

Ss. Cyril and Methodius University, Skopje
Blaže Koneski Faculty of Philology

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BOOK OF ABSTRACTS

6th International Conference on English Pronunciation: Issues & Practices

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**6th INTERNATIONAL CONFERENCE ON ENGLISH
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PLENARY TALKS

When a psycholinguist enters the multilingual classroom: Bridging the gap between psycholinguistics and pronunciation teaching

Tanja Angelovska

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In the last decades, psycholinguists and teachers have tussled with several challenging questions about the acquisition and teaching of L2 pronunciation: How is L2 pronunciation acquired? (How) is L2 pronunciation taught (most effectively)? Our knowledge about the answers to these questions has increased enormously. Likewise, there is evidence that the interest in and the quality of L2 pronunciation teaching has also increased considerably (cf. Lee, Jang and Plonsky, 2015). Yet, there is a general agreement that both psycholinguists and teachers experience more difficulties when it comes to dealing with learners who already use two languages daily (cf. Angelovska, 2019) and approach the task of acquiring the pronunciation of a target third language (L3). L3 learners are different from L2 learners as the former possess a larger repertoire of (meta)linguistic knowledge about pronunciation and phonological awareness about all prior languages (cf. Angelovska, 2018). The three (or more) sound systems, the potential sources for transfer, their type and direction and the various code-switching practices (cf. Heredia and Altarriba, 2001) challenge the outcomes of the L3 pronunciation learning and teaching process. Hence, some additional questions arise for both researchers and teachers: Is the phonetic similarity between the prior languages a trigger for morphosyntactic transfer in third or additional language acquisition? To what extent can psycholinguistic research results shape the practice of pronunciation teaching?

The goal of this talk is to bridge the gap between these current fields by synthesizing existing psycholinguistic evidence. I will first briefly outline what we have and what we lack, then I will address some of the several burning questions from a psycholinguistic perspective and conclude by outlining possible implications for pronunciation teaching in multilingual classrooms.

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Connecting the dots between pronunciation research and practice

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The (non)interaction of research and practice is a common issue in language teaching circles. At teaching-oriented conferences, teachers often lament that research presentations are not relevant to what happens in the classroom, and they seem to assume that direct application to classroom practice is the primary goal of research. Likewise, those who are interested in research often do not or cannot express pedagogical implications of their research that are clearly applicable to the classroom.

The disconnect between researchers and teachers is perhaps nowhere more evident than in teaching and researching L2 pronunciation, where research has traditionally had close connections to pedagogical concerns. But teachers lack an understanding of key concerns that drive pronunciation research, and they are often inadequately trained to teach pronunciation (Foote, Holtby and Derwing, 2011). This leads to comments that any pronunciation researcher is familiar with. Decades ago, at one of my first presentations at International TESOL, Judy Gilbert told me that she found my topic interesting but that she could not see how she could apply it to teaching pronunciation. More recently, at TESOL 2018, my invited talk received feedback from one attendee as having been “Theory only, no practice.” Because I have always tried to connect theory to practice, these and other comments I have received suggest that both research and teaching concerns, while related, are many more steps removed than we think. But there are steps we can take to make both more relevant to each other. This presentation uses my own research history and that of others I know to illustrate some of the reasons it is so difficult to connect theory and pedagogy:

1. Teachers and researchers work on different timelines. Teachers often need pedagogical activities immediately, while researchers’ concerns are not directly connected to the day-to-day concerns of teaching.
2. Teachers are interested in what seems to work; researchers are interested in why and to what extent something seems to work.
3. L2 pronunciation research is typically not directly based on teaching concerns; Similarly, L2 pronunciation teaching is typically indirectly connected to research concerns.
4. Both teachers and researchers are often not able to describe the connections of research concerns and classroom practices.

The goal of this presentation is to encourage non-researching teachers to understand what they can expect from research studies. It will encourage them to consider how some of the important questions in pronunciation research are intensely practical. It will also suggest what researchers can do to better frame their studies so that pedagogical connections are clearer. Finally, I will suggest why researchers should pay closer attention to pedagogy, both to enrich their research and to promote better pedagogy.

