BIMEP 2022

Sixth Belgrade International Meeting of English Phoneticians

BOOK OF ABSTRACTS

English Department & Belgrade Phonetics Lab

Faculty of Philology, University of Belgrade, Serbia

25-26 March 2022

BIMEP 2022

Book of Abstracts

SIXTH BELGRADE INTERNATIONAL MEETING OF ENGLISH PHONETICIANS BIMEP 2022: BOOK OF ABSTRACTS

Editors:

Biljana Čubrović, University of Belgrade
Andrej Bjelaković, University of Belgrade
Nina Đukić, University of Belgrade

Publisher:
Faculty of Philology – University of Belgrade
Professor Iva Draškić Vićanović, Dean of the Faculty of Philology

Print run: 30

ISBN 978-86-6153-662-5

Sixth Belgrade International Meeting of English Phoneticians
BIMEP 2022

25-26 March 2022

English Department and Belgrade Phonetics Lab
Faculty of Philology
University of Belgrade, Serbia

Table of contents

1. Plenary talk ……..5

2. Paper presentations (in alphabetical order)……..8

3. List of participants……..32

PLENARY TALK

Inger M. Mees
Associate Professor Emeritus
Department of Management, Society and Communication
Copenhagen Business School
Denmark

DIFFERENCES BETWEEN GENERAL BRITISH AND GENERAL AMERICAN

Traditionally phonetics/phonology textbooks take either British English or American English as a model, British English being the model taught in the UK and Europe. Increasingly, however, European universities teach both varieties, giving students a choice. It has become necessary therefore to deal with both accents side-by-side. Even if only one model of pronunciation is offered, it is useful to have a knowledge of both accents because, arguably, a contrastive analysis of two accents is phonetically and phonologically richer than the description of a single accent and leads to greater insight into the characteristic features of the intended target accent. A contrastive approach has the additional advantage of helping learners understand both varieties.

In the UK context, the use of the descendant of RP as a reference model for the teaching of phonetics/phonology has always been problematic because of the social significance of the accent. It is a real advantage, therefore, to take a contrastive approach and move away from teaching English phonetics/phonology exclusively in terms of standard British English, focusing instead on the variety of accents in English, which is done by taking the best-described varieties of English (i.e. General American and General British) as reference points.

In this talk a brief outline of the main differences between British English and American English will be provided. The variation will be treated in terms of systemic, distributional, lexical and realisational differences (Wells 1982). Not all differences between the two accents are equally important and consequently consideration will also be given to which aspects of British and American should be taught and which phonemic symbols to use.

References

Wells, J.C. 1982. *Accents of English* (3 vols). Cambridge: Cambridge University Press.

PAPER PRESENTATIONS

Safi Eldeen Alzi'abi
Isra University, Jordan

ARAB EFL LEARNERS' PERCEPTION AND PRODUCTION OF ENGLISH WORD STRESS

Mastering word stress is a crucial part of learning English because it is part and parcel of word recognition and intelligibility. Arabs are always complaining about the mystifying and elusive stress patterns in English. This study examines Arab learners' production and perception, i.e. identification of stress in di-, tri- and other polysyllabic English words. Over 80 native Arab learners were initially asked to produce and give perceptual judgments on 90 English infrequent words of varying syllabic structures and word classes. They were then required to identify the stressed syllable following their hearing of the word from a native speaker. Analysis of the data showed that Arabs had a serious problem in producing English word stresses correctly owing to their tendency to mainly stress ultimate heavy syllables – a strategy usually employed in the L1 stress system. Their performance on the stress identification task was much better but still gave problems, especially with tri- and tetrasyllabic utterances. Syllabi have to comprise stress drills in conjunction with their L1 stress patterns to help them overcome the difficulties in stressing words.

Muzakki Bashori
Roeland van Hout
Helmer Strik
Catia Cucchiarini
Centre for Language Studies, Radboud University Nijmegen, the Netherlands

USING PHONETIC EDIT DISTANCES TO MEASURE THE EFFECTS OF ASR-BASED LANGUAGE LEARNING SYSTEMS ON LEARNERS' PRONUNCIATION

Automatic Speech Recognition (ASR) has proven to be useful for training Second Language (L2) pronunciation. However, relatively little research has measured the effects of ASR-based language learning systems on learners' word-level pronunciation improvement using phonetic edit distances. The present study investigated two ASR-based language learning systems, *I Love Indonesia* (ILI) and *NovoLearning* (NOVO), with each offering distinct corrective feedback. ILI is

equipped with general feedback, while NOVO provides phonetic feedback. 117 vocational high school students in Indonesia took part in this study and were divided into two groups; ILI (52) and NOVO (65). Learners' read-speech of 28 words in the pre- and post-test were recorded. An experienced, proficient expert (Indonesian speaker of English) made detailed phonetic transcriptions of all the recorded word utterances (*n* = 28 target words x 2 pre-post x 128 participants = 7,168 transcribed words). A subset of the phonetic transcriptions (*n* = 28 target words x 2 pre-post x 8 participants = 448 transcribed words) was rechecked by the first author, and we found no major discrepancy. We then analyzed all the transcriptions. The phonetic distances between the learners' realizations and the target pronunciations in the pre- and post-test were measured using an algorithm which calculates the Levenshtein distances which are normalized by the length of the alignment. Results show that, overall, learners significantly improved their word-level pronunciation, as indicated by smaller phonetic distances. NOVO showed more progress than ILI, but both systems were seen as effective in supporting learners' pronunciation improvement. A qualitative analysis on expert's comments reveals interesting insight into the learners' local (Javanese) accent, majority of pronunciation errors, and transcription challenges. Future studies should investigate in-depth effects of ASR-based practice on particular segmental and/or suprasegmental features using phonetic edit distances.

Ana Batas
Belgrade Phonetics Lab, Faculty of Philology, University of Belgrade

SPECTRAL TILT AS AN ACOUSTIC CUE OF LEXICAL STRESS IN THE SERBIAN LANGUAGE

Spectral tilt is considered as a reliable correlate of lexical stress (Sluijter & Hauven 1996). In addition to lexical stress, spectral tilt is also a reliable distinguishing parameter for different types of phonations (Gordon & Ladefoged 2001).

