

Rob van Son

SPECTRO-TEMPORAL FEATURES OF VOWEL SEGMENTS

Rob van Son (1960) graduated in biology at Nijmegen University in 1984. He subsequently worked at the University of Amsterdam for the Dutch national SPIN program *Analysis and synthesis of speech* and for the ESPRIT project *Polyglot* at Nijmegen University. His current research at the University of Amsterdam, on a grant of the Dutch organisation for Scientific Research, concerns variation in the production of consonants.

Current theories in phonetics about vowels are deceptively simple. Vowel identity is fully determined by the position of the first two frequency peaks in the spectrum and to a lesser extent by vowel duration. However, under different conditions of e.g., context and stress, these values will frequently vary in highly systematic ways. What controls this variation? How do listeners cope with it? Theories that try to answer these questions are critically evaluated and a series of experiments is presented that test them. Finally, a unifying view is presented that explains best the current data.