

LIST OF PUBLICATIONS IN 1993 AND 1994

1993

- Bakkum, M.J., Plomp, R. & Pols, L.C.W. (1993). 'Objective analysis versus subjective assessment of vowels pronounced by native, non-native, and deaf male speakers of Dutch', *J. Acoust. Soc. Am.*, **94**, 1983-1988.
- Bergem, D.R. van (1993). 'Acoustic vowel reduction as a function of sentence accent, word stress, and word class'. *Speech Communication*, **12**, 1-23.
- Bergem, D.R. van (1993). 'On the perception of acoustic and lexical vowel reduction'. *Proceedings Eurospeech'93*, **1**, Berlin, 766-680.
- Bergem, D.R. van (1993). 'The influence of linguistic factors on vowel reduction'. In: Bohumil Palek & Premysl Janota (Eds), *Proceedings of Linguistics and Phonetics'90*, Prague, 427-436.
- Bezooijen, R. van & Pols, L.C.W. (1993). 'Evaluation of text-to-speech conversion for Dutch'. In: V.J. van Heuven & L. C.W. Pols (Eds), *Analysis and synthesis of speech. Strategic research towards high-quality text-to-speech generation*, Mouton de Gruyter, Berlin, 339-360.
- Boersma, P. (1993). 'An articulatory synthesizer for the simulation of consonants'. *Proceedings Eurospeech'93*, **3**, Berlin, 1907-1910.
- Boersma, P. (1993). 'Modelling the distribution of consonant inventories'. In: Bohumil Palek & Premysl Janota (Eds), *Proceedings of Linguistics and Phonetics'90*, Prague, 418-426.
- Boersma, P. (1993). 'Accurate short-term analysis of the fundamental frequency and the harmonics-to-noise ratio of a sampled sound'. *Proceedings of the Institute of Phonetic Sciences Amsterdam*, **17**, 97-110.
- Bosch, L.F.M. ten, Wang, X. & Pols, L.C.W. (1993). 'Duration modelling with Hidden Markov models'. *J. Acoust. Soc. Am.*, **94**, Pt2, 1797 (A).
- Clement, C.J. & Os, E.A. den (1993). 'Ontwikkeling van vocalisaties van ernstig slechthorende baby's'. In: A. de Houwer & S. Gillis (Eds). *Kindertaalonderzoek in het Nederlands taalgebied: een overzicht*. Antwerp Papers in Linguistic **75**, 18 (Development of vocalizations of severely hearing-impaired infants).
- Clement, C.J. & Os, E.A. den (1993). 'Development of vocalisations of severely hearing impaired infants'. *Third Congress of the International Clinical Phonetics and Linguistics Association*, Helsinki, Finland, 7 (A).
- Clement, C.J. & Os, E. A. den (1993). 'The babbling stage of a deaf and a hearing infant; perceptual evaluation and acoustic measurements'. *Sixth International Congress for the study of child language*, Trieste, 164 (A).

