

ACTES DU XII^{ème} CONGRES INTERNATIONAL DES SCIENCES PHONETIQUES

19-24 août 1991 - AIX-EN-PROVENCE, FRANCE

Voi 4

JEUDI 22 AOUT
THURSDAY AUGUST 22nd

PROCEEDINGS OF THE XIIth INTERNATIONAL CONGRESS
OF PHONETIC SCIENCES

AIX-EN-PROVENCE, FRANCE - August 19-24, 1991

SESSIONS ORALES / ORAL SESSIONS

SESSION 1 : Production

- | | | |
|---|--|------|
| 1 | Palatoglossus activity during VCV utterances containing oral and nasal consonants of Hindi.
<i>Prakash Dixit</i> | 4:2 |
| 2 | Some acoustic-phonetic parameters of the Lombard effect for the voice trained.
<i>William Weiss</i> | 4:6 |
| 3 | Dynamic voice quality variations in female speech.
<i>Inger Karlsson</i> | 4:10 |
| 4 | Temporal modelling of gestures in articulatory assimilation.
<i>Martin C. Barry</i> | 4:14 |
| 5 | Articulation of prosodic contrasts in French.
<i>Janet Fletcher, Eric Vatikiotis-Bateson</i> | 4:18 |
| 6 | Essai de méthode pour la recherche de l'image centrale : voyelles [i, e, a] du français.
<i>Annie Pastor</i> | 4:22 |
| 7 | De l'analyse d'une variation de débit dans la chaîne parlée, à la lumière de la cinéradiographie.
<i>Béatrice Vaxelaire</i> | 4:26 |
| 8 | Phonological organization in bilinguals : evidence from speech error data.
<i>Cheney Crow</i> | 4:30 |
| 9 | Coordination du geste et de la parole dans la production d'un instrument traditionnel.
<i>Véronique Berthier, C. Abry, T. Lallouache</i> | 4:34 |

SESSION 2 : Perception

- | | | |
|---|--|------|
| 1 | Integration of auditory and visual components of articulatory information in the human brain.
<i>Reijo Aulanko, Mikko Sams</i> | 4:38 |
|---|--|------|

- 2 An objective and a subjective approach to speaker recognition.
Elisabeth Lhote, Laura Abou Haidar 4:42
- 3 Frequency modulation of formant-like spectral peaks.
Peter J. Bailey, Kim Bevan 4:46
- 4 Visual perception of anticipatory rounding during acoustic pauses : a cross-language study.
Marie-Agnès Cathiard, Guy Tiberghien, A. Cirot-Tseva, Tahar Lallouache, Pierre Escudier 4:50
- 5 Occlusive silence duration of velar stop and voicing perception for normal and hearing-impaired subjects.
Yves Cazals, Lionel Palis 4:54
- 6 Perception of syncope in native and non-native American English.
Joann Fokes, Z.S. Bond 4:58
- 7 Central mechanisms of vowel. Perception, categorization and imitation.
Inna Vartanian, Tatiana V. Chernikovskaya 4:62
- 8 Factors affecting the given-new distinction in speech.
Sarah Hawkins, Paul Warren 4:66
- 9 Central mechanisms of intonation processing - comprehension and imitation.
Tatiana Chernigovskaya, Inna V. Vartanian 4:70

SESSION 3 : Perception

- 1 L'influence de la durée dans l'identification des liquides : étude comparée en espagnol de Buenos Aires et en français de Montréal.
Benoît Jacques, Maria Amalia Garcia Jurado, Miguelina Guirao 4:74
- 2 Perception of anticipatory VCV-coarticulation : effects of vowel context and accent distribution.
Vincent-Johan Van Heuven, Marc Ch. Dupuis 4:78
- 3 Effect of vowel quality on pitch perception.
Ilkka-Mauri Raimo, Olli Aaltonen, A. Hellström, E. Vilkman 4:82

4	The perception of silent-center syllables in noise. <i>Susan L. Hura</i>	4:86
5	Minimal duration for perception of full-spectrum vowels. <i>Rudolf Weiss, W.S. Brown (jr.), Shaw N. Gynan</i>	4:90
6	Perception of the high vowel continuum : a cross-language study. <i>Bernard Rochet</i>	4:94
7	Understanding disfluent speech : is there an editing signal ? <i>Robin Lickley, Richard Shillcock, Ellen Gurman Bard</i>	4:98
8	Individual variability in the perception of cues to an initial BA-PA voicing contrast. <i>Valerie Hazan, Bo Shi</i>	4:102
9	Perceptual spaces of the Russian vowels. <i>Galina Lebedeva</i>	4:106

