

# **New Sounds 2007**

## **Program**

**Sunday, November 25**

**7:00-8:00 PM - Plenary talk (Salão Azul)**

**Phones, phonemes, and phonotactics: Similarities and differences between L1 and L2**

Lise Menn

The abstract will be available soon.

**Monday, November 26**

**9:00-10:00 AM - Plenary talk (Salão Azul)**

**The dos and don'ts of assessing cross-language perceptual similarity of speech sounds**

Ocke-Schwen Bohn (Aarhus University, Denmark)

Attempts to predict difficulty in second language speech learning and in cross-language speech perception (such as Flege's Speech Learning Model or Best's Perceptual Assimilation Model) depend critically upon valid similarity measures. This talk will review and evaluate methods used to assess cross-language perceptual similarity of speech sounds. It will be shown that indirect measures of perceptual similarity, such as those based on acoustic comparisons or on comparisons of phonetic symbols, are inadequate. These methods often fail to correctly predict cross-language speech perception and learning difficulty. Because of this, methods have been developed which are aimed at assessing cross-language perceptual similarity directly. In these tasks of perceptual assimilation or interlingual identification, listeners typically hear nonnative sounds, which they are asked to a) identify with native categories and b) rate for the goodness of fit with the native category. Despite the broad acceptance of direct methods in assessments of cross-language perceptual similarity, several questions regarding the design, the nature, and interpretation of perceptual assimilation tasks are still unresolved. This talk will suggest ways of addressing these questions to improve our understanding of what listeners actually do when they perceive the sounds of a foreign language.

**10:30 AM – 12:00 - Talks**

**Salão Azul: Perception of Dutch vowels**

**10:30 - A longitudinal and computational study of how Spanish and Portuguese speakers acquire optimal perception of the Dutch vowel system**

Paola Escudero, Jelle Kastelein, Klara Weiand & R.J.J.H. van Son (University of Amsterdam, The Netherlands)

In this study, we investigated the cross-sectional and longitudinal development of Dutch vowel perception by native speakers of Latin American Spanish and native speakers of Brazilian Portuguese, who had different levels of Dutch proficiency. We then evaluated the explanatory adequacy of formal computational models confronted with these data.

**11:00 - Cue-specific vowel distinction reflected in auditory evoked brain potentials for native and nonnative listeners**

Silvia C. Lipski (University of Konstanz, Germany)

Paola Escudero (University of Amsterdam, The Netherlands)

Carsten Eulitz (University of Konstanz, Germany)

Mismatch negativity was used to trace pre-attentive auditory change detection in synthetic vowel continua representing Dutch /a:/-/A/. Processing of durational and spectral cues was measured separately for native Dutch and Spanish learners of Dutch. Neural responses indicate that native language cue-specific memory traces support processing of spectral, but not of durational cues.

**11:30 - Perceptual cue-weighting in Dutch, Spanish learners of Dutch and German listeners**

Silvia C. Lipski (University of Konstanz, Germany)

Paola Escudero (University of Amsterdam, The Netherlands)

This study investigated the influence of linguistic background on cue-weighting in vowels. Native Dutch, Spanish learners of Dutch and non-Dutch speaking Germans were tested on the Dutch vowels /a:/-/a/. Spanish relied on duration, Germans mapped the vowels on different native categories and, like the Dutch, distinguished the contrast by spectral cues.

## **Sala Turquesa: L2 intonation and tones**

### **10:30 - Question intonation of untutored Italian learners of English**

Aoju Chen (Max Planck Institute for Psycholinguistics, The Netherlands)

Ineke Mennen (Queen Margaret University, The Netherlands)

This study investigated how beginning untutored Italian learners of English realised questions intonationally in English. We found that learners used pitch accent types (i.e., H\*L, L\*H) and boundary tones (L%, H%) common in English intonation. Interestingly, rising contours occurred more frequently in declarative-questions, where morpho-syntactical cues to questions are absent.

### **11:00 - Transfer and universality in learner intonation**

Ineke Mennen (Queen Margaret University, The Netherlands)

This study compares the production and perception of the rise-fall in Greek yes-no questions and contrastive statements of Dutch learners of Greek. Results show that most learners are unable to produce the phonetic differences between the two rise-fall contours, yet are able to perceive them through universal question cues.

### **11:30 - Perception of Norwegian word tones**

Wim van Dommelen & Olaf Husby (Norwegian University of Science and Technology, Norway)

Norwegian is a language which to a certain degree exploits tonal differences to distinguish between lexical entities. This project investigates foreign speakers' perception of toneme 1 and 2 using both original and manipulated speech material. Informants are speakers of a tonal language and a non-tonal language.

## **Sala Celeste: Foreign accent**

### **10:30 - First language attrition in foreign accent detection**

Roy C. Major (Arizona State University, USA)

Barbara O. Baptista (Universidade Federal de Santa Catarina, Brazil)

This study investigates L1 attrition in the ability to detect a foreign accent in one's native language by comparing accent ratings of native and nonnative speakers of Brazilian Portuguese. The results suggest very little L1 attrition in NSs and further that there may be salient universal features of nonnative speech.

### **11:00 - Starting age and exposure effects on EFL learners' sound production in a formal learning context**

Ian R. A. MacKay (University of Ottawa, Canada)

Natalia Fullana (Universitat de Barcelona, Spain)

This study further investigated the effects of starting age of FL learning and experience in the FL on the production of English /i, ɪ, æ, u/ by Spanish/Catalan learners of English in a formal instruction setting. Results showed late starters' short-lived advantage, despite the finding of overall accented production.