- Clement, C.J. & Os, E A. den (1993). 'Early detection methods of hearing impairment in infancy'. *Proceedings of the Institute of Phonetic Sciences Amsterdam*, **17**, 13-18.
- Dijk, J.S.C. van (1993). 'Combinations of tone'. *Symposium Biophysics of hair cell sensory systems*, Paterswolde, 325.
- Dijk, A. van, Dijk, J.S.C. van, Groot, R. de & Vos, P.G. (1993). 'Onderzoek naar de herkennung van maat in eenstemmige composities van J.S. Bach'. *IFA report 123*, 39 pp. (Investigation of melodic cues for metre in composition by J.S. Bach for unaccompanied cello).
- Helsloot, K. (1993). 'The prosodic word: an endless domain?'. *Proceedings of the Institute of Phonetic Sciences*, **17**, 129-146.
- Heuven, V.J. & Pols, L.C.W. (Eds) (1993). *Analysis and synthesis of speech. Strategic research towards high-quality text-to-speech generation*, Mouton de Gruyter, Berlin, XXII + 420 pp.
- Jansonius-Schultheiss, K. (1993). 'Sprakontwikkeling in samenspraak'. In: A. de Houwer & S. Gillis (Eds). *Kindertaalonderzoek in het Nederlands taalgebied: een overzicht*. Antwerp Papers in Linguistic **75**, 32 (Speech development in interaction).
- Koopmans-van Beinum, F.J. (1993). 'Sprak: individuele expressie van universele ontwikkeling?'. In: S. Gilles & A. de Houwer (Eds). *NET Werken: Bijdragen van het vijfde NET-Symposium*, Antwerp Papers in Linguistics **74**, 17-31 (Speech: individual expression of universal development?).
- Koopmans-van Beinum, F.J. (1993). 'Acoustic aspects of a model of early speech development'. In: A. de Houwer & S. Gillis (Eds). *Kindertaalonderzoek in het Nederlands taalgebied: een overzicht*. Antwerp Papers in Linguistic **75**, 34.
- Koopmans-van Beinum, F.J. & Os, E. A. den (1993). 'Sprak in ontwikkeling: perceptie, produktie en interaktie in het eerste levensjaar'. *Stem-, Sprak- en Taalpathologie*, **2**, 137-161 (Speech development: perception, production, and interaction in the first year of life).
- Koopmans-van Beinum, F.J. & Wieringen, A. van. (Eds) (1993). 'Profile of the Institute of Phonetic Sciences 1993', *IFA-report 122*, 60 pp.
- Koopmans-van Beinum, F.J. (1993). 'Cyclic effects of infant speech perception, early sound production, and maternal speech'. *Proceedings of the Institute of Phonetic Sciences*, **17**, 65-78.
- Kuijpers, C.T.L. (1993). *Temporal coordination in speech development. A study on voicing contrast and assimilation of voice*. Ph.D. -thesis, University of Amsterdam, 165 pp.
- Kuijpers, C.T.L. (1993). 'The voiced-voiceless distinction in speech development of young Dutch children'. *Journal of Phonetics*, **21**, 313-327.
- Kuijpers, C.T.L. (1993). 'Child and contrast: imitation, voicing, and assimilation in speech development'. In: A. de Houwer & S. Gillis (Eds). *Kindertaalonderzoek in het Nederlands taalgebied: een overzicht*. Antwerp Papers in Linguistic **75**, 36.

- Laan, G.P.M. & Bergem, D.R. (1993). 'The contribution of pitch contour, phoneme durations and spectral features to the character of spontaneous and read aloud speech'. *Proceedings Eurospeech'93*, 1, Berlin: 569-572.
- Leeuwen, H.C. van & Lindert, te R. (1993). 'Speech maker: a flexible and general framework for text-to-speech synthesis and its application to Dutch'. *Computer Speech and Language*, 7, 149-167.
- Leeuwen, H.C. van & Lindert, te R. (1993). 'Speech maker: a flexible and general framework for text-to-speech systems'. In: V.J. van Heuven & L. C.W. Pols (Eds), *Analysis and synthesis of speech. Strategic research towards high-quality text-to-speech generation*, Mouton de Gruyter, Berlin, 317-338.
- Mennen, I. & Os, E.A. den (1994). 'Intonation of modern Greek sentences'. *Proceedings of the Institute of Phonetic Sciences Amsterdam*, 17, 111-128.
- Os, E.A. den (1993). 'Ritme in spraak: enige kanttekeningen'. In: Eenheid in de kunsten; Verslag van een studiedag over de samenhang tussen de expressievormen: *Taal, Beweging en Muziek*, 27-34 (Rhythm in speech: some notes).
- Os, E. den (1993). 'The development of pitch and temporal structure starting from the early lingual period'. In: A. de Houwer & S. Gillis (Eds). *Kindertaalonderzoek in het Nederlands taalgebied: een overzicht*. Antwerp Papers in Linguistic 75, 22.
- Os, E.A. den & Clement, C.J. & (1993). 'Development of vocalisations of severely hearing impaired infants'. *Sixth International Congress for the study of child language*, Trieste, 39 (A).
- Pols, L.C.W. et al. (1993). 'Letteren zonder fonetiek is taal zonder spraak'. *IFA-report* 121, 16 pp. (A faculty of art without phonetics is as language without speech).
- Pols, L.C.W. & Son, van R.J.J.H. (1993). 'Acoustics and perception of dynamic vowel segments', Festschrift in honor of prof. H. Fujisaki, *Speech Communication*, 13, 135-148.
- Son, R.J.J.H. van (1993). *Spectro-temporal features in vowel segments*. Ph.D.-thesis, University of Amsterdam, IFOTT Studies in language and language use 3, 195 pp.
- Son, R.J.J.H. van & Pols, L.C.W. (1993). 'Vowel identification as influenced by vowel duration and formant track shape'. *Proceedings Eurospeech'93*, Vol 1, Berlin, 285-288.
- Son, R.J.J.H. van & Pols, L.C.W. (1993). 'How does speaking rate influence vowel formant track parameters?'. In: V.J. van Heuven & L. C.W. Pols (Eds), *Analysis and synthesis of speech. Strategic research towards high-quality text-to-speech generation*, Mouton de Gruyter, Berlin, 171-191.
- Son, R.J.J.H. (1993). 'Vowel perception: A closer look at the literature'. *Proceedings of the Institute of Phonetic Sciences Amsterdam*, 17, 33-64.
- Stelt, J.M. van der (1993). *Finally a word. A sensori-motor approach of the mother-infant system in its development towards speech*. Ph.D. -thesis, IFOTT Studies in language and language use 4, University of Amsterdam, 226 pp.