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Revisiting some myths and misconceptions in pronunciation teaching

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Despite a growing interest in pronunciation teaching in recent years and an increasing body of research in the field, there still seems to be a substantial gap between pronunciation research and practice. This disconnect can mean that approaches to pronunciation pedagogy tend to be intuition-based rather than informed by research evidence. Relying on experiences and intuitions can sometimes be very helpful for teachers but as Derwing and Munro (2005) point out ‘expecting teachers to rely solely on intuition is unrealistic and unfair’ (p.389) and, I would argue, may also result in the perpetuation of myths and misconceptions which have little or no basis in empirical reality (Rogerson-Revell, 2011; 2012). For example, ideas such as “accent is the primary cause of unintelligibility”; “all wh-questions have a falling tone”; or “students need to pronounce all sounds clearly and accurately” are common (Pennington and Rogerson-Revell, 2019:431). It is not surprising that such misconceptions develop, given that many teachers lack confidence to teach pronunciation, either through limited knowledge or training opportunities.

In this talk, I hope to demonstrate some of the benefits of creating stronger links between pronunciation research and teaching practices, showing how an understanding of key issues and relevant research can help teachers prioritise pronunciation content and select relevant teaching approaches. To illustrate, I will revisit some areas of pronunciation which have been susceptible to myths and misconceptions, such as tone and sentence type, minimal pairs, rhythm and linking. In some cases, this may mean revising or rejecting ideas or approaches in light of new research findings while in others it may result in reconsidering notions or methods that were previously disregarded.

It is hoped that stronger links between teaching and empirical research may mean that, as Brinton (2017) puts it, ‘some of the ‘methodological bandwagons’ of past decades receive diminished attention from teachers, materials developers and curriculum designers’ (p.458). This is an exciting time for pronunciation teachers and researchers with many opportunities for closer collaboration in order to improve the effectiveness of pronunciation teaching and learning.

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Assessing, developing and teaching second language comprehensibility as a multifaceted phenomenon: The role of listener and speaker individual differences

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It is widely known that foreign accent is a normal characteristic of second language (L2) learning. Because of this, researchers and practitioners alike agree that helping L2 learners to be more easily understood when they speak is preferable to pushing them to develop nativelike accents. In this talk, I will provide a state-of-the-art overview on research which has developed, assessed, and taught second language comprehensibility (i.e., perceived ease of understanding). In particular, I will discuss a recent research paradigm which views successful L2 comprehensibility as a *multifaceted* phenomenon that is related to the individual variability of both listeners and speakers.

To explain “listener variability,” I will deconstruct how comprehensibility judgements are made according to phonological, lexical and grammatical information gleaned from L2 speech, and how assessment behaviour differs according to listeners’ linguistic, experiential and metacognitive profiles (e.g., monolinguals, bilinguals, vs. L2 users). Using these findings, I will provide tentative suggestions on how L1 and L2 listeners can be guided to better understand other L2 speakers while promoting a greater leniency towards foreign-accented speech—a crucial orientation that many listeners may need so as to smoothly handle real-life communication in today’s globalised world (e.g., Saito and Shintani, 2016; Saito et al., in press).

To explain “speaker variability,” I will illustrate how individual speakers differently enhance the comprehensibility of their speech, not only because they engage in different types of learning and instructional experience (learner-external factors), but also because they have different kinds of aptitude, motivation, emotion and personality profiles (learner-internal factors). While introducing a range of research-based comprehensibility training methods, I will explore which methods are most appropriate for different types of learners. These suggestions will ultimately help researchers and practitioners identify optimal instructional options that can be matched to individual difference profiles, and thus maximize the benefits of instruction (e.g., Saito et al., forthcoming; Saito and Plonsky, in press).

I will go over and connect each topic in the context of my previous experience as a researcher as well as a teacher in various foreign language classrooms all over the world.

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WORKSHOP

A framework for including pronunciation work in English lessons

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This practical 2-hour workshop will help participants to better understand how to successfully integrate pronunciation into their teaching. They will get plenty of hands-on practice, with exercises situated at different points along a continuum (Celce-Murcia et al. 2010; Gilbert, 2008): from less to more communicative and/or “risky” (Fraser, 2001). The continuum framework helps teachers to flexibly adapt to learners’ needs, both when planning lessons and when reacting in real-time to classroom dynamics. Participants will come away with exercises and ideas to apply immediately with their learners.