### **11:30 - Accent attitudes in an EFL context**

Jarosław Weckwerth (Adam Mickiewicz University, Poland)

For Polish learners of English, perceived nativeness and attractiveness of "lesser known" native Englishes vs. non-native accents inversely correlates with their distance from the model used in pronunciation instruction. Accents closest to the model cluster together and score highest, irrespective of whether they are conventionally defined as native.

## **1:30-3:30 PM - Talks**

### **Salão Azul: Perception/production of English final consonants**

#### **1:30 - Production and perception of voicing contrasts in English word-final obstruents: Assessing the effects of experience and starting age**

Natalia Fullana & Joan C. Mora (Universitat de Barcelona, Spain)

This study investigates the production and perception of several English voicing contrasts by Catalan/Spanish learners of English varying in starting age of FL learning and experience in the FL in a formal learning context. Neither starting age nor experience had a significant effect on learners' perception and production.

#### **2:00 - Differences in the production of English CVC and CVCV sequences by Brazilian learners: An acoustic analysis**

Ana Paula Petriu Ferreira (Universidade Federal do Paraná, Brazil)

This research reports an acoustic analysis of CVC and CVCV English words by Brazilian learners. The aim of this study was to compare the production of monosyllabic words ending in an oral stop and its dissyllabic counterpart formed by the addition of the morpheme -y.

### **2:30 - Acoustic analysis of the production of [m] and [n] in codas by Brazilian students**

Marcia Regina Becker (Universidade Federal do Paraná, Brazil)

Brazilian learners commonly omit or mispronounce final English nasals. An instrumental analysis of monosyllabic words with /m/ and /n/ codas was conducted, the participants being ten pre-intermediate teenagers. Results showed that the correct labial-alveolar place distinction was made in 54% of the girls' productions, and 26% of the boys'.

### **3:00 - Final stop devoicing revisited**

Mehmet Yavas & Tasha Uria (Florida International University, USA)

This study investigates the effects of the place of articulation of the final voiced stop and the height of the preceding vowel in the devoicing of English voiced stops in interlanguage phonological productions. Results show that both variables are influential in the amount of devoicing of the targets.

## **Sala Celeste: Training/Instruction**

### **1:30 - Effects of perceptual training on the learning of English vowels in non-native settings**

Denize Nobre-Oliveira (Universidade Federal de Santa Catarina, Brazil)

This study investigated the effect of perceptual training on the learning, by speakers of Brazilian Portuguese, of three English vowel contrasts which, when not discriminated, can potentially cause comprehension problems. Training involving two different sets of stimuli was carried out and generalization of the new knowledge was investigated.

### **2:00 - Instruction hampers distributional learning of vowel contrasts**

Margarita Gulian (Leiden University, The Netherlands)

Paola Escudero & Paul Boersma (University of Amsterdam, The Netherlands)

We investigated the interaction between instruction and distributional learning in the learning of new contrasts. An experiment with non-Dutch speaking Bulgarians reveals that listeners who receive bimodal training without instruction can acquire new Dutch vowel contrasts, while listeners who receive the same training with instruction do not acquire the new contrasts nearly as well, showing that instruction hampers distributional learning.

### **2:30 - Perception of English vowel reduction by trained Spanish learners**

Esther Gómez Lacabex & M. Luisa García Lecumberri (University of the Basque Country, Spain)

This study examines perception of phonological vowel reduction in English by a group of Spanish learners after two different types of training: perceptual and productive. Our findings demonstrate positive effects of training and a facilitating view between perception and production but a lack of generalization to novel stimuli.

### **3:00 - Assessing the effects of phonetic training on L2 sound perception and production**

Cristina Aliaga-García & Joan C. Mora (University of Barcelona, Spain)

This study investigates the effects of phonetic training on the perceptual and productive ability of Catalan/Spanish learners of English. Phonetic Training resulted in accuracy gains for oral stop production and vowel discrimination but not for vowel production or the location of category boundaries along a VOT continuum for oral stops.

## **Sala Turquesa: Morphophonology: English -ed**

### **1:30 - Phonological environment in the perception and production of words ending in -ed by Brazilian EFL learners**

Rudinei Aldini Frese & Rosana Denise Koerich (Universidade Federal de Santa Catarina, Brazil)

This study investigated the relationship between perception and production of words ending in -ed by Brazilian learners of English as a foreign language in different preceding and following phonological environments. Results showed that there was a statistically significant and positive correlation between the two skills.

### **2:00 - The production of verbs with the morpheme ED by Brazilian speakers of English as a Foreign Language**

Maria Lucia de Castro Gomes (Grupo Educacional Uninter, Brazil)

This talk will present preliminary results of research which describes the realization of epenthesis in past tense regular verbs by learners in three different levels of English. Spectrograms and sound files from the recordings of text reading and story telling will be presented and the production analysis will be reported.

## **2:30 - The influence of preceding context and cluster length on the production of English words ending in -ed by Brazilians**

Fernanda Delatorre & Rosana Denise Koerich (Universidade Federal de Santa Catarina, Brazil)

This study investigated the influence of markedness relations on the production of vowel epenthesis in English words ending in -ed by Brazilians. The results show that preceding consonantal and voiceless contexts as well as three-member clusters induced more epenthesis than vowels, voiced consonants and two-member clusters, respectively.

## **3:00 - The production of English final obstruent clusters by Brazilian speakers: The difference between monomorphemic and “-ed” sequences**

Ubiratã Kickhöfel Alves (Pontifícia Universidade Católica do Rio Grande do Sul, Brazil)

This study investigates the production of monomorphemic and bimorphemic (“-ed”) two-obstruent codas by 32 learners of English. Our Optimality-based analysis accounts for the fact that, whereas monomorphemic words are produced with a consonant cluster, an epenthetic vowel tends to emerge in words containing the “-ed” marker.