SESSION 4 : Phonétique descriptive / Descriptive phonetics

1	A cross-linguistic experimental investigation of syllable structure : some preliminary results. <i>Bruce L. Derwing, Sook Whan Cho, H. Samuel Wang</i>	4:110
2	La phonétisation du Castillan. <i>Claudine Cabrera, M. Contini, L.J. Boë</i>	4:114
3	Language specific patterns of prosodic and segmental structures in Swedish, French and English. <i>Gunnar Fant, Anita Kruckenberg, Lennart Nord</i>	4:118
4	Towards an account of language-specific patterns of the timing of voicing. <i>Caroline Wills, Gerard Docherty</i>	4:122
5	Instrumental phonetic fieldwork : techniques and results. <i>Peter Ladefoged</i>	4:126
6	An acoustic study of Xhosa Clicks. <i>Bonny Sands</i>	4:130

- 7 **The effect of linguistic expectancy on phonetic transcription : developing an adequate alignment algorithm.**
Catia Cuccharini, R. Van Bezooijen 4:134
- 8 **Phonetic transcription as a means of diagnostically evaluating synthetic speech.**
Renée Van Bezooijen, Wilhelm Vieregge 4:138
- 9 **Consonant clusters : a comparison between word internal and word juncture.**
Christine Meunier 4:142

SESSION 5 : acquisition

- 1 **Speaking while intoxicated : phonetic and forensic aspects.**
Angelika Braun 4:146
- 2 **Temporal control in speech of children and adults.**
Cécile Kuijpers 4:150
- 3 **Premeaningful vocalizations of hearing-impaired and normally hearing subjects.**
Carol Stoel-Gammon 4:154
- 4 **A longitudinal study of the speech acquisition of three siblings diagnosed as verbally dyspraxic.**
Maryanne Tate 4:158
- 5 **Examination of language-specific influences in infants' discrimination of prosodic categories.**
Catherine T. Best, Andrea Levitt, Gerald McRoberts 4:162
- 6 **Articulatory organization of early words : from syllable to phoneme.**
Elisabeth W. Goodell, Michael Studdert-Kennedy 4:166
- 7 **Rhythmic phenomena in a child's babbling and one-word sentences.**
Morio Kohno, T. Tsushima 4:170
- 8 **L'intonation de question dans le langage émergent.**
Gabrielle Konopczynski 4:174
- 9 **Contemporary Czech pronunciation : a database study.**
Premysl Janota, Zdena Palkova 4:178

SESSION 6 : prosodie / prosody
Intonation

- | | | |
|---|--|-------|
| 1 | Strategies for prosodic phrasing in Swedish.
<i>Gösta Bruce, Björn Granström, David House</i> | 4:182 |
| 2 | The interaction of fundamental frequency and intensity in the perception of intonation.
<i>Klaus Kohler</i> | 4:186 |
| 3 | Rhythmic patterns of the discourse in Mexican Spanish and Brazilian Portuguese.
<i>Antonio Simões</i> | 4:190 |
| 4 | Syntax and intonation in Italian noun phrases.
<i>Shiro Kori, Hiroko Yasuda</i> | 4:194 |
| 5 | The role of intonation as a marker of semantic associations and enunciative operations in English.
<i>Jennifer Low</i> | 4:198 |
| 6 | Perception of intonational characteristics of WH and non-WH questions in Tokyo Japanese.
<i>Kikuo Maékawa</i> | 4:202 |
| 7 | Combinations of types of pitch accent in a corpus of Russian speech.
<i>Cecilia Odé</i> | 4:206 |
| 8 | A crosslinguistic description of intonation contours of a multilanguage text-to-speech system.
<i>Gábor Olasz</i> | 4:210 |
| 9 | Measuring intonation at low signal-to-noise-ratios.
<i>Vytautas Piktuna</i> | 4:214 |

SESSION 7 : Prosodie / Prosody

- | | | |
|---|--|-------|
| 1 | Speech F0 extraction based on Licklider's pitch perception model.
<i>Alain De Cheveigne</i> | 4:218 |
| 2 | A computer assisted method of investigating intonational correlations in adjacent utterances.
<i>Christian Sappok, Rozalija Kasatkina, Sandro Kodzasov</i> | 4:222 |

