coarticulation in individuals before and after surgical treatment for tongue carcinomas*
- 2022-2023  **Rachel D'Cruz** - rMA thesis in Clinical Linguistics, University of Groningen.
Thesis title: *Impact of age on acoustic and perceptual measures of voice quality*
Co-supervised with: Defne Abur
Josephine Glenn - rMA Research Training, University of Groningen.
Project: *Investigating the effect of levodopa on dysarthria in Parkinson's Disease.*
Co-supervised with: Defne Abur
- 2021-2022  **Anouck Hollander** - MA thesis in Speech and Language Pathology, Radboud University.
Thesis title: *An analysis on vowel production in patients treated for oral cancer using acoustic measurements*
Co-supervised with: Rob van Son and Bence Halpern


Teaching

- 2023-24  **Speech Science** - MA course, University of Groningen.
Guest lecture about meaningful measures of speech in clinical populations.
Introduction to Research Methods - BA course, University of Groningen.
Co-taught with: Defne Abur
Speech and Language Disorders in Adults - MA course, University of Groningen
Guest lecture about speech outcomes following oral cancer treatment.
The Neurobiological Basis of Behaviour - MSc course, University of Groningen
Workshop on Praat and working with (animal) acoustic data.






Academic service

- Journals  **Reviewer:** Journal of Voice, Journal of Speech, Language, and Hearing Research

Academic service (continued)

- Conferences  **Reviewer:** Advances in Quantitative Laryngology 2023, International Congress of Phonetic Sciences 2023, The 2023 ASHA Convention on Speech Motor Disorders across the life span
Planning Committee: The 2023 ASHA Convention on Speech Motor Disorders across the life span

Outreach

- Outreach statement  Public engagement and science communication are important aspects within the Speech Lab Groningen. We are committed to communicating our results with the general public and engaging them in the scientific process. As such, we often visit festivals or popular science events where we have outreach activities alongside scientific experiments.
- 2024  Festival della Scienza, Genoa, Italy
Noorderzon Festival, Groningen, The Netherlands
Zwarte Cross, Lichtenvoorde, The Netherlands
Lowlands Science, Biddinghuizen, The Netherlands
MindMint, Online article
Expeditie NEXT, Zuthpen, The Netherlands
Grasnapolsky Festival, Scheemda, The Netherlands
- 2023  University Newspaper, Online article ([link](#))
House of Connections, Groningen, The Netherlands
Poetry in the Prinsentuin, Haren, The Netherlands
Zwarte Cross, Lichtenvoorde, The Netherlands
Noorderzon Festival, Groningen, The Netherlands
Zpannend Zernike, Groningen, The Netherlands
- 2022  Noorderzon Festival, Groningen, The Netherlands
Festival della Scienza, Genoa, Italy
Zwartecross Festival, Lichtenvoorde, The Netherlands
Expeditie NEXT, Franeker, The Netherlands
Zpannend Zernike, Groningen, The Netherlands
The Spence School, New York City, United States of America
- 2021  Noorderzon Festival, Groningen, The Netherlands
Oktober Kindermaand, Groningen, The Netherlands

References

Available on Request