## **Sala Royal: Prosody, acquisition, L2 teaching**

### **1:30 - Análise comparativa de três padrões prosódicos em francês e português europeu**

Lurdes de Castro Moutinho & Rosa Lúcia Coimbra (Universidade de Aveiro, Portugal)

Jean-Pierre Zerling (Universite Marc Bloch, France)

O presente estudo tem como objectivo comparar três estruturas prosódicas (declarativa, imperativa e interrogativa), com diferentes tipos de acento: o do Francês (acento rítmico) e o do Português (acento lexical). Os parâmetros analisados são os seguintes: Frequência fundamental ( $F_0$ ) e duração das vogais. São analisadas as diferenças inter-línguas, com especial relevância para os padrões de  $F_0$  e variação da duração.

### **2:00 - A aquisição do prefixo *sub-* do inglês por falantes de português brasileiro: Uma abordagem morfofonológica**

André Schneider (Universidade Federal do Rio Grande do Sul, Brazil)

Propõe-se analisar a aquisição do prefixo *sub-* do inglês por falantes de português brasileiro (PB), considerando-se aspectos morfofonológicos dessas línguas. Presume-se que aprendizes brasileiros de inglês em nível inicial realizem epêntese entre o prefixo e a palavra-base, evidenciando-se a transposição do molde silábico do PB para o inglês.

### **2:30 - Ensino de pronúncia: Uma experiência de prática distintiva de vogais do inglês**

Joceli Rocha Lima (Universidade Estadual do Sudoeste da Bahia, Brazil)

Este trabalho apresenta o estudo da produção distintiva de quatro vogais anteriores do inglês /i/, /ɪ/, /e/ e /æ/, em posição de contrastividade. Ao final do estudo os sujeitos registraram maior volume de realizações adequadas de /i/ e /æ/, fonemas não pertencentes ao inventário fonológico do PB.

## **4:00-6:00 PM - Talks**

## **Salão Azul: Initial /s/ clusters and L2 consonants**

### **4:00 - Brazilian Learners' Production of Initial /s/ Clusters: Phonological Structure and Environment**

Deunézio Cornelian Jr (Universidade Federal de Santa Catarina, Brazil)

This study is a partial replication of Rebello (1997a, 1997b) and Rauber (2002). Vowel epenthesis was found to be the most common strategy used by the participants to produce the target pattern. An important aspect revealed was that voicing assimilation proved to be a more powerful constraint influencing the rate of epenthesis. Voiced environments were also shown to result in epenthesis more frequently than voiceless ones. Vocalic contexts yielded a higher rate of epenthesis than consonant contexts. Major's Ontogeny Model (OM) was strongly supported by the findings.

### **4:30 - /s/ and the classification of onset clusters in L2 speech**

Steven H. Weinberger (George Mason University, USA)

Are only the sonority-violating /s/-clusters different from other clusters? Or do all /s/-clusters pattern together? We present data from L2 speakers of English that show that all /s/-clusters are classified together. This is true for speakers whose native languages lack clusters. The phonological grammar of L2 adults is more sensitive to the exceptional nature of /s/ in clusters than to sonority sequencing violations.

#### **5:00 - Effects of place of articulation and vowel height in the acquisition of English long lag stops**

Mehmet Yavaş (Florida International University, USA)

This study examines the effects of the place of articulation of the stop and the height of the following vowel in the acquisition of English long lag stops. Productions of 20 learners whose native language is Spanish are analyzed. Results show that the effects of the two variables are significant.

#### **5:30 - Early Second Language Acquisition: A longitudinal study on the production of a new laryngeal contrast**

Ellen Simon (Ghent University, Belgium/University of Massachusetts, USA)

This paper presents the results of a longitudinal case study on the acquisition of the English laryngeal contrast by a three-year old native speaker of Dutch. The results of the study suggest that early L2 acquisition of a laryngeal system differs from late L2 as well as from bilingual acquisition.

### **Sala Celeste: Influence of spelling**

#### **4:00 - The role of spelling on the perception and production of an L2 phonological contrast: An artificial language learning experiment**

Ellen Simon (Ghent University, Belgium/University of Massachusetts, USA)

Della Chambless (University of Massachusetts, USA)

Ubiratã Alves (Pontifícia Universidade Católica do RS, Brazil/ University of Massachusetts, USA)

This study investigates the influence of spelling on the perception and production of L2 phonological contrasts. In our artificial language learning experiment, we examine the effect of two different types of training (with and without spelling) on the acquisition of the /ʊ/ - /ʏ/ contrast by native English speakers.

#### **4:30 - Explaining the interrelation between auditory and orthographic cues in L2 sound perception and word recognition**

Paola Escudero (University of Amsterdam, The Netherlands)

Rachel Hayes-Harb (University of Utah, USA)

Although studies show that both L1 phonology and orthography influence L2 speech, there is a lack of experimental and theoretical studies showing their actual interaction in L2 acquisition. We present three recent studies which aimed at showing their relative effects, and then introduce a formal model which explains this interaction.

#### **5:00 - Is the pronunciation of the “s” between vowel letters really unpredictable in English?**

Aurora M. S. Neiva, Myrian A. de Freitas & Mônica M. R. Nobre (Universidade Federal do Rio de Janeiro, Brazil)

In monomorphemic words and in those perceived as such, the voicing feature of the segment corresponding to the letter “s” at morpheme boundary can be predicted in most inflected and derived forms. Our analysis helps Brazilian learners of English since in Portuguese the “s” between vowel letters sounds as [z].

#### **5:30 - Investigating the role of orthography in the acquisition of L2 pronunciation: A case study**

Rosane Silveira (Universidade Federal de Santa Catarina, Brazil)

This paper investigates if the variable orthography can account for the pronunciation difficulties faced by Brazilian learners when pronouncing English vowels and consonants. Free speech and reading-aloud data were recorded and analyzed to identify the strategies used to produce the target sounds and to verify whether these strategies could be attributed to transferring of the L1 sound-spelling correspondence.