This study examines different spectral parameters, such as H1-H2, H1-A1, H1-A2, H1-A3, CPP and HNR of vowel /a/ in stressed and unstressed syllables. It is hypothesized that there is a difference between stressed and unstressed syllables (pre-stressed and post-stressed short and long), as well as between stressed syllables, since more than one pitch-contour can occur on the stressed syllables.

Ten female speakers from the Neo-Shtokavian dialects voluntarily participated in this study. They read 30 carrier sentences with embedded target stimuli. Spectral

parameters were obtained automatically using *Praat* script *praatvoicesauceimitator.praat* by Chad Vicenik (modifications by Patrick Callier).

According to preliminary results, H1-H2 does not show statistically significant difference between stressed and unstressed syllables in the Serbian language, but both CPP and HNR show statistically significant difference between these syllables ($F = 10.414$, $df = 4$, $= p < 0.01$; $F = 16.995$, $df = 4$, $p < 0.01$).

Kizzi Edensor Costille
CRISCO University of Caen, France

USING MULTI-SENSORIAL INPUT TO PRACTICE L2 PROSODY

Research has shown that prosody plays an important role in the intelligibility, comprehensibility and accentedness of non-native discourse (Munro and Derwing 1995, 1998). Yet prosody is deemed difficult to teach (Setter et al. 2010).

Certain previous studies have used software such as PRAAT (Olson 2014; Imber et al. 2017; Setter et al. 2010) but they appear to be too complex for L2 learners to use (Setter et al. 2010; Jenkins 2005). Could a more comprehensive tool help L2 learners to improve their prosody? The aim of this study is to contribute to the teaching of L2 prosody by providing a multi-sensory user-friendly tool for both teachers and students. To do this, an experiment was set up using a 3D spectrogram where both intensity and intonation contours are seen in colour.

Four groups of two French students enrolled in a BA in English took part in this trial experiment. Each received different types of input: group 1 has limited input (with no auditory or visual input), group 2 has only auditory input, group 3 has only visual input and group 4 has multi-sensorial input. Each group can only hear or see each item once, before recording their own production.

An initial auditive analysis leads us to believe that multi-sensorial input is beneficial. However, despite the necessary steps to ensure that the participants were homogeneous, (for example, the same number of years studying English), the results were very heterogeneous. Positive results came from the students' feedback; they generally found the tool useful, easy to use, fun and interesting. The participants who saw the spectrogram found it especially effective when they were able to match their own spectrogram with the provided model. This result is encouraging as one of our

initial and main objectives was to determine, discuss and assess the usability of this multi-sensory tool in order to contribute to the teaching of L2 prosody.

References

Boersma, P. and D. Weenink. 2001. PRAAT, a system for doing phonetics by computer. *Glot International* 5: 341–345.

De Bot, K. 1983. Visual feedback of intonation: Effectiveness and induced practice behavior. *Language and Speech* 26: 331–350.

Imber, B., C. Maynard and M. Parker. 2017. Using Praat to increase intelligibility through visual feedback. In *Proceedings of the 8th Pronunciation in Second Language Learning and Teaching Conference*, edited by M. O'Brien and J. Levis, 195–213.

James, E. 1976. The acquisition of prosodic features of speech using a speech visualizer. *IRAL* 14 (3): 227–243.

Munro, M. J. and T. M. Derwing. 1995. Foreign-Accent, Comprehensibility, and Intelligibility in the Speech of Second Language Learners. *Language Learning* 45 (2): 73–97.

Munro, M.J. and T. M. Derwing. 1998. Evidence in Favor of a Broad Framework for Pronunciation Instruction, *Language Learning* 48 (2): 393–410.

Setter, J. and J. Jenkins. 2005. Pronunciation: State-of-the-art review article. *Language Teaching* 38 (1): 1–17.

Setter, J., V. Stojanovik and P. Martínez-Castilla. 2010. Evaluating the intonation of non-native speakers of English using a computerized test battery. *International Journal of Applied Linguistics*, 368–385. http://dx.doi.org/10.1111/j.1473.

Biljana Čubrović
Belgrade Phonetics Lab/English Department, Faculty of Philology, University of Belgrade, Serbia

UNLEARNING L1 VOWEL QUALITY DIFFERENCE – A CASE OF ADVANCED SERBIAN EFL LEARNERS

It is well known that most quantity languages demonstrate a quality difference between short and long vowels. Serbian is one such language, but research in this area seems scarce. Lehiste (1970: 31) found that Serbian vowels "/e/, /o/ and /a/ […] show a marked influence of quantity on vowel quality", but also pointed out that vowels /i/ and /u/ are not necessarily centralized and lowered in the vowel space of this language. Contrary to this, Čubrović (2016) observed that all five Serbian short and long vowels manifest quality differences in a group of Serbian native speakers from Belgrade, long-term residents in the US. The present study replicated the experiment from Čubrović (2016) with 5 Belgrade native speakers of Serbian residing in Serbia, who are advanced EFL learners. Vowel quality differences in two pairs of high vowels in English and Serbian are in focus. The aim of the paper is to shed some more light on whether L1 vowel quality characteristics may influence the acquisition of L2 vowels. The results show that the participants have acquired important qualitative differences in English high vowel pairs in BEAT vs. BIT and BOOT vs. PUT, disregarding the quality distinction that is smaller in native Serbian productions.

References

Čubrović, B. (2016). *Acoustic Investigations of Serbian and American English Vowel Inventories*. Belgrade: University of Belgrade, Faculty of Philology.

Lehiste, I. (1970). *Suprasegmentals*. Cambridge, MA/London, England: The M. I. T. Press.

Urjani Chakravarty
Vellore Institute of Technology, Chennai, India
Gulab Chand
Amity University, Gurgaon, India

PHONO-SYNTACTIC INTERFACE: MODALITY MARKERS IN INDO-ARYAN LANGUAGES

Modality is a cross-linguistic category that is marked in languages with the help of varied expressions such as individual verbal suffixes, auxiliaries, clitics, particles, and adverbs. It is investigated within different levels of linguistics. The current investigation takes selected particles from Indo-Aryan languages found in daily use of native speakers and studies their linguistic function focusing on the meaning interpretation process. The claim is that in regular use the particles perform modality functions of varied nature. Illustrating this claim we have Bangla discourse particle *to*, Hindi negative particle *na* and Hadoti discourse particle *re*. Through the distribution of these particles the study attempts to answer the following questions:

1) What type of modality do these particles mark?
2) Is there any similarity between them at the level of phono-syntactic interface when compared with their English interpretation?

