

ACADEMY OF SCIENCES OF THE ESTONIAN S.S.R.
INSTITUTE OF LANGUAGE AND LITERATURE

CONTENTS

Pl 3.1	B. Lindblom <i>Adaptive Variability and Absolute Constancy in Speech Signals: Two Themes in the Quest for Phonetic Invariance</i>	Se 44	PROCESSING LEVELS IN SPEECH PERCEPTION; PERIPHERAL ANALYSIS	55
Se 42	LARYNGEAL CONTROL 1	19	Se 44.1	V. B. Kasevich, Y. M. Shabelnikova <i>Hierarchy of Levels in Speech Perception</i>
Se 42.1	I. Raimo, O. Aaltonen, E. Vilkman <i>Stress — Pressure Changes or Laryngeal Activity?</i>	Se 44.2	J. Schorradt, H. G. Piroth, H. G. Tillmann <i>Audiovisually Perceived «Fusions» Within Different Vowel Contexts</i>	
Se 42.2	M. J. Hunt <i>Studies of Glottal Excitation Using Inverse Filtering and an Electroglossograph</i>	Se 44.3	Sh. Hiki <i>Interaction Between Phonetic and Literal Components in Perception and Production of Japanese Speech</i>	
Se 42.3	L. Sagart, P. Hallé, B. de Boysson-Bardies <i>An Electromyographic Investigation of Laryngeal Muscle Activity in Modern Standard Chinese Tones</i>	Se 44.4	N. G. Bibikov, N. A. Dubrovsky, G. A. Ivanitsky, L. K. Rimskaya-Korsakova, V. N. Telepnev <i>A Model for Filtering and Analog-to-Pulse Conversion on the Periphery of Auditory Pathway</i>	
Se 42.4	Ph. Hoole <i>Velar and Glottal Activity in a Speaker of Icelandic</i>	Se 44.5	B. C. Шупляков, Л. В. Лесогор, Ж. М. Долмазон <i>Модель периферического слухового анализа и адаптации</i>	
Se 42.5	D. Autesserre, B. Roubeau, A. Di Cristo, C. Chevrie-Muller, D. J. Hirst, J. Lacau, B. Maton <i>Contribution du cricothyroïdien et des muscles sous-hyoïdiens aux variations de la fréquence fondamentale en français: approche électromyographique</i>	Se 45	CONTINUOUS SPEECH RECOGNITION 1	75
Se 43	ACOUSTIC FEATURES 1	39	Se 45.1	A. Andreevsky, M. Desi, P. Ringot <i>Le système de sélection et validation auto-adaptatif varap pour la reconnaissance de la parole continue</i>
Se 43.1	R. Sock, L. Ollila, C. Delattre, C. Zilliox <i>Intersegmental (VC&VCC) and Intrasegmental (VOT&VTT) Phasings in French</i>	Se 45.2	G. S. Slutsker, S. N. Krinov <i>Saphir-1: système multilocuteur comprenant les phrases parées continues</i>	
Se 43.2	J. Vaissière <i>Effect of Phonetic Context and Timing on the F-Pattern of the Vowels in Continuous Speech</i>	Se 45.3	M. O'Kane, D. Mead <i>Key Features in Continuous Speech</i>	
Se 43.3	Sh. Hunnicutt <i>Acoustic Correlates of Redundancy and Intelligibility</i>	Se 45.4	V. G. Lebedev, S. A. Khamidullin <i>Speech Recognition System on a Microcomputer</i>	
Se 43.4	P. T. van Reenen, H. van den Berg <i>A Problem of Assimilation Between Nasal Vowel and Preceding Nasal Consonant: A Perceptual Experiment</i>	Se 45.5	J. Harrington, A. Johnstone <i>The Effects of Word Boundary Ambiguity in Continuous Speech Recognition</i>	