### **Sala Turquesa: Production of French vowels**

#### **4:00 - Vogais francesas produzidas por falantes do português brasileiro: um experimento acústico**

Izabel Christine Seara & Jaqueline Alves Scardueli (Universidade Federal de Santa Catarina, Brazil)

Esta pesquisa constitui-se em um estudo acústico da produção de vogais francesas produzidas por falantes do português brasileiro, aprendizes de Francês Língua Estrangeira (FLE). Parâmetros acústicos (F1 e F2) de vogais orais e nasais de dois sujeitos de FLE foram coletados e comparados às produções de falantes nativos de francês.

#### **4:30 - A produção dos fonemas vocálicos de alunos universitários de língua francesa: Resultados parciais**

Guilherme Rocha Duran & Margarida da Silveira Corsi (Universidade Estadual de Maringá, Brazil)

Este artigo aponta que os alunos da Universidade Estadual de Maringá sofrem interferência da Língua Materna na produção dos fonemas vocálicos da Língua Francesa devido às semelhanças/diferenças entre as línguas e à Interfonologia. O trabalho também quantifica a porcentagem de evolução na aprendizagem de tais fonemas em dois anos.



#### **5:00 - Estudo da descrição acústica das vogais orais de média abertura da língua francesa**

Celina Maria Ramos Arruda Macedo (Universidade Federal de Santa Catarina, Brazil)

Este estudo teve por objetivo a comparação da realização do timbre das vogais orais de média abertura da língua francesa entre aprendizes de francês que moraram na França (grupo A) e aqueles que nunca foram à França (grupo B). Os resultados mostraram que o grupo A apresentou melhor desempenho do que o grupo B.

#### **Sala Royal: Stress and vowel reduction**

#### **4:00 - Stress placement in suffixed words by Brazilian students of English**

Andressa Brawerman Albini (Universidade Tecnológica Federal do Paraná, Brazil)

This work investigates the stress pattern of suffixed words produced by advanced Brazilian students of English, especially in words with stress on the fourth syllable from the end. The hypothesis that words with this type of stress would be mispronounced by Brazilian students was confirmed by the results.

#### **4:30 - Variability in vowel reduction by Brazilian speakers of English**

Michael Alan Watkins (Universidade Federal do Paraná, Brazil)

This study measured the influence of phonological environment on the degree of reduction of word-initial unstressed vowels by advanced Brazilian speakers of English. Thirty participants performed a sentence-reading task, and comparisons of duration, F1 and F2 were made for the same orthographic vowels in stressed and unstressed syllables.

#### **5:00 - A contrastive analysis of schwa in English and Portuguese**

Thaís Cristóvão Silva (Universidade Federal de Minas Gerais, Brazil)

Adriana Marusso (Universidade Federal de Ouro Preto, Brazil)

A contrastive analysis between the schwa in BP and RP showed that in both languages it presents similar acoustic characteristics both in terms of quality and durational patterns in the prosodic environment studied. The main conclusion is that properties of segments must take into consideration the prosodic patterns involved.

### **Tuesday, November 27**

#### **9:00-10:00 AM – Plenary talk (Salão Azul)**

#### **Decay of early phonetic discrimination**

Leonor Scliar Cabral (Universidade Federal de Santa Catarina, Brazil)

Research carried out within the HAS (high-amplitude sucking) paradigm has shown early discrimination by newborns (beginning with 36 hours of life) of the differences among the sounds of any language. For instance, newborns are able to discriminate the opposition between [±voiced] in the minimal pair [ba]/[pa] (Eimas et al., 1971), regardless of the ambient language. Despite this ability, empirical data obtained from psycholinguistic experiments show the difference between phonetic discrimination and perceptual categorization (Mandler, 1999, p. 303) and the decay of the former during the first twelve months: Not only the ability to discriminate many language sound differences but also initial phonotactic preferences will be gradually lost in favor of the ones belonging to the language(s) which is/are being acquired. The child, innately guided, loses the sensitivity to some phonetic features, reorganizes categories, and narrows or enlarges their scope (Jusczyk, 1997, pp. 73-74): The cortex cells must become tuned to these categories (Aslin & Pisoni, 1980). This presentation will focus on the inability Spanish native speakers show to perceive the differences between the vowel pairs [-high, -low, -back] and [+low, -back] and between [-high, -low, +back] and [+low, +round, + back] in Brazilian Portuguese.

### **10:30 AM – 12:00 - Talks**

#### **Salão Azul: Initial /s/ clusters**

#### **10:30 - Environmental constraints on prothesis**

Robert S. Carlisle (California State University, Bakersfield, USA)

Barbara Baptista (Universidade Federal de Santa Catarina, Brazil)

The findings of this research will determine whether the unexpected results from two previous studies with native speakers of Brazilian Portuguese concerning both onset length and the different environmental effects of consonants and vowels will be replicated with a larger population and the same instrument used in research with native Spanish speakers.

### **11:00 - The production of /sC/ onsets in a markedness relationship: A longitudinal study**

Robert S. Carlisle (California State University, USA)

Juan Antonio Cutillas Espinosa (Universidad de Murcia, Spain)

This paper reports Time II findings of a longitudinal study investigating the production of three onsets differing in sonority profiles. At Time I the onsets differed significantly from one another in amount of correct production. Time II results reveal whether the same pattern obtains and whether the frequency of correct production increases.