For example,

In Bangla,

aapnii gayiite parben to?

You-hon sing-inf can MM

"You can sing, can't you?"

In Hindi,

kyuN na ham kaphii piine caleN?

Why MM we coffee drink-ger go-subj-1p-pl

"Why don't we go for a cup of coffee?"

In Hadoti,

kʰəh rə tu chaləgo kə?

Tell MM you go/walk-future

"Will you go with me?"

In the above examples' modality is expressed in all instances however, the expressions differ in meaning. Furthermore, in each case the presence of these particles expands the modal characteristics of each construction. As in the Bangla example 'ability' is expressed through the verbal form ***para*** which maps onto English 'can' and to expands this 'ability' and maps onto English tag question. In the Hindi example 'wish' is expressed through the verb as well as the negative particle ***na***. In the Hadoti example too 'wish' is expressed through rə. The Hindi example also includes the possibility angle along with 'wish' in a specific situation of asking out. On the other hand, Hadoti is more for a general 'wish' for accompanying someone somewhere without any said purpose. Therefore, the analysis will cross-linguistically explore functions of modal particles in the interpretation process thereby elucidating the phono-syntactic interface.

Dimitra Dimitriou
University of Central Lancashire, UK

PERCEPTUAL TRAINING EFFECTS ON THE PERCEPTION AND PRODUCTION OF L2 ENGLISH VOWELS BY L1 GREEK-CYPRIOT LEARNERS

In line with the assumptions of current models of L2 speech perception and production, such as the SLM (Flege 1995: 2002) and the PAM-L2 (Best & Tyler 2007), segmental perception and production can pose considerable difficulties for L2 learners due to the influence of the L1. High Variability Phonetic Training (HVPT) has been proposed as a way to facilitate the formation of L2 phonetic categories by providing naturalistic exposure to L2 learners, with previous studies yielding encouraging results (e.g. Carlet 2019; Carlet & Cebrian 2014; Lengeris 2018). The present pilot study examined the effects of HVPT on 5 Greek-Cypriot learners' perception and production of L2 English contrastive vowels, since the differences in the vowel inventories of their L1 and L2 appear to cause difficulties for these learners. Participants' perceptual and production performance was assessed before and after exposure to 11 English vowels over 8 training sessions. The HVPT

paradigm used was effective in improving the perceptual performance, which reflected durational results in production, with nativelike tendencies in /iː/-/ɪ/ and /uː/-/ʊ/, and difficulties in /ɒ/-/ɔː/, /ɑː/-/æ/-/ʌ/ and /e/-/ɜː/. This alignment of perceptual and durational results was not extended to spectral characteristics in learners' productions: /ʊ/, /uː/, /ɑː/ and /iː/ were the least nativelike, while /ɒ/, /ɔː/ and /æ/ were the most native-like. The results are to some extent but not entirely consistent with the perceptual and production results of previous studies (e.g. Lengeris 2009; Georgiou 2019). Inconsistencies with previous studies can be attributed to methodological differences, especially tasks, groups of participants and sample size. Although no statistical analyses were conducted due to the small sample size, the tendencies observed are promising for the effectiveness of HVPT, as they suggest that improvement is possible if enriched training paradigms are used.

References

Best, C. T. and Tyler, M. 2007. Non-native and second-language speech perception: Commonalities and complementarities. In *Second Language Speech Learning: In Honor of James Emil Flege*, edited by O.-S. Bohn and M. J. Munro, 13–34. Amsterdam/Philadelphia: John Benjamins.

Carlet, A. 2019. Different high variability procedures for training L2 vowels and consonants. *Proceedings of the 19th International Congress of Phonetic Sciences*, 944–948.

Carlet, A. and J. Cebrian. 2014. Training Catalan speakers to identify L2 consonants and vowels: A short-term high variability training study. *Proceedings of the International Symposium on the Acquisition of Second Language Speech* 5: 85–98.

Flege, J. E. 1995. Second language speech learning: theory, findings, and problems. In *Speech Perception and Linguistic Experience: Theoretical and Methodological Issues*, edited by W. Strange, 233–277. Baltimore: York Press.

Flege, J. E. 2002. Interactions between the native and second-language phonetic systems. In *An Integrated View of Language Development: Papers in Honor of Henning Wode*, edited by P. Burmeister, 217–243. Trier: Wissenschaftlicher Verlag.

Georgiou, G. P. 2019. Bit and beat are heard as the same: Mapping the vowel perceptual patterns of Greek-English bilingual children. Language Sciences 72: 1–12.

Lengeris, A. 2009. *Individual Differences in Second-language Vowel Learning* (Doctoral dissertation). Retrieved from https://discovery.ucl.ac.uk/id/eprint/19029/1/19029.pdf

Lengeris, A. 2018. Computer-based auditory training improves second-language vowel production in spontaneous speech. The Journal of the Acoustical Society of America, 144 (3): EL165-EL171.

Mahdi Duris
Iowa State University, USA

THE ACOUSTIC INTELLIGIBILITY OF CONSONANTS IN SAUDI SPOKEN ENGLISH

This study presents an instrumental phonetic account of the intelligibility of Saudi Spoken English (SSE) consonants. Few studies have investigated the spoken consonants of highly proficient EFL teachers in Saudi Arabia. This research informs on how intelligible SSE consonants are perceived by General American English (GAE) listeners using the Koffi (2021) intelligibility framework. Traditionally, intelligibility has been measured by having listeners transcribe speakers' utterances. How well the speech is transcribed demonstrates a certain level of intelligibility. Koffi (2021) has proposed an acoustic approach to measuring consonant intelligibility using acoustic thresholds of Just Noticeable Differences (JND) combined with considerations for Relative Functional Load (RFL). An analysis of 23 segments spoken by 32 Saudi EFL teachers using acoustic correlates for intensity, duration, F2, and F3 inform the results. The quantitative results based on 1,280 tokens suggest that Saudi speakers of English are perceived as intelligible by GAE listeners. Missing L1 segments [p] and [g], and substituting segments [f] for [v] does not impact intelligibility. Only the female participants did not distinguish their [ɹ] from [l]. Findings confirm that Saudi speakers of English can be highly intelligible in the segmental production of consonants.