<p>Se 46 SPEECH SYNTHESIS AND RECOGNITION: APPLICATIONS 93</p> <p>Se 46.1 G. Olaszy, G. Gordos On the Speaking Module of an Automatic Reading Machine</p> <p>Se 46.2 B. C. Dickson, S. J. Eady, J. A. W. Clayards, S. C. Urbanczyk, A. G. Wynrib Use of Speech Synthesis in an Information System for Handicapped Travellers</p> <p>Se 46.3 D. Mehnert Modellierung von Intonationskonturen des Deutschen — Anwendungen für Sprachkommunikationsgeräte</p> <p>Se 46.4 G. Kiss, A. Arató, J. Lukács, J. Sulyán, T. Vaspóri A Full Hungarian Text-to-Speech Microcomputer for the Blind</p> <p>Se 47 DESCRIPTIVE PHONETICS: VOWELS 109</p> <p>Se 47.1 P. R. Léon E caduc: facteurs distributionnels et prosodiques dans deux types de discours</p> <p>Se 47.2 P. L. Salza, G. Marotta, D. Ricca Duration and Formant Frequencies of Italian Bivocalic Sequences</p> <p>Se 47.3 V. B. Kuznetsov, A. Ott Spectral Properties of Russian Stressed Vowels in the Context of Palatalized and Nonpalatalized Consonants</p> <p>Se 47.4 Ph. Christov Computer Aided Analysis of Stressed and Unstressed Bulgarian Vowels From 30 Male and 30 Female Speakers</p> <p>Se 48 DESCRIPTIVE PHONETICS: TIMING 125</p> <p>Se 48.1 G. A. Toledo, N. Antoñanzas-Barroso Influence of Speaking Rate in Spanish Diphthongs</p> <p>Se 48.2 J. Fletcher Some Micro-effects of Tempo Change on Timing in French</p> <p>Se 48.3 G. J. Docherty The Timing of Voicing in British English Consonant Clusters as a Function of Medial Boundary Status</p> <p>Se 48.4 L. T. Vygonnaya The Variations in the Word Phonetic Structure Caused by Speech Tempo Variation</p> <p>Se 48.5 T. S. Yesenova On Tempo Divergences in Mongolian Languages</p>	<p>Se 49 COMPOSITION OF F₀ CONTOURS 145</p> <p>Se 49.1 J. B. Pierrehumbert, S. A. Steele How Many Rise-Fall-Rise Contours?</p> <p>Se 49.2 K. J. Kohler The Linguistic Functions of F₀ Peaks</p> <p>Se 49.3 C. Avesani Declination and Sentence Intonation in Italian</p> <p>Se 49.4 C. Sappok Irregular Periodicity as a Boundary Cue Between Phrases</p> <p>Se 50 SPONTANEOUS SPEECH 1 161</p> <p>Se 50.1 N. J. Geilman Variability of Phonemes in Spoken Russian</p> <p>Se 50.2 L. Madelska Computer-Assisted Examination of the Phonetic Variancy of Spontaneous Speech (A Preliminary Report)</p> <p>Se 50.3 S. Shattuck-Hufnagel Phonological Planning for Speech Production: Speech Error Evidence for Word-Based vs. Syllable-Based Structure</p> <p>Se 50.4 E. Magno Caldognetto, L. Tonelli, K. Vagges, P. Cosi The Organization of Constraints on Phonological Speech Errors</p> <p>Se 50.5 M. R. Delgado Martins Strategie conversationnelle: donner et prendre la parole</p> <p>Se 51 INTONATIONAL ASPECTS OF VARIOUS LANGUAGES 1 180</p> <p>Se 51.1 T. Nevalainen A Quantitative Survey of Nuclear Tone Variation in English</p> <p>Se 51.2 O. Profili, Ph. Martin Antonio mangia la zuppa inglese. Phonetic and Phonological Aspects of Italian Sentence Intonation</p> <p>Se 51.3 Th. Malavakis Intonation Patterns in Greek</p> <p>Se 51.4 M. V. Gordina Ton syllabique et intonation de phrase en vietnamien</p> <p>Se 51.5 C. Odé A Perceptual Analysis of Russian Intonation: Some Aspects</p> <p>Po 2 HISTORY OF PHONETICS 198</p> <p>Po 