- Stelt, J.M. van der (1993). 'Intersubjektiviteit: een vergeten aspect in de communicatie-ontwikkeling'. In: S. Gilles & A. de Houwer (Eds). *NET Werken: Bijdragen van het vijfde NET-Symposium*, Antwerp Papers in Linguistics 74, 33-44 (Intersubjectivity: a forgotten aspect in communication development?).
- Stelt, J.M. van der (1993). 'Early mother infant interaction and their development to speech communication'. In: A. de Houwer & S. Gillis (Eds). *Kindertaalonderzoek in het Nederlands taalgebied: een overzicht*. Antwerp Papers in Linguistic 75, 55.
- Vroomen, J., Collier, R. & Mozziconacci, S. (1993). 'Duration and intonation in emotional speech'. *Proceedings Eurospeech'93*, 2, Berlin, 577-580.
- Wang, X. (1993). 'Durational modelling in HMM-based speech recognition: towards a justified measure'. *Proceedings (Contribution papers) NATO ASI on New Advances and Trends in Speech Recognition and Coding*, Bubion (Granada), Spain, 67-70.
- Wang, X., Bosch, L.F.M. ten & Pols, L.C.W. (1993). 'Impact of dimensionality and correlation of observation vectors in HMM-based speech recognition'. *Proceedings Eurospeech'93*, 3, Berlin, 1583-1586.
- Wang, X. (1993). 'Modelling duration and other long-term speech features in HMM-Based speech recognition'. *Proceedings of the Institute of Phonetic Sciences Amsterdam*, 17, 19-32.
- Weenink, D.J.M. (1993). 'Modelling speaker normalization by adapting the bias in a neural net'. *Proceedings Eurospeech'93*, 3, Berlin, 2259-2262.
- Weenink, D.J.M. (1993). 'Vowel classification with neural nets: A comparison of cost functions'. *Proceedings of the Institute of Phonetic Sciences Amsterdam*, 17, 1-12.
- Weenink, D.J.M. (1993). 'Computer facilities'. *Proceedings of the Institute of Phonetic Sciences Amsterdam*, 17, 147-148.
- Wieringen, A. van, Boersma, P. & Pols, L.C.W. (1993). 'Perceptual asymmetry between initial and final and glides: psycho-acoustics and cochlear encoding'. *Proceedings of the Institute of Phonetic Sciences Amsterdam*, 17, 79-96.
- Wieringen, A. van, Cullen, J.K. & Pols, L.C.W. (1993). 'The perceptual relevance of CV- and VC-transitions in identifying stop consonants: cross-language results'. *Proceedings Eurospeech'93*, 2, Berlin, 1499-1502.
- Zanten, E. van, Damen, L.W.M. & Houten E. van (1993). 'Collecting data for a speech database'. In: V.J. van Heuven & L. C.W. Pols (Eds), *Analysis and synthesis of speech. Strategic research towards high-quality text-to-speech generation*, Mouton de Gruyter, Berlin, 207-222.