References

Koffi, E. 2021. *Relevant Acoustic Phonetics of L2 English: Focus on Intelligibility*. CRC Press.

Elena Freydina
Margarita Seiranyan
Moscow Pedagogical State University, Moscow, Russia

THE STATUS OF EFL AND ELF PRONUNCIATION MODELS IN TEACHER EDUCATION IN RUSSIA

The change of priorities in teaching pronunciation with regard to the global spread of English has resulted in ELF taking the dominant position worldwide. However, there is little consensus on which pronunciation model (English as a Foreign Language or English as a Lingua Franca) should be applied in teacher education.

The paper reports on the study aimed at identifying the attitudes to EFL and ELF pronunciation models among the participants of teacher education in Russia (students and lecturers of the Institute of Foreign Languages at Moscow Pedagogical State University). The study was mixed-method, quantitative and qualitative: the quantitative data were processed by means of descriptive statistics, for the analysis of qualitative data content analysis was applied. The study involved one hundred and twenty-two students in answering the questionnaire and twenty university lecturers in responding to semi-structured interview questions. The results show that both students and lecturers would prefer the EFL model to be used in pronunciation instruction due to the professional targets of teacher education. Drawing on the findings made in the course of the study, the authors argue that such factors as the target of phonetic training, preferences of learners and teachers and educational philosophy of the particular educational institution are highly relevant for choosing the approach to pronunciation teaching.

From the pedagogical perspective, the key findings demonstrate that a balanced combination of the traditional EFL approach and ELF awareness may enhance the efficiency of pronunciation teaching in teacher education programmes in Russia.

Renáta Gregová
Renáta Timková
P. J. Šafárik University, Košice, Slovakia

SONORITY VERSUS THE NET AUDITORY DISTANCE AND THE INITIAL CONSONANT CLUSTERS IN ENGLISH AND IN SLOVAK

Following the Sonority Sequencing Principle (SSP) as originally introduced by Jespersen (1904), the segments in the syllable are organized in a way their sonority

decreases towards the syllable margins. Nevertheless, in languages, there are consonant clusters occurring especially word-initially that violate the principle of sonority and yet are very frequent in the given language. This "exceptional" behaviour of the initial consonants is usually connected with fricatives. Consider, for example, clusters str-, spr- in English, in Slovak or in many other Indo-European languages (see, e.g., Pawelec 2012 or Gregová 2021 for further details). The so-called Beats-and-Binding phonology (Dziubalska-Kołaczyk (2002) offers solution to this issue. In the Beats-and-Binding phonology, phonotactics (that is, the relationship of the neighbouring segments) is governed by the Net Auditory Distance (NAD) involving three factors: manner of articulation, place of articulation and voicing. Many consonant clusters that are ill-formed from the viewpoint of sonority, are well-formed in terms of the NAD. The detailed analysis of the initial English and Slovak consonant clusters from the viewpoint of traditional sonority theory and more refined Beats-and-Binding phonology shows that phonotactic issues that cannot be accounted for by sonority are easily explainable by the NAD principle in both languages. This finding indicates the verity of the idea that creation of consonant clusters in languages is a complex phenomenon and sonority is not the only "power" governing the combinability of segments.

References

Dziubalska-Kołaczyk, K. 2002. *Beats-and-binding phonology*. Frankfurt Am Main: Peter Lang.

Gregová, R. 2021. The Sonority Sequencing Principle and the Structure of Slovak Consonant. In *Studia z Filologii Polskiej i Słowiańskiej.* Varšava: Instytut Slawistyki, 1–20.

Pawelec, P. 2012. The Sonority Sequencing Generalization and the Structure of Consonant Clusters with Trapped Sonorants in Polish. In *Anglica Wratisaviensia* 50: 183–195.

Congchao Hua

Shenzhen Technology University, Guangdong Province, China

PROSODY OF PRONOUNS IN ENGLISH AND MANDARIN AND ITS ACQUISITION

It has been widely reported that when marking focus with prominence Mandarin-speaking learners of English tend to treat content words and function words equally (Juffs 1990; Deterding 2010; Hua & Li 2016). This study compared the prosody of pronouns in English and Beijing Mandarin in broad focus, narrow focus, and given information, and examined Mandarin-speaking EFL learners' acquisition of the prosody of pronouns in these three information statuses. Ten L1 British English speakers, 10 native Beijing Mandarin speakers, and 60 Mandarin-speaking adult English learners with varying English proficiencies (preliminary, intermediate, and advanced) participated in a question-answer reading task. Acoustic analysis (duration, average F0, maximum F0, maximum intensity) revealed that in English the duration of pronouns differed considerably from that of content words in all three information statuses, especially in broad focus, whereas in Mandarin pronouns mainly differed from content words in F0 and intensity, but not in duration. As regards L2 acquisition of pronoun prosody, auditory analysis revealed that at the intermediate level the Mandarin-speaking English learners learned to discriminate pronouns and content words in prominence assignment in broad focus. Acoustic analysis showed that compared with the L1 English speakers, these learners realized pronouns and content words with less variation, and they learned to realize pronouns and content words differently for broad focus at the intermediate level. Pedagogical implications are proposed based on these findings.

References

Deterding, D. 2010. ELF-based pronunciation teaching in China. *Chinese Journal of Applied Linguistics* 33 (6): 3–15.

Hua, C. C. and B. Li. 2016. Nuclear stress patterns in reading by adult Chinese EFL learners: Explicit training or implicit learning? *The Journal of Asia TEFL* 13 (1): 1–15.

Juffs, A. 1990. Tone, syllable structure and interlanguage phonology: Chinese learners' stress errors. *International Review of Applied Linguistics* 28: 99–117.