### **11:30 - Perceptual training on /s/-cluster pronunciation in Brazilian Portuguese/English interphonology**

Melissa Bettoni-Techio, Rosana D. Koerich & Andréia S. Rauber (Universidade Federal de Santa Catarina, Brazil)

This study examines the effect of perceptual training on the pronunciation of English words containing initial /s/-clusters by a Brazilian Portuguese speaker. The training was designed based upon the high-variability approach. The results show that after training, both trained and untrained clusters were more correctly produced and perceived.

## **Sala Celeste: Acquisition of L2 consonant contrasts**

### **10:30 - A viper is a wiper to Turkish students**

Bariş Dinçer (Anadolu University, Turkey)

Forty freshman university students and 5 native speakers of English participated in the study. Turkish learners were tested on their ability to perceive and produce a clear English /v/ sound. Findings reveal that /v/ is the most difficult sound both to perceive and produce for Turkish learners. The findings accentuate the need for language-sensitive pronunciation programs.

### **11:00 - Acquisition of Italian L2 affricates: The case of a Brazilian learner**

Lidia Costamagna (University for Foreigners, Italy)

This study examines the acquisition of Italian affricates by a Brazilian learner. Processes of substitution adopted during the various learning stages, with the intent of reaching target phonemes, outline a not very linear pattern in which L1 influence intertwines with influence of marked phonemes influencing learning speed as well as their complete acquisition.

### **11:30 - Accommodating new sounds: Consonant perception in L2 learning**

Silke Hamann (Utrecht University, The Netherlands)

Anke Sennema (Potsdam University, Germany)

Paul Boersma (University of Amsterdam)

We tested the perceptual relevance of three acoustic cues (voicing, friction and duration) for the categorization of the Dutch labiodentals /f, v, ʋ/ and the German labiodentals /f, v/ by native speakers. The results allow us to model the development of a German L1 listener towards perfect Dutch L2 perception.

## **Sala Turquesa: Production of English vowels**

### **10:30 - Production of English front vowels by Brazilian EFL teachers in Western Rio Grande do Norte**

Clerton Luiz Felix Barboza (Universidade Estadual do Rio Grande do Norte/Universidade Estadual do Ceará, Brazil)

This study investigated the relationship between mother-language and interlanguage front vowels produced by Brazilian EFL teachers in Mossoró, Rio Grande do Norte. Four teachers had English [i, ɪ, e, æ] and Portuguese [i, e, ε] vowels recorded in a carrier sentence. Results indicate that the subjects do not make distinction between native and foreign language sounds.

### **11:00 - Vowel assimilation from Brazilian Portuguese (L1) into North-American English (L2) in naming tasks: A connectionist approach to interphonology**

Márcia C. Zimmer (Universidade Católica de Pelotas, Brazil)

Ricardo Bion (Scuola Internazionale Superiore di Studi Avanzati, Italy)

Vowel assimilation from Brazilian Portuguese (L1) to American English (L2) was investigated among advanced speakers of English naming L1 pseudowords and L2 words. F1 and F2 of all vowels were measured; L2 vowels were assimilated towards the formant values of L1 vowels. The results are discussed within a connectionist framework.

### **11:30 - Interaction of L2 phonotactics and L1 syllable structure in L2 vowel production**

Juli Cebrian (Universitat Autònoma de Barcelona, Spain)

This paper examines the relationship between L1-L2 differences in phonotactics and syllabification and L2 production of the English tense-lax vowel contrast. Results of psycholinguistic and production experiments indicate that segmental errors may result from insufficient knowledge of L2 suprasegmental structure and interference from the L1 (Catalan) system.

**1. Estratégias de reparo na aquisição do acento primário do inglês: Efeitos da instrução explícita**

Amanda Post da Silveira (Universidade Federal de Santa Maria, Brazil)

Este trabalho busca investigar a interferência da L1-Português na aquisição do acento primário do Inglês e contribuir para a descrição do processo de aquisição de língua estrangeira. Foram identificadas as estratégias de reparo aplicadas e verificou-se a relevância da instrução explícita para a aquisição do padrão acentual do Inglês.

**2. The use of visual cues in the perception of English syllable-final nasals by Brazilian EFL learners**

Denise Cristina Kluge, Mara Silvia Reis, Denize Nobre-Oliveira &

Melissa Bettoni-Techio (Universidade Federal de Santa Catarina, Brazil)

This study aims at investigating whether Brazilian EFL learners rely on phonetic information contained in visual cues when identifying the nasals /m/ and /n/ in coda. Perception was assessed by means of an Identification Test with three test conditions: (i) audio alone, (ii) audio-visual, and (iii) video alone.

**3. An Adaptation of the CDT and Working Memory Capacity**

Melissa Bettoni-Techio, Denise Cristina Kluge, Mara Silvia Reis &

Denize Nobre-Oliveira (Universidade Federal de Santa Catarina, Brazil)

This study investigates the relationship between perception of word-final nasals as assessed by an adaptation of the Categorial Discrimination Test (Flege, Munro, & Fox, 1994) and working memory capacity (WMC) as assessed by a listening span task. The results show that the CDT scores do not seem to be affected by WMC.

**4. Transfer characteristics from L1 to FL in the production of interrogative-negative sentences**

Érica de Souza Marta (Universidade Federal do Rio de Janeiro, Brazil)

The aim of developing this research is to verify factors that could be responsible for a transfer from the L1 to the FL in the production of interrogative-negative sentences. Some factors were considered, however, the factor gender was responsible for the differences in the phonetic description.

**5. Pronunciation differences in British and American English vowels: A reflection upon the impact they have on the acquisition of English vowels by Brazilian-Portuguese speakers.**

Flávia Cristina de Souza Camargo (Universidade Federal de Minas Gerais, Brazil)

The work aimed at investigating how Brazilian ESL speakers acquire English vowels. An experiment was carried out as to discover the speakers' main mistakes and tendencies. The data analysis was made through formant measurements. The results show that mistakes and replacements were the most common production strategies.