2.1 S. N. Mouraviev Page d'histoire de la phonétique ancienne. La forme externe de l'alphabet ASOMT'AVRULI en tant que modèle graphique de la structure différentielle des phonèmes du vieux-géorgien</p>	<p>Po 2.2 H. Weinstock Laut und Name mittelalterlicher Buchstaben</p> <p>Po 2.3 A. Kemp Phonetic Transcription and the Volney Prize</p> <p>Po 2 ATTITUDINAL-EMOTIONAL VARIATIONS IN SENTENCE PROSODY 1 210</p> <p>Po 2.4 E. A. Nushikyan The Typological Analysis of Emotional Speech Prosody</p> <p>Po 2.5 I. V. Yurova Intonational Universalities and Perception of Emotional Intonations</p> <p>Po 2.6 L. V. Zlatoustova, G. Y. Kedrova Perceptive and Acoustic Characteristics of Emotions: A Typological Research Based on the Material of Languages with Different Structures</p> <p>Po 2 PHONOTACTICS 1 222</p> <p>Po 2.7 C. Fonda The Theory of Complementary Distribution as a Tool of Discovery: an Analysis of the Phonemic Status of the Sibilants in the Venezia Giulia Variant of Standard Italian</p> <p>Po 2.8 S. N. Dmitrenko The Specific Character of the Initial Sound-Type Abbreviations Phonological System</p> <p>Po 2.9 Л. Э. Калнынь Фонетическая программа слова как основная произносительная единица</p> <p>Po 2.10 R. Tokhmakhyan The Statistical Analysis of Initial and Final Consonant Clusters in Armenian</p> <p>Po 2 DESCRIPTIVE PHONETICS 236</p> <p>Po 2.11 J. H. Koo, Y. Nomura Consonant Gemination in English</p> <p>Po 2.12 И. Я. Селютина Квантитативность кумандинских гласных</p> <p>Po 2.13 N. I. Totskaya The Nature of the So-Called Non-Syllabic Vowels in the Ukrainian Language</p> <p>Po 2.14 I. I. Lezhava, N. A. Gamkrelidze On the Problem of Acoustic Peculiarities of Stops in Some Languages of the Caucasian Area</p>	<p>Se 52 ANALYSIS AND SYNTHESIS OF PROSODIC CONTOURS 249</p> <p>Se 52.1 G. Demenko Multidimensional Analysis of the Similarity of Pitch Contours</p> <p>Se 52.2 W. Jassem Computer-Assisted Classification of Basic Polish Intonations</p> <p>Se 52.3 J. Tro Separate Pitch and Rhythmic Patterns in Synthetic Speech and Music</p> <p>Se 52.4 G. E. Ottesen Adding Natural Prosody to a Phoneme Synthesiser</p> <p>Se 52.5 S. J. Eady, B. C. Dickson Speech Synthesis of Sentence Focus in English Declaratives</p> <p>Se 53 NATURALNESS AND INTELLIGIBILITY OF SYNTHETIC SPEECH 2; EXPERT SYSTEMS IN SPEECH PROCESSING 266</p> <p>Se 53.1 E. Meister, M. Rohtla, M. Raudsepp Increase of Naturalness in Synthesized Speech</p> <p>Se 53.2 C. G. Henton Phonetic Considerations for the Synthesis of Female Voices</p> <p>Se 53.3 V. N. Sobolev Studies of Phonetic Function Applicability to Automatic Quality Testing of Speech Processing Systems and Transmission Channels</p> <p>Se 53.4 A. Ott, I. Siil The Synthesis-by-Rule Development System with Expert Capabilities</p> <p>Se 53.5 A. Bonneau, M. Rossi Recognition of French Vowels by Expert System Serac</p> <p>Se 54 CONTINUOUS SPEECH RECOGNITION 2; SPEECH RECOGNITION ALGORITHMS 286</p> <p>Se 54.1 Б. В. Панченко