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PARALLEL SESSIONS

Pronunciation feedback and assessment in Polish secondary schools: From the perspective of the students

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Research data show that certain aspects of pronunciation determine the level of intelligibility and comprehensibility of the speaker (e.g. Couper, 2011; Derwing, Munro and Wiebe, 1998; Szpyra-Kozłowska, 2015). Moreover, it appears that FL users' self-perceived level of pronunciation shapes their level of language anxiety (Baran-Łucarz, 2011), L2 self-confidence (e.g. Baran-Łucarz, 2017), and willingness to communicate (Baran-Łucarz, 2014). Moreover, it should not be ignored that concern for pronunciation is revealed by the students themselves (e.g. Baran-Łucarz, 2014). Consequently, it is most vital to introduce systematic pronunciation teaching at all levels of education.

Outcomes of many studies reveal that what aids in improving pronunciation is explicit pronunciation form-focused instruction (e.g. Derwing and Rossiter, 2003), supported by consistent feedback (Saito and Lyster, 2012), particularly when they lead to increased phonological awareness (e.g. Dłaska and Krekeler, 2013). It is also systematic assessment, both summative and formative, that should be considered a necessary tool in improving students' pronunciation (Derwing and Munro, 2015).

It is comforting to see the changes in the phonological descriptors and scales of the CEFR Companion Volume (2018). Fortunately, the Polish national curriculum for FL teaching for secondary school also seems to take into account the importance of pronunciation, though many amendments of the document in this respect are evidently needed. In 2015 Derwing and Munro expressed concern not only about pronunciation instruction being still neglected in the FL classrooms but also about the lack or limited provision of feedback and assessment in this area.

What is the situation like in Polish secondary schools nowadays? Do students receive systematic pronunciation feedback from their EFL teachers? What aspects of their pronunciation are they assessed for and what techniques are used to verify their phonological competence and pronunciation skills? To find the answers to these questions, 106 graduates of over 80 different high schools in different regions of Poland filled out an anonymous questionnaire. What complimented numerical data were opinions of the students about the consequences of the frequency and quality of pronunciation feedback and assessment offered to them during their secondary school education, provided in open-ended questions following the questionnaire.

It appeared that about 40% of the respondents were never assessed for their pronunciation. The most popular type of assessment was impressionistic assessment of students' intelligibility, while feedback on word pronunciation was hardly provided (only 12% of the respondents received it systematically once a month). 80% - 60% of the respondents claimed that word stress identification, transcription, minimal pairs, games and quizzes were never used by their secondary school teachers to inform them about their pronunciation strengths and weaknesses. Finally, over 70% of the respondents claimed that pronunciation was the subskill they received too little feedback on and assessment of, which, as the participants claimed, resulted in several negative effects for their further EFL learning and use.

The study shows that despite more clear-cut empirically based guidelines on the pronunciation instruction (e.g. Derwing and Munro, 2015; Szpyra-Kozłowska, 2015), pronunciation teaching is still neglected in Poland, with feedback provision and assessment in regard to this aspect being incidental and particularly scarce. This evidently calls for the need to draw more attention to pronunciation instruction both at pre- and in-service EFL teacher training courses.

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Intelligibility and comprehension between foreign language speakers of English: Investigating proficiency levels

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Frameworks such as the Speech Learning Model (Flege, 1995) predict a significant influence of FL learners' L1 structures on their FL perceptual abilities, which decreases as the learner becomes more proficient in the FL. This would predict improvements in FL intelligibility from beginner level through to mastery level. In addition, descriptions of FL learner abilities in the Common European Framework of Reference for Languages (CEFR) suggest that the more advanced a FL learner is, the closer their performance is to that of an L1 speaker of the target language (Council of Europe, 2001 and 2017). Apart from the level of proficiency, a further important factor is familiarity, which may contribute to intelligibility (Kennedy and Trofimovich, 2008). This is supported by findings from Major et al. (2002) who found that L2 learners of English understood other L2 learners more easily when they had the same L1.