3	The beginning of Germanic prosody.	<i>Anatoly Liberman</i>	4:226
4	Timing in Catalan.	<i>Daniel Recasens</i>	4:230
5	The timing of vowel and consonant gestures in Italian and Japanese.	<i>Caroline Smith</i>	4:234
6	Pausing in texts read aloud.	<i>Eva Strangert</i>	4:238
7	Rhythmical structures in poetry reading.	<i>Anita Kruckenberg, Gunnar Fant, Lennart Nord</i>	4:242
8	A contrastive analysis of Spanish and Catalan Rhythm.	<i>Mar Carrio i Font, Antonio Rios Mestre</i>	4:246
9	Rhythmical model of a phonetical word of present-day Lithuanian utterances.	<i>Lilija Anusiene</i>	4:250

SESSION 8 :

1	Incidence du trait phonologique de durée vocalique sur la prosodie du français québécois.	<i>Laurent Santerre</i>	4:254
2	Perceiving rhythm in French ?	<i>Jacqueline Vaissière</i>	4:258
3	Tone production in standard Chinese : EMG data and command-response modelling.	<i>Pierre Hallé</i>	4:262
4	Acoustic correlates of stress shift.	<i>Stefanie Shattuck-Hufnagel</i>	4:266
5	Terminality and completion in Danish, Swedish and German.	<i>Nina Grønnum</i>	4:270
6	Intonation modelling in a text generation program.	<i>Carlos Gussenhoven, Toni Rietveld, Lex Elich</i>	4:274

- 7 **Ways of exploring speaker characteristics and speaking styles.**
Björn Granström, Lennart Nord 4:278
- 8 **Analyse de la prosodie de la parole spontanée en suédois et en français.**
Paul Touati 4:282
- 9 **Intonation patterns in Greek discourse.**
Antonis Botinis 4:286
- SESSION 9 : Phonétique appliquée : Applied phonetics**
- 1 **The most important difficulties when teaching Spanish phonetics to Czechs.**
Jana Kullova 4:290
- 2 **Aspects of the relation between intonation and the interpretation of poems.**
Johann Uys 4:294
- 3 **Effects of voice characteristics on attitude change.**
Claire Gélinas-Chebat, Jean-Charles Chebat 4:298
- 4 **Parole chantée et parole déclamée : autour de Salomé. Aspects articulatoires, rythmiques et intonatifs.**
Sibylle Vater 4:302
- 5 **Phonestylistics in foreign language learning.**
Kathryn Keller 4:306
- 6 **Riez-vous en hi ! hi ! hi ! ou en ah ! ah ! ah ! oh ! oh !**
Pierre Léon 4:310
- 7 **Variables intonatives chez la femme vénézuélienne.**
Elsa Mora 4:314
- 8 **Etude des paramètres temporels des voix sans larynx.**
Lise Crevier-Buchman 4:318
- 9 **Phonetic aspects of speech produced without a larynx.**
Lennart Nord, Britta Hammarberg, Elisabet Lundström 4:322

SESSION 10 : Pathologie / Pathology

- 1 On using intensity as a coding parameter in tactile speech stimuli : psychophysiological discriminability effects.
Hans Georg Piroth, Stephan Gfroerer 4:326
- 2 Speech perception abilities of patients using cochlear implants, vibrotactile aids and hearing aids.
Eva Agelfors, Arne Risberg 4:330
- 3 Changes in speech breathing following cochlear implant in postlingually deafened adults.
Harlan Lane, Joseph Perkell, Mario Svirsky, Jane Webster 4:334
- 4 Compensatory articulation and nasal emission of air in cleft palate speech with special reference to the reinforcement theory.
Birgit Elisabeth Hutters, Kirsten Brondsted 4:338
- 5 Perceptual and acoustic analysis of the voice in acute laryngitis.
Anders Löfqvist, Lucyna Schalén 4:342
- 6 The development of articulatory skills in cleft palate babies.
Kino Jansonius-Schultheiss 4:346
- 7 Acoustic evidence that postlingually acquired deafness affects speech production.
Roddy Cowie, Ellen Douglas-Cowie, Joan Rahilly 4:350
- 8 Mean-term perturbations of the pseudo-period of the glottal waveform.
Raoul De Guchteneere, Jean Schoentgen 4:354
- 9 The interaction of speech perception and reading ability.
Mária Gósy 4:358

