

Professor David House
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Career profile

David House, Professor of Acoustic and Phonetic Analysis at the Division of Speech, Music and Hearing, KTH since 2007, with previous appointments at KTH, University of Skövde and Lund University. He received a BA in English and Cinema Studies from the University of Kansas, 1975 and a Ph.D. in Phonetics, Lund University, 1991. House has more than 200 scientific publications representing research activity in speech and gesture, speech perception, prosody, tone and intonation, speech synthesis and recognition, spoken dialogue systems, and speech perception by the hearing-impaired. Recent work includes studies on social aspects of audio-visual prosody and the function and use of prosody and gesture for interaction in spoken dialogue. Other research interests include phonetic variation in spontaneous speech and prosodic typology. House has participated in the organization of numerous conferences, workshops and summer schools and served as General Co-Chair of Interspeech 2017 with more than 1600 participants. In 2022, House was elected a fellow of the International Speech Communication Association (ISCA) "For outstanding multidisciplinary work at the crossroads of speech science and technology."

Research projects (Principal investigator)

2002-2004	OLP (Ortho-Logo-Paedia) (EU)
2002-2004	PF-Star (Preparing future multisensorial interaction research) (EU)
2007-2010	Multimodal database of spontaneous speech in dialog (Swedish Research Council)
2010-2013	Intonational variation in questions in Swedish (Swedish Research Council)
2013-2016	Timing of intonation and gestures in spoken communication (Bank of Sweden)
2018-2022	The production of prosodic prominence: integrating bodily and articulatory gestures (Swedish Research Council)

Professional bodies and memberships

- Member of the Editorial Board, *Phonetica* (2015-present)
- Associate Editor, *Phonetica* (2009-2015)
- Member of the Program Council, Doctoral Program in Computer Science, KTH (2011-present)
- External examiner, Trinity College Dublin (2013-2015)
- Member of the International Advisory Group, KTH (2012-2013)
- Member of the Strategic Council of the School of Computer Science and Communication, KTH (2011-2013)
- Director of Graduate Studies, School of Computer Science and Communication, KTH (2005-2010)
- Secretary of International Speech Communication Association (ISCA) (2005-2011)
- Board Member of International Speech Communication Association (ISCA) (2005-13)
- Scientific Council Member of HSU-PD Humanities and Social Sciences, Swedish Research Council (2008-2009)
- Evaluation Panel 9 (HS-J) Member of Humanities and Social Sciences – Languages, Swedish Research Council (2006-2008)
- Management Committee Member of the Centre for Speech Technology (CTT) (1998-2006)

Selected recent publications

Ambrazaitis, G., & House, D. (2022). Probing effects of lexical prosody on speech-gesture integration in prominence production by Swedish news presenters. *Laboratory Phonology*, 13(1). doi: <https://doi.org/10.16995/labphon.6430>

Kelterer, A., Ambrazaitis, G., & House, D. (2018) Head beats as pitch-accompanying visual correlates of primary and secondary lexical stress: evidence from Stockholm Swedish compounds. Proc. TAL2018, Sixth International Symposium on Tonal Aspects of Languages, (pp.124-128). DOI: 10.21437/TAL.2018-25.

Ambrazaitis, G., & House, D. (2017). Multimodal prominences: Exploring the patterning and usage of focal pitch accents, head beats and eyebrow beats in Swedish television news readings, *Speech Communication*, <http://dx.doi.org/10.1016/j.specom.2017.08.008>

Ambrazaitis, G., & House, D. (2017). Acoustic features of multimodal prominences: Do visual beat gestures affect verbal pitch accent realization? In *Proceedings of the 14th International Conference on Auditory-Visual Speech Processing (AVSP2017)*. Stockholm, Sweden. ISSN 2308-975X (Online).

Frid, J., Ambrazaitis, G., Svensson-Lundmark, M., & House, D. (2017). Towards classification of head movements in audiovisual recordings of read news. In Paggio, P. & Navarretta, C. (Eds.) *Proceedings of the 4th European and 7th Nordic Symposium on Multimodal Communication (MMSYM 2016)*, Linköping University Electronic Press, Linköping, Sweden.

Alexanderson, S., House, D., & Beskow, J. (2016). Automatic Annotation of Gestural Units in Spontaneous Face-to-Face Interaction. In *Proceedings of the Workshop on Multimodal Analyses enabling Artificial Agents in Human-Machine Interaction* (pp. 15-19). Tokyo, Japan.

Hultén, M., Artman, H., & House, D. (2016). A model to analyse students' cooperative idea generation in conceptual design. *International Journal of Technology and Design Education*, <https://doi.org/10.1007/s10798-016-9384-x>, Springer, The Netherlands.

Zellers, M., House, D., & Alexanderson, S. (2016). Prosody and hand gesture at turn boundaries in Swedish. In *Proceedings of Speech Prosody 2016* (pp. 832-835). Boston, USA.

Strömbergsson, S., Salvi, G., & House, D. (2015). Acoustic and perceptual evaluation of category goodness of /t/ and /k/ in typical and misarticulated children's speech. *Journal of the Acoustic Society of America*, 137(6), 3422--3435.

Alexanderson, S., House, D., & Beskow, J. (2013). Aspects of co-occurring syllables and head nods in spontaneous dialogue. In *Proc. of 12th International Conference on Auditory-Visual Speech Processing (AVSP2013)*. Annecy, France.

Edlund, J., House, D., & Strömbergsson, S. (2012). Question types and some prosodic correlates in 600 questions in the Spontal database of Swedish dialogues. In Ma, Q., Ding, H., & Hirst, D. (Eds.), *Proc. of Speech Prosody 2012* (pp. 737-740). Shanghai, China.

Edlund, J., House, D., & Beskow, J. (2012). Gesture movement profiles in dialogues from a Swedish multimodal database of spontaneous speech. In Bergmann, P., Brenning, J., Pfeiffer, M. C., & Reber, E. (Eds.), *Prosody and Embodiment in Interactional Grammar* (pp. 265-280). Berlin: de Gruyter.

Karlsson, A., House, D., & Svantesson, J-O. (2012). Intonation adapts to lexical tone: The case of Kammu. *Phonetica*, 69(1-2), 28-47.

Al Moubayed, S., Beskow, J., Edlund, J., Granström, B., & House, D. (2011). Animated Faces for Robotic Heads: Gaze and Beyond. In Esposito, A., Vinciarelli, A., Vicsi, K., Pelachaud, C., & Nijholt, A. (Eds.), *Analysis of Verbal and Nonverbal Communication and Enactment: The Processing Issues, Lecture Notes in Computer Science* (pp. 19-35). Springer.