Формирование эталонов для морфемного распознавания речи</p> <p>Se 54.2 Н. П. Дегтярев, Е. Я. Левков Повышение надежности распознавания слов слитной речи</p> <p>Se 54.3 F. W. a Campo Ein Dynamic-Programming-Algorismus zur Anwendung in der automatischen Sprachverarbeitung</p> <p>Se 54.4 F. Y. Korkmazsky Speech Recognition System Based on Walsh Function</p> <p>Se 54.5 K. P. Maistrenko Development of Method and Device for Improved Real-Time Speech Recognition Reliability</p>
---	--	--	--

Se 55	WORD STRESS 2; TONES	306	Sy 2	THE RELATIONSHIP BETWEEN PHONETICS AND NATURAL PHONOLOGY	344			
Se 55.1	V. J. van Heuven An Unusual Effect on the Perception of Stress		Sy 2.1	J.-P. Angenot, A. Landercy, U. H. Mondl Instrumental Quantification of the «Over-all Amplitude» Feature				
Se 55.2	T. Matsushita Word Stress of Trisyllabics of Old French Origin in Late Middle English		Sy 2.2	H. Basbøll Natural Phonology and Some Competing Paradigms, with Particular Reference to Syllabification				
Se 55.3	J. A. de Moraes Corrélatifs acoustiques de l'accent de mot en portugais brésilien		Sy 2.3	P. M. Bertinetto Phonetics, Phonology, and the Natural of It	a Campo, F. W. Aaltonen, O. Abberton, E. Andreevsky, A. Angenot, J.-P. Antoñanzas-Barroso, N. Arató, A. Autesserre, D. Avesani, C. Basbøll, H. Bertinetto, P. M. Bibikov, N. G. Bienvenue, G. R. Bonneau, A. Carre, R. Celmer, R. D. Chevrie-Muller, C. Christov, Ph. Clayards, J. A. W. Contini, M. Cosi, P. de Boysson-Bardies, B. de Moraes, J. A. Degtyarev, N. P. Delattre, C. Delgado Martins, M. R. Demenko, G. Desi, M. Di Cristo, A. Dickson, B. C. Dmitrenko, S. N. Docherty, G. J. Dogil, G. Dolmason, J. M. Dressler, W. U. Dubrovsky, N. A. Eady, S. J. Edward, D. Fant, G. Feng, S. Fletcher, J. Fonda, C. Fourcin, A. Frank, Y. Gamkrelidze, N. A. Geilman, N. J. Gordina, M. V. Gordos, G. Hallé, P. Harrington, J. Hazan, V.	Se 54.3 Se 42.1 Se 56.4 Se 45.1 Sy 2.1 Se 48.1 Se 46.4 Se 42.5 Se 49.3 Sy 2.2 Sy 2.3 Se 44.4 Se 56.2 Se 53.5 Sy 3.1 Se 56.2 Se 42.5 Se 47.4 Se 46.2 Se 55.4 Se 50.4 Se 42.3 Se 55.3 Se 54.2 Se 43.1 Se 50.5 Se 52.1 Se 45.1 Se 42.5 Se 46.2, Se 52.5 Po 2.8 Se 48.3 Sy 2.4 Se 44.5 Sy 2.5 Se 44.4 Se 46.2, Se 52.5 Se 56.3 Sy 3.2 Se 55.5 Se 48.2 Po 2.7 Se 56.4 Se 56.5 Po 2.14 Se 50.1 Se 51.4 Se 46.1 Se 42.3 Se 45.5 Se 56.4	Henton, C. G. Hiki, Sh. Hirst, D. J. Holden-Pitt, L. Holte, L. A. Homma, Y. Hoole, Ph. Hunnicutt, Sh. Hunt, M. J. Ivanitsky, G. A. Jassem, W. Johnstone, A. Kalnyn, L. E. Kasevich, V. B. Kedrova, G. Y. Kemp, A. Khamidullin, S. A. Kiss, G. Kohler, K. J. Koo, J. H. Korkmazsky, F. Y. Krinov, S. N. Kuznetsov, V. B. Lacau, J. Landercy, A. Lebedev, V. G. Léon, P. R. Lesogor, L. V. Levkov, Y. Y. Lezhava, I. I. Lin, S. Lindblom, B. Pl 3.1 Lukács, J. Madelska, L. Magno Caldognetto, E. Maistrenko, K. P. Malavakis, Th. Marotta, G. Martin, Ph. Maton, B. Matsushita, T. Mead, D. Mehnert, D. Meister, E. Mondl, U. H. Mouraviev, S. N. Nevalainen, T. Nushikyan, E. A. O'Kane, M. Odé, C. Olaszy, G.	Se 53.2 Se 44.3 Se 42.5 Se 56.3 Se 56.1 Po 2.11 Se 42.4 Se 43.3 Se 42.2 Se 44.4 Se 52.2 Se 45.5 Po 2.9 Se 44.1 Po 2.6 Po 2.3 Se 45.4 Se 46.4 Se 49.2 Po 2.11 Se 54.4 Se 45.2 Se 47.3 Se 42.5 Sy 2.1 Se 45.4 Se 47.1 Se 44.5 Se 54.2 Po 2.14 Se 55.5 Pl 3.1 Se 46.4 Se 50.2 Se 50.4 Se 54.5 Se 51.3 Se 47.2 Se 51.2 Se 42.5 Se 55.2 Se 45.3 Se 46.3 Se 53.1 Sy 2.1 Po 2.1 Se 51.1 Po 2.4 Se 45.3 Se 51.5 Se 46.1