SESSIONS AFFICHEES / POSTER SESSIONS

SESSION 11 : Acoustique / Acoustics

- | | | |
|----------|--|-------|
| 1 | Analysis of glottal waveform in different phonation types using the new IAIF-method.
<i>Paavo Alku, Erkki Vilkman, Unto K. Laine</i> | 4:362 |
| 2 | A voice conversion method and its application to pathological voices.
<i>Hisao Kuwabara, Tohru Takagi</i> | 4:366 |
| 3 | Consistency in /r/ trajectories in American English.
<i>Carol Espy-Wilson</i> | 4:370 |
| 4 | La variabilité inter-locuteur, étude sur les réalisations acoustiques de /e,ɛ/
<i>Anne Bonneau</i> | 4:374 |
| 5 | Some SARA vowel inventories and vowel system predictions.
<i>Djita Issa Djarangar</i> | 4:378 |
| 6 | Locus-nucleus relation and vot in spontaneous and elicited speech.
<i>Diana Krull</i> | 4:382 |
| 7 | A study of [r] and [ɾ] in spontaneous speech.
<i>Carme de la Mota Gorriz</i> | 4:386 |
| 8 | Automatic classification and formant analysis of Finnish vowels using neural networks.
<i>Toomas Altosaar, Matti Karjalainen</i> | 4:390 |
| 9 | Bulgarian vowel clusters and statistics by 30 male and 30 female speakers.
<i>Philip Christov</i> | 4:394 |

SESSION 12 : Aspects linguistiques / Linguistic aspects

- | | | |
|----------|--|-------|
| 1 | Phonology of synharmonism and a new synharmonic script.
<i>Alimchan Dzhunisbekov</i> | 4:398 |
|----------|--|-------|

2	De l'indépendance du phonème faible au système phonologique de la langue russe. <i>Svetlana Nikolaievna Dmitrenko</i>	4:402
3	Modelling vowel systems by effort and contrast. <i>Louis Ten Bosch</i>	4:406
4	Articulatory and perceptive aspects of typology of sound systems in conditions of multilingualism. <i>Tatiana Verbitskaya, T. Korolyova</i>	4:410
5	The influence of social factors on urban speech. <i>Lidia Ignatkina</i>	4:414
6	Regional voice quality variation in Sweden. <i>Claes-Christian Elert, Britta Hammarberg</i>	4:418
7	Etude sur la perception de l'"accent" régional du nord et de l'est de la France. <i>Fernand Carton, Robert Espesser, Jacqueline Vaissière</i>	4:422
8	The effect of addressee familiarity on word duration. <i>Janice McAllister, Cathy Sotillo, Ellen Gurman Bard</i>	4:426
9	Computer data base and orthoepic studies. <i>Natalia Bogdanova</i>	4:430
10	Sur la classification universelle des sons du langage et l'APhI. <i>Myrrha Gordina</i>	4:434
11	Gémination phonétique en frontière de mots. <i>Alain Marchal, A.S. Del Negro</i>	4:438
12	Consonant clusters and their connection with the morphological structure of the Kazakh word. <i>Svetlana Meirbekova</i>	4:442
13	Understanding "hm", "mhm", "mmh". <i>Stefan Werner</i>	4:446
14	Age effects in acquisition of non-native phonemes : perception of English /r/ and /l/ for native speakers of Japanese. <i>Yamada Reiko, Yoh'ichi Tohkura</i>	4:450

- 15 The reduplicative babbles of French -and English-learning infants : evidence for language-specific rhythmic influences.** *Andrea Levitt, Qi Wang* 4:454
- 16 The unintelligibility of speech to children : effects of referent availability.** *Ellen Gurman Bard, Anne H. Anderson* 4:458
- 17 On the phonetic system evolution in some archaic Russian Dialects.** *Sergey Knyazev, Sofia Pojaritskaya* 4:462

SESSION 13 : Technologie / Technology

Reconnaissance automatique de la parole / Automatic speech recognition

- 1 Modelling articulatory inter-timing variation in a speech recognition system.** *Mats Blomberg* 4:466
- 2 Including duration information in a threshold-based rejector for hmm speech recognition.** *Antonio M. Peinado, Antonio J. Rubio, Juan M. Lopez, José C. Segura, Victoria E. Sanchez* 4:470
- 3 Modelization of allophones in a speech recognition system.** *Katarina Bartkova, Denis Jouvet* 4:474
- 4 Towards more reliable automatic recognition of the phonetic units.** *Arvydas Domatas, Algimantas Rudzionis* 4:478
- 5 The SYLK project : syllable structures as a basis for evidential reasoning with phonetic knowledge.** *Peter-John Roach, D. Miller, P.D. Green, Antony J. Simons* 4:482
- 6 Recovering tube kinematics using time-varying acoustic information.** *Richard Mc Gowan* 4:486
- 7 Phoneme-like model of speech signal.** *Stasys Noreika, Algimantas Rudzionis* 4:490

- 8 Représentation de connaissances indépendantes du locuteur pour la reconnaissance de mots acoustiquement proches.**
Henri Meloni, Philippe Gilles 4:494
- 9 Automatic formant estimation in a speech recognition system.**
Otto Schmidbauer 4:498