**6. Effects of perceptual training on the identification and production of the English voiceless plosives by Brazilian EFL learners**

Mara Silvia Reis, Denize Nobre-Oliveira & Andréia S. Rauber (Universidade Federal de Santa Catarina, Brazil)

This study aims at investigating whether perceptual training could affect both perception and production of the values of the voice onset time of voiceless stops. Identification and discrimination tasks were used in the perceptual training. The results suggest a positive effect on identification and a tendency for more target language production.

**7. Socialização na aquisição de segunda língua**

Paula Cristina Bullio & Alessandra Del Ré (Universidade Estadual Paulista, Brazil)

A aquisição de uma língua não é um processo irreconhecível, mas embebido no processo de socialização e na relação intrínseca entre língua e cultura. Verificamos de que forma esses processos contribuem para a aprendizagem. Levantando essas questões, trazemos aspectos para serem considerados na aquisição de L2: culturais, históricos e institucionais.

**8. Application of a speech archive analysis to English pronunciation teaching**

Rastislav Sustarsic (University of Ljubljana, Slovenia)

A speech archive was analyzed to determine the most important segmental and suprasegmental features in teaching English pronunciation to EFL learners. Two hundred and eight recordings of a reading passage of speakers of English as L1 were studied to see which features prevail and should be given higher priority in EFL pronunciation classes.

**9. From stumbling readers to successful presenters**

Smiljana Komar (University of Ljubljana, Slovenia)

The purpose of reading aloud should be to evaluate the understanding of a text via its interpretation. Reading is a skill which learners of any L2 should master because it improves their speaking and oral presentation skills. The present paper presents the results of a reading test carried out with the first-year students of English and proposes strategies for building good reading skills.



## 10. Analyzing pronunciation books in Turkey

Mustafa Gultekin (Anadolu University, Turkey)

Many books used for pronunciation lessons are not effective for Turkish students because the ones written by foreign authors are not written only for the problems of Turkish students, and the others written by Turkish authors for Turkish students do not depend on a study for their problematic areas.

## 11. Perception versus production in the acquisition of L2 phonemic contrasts

Fred Eckman & Gregory Iverson (University of Maryland, USA)

This paper investigates whether the perception of a target-language contrast by a learner must necessarily precede that learner's systematic production of the contrast. The paper concludes with a discussion of the claim that written input is necessary for learners' production of a contrast to systematically outstrip their production.

### 2:00-3:30 PM - Talks

#### Salão Azul: L2 consonants

##### 2:00 - More flexible use of perceptual cues in nonnative than in native listening: Preceding vowel duration as a cue for final /v/-/f/

Mirjam Broersma (Radboud University Nijmegen, The Netherlands)

Marco van de Ven (Max Planck Institute for Psycholinguistics, The Netherlands)

Three 2AFC experiments investigated Dutch and English listeners' use of preceding vowel duration for the English final /v/-/f/ contrast. Dutch listeners used vowel duration more flexibly than English listeners did: they could use vowel duration as accurately as native listeners, but were better at ignoring it when it was misleading.

##### 2:30 - Francophone ESL learners' difficulties with English /h/

Paul John (Université du Québec à Montréal, Canada)

Walcir Cardoso (Concordia University, Canada)

Our study examines h-epenthesis by francophone ESL learners, a process involving variable insertion of an [h] into the onset of vowel-initial words, as in "I hurt my [h]ankle." H-epenthesis was found to vary as a function of linguistic and extralinguistic variables, including preceding phonological environment and level of formality.

##### 3:00 - A gradiência das fricativas posteriores em caso de contato lingüístico: castelhano paraguaio

Diego Jiquilin Ramirez (Universidade Estadual de Campinas, Brazil)

No Paraguai, guarani e espanhol estão em contato desde o período colonial. Neste trabalho, analiso as interferências fonéticas dum idioma noutro, especificamente, sobre as fricativas posteriores. Com a Fonologia Articulatória, extrapolo os limites dos pontos articulatórios e transito pelo gradiente existente da glote ao palato mole.

#### Sala Celeste: General L2 perception/production

##### 2:00 - Dimensions of the body in the production of sounds

Simone Hashiguti (State University of Campinas, Brazil)

This paper analyzes how the body works in the processes of foreign language sound production and recognition. From a discursive theoretical perspective, the difficulty to accomplish such tasks is related to body experiences in different, inter-constitutive discursive dimensions: the empirical, the imaginary and the symbolic ones.

##### 2:30 - Towards a dynamic view on L2 acquisition

Adelaide H. P. Silva (Universidade Federal do Paraná, Brazil)

Based on some acoustic data, it is argued here that taking a generative approach to L2 phonological acquisition requires us to view beginners as individuals who have to initiate a completely new process when learning new L2 sounds. On the contrary, if we take a dynamic approach, we view beginners as individuals that already produce gestures that constitute the sounds. The teacher's task, then, is to lead the beginners to tune the gestures in their speech next to the way native speakers do.

##### 3:00 - The impact of voice quality resetting on the perception of a foreign accent in Third Language Acquisition

Magdalena Wrembel (Adam Mickiewicz University, Poland)

The paper investigates the concept of a foreign accent in Third Language Acquisition (TLA), and tests the hypothesis that L2 rather than L1 is the major source of phonetic transfer. The study focuses on the resetting of voice quality by comparing perceptual judgements of a foreign accent to an auditory and acoustic analysis of articulatory setting of L3 English.