Oleksandr Kapranov

NLA University College, Oslo, Norway

PRE-SERVICE EFL TEACHERS' REFLECTIONS ON THE ROLE OF ENGLISH PRONUNCIATION IN EFL TEACHING AND LEARNING IN PRIMARY SCHOOL

This conference presentation introduces and discusses a mixed-method study that aims at examining how pre-service teachers of English as a Foreign Language (EFL) construe the role of English pronunciation in the EFL teaching and learning in primary school in Norway. The study is embedded in the linguo-didactic construal of language awareness, which is regarded as an umbrella term that involves such concepts, as knowledge about language, explicit knowledge, metalinguistic awareness and metalinguistic knowledge (Bolitho et al. 2003). In the study, 20 pre-service EFL primary school teachers (further – "participants") were requested to write a reflective essay on the topic "My Reflections upon the Role of English Pronunciation in EFL Teaching and Learning in Primary School in Norway". In particular, the participants were asked to illustrate their reflections with teaching situations from their teaching practice at primary school. The corpus of the participants' reflective essay was analysed qualitatively in order to identify the major themes associated with the role of English pronunciation in the EFL teaching and learning contexts in Norwegian primary schools. The results of the qualitative analysis revealed the following themes: i) "An EFL teacher as a model speaker", ii) "An EFL teacher as an example of fluency in English", iii) "An EFL teacher as a guide to mastering difficult sounds of English", iv) "English pronunciation as an area of concern to Norwegian EFL young learners", and v) "English pronunciation as a neglected area of EFL instruction in Norway". These findings and their linguo-didactic implications will be further discussed at the conference.

References

Bolitho, R. et al. 2003. Ten questions about language awareness. *ELT Journal*, 57 (3): 251–259.

Takehiko Makino
Chuo University, Japan

HOW TO HANDLE NONSTANDARD PECULIARITIES IN THE AUDIO EXAMPLES OF PRONUNCIATION TEACHING MATERIALS

I published an English pronunciation manual at the end of 2021. The book is written in Japanese, and its emphasis is mainly on the pronunciation of sentences, with about three hundred examples annotated for accentuation and intonation. In this presentation, I am going to discuss how I handled the non-standard pronunciation features found in the recordings accompanying the book.

When preparing the manuscript, I first made a sentence set, recorded it with two professional American voice actors, phonetically analyzed the recordings to decide how to allot the materials to different sections dealing with what I had to teach, and then wrote the text. This was the desirable procedure because one cannot totally control the way the voice actors read the sentences.

The audio materials of this book include a sizable number of "nonstandard" features. At the very least, the model pronunciation variety was that of the Western United States, as the voice actors were both from California, and had no contrast between LOT and THOUGHT. This was partly because I preferred to use the variety with fewer number of contrasts, and also because of the fact that the majority of American voice actors have such pronunciation meant that it was easier to recruit such speakers.

Other nonstandard features found in the book's audio include: the loss of /g/ from /-ŋg-/ in "younger" or "finger"; the tapping of /d/ before a stressed vowel in "yesterday"; the loss of the stop phase of /dʒ/ in "age," resulting in /eɪʒ/; and the loss of /t/ in "eighth."

Iuliia Nenasheva
South-Ural State Humanitarian University (SUSHPU), Chelyabinsk, Russia

TURNING IMPERATIVES INTO DISCOURSE MARKERS: HOW THE MAGIC HAPPENS

Literature on discourse markers (DMs) (Maschler & Schiffrin 2015; Halliday & Hassan 1976; Fraser 2009; Schiffrin 1987, 2001) is rather scarce when it comes to

prosody (Aijmer 2002; Dehe Wichmann 2010; Wichmann et al. 2010). We address this aspect, suggesting that while reading aloud the reader processes prosodic features of imperatives, converting imperatives into interjection-like units (DMs). We define this process as 'hybridization': imperatives partially preserve their characteristics and acquire those of interjections. Quantitative & qualitative methods of analyzing and evaluating the data were used on over 9000 utterances imitating direct speech from read-aloud texts. 'Hybridization' clearly manifests in 7.3% (670 autonomous utterances) of the sample in different degrees: 1) imperatives which prosodic features are close to those of 1st -type interjections (3.2% of the 670 utterances) (Kruchinina 1980): they show no tonal characteristics and much minimum intensity variation (SD 14.3) (marked as emphatic in 79%); 2) imperatives preserve some prosodic features (8.3%): they have both dynamic and tonal properties but no identifiable intonation contour (marked as emphatic in 55%) (Boersma & Weenik 2018, Mertens 2019), show more variation in minimum intensity (SD 23.8); 3) imperatives preserve all prosodic features (88.5%): they also have identifiable intonation contours, in 32.2% (56% of emphatic utterances in the group), but the contours are different from expected for imperatives. The findings support Maschler (Maschler 2009): 1) 'hybrids' have a metalingual interpretation in the context: phonetically they can be no more than unusual sounds, which places them close to interjections aimed to attract attention to new information; 2) 'hybrids' manifest in initial structural position and are detached by pauses. The study did not account for imperatives that appear within longer than 10-syllable utterances. It appears that the initial position is prerequisite for autonomy of the 'hybridized' imperatives, in other than initial position they act as an enclitic to the previous word. Factors facilitating 'hybridization' are: 1) the formulaic/iconic structure of the imperative ("Hush!"), 2) initial position, 3) emphatic nature of the utterance.

Dušan Nikolić
University of Calgary, Canada

THE PERCEPTION OF STRESS BY SPEAKERS OF LANGUAGES WITH PROSODICALLY MARKED LEXICON

Previous research has shown that speakers of certain languages exhibit a general perceptual insensitivity to stress contrasts, termed *stress "deafness"* (Dupoux et al. 2008, Domahs et al. 2012, Rahmani et al. 2015). In their study with Dutch, Japanese,

Persian, French, and Indonesian speakers, Rahmani et al. (2015) found that speakers of French, Indonesian, and Persian exhibited stress "deafness", while speakers of Japanese and Dutch did not show any patterns of stress "deafness". The authors concluded that the "deafness" effect was observed with speakers of languages whose adult lexicon does *not* contain any prosodic markings.

In the present study, our goal was to test this hypothesis by exploring how speakers of Serbian, a lexical pitch accent language, and speakers of English, a stress-accented language, perceived stress contrasts in non-words. To that end, two disyllabic CVCV non-words were recorded by a trained linguist. Each non-word was produced with stress on the first and the second syllable. Seventeen English and ten Serbian speakers carried out an online Sequence Recall Task (SRT) in which they were asked to contrast stress placement and recall the sequences of four, five, and six non-words by pressing the keyboard keys.