- Akagi, M., Wieringen, A. van & Pols, L.C.W. (1994). 'Perception of central vowel with pre- and post anchors'. *Proceedings of the ICSLP'94*, Yokohama, 2, 503-506.
- Bergem, D.R. van (1994). 'A model of coarticulatory effects on the schwa'. *Speech Communication* 14, 143 - 162.
- Bergem, D.R. van & Os, E.A. den (1994). 'Spoken languages corpora'. In: Eagles spoken languages systems. *Eagles document EAG-SLWG-IR.2*, Version of October 1994, 4-35.
- Clement, C. (1994). 'Acquisition of vowel contrasts in Dutch'. *Journal of Speech and Hearing Research*, 37, 83-89.
- Clement, C., Den Os, E.A. & Koopmans-van Beinum, F.J. (1994). 'The development of vocalisations of deaf and normally hearing infants'. In: *Abstracts of the fourth symposium of the International Clinical Phonetics and Linguistics Association*, New Orleans, 10 (A).
- Donzel, M. van (1994). 'Stress shift in het Nederlands. Enige fonetische experimenten naar de akoestische en perceptieve kenmerken van stress shift in het Nederlands'. M.A. -thesis, Department of Linguistics, Leiden, 88 pp. (Stress shift in Dutch. Some phonetic experiments on the acoustic and perceptual features of stress shift in Dutch).
- Hasperhoven, R. (1994). 'Zichtbare spraak: real-time spectrogram op een PC met DSP-kaart'. *IFA report* 124, 47 pp. (Visible speech: real-time spectrograms on a PC with DSP-card).
- Jekosch, U. & Pols L.C.W. (1994). 'A structured approach towards a framework for application-specific speech quality assessment'. *Proceedings of the ICSLP'94*, Yokohama, Vol.3, 1319-1322.
- Koopmans-van Beinum, F.J. (1994). 'What's in a schwa? Durational and spectral analysis of natural continuous speech and diphones in Dutch'. In: O. Engstrand & K. Kohler (Eds), *The speaker, the listener and the child. Festschrift on the occasion of Bjorn Lindblom's 60th Birthday*. *Phonetica* 51, 68-79.
- Koopmans-van Beinum, F.J. & Pols, L.C.W. (1994). 'Naturalness and intelligibility of rule-synthesized speech, supplied with specific spectro-temporal features derived from natural speech'. *Proceedings of the ICSLP'94*, Yokohama, 4, 1787-1790.
- Mozziconacci, S.J.L. (1994). 'Pitch and duration variations conveying emotions in speech'. *IPO report* 961, 48pp.
- Os, E.A. den (1994). 'Annual report of the Speech Processing Expertise Centre (SPEX)'. *SPEX report: Activities in 1993 and plans for 1994*, 18pp.
- Pols, L.C.W. (1994). 'Evaluating the performance of speech technology systems'. In: R.E. Asher (Ed.), *Encyclopedia of Language and Linguistics*, Pergamon Press, Oxford, 8, 4289-4296.

- Pols, L.C.W. (1994). 'Voice quality of synthetic speech: Representation and evaluation'. *Proceedings of the ICSLP'94*, Yokohama, 3, 1443-1446.
- Pols, L.C.W. (1994). 'Synthesis performance assessment'. In: H. Niemann, R. de Mori & G. Hanrieder (Eds), *Progress and Prospects of Speech Research and Technology. Proceedings of the CRIM/FORWISS Workshop*, München, 63-68.
- Pols, L.C.W. (1994). 'Cocosda speech output development and assessment'. *Deliverable D6 of LRE-project Eurococosda*, 13 pp.
- Pols, L.C.W. & Jekosch, U. (1994). 'A structured way of looking at the performance of text-to-speech systems'. In: J. Olive, J. Hirschberg, J. van Santen & R. Sproat (Eds), *Proceedings ESCA/IEEE Speech Synthesis Workshop*, New Paltz, NY, 203-206.
- Pols, L.C.W. & Wieringen, A. van (1994). 'Meten aan Spraak'. In: Natuurkunde uit de kunst, *Verslag Woudschoten Conferentie'93*, 92 - 93.
- Verdonck-Leeuw, I. de (1994). 'The effect of radiotherapy on voice quality measured by means of the signal-to-noise ratio'. In: *Abstracts of the fourth Symposium of the International Clinical Phonetics and Linguistics Association*, New Orleans, 44 (A).
- Wieringen, A. van & Pols, L.C.W. (1994). 'Frequency and duration discrimination of short first-formant speechlike transitions'. *J. Acoust. Soc. Am.* **95**, 502 - 511.
- Wijnen, F., Krikhaar, E. & den Os, E.A. (1994). 'The (non) realisation of unstressed elements in children's utterances: a rhythmic constraint?'. *Journal of Child Language*, **21**, 59-83.