## **Sala Turquesa: English consonants**

### **2:00 - Different task type and the perception of the English interdental fricatives**

Mara Silvia Reis, Denise Kluge & Melissa Bettoni-Techio (Universidade Federal de Santa Catarina, Brazil)

The study aims at examining whether different task types can influence the level of information processing in speech perception of interdental fricatives by Brazilian EFL learners. Three types of tests were used: (i) a general pronunciation perception test, (ii) an odd-item-out test, and (iii) an alternative forced-choice identification test.

### **2:30 - Perceptual assimilation of ambiguous /r/-/l/ speech tokens**

Michael D. Tyler (University of Western Sydney, Australia)

Native English listeners heard tokens from an /r/-/l/ continuum in categorization and discrimination tasks, and a rating task designed to test PAM-L2 (Best & Tyler, 2007) hypotheses. They appear to perceive the ambiguous token simultaneously as multiple categories and preliminary data from second-language listeners show the same pattern of results.

## **Sala Royal: Intelligibility, stress, teaching**

### **2:00 - Vowel insertion in the speech of Brazilian learners of English: A source of unintelligibility?**

Neide Cesar Cruz (Universidade Federal de Campina Grande, Brazil)

This presentation reports on a study investigating the effect of vowel insertion on the pronunciation intelligibility of Brazilian learners' English. Results suggest the following findings: (1) the category vowel insertion in itself is insufficient to reveal its effect, and (2) it is necessary to specify the type of vowel inserted.

### **2:30 - Acoustic correlates of word stress in the connected speech of American English and Brazilian Portuguese speakers**

Thais Sada Ribeiro (Universidade Federal de Santa Catarina, Brazil)

This study aimed at describing and comparing the acoustic correlates of word stress in the connected speech of Brazilian Portuguese and American English speakers, so that tentative suggestions for the teaching of word stress to Brazilian EFL learners could be made. Co-occurring sentence stresses and perceptual units were also taken into consideration.

### **3:00 - Rhyme lessens time: Techniques to help Iranian EFL learners sound near native**

Hamed Abdi (Islamic Azad University-Northern Tehran Branch, Iran)

Kids chanting nursery rhymes without much knowing what they sing served as an inspiration for the adoption of a similar technique in devising an American English Phonetics Course which makes use of literary devices to perceive and produce the non-existent sounds in their L1 phonemic inventory.

## **4:00-5:00 PM - Talks**

### **Salão Azul: L2 intonation**

### **4:00 - Assessing individual talent in second language production and perception**

Matthias Jilka, Henrike Baumotte, Natalie Lewandowski (University of Stuttgart, Germany)

Susanne Reiterer (University of Tübingen, Germany)

Giuseppina Rota (University of Stuttgart, Germany)

This study describes the construction of a comprehensive test battery intended to allow the selection of subjects for neuroimaging studies (e.g., fMRI) as part of a larger project that aims to find the neuronal correlates of foreign language pronunciation talent. Example analyses of intonational phenomena are included.

### **4:30 - New trends on the teaching of intonation of foreign languages**

Paulina D. Artimonte Rocca (Pontifícia Universidade Católica de São Paulo, Brazil)

This paper presents some contributions from the acoustic analysis for the elaboration of material for the teaching of intonation to learners of a foreign language, which were motivated by the results of a study that aimed at the implementation and evaluation of techniques designed to improve Brazilian students' perception and production of English intonation contours by means of the analysis, manipulation and visualization of the acoustic signal provided by speech analysis.

## **Sala Celeste: L2 pronunciation teaching**

### **4:00 - L2 sound acquisition: Perspectives and strategies**

Sandra Madureira (Pontifícia Universidade Católica de São Paulo, Brazil)

This paper focuses on the acquisition of English sounds by Brazilian Portuguese native speakers and its objective is to discuss relevant findings (theoretical, experimental and technological) in speech research over the last decades which might be taken into account in designing oral comprehension, speech production and perception activities in English as L2.

### **4:30 - A contrastive approach in teaching Spanish and Portuguese pronunciation to Slovene students**

Jasmina Markic (University of Ljubljana, Slovenia)

Contrastive analysis can have an important role in students' awareness of their pronunciation errors and in the way of improving their production. The paper describes in a contrastive manner the main features of sound systems of Spanish, Portuguese and Slovene and explains some common errors of Slovene university students resulting from the systemic differences between Slovene, Spanish and Portuguese.

## **Sala Turquesa: Perception of L2 connected speech**

### **4:00 - Designing speech-perception tasks focusing on sandhi-forms**

Margareth Perucci (Pontifícia Universidade Católica de Campinas, Brazil)

This talk has the purpose of sharing with *New Sounds* attendees some speech-perception tasks designed by Language undergraduate students. The tasks focus on the teaching of sandhi-forms within listening comprehension, and aim at helping EFL students become aware of sandhi features, which prevent them from carrying out speech perception tasks successfully.

### **4:30 - Helping students to understand natural, connected speech**

Hegrisson Carreira Alves (Faculdade Dinâmica das Cataratas, Brazil)

L2 students find it difficult to understand connected speech even after having studied the language for some time. Different aspects might influence their comprehension such as lexis, grammar and pronunciation. I carried out a project to help students perceive suprasegmental features so that this could improve their listening comprehension skills.

## **Sala Royal: Initial /s/ clusters**

### **4:00 - When input frequency patterns fail to drive learning: Evidence from Brazilian Portuguese English**

Walcir Cardoso (Concordia University, Canada)

The study investigates the effects of markedness and input frequency in the second language acquisition of English /s/ + consonant onset clusters. The results support the hypothesis that it is markedness on sonority sequencing, not input frequency, that determines the order of acquisition of sC clusters in second language speech.

### **4:30 - The variable perception of /s/ + Coronal onset clusters in Brazilian Portuguese English**

Walcir Cardoso (Concordia University, Canada)

Paul John (Université du Québec à Montréal, Canada)

Leif French (Concordia University, Canada)

Within a multidisciplinary approach to the study of language, this study examines how perception may affect the acquisition of homorganic sC onset clusters in interlanguage. The results indicate that the ability of participants to discriminate between these clusters has no influence in the production of sC sequences.