This presentation explores the differences between foreign language (FL) learners of English at different proficiency levels in understanding foreign-accented English. It aimed to investigate the following research questions: 1) What are the differences in intelligibility (i.e. the extent to which the speaker understands the intended message, following Derwing and Munro 1997 and Munro and Derwing, 1995) and comprehensibility (i.e. the perceived ease of understanding, Derwing and Munro 1997) between learners at different levels of proficiency?, and 2) Which specific features of FL pronunciation contribute to intelligibility at different proficiency levels?

To address the above issues, this study investigated the FL perceptual abilities of Spanish and German learners of English across the six proficiency levels defined in the CEFR (from A1: 'basic' to C2: 'proficient'). Additionally, two groups of English L1 speakers were included; one group with experience of interacting with FL speakers of English, and another group with very little such experience. These participants (from here on called 'listeners') listened to short utterances in English, spoken by Spanish and German FL speakers of English, and rated the comprehensibility of each utterance on a Likert scale. A transcription task evaluated actual intelligibility (based on Derwing and Munro, 1997).

Results show that FL listeners at beginner levels rated speakers from their own L1 background as easier to understand. This evaluation, however, did not translate into higher intelligibility scores (assessed via transcriptions). On the other hand, FL listeners at higher proficiency levels rated all stimuli as more difficult to understand while being more successful in understanding the intended message. There was no significant difference in the intelligibility scores between the two English L1 listeners groups. This indicates that familiarity may influence perceived ease of understanding more than actual intelligibility.

Of particular interest are the transcriptions which identify specific features as influencing intelligibility significantly, e.g. English vowel-length contrasts and selected consonants. As this study uses speech stimuli spoken by FL speakers of English, some mispronunciations occurred. Our results show that participants at higher proficiency levels were generally better able to resolve mispronunciations, but specific types of mispronunciation caused difficulties across all proficiency levels.

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Prosodic criterial feature methodology: In search of native intonation phrase models

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This research paper aims at presenting the methodology used to find specific criteria for an automatic evaluation of prosodic quality among French learners of English. This notion is based on the ability of a given item to assess quality levels in non-native speech (Hawkins and Buttery 2010).

Prosody has long remained neglected when studying non-native learners' phonological productions. Pioneering studies have emerged (Gut 2009) followed by significant progress in research on French learners' English realisations in the field (Tortel, 2009; Horgues, 2010; Ferragne, 2013; Herment *et al.*, 2014; Ballier *et al.*, 2016; Cauvin, 2017).

This work focuses on the methodology used to select intonation units to serve as models in an automatic prosodic evaluation of French-speaking learners of English. The first phase rates how understandable and pleasant twelve readings of a 426-word text are to 52 listeners, among whom 8 are native English speakers. The analysis shows that tempo is a main variable in their subjective appreciation. The second phase of the investigation selects both extremes according to the tempo variable insofar as they are rated as acceptable readers. The 'best' reader's performance constitutes a third source of data to determine the areas of greatest variability. Using Herment's (2001) notion of prosodic emphasis, each word is graded in their use of degrees of emphasis from 0 to 4 by eight native English speakers, mapping zones of emphasis to individual variation, taking speech rate into account. The study is then extended to the acoustic correlates of the most salient markers of emphasis (duration: seconds/milliseconds, F0: semi-tones). The recordings of the text read by the 42 native English speakers of the whole corpus have been aligned using the *SPPAS* and *Praat* software tools on a syllable basis and manually checked. The *ProsodyPro* script has made it possible to investigate the mean F0 on IPs with automatic measurements. The following syntactic elements with maximum emphasis degree have been analyzed:

- an exclamative sentence ("*How happy we are here!*");
- the degree adverb *so* followed by an adjective or adverb (*so sweetly, so sweet, so late*);
- a *Wh*-interrogative ("*What are you doing here?*"); and
- the indefinite pronoun *nobody*.

These elements are confronted with a neutral sentence having a minimal degree of emphasis (*When he arrived, he saw the children playing in the garden.*). A thorough analysis distinguishes the most similar - hence representative - markers of the IPs from those most prone to variation. The grammatical structures whose IPs could be trusted to be reliable assessment models could therefore be selected.