Se 56	SPEECH OF HEARING-IMPAIRED SUBJECTS: PRODUCTION AND PERCEPTION 1	324	Sy 2.5	W. U. Dressler Phonetics and Natural Phonology				
Se 56.1	C. W. Turner, L. A. Holte Internal Speech Representations in Normal and Hearing-Impaired Subjects		Sy 3	INTERACTION PHENOMENA IN SPEECH PRODUCTION MODELLING	371			
Se 56.2	R. D. Celmer, G. R. Bienvenue Critical Bands in the Perception of Speech Signals by Normal and Sensorineural Hearing Loss Listeners		Sy 3.1	R. Carre Review of French Work on Vocal Source — Vocal Tract Interaction				
Se 56.3	S. G. Revoile, L. Holden-Pitt, D. Edward, J. M. Pickett Speech Cue Enhancement for the Hearing Impaired: III. Amplification of Frication for Improved Perception of Final Fricative Voicing		Sy 3.2	G. Fant Interactive Phenomena in Speech Production				
Se 56.4	E. Abberton, V. Hazan, A. Fourcin Speech Pattern Acquisition in Profoundly Hearing Impaired Children		Sy 3.3	V. N. Sorokin Coordination of Muscles and Articulators				
Se 56.5	Y. Frank From Syllables to Sentences		Sy 3.4	K. N. Stevens Interaction Between Acoustic Sources and Vocal-Tract Configurations for Consonants				
			Sy 3.5	J. Zhang The Intrinsic Fundamental Frequency of Vowels and the Effect of Speech Modes on Formants				

INDEX OF AUTHORS

Ollila, L.	Se 43.1
Ott, A.	Se 47.3, Se 53.4
Ottesen, G. E.	Se 52.4
Panchenko, B. V.	Se 54.1
Pickett, J. M.	Se 56.3
Pierrehumbert, J. B.	Se 49.1
Piroth, H. G.	Se 44.2
Profili, O.	Se 51.2
Raimo, I.	Se 42.1
Raudsepp, M.	Se 53.1
Revoile, S. G.	Se 56.3
Ricca, D.	Se 47.2
Rimskaya-Korsakova, L. K.	Se 44.4
Ringot, P.	Se 45.1
Rohtla, M.	Se 53.1
Rong-Rong, L.	Se 55.5
Rossi, M.	Se 53.5
Roubeau, B.	Se 42.5
Sagart, L.	Se 42.3
Salza, P. L.	Se 47.2
Sappok, C.	Se 49.4
Schorradt, J.	Se 44.2
Selyutina, I. Y.	Po 2.12
Shabelnikova, Y. M.	Se 44.1
Shattuck-Hufnagel, S.	Se 50.3
Shuplyakov, V. S.	Se 44.5
Sii, I.	Se 53.4
Slutsker, G. S.	Se 45.2
Sobolev, V. N.	Se 53.3
Sock, R.	Se 43.1
Sorokin, V. N.	Sy 3.3
Steele, S. A.	Se 49.1
Stevens, K. N.	Sy 3.4
Sulyán, J.	Se 46.4
Telepnev, V. N.	Se 44.4
Tillmann, H. G.	Se 44.2
Tokhmakhyan, R.	Po 2.10
Toledo, G. A.	Se 48.1
Tonelli, L.	Se 50.4
Totskaya, N. I.	Po 2.13
Tro, J.	Se 52.3
Tseva, A.	Se 55.4
Turner, C. W.	Se 56.1
Urbanczyk, S. C.	Se 46.2
Vagges, K.	Se 50.4
Vaissière, J.	Se 43.2
van den Berg, H.	Se 43.4
van Heuven, V. J.	Se 55.1
van Reenen, P. T.	Se 43.4
Vaspöri, T.	Se 46.4
Vilkman, E.	Se 42.1
Vygonnaya, L. T.	Se 48.4
Weinstock, H.	Po 2.2
Wynrib, A. G.	Se 46.2
Yesenova, T. S.	Se 48.5
Yurova, I. V.	Po 2.5
Zhang, J.	Sy 3.5
Zilliox, C.	Se 43.1
Zlatoustova, L. V.	Po 2.6