The data were analyzed by using the Bayesian Statistics methods with an open-source R Package for Bayesian Statistics in Psychology (Demšar et al. 2020). The results showed that the probability that the Serbian participants were more successful than English was 96% (± 0.002%), and the 95% HDI of the difference ([-0.26, 0.01]) indicated that there was a higher probability of difference (than non-difference) in the distribution of responses between the two groups. The findings revealed that the stress "deafness" effect was observed only with English listeners challenging the hypothesis that the speakers of languages with *any* prosodic markings would not be stress "deaf".

References

Demšar, J., G. Repovš and E. Štrumbelj. 2020. bayes4psy—An Open Source R Package for Bayesian Statistics in Psychology. *Frontiers in psychology* 11: 947.

Dupoux, E. et al. 2008. Persistent stress "deafness": The case of French learners of Spanish. *Cognition* 106 (2): 682–706.

Domahs, U. et al. 2012. Stress "deafness" in a language with fixed word stress: an ERP study on Polish. *Frontiers in psychology* 3: 439.

Rahmani, H., T. Rietveld and C. Gussenhoven. 2015. Stress "deafness" reveals absence of lexical marking of stress or tone in the adult grammar. *PloS one*, 10 (12): e0143968.

Hiroki Nonomura
Waseda University, Japan

THE ACQUISITION OF VOICE ONSET TIME BY ADVANCED JAPANESE-ENGLISH BILINGUALS: FACTORS THAT AFFECT THEIR PRODUCTION

This study examined the acquisition of Voice Onset Times (VOTs) by advanced Japanese-English bilinguals. English and Japanese words with word-initial /k/ (voiceless velar stops) were collected from 28 advanced Japanese-English bilinguals and 6 monolingual English speakers. Bilinguals were divided into three groups (early, middle, and late) by their age of exposure to English. Cognate and non-cognate words were used to analyze the cognate effect in different conditions: a sentence-read aloud task and a picture-naming task. Acoustic analysis showed that compared to English monolinguals, all bilingual groups produced a shorter English VOT. The group analysis showed that amongst the three groups, bilinguals differed not only in their English VOT production but also in their Japanese VOT production, suggesting the dynamicity of L1 and L2 phonetic systems. An interesting finding of the age effect was that the late bilinguals performed similarly to the early bilinguals and were more target-like than the middle bilinguals, suggesting that age is not a determining factor for L2 performance. Further correlation analysis revealed that language dominance is a moderate predictor for L2 VOT acquisition and that current language usage had the most correlations with bilinguals' VOT performance. As for the effect of cognates, bilinguals produced longer VOTs for English non-cognate words than English cognate words, and longer VOTs for Japanese cognate words than Japanese non-cognate words, which seemingly suggest a cognate effect. However, further analysis of individual words suggests a possible alternative explanation to this effect, which is phonetic context. Lastly, the effect of task difference shows that only the bilinguals' dominant language (Japanese) was affected by the task. Further group analysis shows that those groups with high L2 acuity of L2 VOT showed differences in the Japanese VOT with tasks.

The results are discussed in terms of the theoretical models for L2 and bilingual speech acquisition.

Mateusz Pietraszek
Universidad Francisco de Vitoria, Madrid, Spain

THE ACCURACY OF L2 PRONUNCIATION SELF-ASSESSMENT: EVIDENCE FROM ADVANCED SPANISH LEARNERS OF ENGLISH

The aim of this talk is to draw a connection between learners' self-assessment scores and the assessment of their pronunciation by listeners. Previous research suggests that certain attitudinal variables may be associated with better pronunciation performance (Smit 2002; Moyer 2007; Nagle 2018). The proxy variables (cf. Derwing & Munro 2015) used for measuring pronunciation in this research were: (1) intelligibility (an objective measure of how well the speaker is understood, measured through tests), (2) comprehensibility (a subjective measure of how difficult/easy the listeners find it to understand a speaker, measured through scales) and (3) foreign-accentedness (a subjective measure of the degree of a speaker's foreign accent).

60 students in a Spanish university (levels B2 and above) were recorded reading an elicitation paragraph and a series of semantically unpredictable sentences (SUS) (Benoît et al. 1996), which reduced the impact of contextual information on understanding. Additionally, they were asked to complete an attitudinal questionnaire containing self-assessment items. Subsequently, a total of 330 speakers of English from different L1 backgrounds (including native and non-native speakers) were asked to assess their pronunciation. An average of 27 listeners assessed each speaker. Paragraph excerpts were used for the comprehensibility and foreign-accentedness test, where the listeners rated provided input by means of semantic differential scales (Dörnyei 2007). The contextually limited SUS were used for intelligibility tests consisting in orthographic transcription.

The statistical analyses conducted with the average scores obtained by each speaker in the tests and their self-assessment showed that the learners were not accurate predicting their own intelligibility and comprehensibility although their self-assessment was correlated with their degree of foreign-accentedness. Also, some evidence suggested that those students who felt confident when communicating in English might also be judged as more comprehensible. Virtually no evidence was found correlating intelligibility as construed in this study with the speaker-reported data.

Tatiana Polushkina
Department of Foreign Languages, Moscow Institute of Physics and Technology, Russia

UNLEARNING ACCENT BIAS IN ELF CONTEXT

Accent bias is language-related discrimination based on phonological divergences. As a result of standard language ideology and social categorization, it has an extremely negative impact on many realms of life, including human rights. For decades, no instructional attempts have been made to address accent bias in communication in English as a lingua franca (ELF). New educational agreements call us to rethink previous beliefs in terms of global citizenship education. A systematic review of interdisciplinary literature (2002-2022), following the PRISMA protocol, was carried out by analyzing articles (n=51) extracted from two databases (Scopus and Google Scholar). Two research questions were answered on accent attitudes across various contexts and pedagogical dimensions. From the results of the analysis, several observations are made: a lack of integrated teaching effort to combat accent bias; pedagogical implications are limited to raising awareness; dynamic, non-linear teaching model is most relevant to encompass accentual instability and ambiguity; multicentric approach should be implemented to ensure learners' transition from local to global soundscape; reflexive practices and non-competitive assessment are required. Bilingual education should be promoted among native speakers to develop empathy and solidarity. New educational agreements, based on the principles of democratic education, are critical for educating an unbiased globally aware ELF speaker.