Results show that the best models to be retained are the *How*-exclamative, the degree adverb *so* followed by an adjective or an adverb, while the *What*-interrogative along with the "*so late*" phrase have had to be discarded (too complex). The neutral sentence is insufficient for assessing and categorizing the prosodic quality of non-native speakers when this model is confronted with the readings of 15 non-native speakers representative of a corpus of 155 French learners of English.

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Emergent language attitudes of Czech pre-service EFL teachers

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Our proposed paper is part of a university grant programme in the field of teacher preparation and educational science. Specifically, our main research question is how to identify the language attitudes of our pre-service teachers and how to assist them in the process of reflexive sense-making of their second-language identity. From a broader perspective, we strive to analyze the structure of their *linguistic habitus* in order to help them establish a sound and unbiased *linguistic capital* that they can pass on as language teachers on the *linguistic market* (Bourdieu, 1991).

Our contribution focuses on the relationship between norm and the degree of its internalisation in the applied perspective of pre-service teacher training. Herein, we adopt Milroy's (2001) approach which stipulates that standard can be viewed either non-ideologically or ideologically. The former is characterised as uniformity and invariance; the latter as a measure of achievement. The elementary premise we base our preliminary research on is that the neutral (native) accents set the normative framework and consequently determine evaluative practices.

The existing research on language attitudes in the Czech educational context has focused on students of English from the Faculty of Arts (Quinn Novotná, 2012), secondary school students (Jakšič and Šturm, 2017), as well as English speakers whose major is in fields other than English (Brabcová and Skarnitzl, 2018). To the best of our knowledge, no study has been exclusively targeted at teacher trainees and their belief system vis-à-vis accent variation and attitudes towards accented speech.

The data in the current quantitative descriptive study were amassed via a questionnaire in which 251 respondents, predominantly Czech undergraduate students of the Faculty of Education in Prague, took part. The questionnaire was administered online and was divided into three parts: in the first section, personal information including brief language learning history was collected, the second part, *Accent and me*, explored the respondents' attitudes to their own accents and the last part, *Accent and teachers*, looked at the role accent(s) play in the teaching profession and how teacher trainees might address the question of accent variation in their future careers.

The obtained results seem to testify against the broadly proclaimed *prescriptive abstinence* (see Coulmas, 1989). They also suggest an inclination of our informants to the ideological perspective on language standard as a vast majority of respondents expressed their preference to acquire a native like accent. Simultaneously, the findings indicate the teacher trainees' familiarity with the intelligibility principle (Derwing and Munro, 2015). Interestingly, accented speech did not appear to be a cause for concern in terms of losing respect in the teacher role in half of the examined sample. On the one hand, the data tend to confirm the deeply entrenched native English ideology, on the other hand, they may signal the growing acceptance of non-native teacher identities.

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Exploring the potential of phonetic symbols for perceptual training

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The use of phonetic symbols for pronunciation training has been advocated by researchers and pronunciation practitioners as a valuable resource, as phonetic notation offers an orthography-independent way of conceptualising speech which can make sounds more ‘tangible’, and consequently facilitate autonomous learning (see Mompeán, 2005; Mompeán and Lintunen, 2015). Nevertheless, their potential has not yet been investigated empirically. Thus, the present study aims to shed some light on the potential of phonetic symbols to facilitate the creation or modification of foreign language (FL) learners’ perceptual categories for FL sounds.

The study follows a mixed-methods design, with pre- and post-tests aimed at measuring the participants’ perception of the target sounds before and after training, and a delayed post-test in order to evaluate the effects of training over time. Participants in this study were a group of 75 Spanish EFL learners recruited from an English Studies degree at a Spanish university. They were randomly assigned to three groups of 25 participants each. Training took place over a period of four weeks in which each group received a different modality of a High Variability Phonetic Training (HVPT) paradigm (Logan, Lively and Pisoni, 1991) administered with TP (Rato, Rauber, Kluge, and Santos, 2015). Group 1 (G1) received HVPT training using phonetic symbols as response labels, Group 2 (G2) was used as a comparison group using common words representing each vowel sound as response labels, and Group 3 (G3) acted as control, with no training between testing times. However, in order to avoid depriving one of the groups of the benefits of instruction, after G1 and G2 took the delayed post-test, G3 started to receive instruction with phonetic symbols too, therefore also acting as experimental group (see Fouz-González, 2018).