## **5:10-6:30 PM – Panel (Salão Azul)**

### **Future directions for interphonology research**

Roy C. Major (Arizona State University, USA)

Ocke-Schwen Bohn (Aarhus University, Denmark)

Paul Iverson (University College London, UK)

## **8:30 PM – Conference dinner (Restaurante João de Barro)**

Wednesday, November 28

9:00-10:00 AM – Plenary talk (Salão Azul)

**The role of categorization in learning second-language phonemes**

Paul Iverson (University College London, UK)

Current work on second-language phoneme learning and perception emphasizes the role of phonetic or phonological categorization, by examining, for example, how second-language phonemes assimilate to first-language categories, how first- and second-language categories interact, and what cues are used in the category representations. The aim of this talk is to demonstrate some limitations of this approach. Learning second-language phonemes almost certainly involves many levels and types of processing, such as auditory tuning and focused attention, that cannot be easily related to category structure, and we thus need to broaden the scope of our investigation if we are to understand difficulties in second-language phoneme learning. Examples will be given from recent research on the perception and training of English vowels by Spanish, French, German, and Norwegian speakers; and English /r/-/l/ by Japanese speakers.

10:30 AM - 12:00 - Talks

**Salão Azul: L2 vowel perception**

**10:30 - Early and late bilinguals' vowel perception and production: English vowel contrast that gives Serbian-English speakers a H(E)AD-ache**

Lidija Krebs-Lazendic, Catherine T. Best (University of Western Sydney, Australia)

Phonological priming was used to investigate “early” and “late” Serbian-English bilinguals’ production and perception of two English (L2) vowel contrasts (*hid-heed*, *head-had*) that are non-contrastive in Serbian (L1). Group differences in discrimination and production reflect differences in assimilations that may arise from differences in L1 establishment at L2 onset.

**11:00 - Explaining individual variation in L2 perceptual development: The acquisition of rounded German vowels by English learners**

Robert Mayr (University of Wales Institute, Cardiff)

Paola Escudero (University of Amsterdam, The Netherlands)

This paper will show how Escudero’s (2005) Second Language Linguistic Perception Model can explain and predict individual developmental patterns in the L2 perception of German vowels by native English learners of German.

**11:30 - Language Dominance and Bilingual’s Speech Perception**

Ivana Brasileiro (Utrecht University, The Netherlands)

I compare the perceptual behaviour of simultaneous bilingual children with that of L2 learners. I focus on the possible role language dominance plays in speech perception. My results show that, regardless the language dominance, the bilinguals did not differ from the monolinguals. They do however differ from the L2 learners.

**Sala Celeste: English consonant clusters**

**10:30 - Allophonic variation can affect L2 speech perception: Evidence from a Tuscan neutralization process**

Chiara Celata (Scuola Normale Superiore, Italy)

In L2 perceptual processing, perceived similarity maps non-native sounds onto native phonological/phonetic categories. Yet what is still unclear is the influence of L1 rules of allophonic variation, and contrast neutralization in particular, on L2 speech perception. This study investigates the influence of Tuscan postsonorant affrication on the perception of an English similar sound sequence.

**11:00 - Predicting phonotactic difficulty in second language acquisition.**

Katarzyna Dziubalska-Kołaczyk (Adam Mickiewicz University, Poland)

The paper reports on a study of 53 young speakers of 15 languages of the Austronesian and Sino-Tibetan family, and Japanese, Korean and Vietnamese, learning ESL in a US school. The study focuses on phonotactics. It shows that there is a universal principle underlying the complexity of clusters and the difficulty of their acquisition.

### **11:30 - Reconstructing English postalveolar sequences: The case of Serbian EFL learners**

Biljana Čubrović (University of Belgrade, Serbia)

One of the most complex obstacles encountered by Serbian EFL learners in the domain of the acquisition of English consonants is the one dealing with the English postalveolar consonant clusters /tr/ and /dr/ which are often substituted by the “corresponding” Serbian affricates.

### **Sala Turquesa: Influence of L2 on L3**

### **10:30 - L2(French)-L3(English) phonetic-phonological transfer among Brazilian Portuguese native speakers**

Cintia Avila Blank & Márcia Cristina Zimmer (Universidade Católica de Pelotas, Brazil)

This study investigates the role played by grapho-phonetic-phonological transfer of the knowledge of French (L2) vowels into North-American English (L3) vowels by native speakers of Brazilian Portuguese (L1). This research aims to assign such transfer to the way the hippocampal and neocortical memory systems organize L1, L2 and L3 knowledge.

### **11:00 - Unintentional intrusions in third language speech production**

Marcia Fernandes-Boechat, Karim Siebeneicher Brito & Luciana Pereira Jasinski (Universidade Federal do Paraná, Brazil)  
Research was based on cross-sectional studies of multicultural class groups learning French in France and Brazilians learning either French, English or German in Brazil as a second foreign language. Results will be presented according to the Cognitive Chain Reaction Theory© in individual multilingualism (Fernandes-Boechat 1999, 2000, 2005, 2006).

### **11:30 - The roles of typology and L2 status in the acquisition of L3 phonology: The influence of previously learnt languages on L3 speech production**

Raquel Llama, Walcir Cardoso & Laura Collins (Concordia University, Canada)

Studies on L3 phonology suggest a strong influence of the L2 on the acquisition of a third sound system. Our study investigates how a typologically related L1 and a typologically distant L2 may compete in becoming the source of influence in the production of L3 speech.

### **1:30-3:00 PM - Meeting to create the *New Sounds International Association***