Vladimir Phillipov
Sofia University "St. Kliment Ohridski", Bulgaria

INTONATIONAL MORPHEMES AND THEIR ROLES AS GRAMMATICAL MARKERS

K.L. Pike (1945: 20) posits, "no language uses a pure monotone," i.e., every utterance always has an intonation component. In terms of evolution, intonation is certainly one of the primordial semantic mechanisms for conveying meaning on any language level, the process being accounted for in terms of rank shifting and facilitated by fluctuation. Phillipov (2012) proves that on the level of grammar, intonation can function as a grammatical morpheme, more specifically as a case

marker. Phillipov (2019) convincingly illustrates that this is not a mere *hapax* occurring on the periphery of grammar, and can be frequently observed in languages world-wide. In the present paper, the casual aspect of the functioning of intonation within the relational field in the text in the sense of specific 'roles', 'actantes', etc. was extrapolated to the category of the verb and the Verb Phrase (VP), the ultimate goal being to check the former for its characteristic of all-pervasiveness in language. In this respect, the paper reinterprets from a modern viewpoint some relevant observations of Yanakiev (1974). The latter examines in the case of Bulgarian the behavior on the one hand of the Default Focus when associated with a Past Anterior Tense head of the VP, and, on the other, the rather exceptional case of semantic behavior of the Focus associated with the Adverbial Phrase of Time. Whereas Yanakiev makes a futile attempt at explaining the phenomenon by referring to the rather vague „извънмозъчна" семантика" (' "external to the brain" semantics') (Yanakiev 1974: 120), the present paper is based on the presence of an exclusive contrastive focus there, "well-formed if the existential closure of the contextually supplied value of C[ontext] entails the existential focus closure of … [the linguistic unit] *and the value of C[ontext] contrasts with the ordinary denotation of … [the linguistic unit]*" (Büring 2016: 106).

References

Büring, D. 2016. *Intonation and Meaning.* Oxford: Oxford University Press.

Phillipov, V. 2012. The status of intonation in a level approach in the organization of language. In *Exploring English Phonetics*, edited by T. Paunović and B. Čubrović, 115–131. Newcastle-upon-Tyne: Cambridge Scholars Publishing.

Phillipov, V. 2019. *Some Aspects of Intonational Typology*. A PhD Dissertation. Faculty of Classical and Contemporary Philology, St. Kliment Ohridski, University of Sofia.

Yanakiev, M. 1974. – Янакиев, М. 1974. За фразовото ударение в изрази, съдържащи форми за минало предварително време и обстоятелство за време. In *В памет на професор Стойко Стойков (1912–1969). Езиковедски изследвания*, 11–120. БАН: София.

Valentina Rapajić
University of Defence, Military Academy, Belgrade, Serbia

VARIABILITY IN L1 SERBIAN AND L2 ENGLISH VOWELS PRODUCTION

Among multiple lines of investigation formulated in research on segmental variability in language production, especially in the context of L2 learning, those that are pursued in this study focus on language, phoneme, and elicitation method as variation-contributing factors. Firstly, it still remains unclear whether variability (in terms of acoustic correlates of articulation) is greater in L1 or L2. Secondly, although high variability suggests an unstable vowel system, it is exactly instability that is a prominent feature of interlanguage: high variability is then evidence of L2 approximation, whereas low variability may point to fossilization. To test the hypotheses that a) vowel articulation variability is greater in L2 than in L1; b) low variability in articulation corresponds to substitution of L1 vowels for their L2 diaphones; c) articulation variability depends on the method of segment elicitation; and d) vowels in both L1 and L2 do not exhibit the same amount of variation, a total of 2400 Serbian and English tokens were collected from 10 female L1 Serbian L2 English speakers, through 4 different methods of elicitation. The recording of the /kVd/ tokens, and the acoustic analysis of the vowels were performed in PRAAT. Pearson Correlation Test, Single Factor ANOVA, and Two-Factor ANOVA with Replication were performed on the non-normalised data consisting of vowel duration records and the first two formants' values. Results suggest that a) there is more variability overall in L2 than in L1; b) the closer the F1 and F2 means in the speakers' L1 and L2 vowels, the lower the variability (the similarity of means does not imply similar scatter); c) there is evidence of correlation between vowel variability and method of elicitation but only in L1 and not in all vowels; and d) variability does seem to be vowel-specific.

Leônidas Silva Jr.[1]
State University of Paraíba, Brazil
Plínio A. Barbosa[2]
University of Campinas, Brazil

VOICE DISGUISE ON FOREIGN ACCENT DEGREE IN L2-ENGLISH SPEECH: PROSODIC EFFECTS AND FORENSIC IMPLICATIONS

This study aims to identify and assess which prosodic-acoustic parameters influence the listener's perception of foreign accent produced by Brazilian Portuguese (BP) speakers of English. This research yet brings forward forensic implications, through the use of voice disguise, i.e., the voluntary act of changing one's voice as a means to mask identity, in speaker identification contexts (Farrús 2008, 2018; Leemann & Kolly 2015). As for the Methods, we ran three different experiments: I) in the first one, we collected data from speech production of L1 (four Americans) and L2 (ten Brazilians) English speakers. Participants read a phonetically-adapted version of the Aesop's fable "The Lion and the Mouse". II) for the second experiment, we chose one out of the ten L2 speakers from the first experiment and asked him to memorize, and narrate the same fable from the first experiment, but with a disguised voice, in addition to imitate an American voice-over artist interview. III), on the third experiment, ten American raters, who were L2-BP speakers, listened to 60 chunks of L1and L2 English and scored the speakers' foreign accent degree through a 7-point Likert scale (the higher the score, the higher the foreign accent degree). Preliminary results point out to significant acoustic and perceptual differences between L1-L2 groups in text-reading instances, such as: lower speech rate, melodic, and intensive variability produced by Brazilian speakers. In voice disguise instances, and at least to some extent, listeners did not accurately recognize the foreign speaker when there was a L1-convergence attempt of the prosodic-acoustic parameters, such as Speech and Articulation rate; f0 variability, centrality and modulation features, as well as voice quality. Significant differences were found just for the intensive-based features, such as Spectral emphasis, Harmonic-to-noise ratio, and Long-term average spectrum.

[1] First author. Research grant from the *Brazilian National Council for Scientific and Technological Development* (CNPq), nº. 151027/2020-0. E-mail: <leonidas.silvajr@gmail.com>.
[2] Second author. Research grant from the *Brazilian National Council for Scientific and Technological Development* (CNPq), nº. 302194/2019-3. E-mail: <pabarbosa.unicampbr@gmail.com>.

Galina M. Vishnevskaya
Michael E. Zverev
Ivanovo State University, Russia

ON LOOKING FOR A LINGUISTIC CODE: RHYTHMIC UNIVERSALS (FROM THE RUSSIAN POINT OF VIEW)

The paper provides a critical and brief retrospective survey of contemporaneous language-and-speech rhythmology, focusing upon phonetic (rhythmic) universals, which constitute the most generic mechanisms of sound speech material. It draws upon both published theoretical evidence and applied and experimental data in phonetic science in general, and verbal (speech) and non-verbal rhythmology in particular.

As is well known, typological (contrastive) linguistics embraces three different facets that correlate with each other – *universal*, *typological* and *specific*, or *individual* features (Nikolayeva, 1977). There is no doubt that any linguistic code (system, structure, form) possesses verbal rhythm, which is to say, an *absolute phonetic (suprasegmental) universal*.

Rhythm, both verbal and non-verbal, is considered to be an *omnipresent peculiarity* of a self-movement of matter. Verbal rhythm, being part of universal rhythm, from the viewpoint of the systemic (integrated) approach, is thought to be a fundamental hierarchically structured unit which organises language and speech. It is formed by means of all linguistic strata and all their units and features (phonetic, morphological, syntactic, lexical, semantic, stylistic, pragmatic, etc.) (e.g., Antipova, 1980). The phonetic and phonological level of verbal rhythm is constituted by a complex of various units and features – both segmental and suprasegmental (prosodic). Speech rhythm in terms of its functions – integrated, disintegrated, semantical ones – may be called a multi-dimensional phenomenon. The discussion of the selected results, especially theoretical ones, are indicative of further research directions.

References

Antipova, A. M. 1980. *Rhythmic System of English Speech: Theoretical and Experimental Investigation Rhythm-Forming Prosodic Function* (Ritmicheskaya organizatsiya anglijskoj rechi: Eksperimental'no-teoreticheskoe issledovanie ritmoobrazuyushhej funktsii prosodii). Doctoral

Thesis. Maurice Thorez Moscow State Pedagogical Institute of Foreign Languages, Moscow.

Nikolayeva, T. M. 1977. *Sentence Intonation of the Slavic Languages* (Frasovaya intonacyya slavjanskix yazykov). Moscow: Nauka Publishers.

LIST OF PARTICIPANTS

NAME	E-MAIL
Safi Eldeen Alzi'abi	alziabi@gmail.com
Plínio A. Barbosa	pabarbosa.unicampbr@gmail.com
Muzakki Bashori	muzakkibashori90@gmail.com
Ana Batas	batas.ana@gmail.com
Andrej Bjelaković	b.andrej@sezampro.rs
Kizzi Edensor Costille	kizzi.edensor-costille@unicaen.fr
Catia Cucchiarini	catia.cucchiarini@ru.nl
Urjani Chakravarty	urjaiimidr@gmail.com
Gulab Chand	potter.linguistics@gmail.com
Biljana Čubrović	biljana.cubrovic@fil.bg.ac.rs
Dimitra Dimitriou	dimitriou.dimitra18@gmail.com
Nina Đukić	djukic.nina96@gmail.com
Mahdi Duris	mduris@iastate.edu
Elena Freydina	freydina55@mail.ru
Renáta Gregová	renata.gregova@upjs.sk
Congchao Hua	cchua2-c@my.cityu.edu.hk
Oleksandr Kapranov	oleksandr.kapranov@nla.no
Takehiko Makino	mackinaw@tamacc.chuo-u.ac.jp
Inger M. Mees	im.msc@cbs.dk
Iuliia Nenasheva	nenajalex@gmail.com
Dušan Nikolić	dusan.nikolic1@ucalgary.ca
Hiroki Nonomura	hirokinonomura10@gmail.com
Mateusz Pietraszek	mat.pietraszek@gmail.com
Tatiana Polushkina	polushkina@gmail.com
Vladimir Phillipov	vphillipov1147@gmail.com

Valentina Rapajić	valentinarapajic@yahoo.co.uk
Margarita Seiranyan	margo.seiranyan@yandex.ru
Leônidas Silva Jr.	leonidas.silvajr@gmail.com
Helmer Strik	helmer.strik@ru.nl
Renáta Timková	renata.timkova@upjs.sk
Roeland van Hout	roeland.vanhout@ru.nl
Galina M. Vishnevskaya	galamail2002@mail.ru
Michael E. Zverev	m.zverev2001@gmail.com

CIP - Каталогизација у публикацији
Народна библиотека Србије, Београд

811.111'34(048)(0.034.2)

BELGRADE International meeting of English Phoneticians (6 ; 2022 ; Beograd)

Book of Abstracts [Elektronski izor] / Sixth Belgrade International meeting of English Phoneticians, 25-26 March 2022, BIMEP 2022, ; [editors Biljana Čubrović, Andrej Bjelaković, Nina Đukić]. - Belgrade : Faculty of Philology, University, 2022 (Belgrade : Faculty of Philology). - 1 elektronski optički disk (CD-ROM) : ilustr. ; 12 cm

Sistemski zahtevi: Nisu navedeni. - Na nasl. str.: English Department and Belgrade Phonetics Lab. - Nasl. sa naslovne strane dokumenta. - Tiraž 30.

ISBN 978-86-6153-662-5

а) Енглески језик -- Фонетика -- Апстракти

COBISS.SR-ID 61129737

9 788661 536625

www.fil.bg.ac.rs

Belgrade Phonetics Lab

Laboratorija za fonetska istraživanja