Training and testing stimuli consisted of CVC nonwords featuring the English vowel contrasts /i: -ɪ/, /æ -ʌ/, /ɜ: -e/, /ɒ -ɔ:/ in a range of phonetic contexts. Non words were used for the audio training stimuli to ensure that learners focused on the sounds they heard and not on the words themselves. This was done in an attempt to minimise lexical familiarity effects or the activation of fossilised pronunciations. However, pre-, post- and delayed post-tests included a combination of nonwords and real words (familiar and novel) in order to measure potential generalisation gains, both to novel contexts and to real words. Participants were required to attend a total of four 30-minute sessions of HVPT in which they received immediate and cumulative feedback on their performance. The participants’ perception of the target sounds was measured with a 6-forced-choice identification task (see Logan and Pruitt, 1995).

The paper will present the results of the perception pre-, post- and delayed post-tests as well as the learners’ attitudes towards the approach adopted and the use of phonetic symbols for perceptual training. The implications of the results for pronunciation pedagogy will be discussed in the light of theoretical approaches such as focus on form or cognitive phonology. Finally, recommendations for future applications of HVPT paradigms will be offered.

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The IP-CAFES project: Reactions to foreign accented English academic discourse

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The “IP-CAFES” project (Interphonology – Czech, Arabic, French, English and Spanish) is an international project being carried out by partners in France, the Czech Republic, and Spain. The project is in its very early stages and is set to run over two years. It addresses the psycho-social impacts of communicating in a foreign language, specifically the negative bias or discrimination against foreign-accented speakers. A series of perception tests will be carried out using foreign-accented speech in both English and French, where the stimuli will have had certain temporal and melodic features modified using speech software. This will enable us to address our principal research question, i.e. what are the parameters which are responsible for problems in perception and comprehension. By using the “matched guises” technique (Lambert et al., 1960), we will be able to tap into the listeners’ subconscious evaluations of foreign-accented speech.

English is increasingly used as the language of delivery not only in international conferences, but also in university teaching programs (Content and Language Integrated Learning, CLIL). It is sometimes claimed that a foreign accent matters only as long as it leads to direct misunderstandings in the sense of lexical item confusions – and this may indeed be a serious problem. However, aside from issues of intelligibility and comprehensibility, important psychological and social processes build over the abstract linguistic plan, resulting in the negative bias against and stigmatization of foreign speakers (Munro, 2003; Miller, 2009; Lev-Ari and Keysar, 2010; Lippi-Green, 2012; Wang et al., 2013; Moyer, 2013; Harrison, 2014; Hanzlíková and Skarnitzl, 2017). Higher cognitive load also interferes with communication (Clarke and Garret, 2004; Adank et al. 2009; Berkovcová et al., 2016; Dragojevic et al. 2017). Intelligibility seems to be most impaired by deviations in the prosodic aspects of speech, and it is therefore these aspects which are considered of primary importance for teaching pronunciation (Kjellin, 1999; Derwing and Rossiter, 2003). This project follows up on our belief in the importance of prosodic features (Volín, Poesová and Skarnitzl, 2014; Berkovcová et al., 2016; Frost and O’Donnell, 2018).

Among other things, the results of the project will help to inform pedagogical practices in teaching and learning the pronunciation of a foreign language and, by extension, improve the quality of CLIL and communication in international contexts in general.

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Automated Speech Recognition (ASR) as a tool for providing feedback for vowel pronunciation practice for Macedonian learners

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ASR is an intriguing software that may offer possibilities for visual feedback for L2 learners facilitating autonomy and creating easily accessible learning environment (Derwing, Munro and Carbonaro, 2000). The possibility of using ASR in the area of second language pronunciation has been investigated by several researchers (e.g. Eskenazi, 1999; Derwing, Munro and Carbonaro, 2000; McCrocklin, 2016). They examined ASR's written output (speech-to-text) as feedback for learners. Most recent research is in favor of ASR (Liakin, Cardoso and Liakina, 2014; McCrocklin, 2016; Mroz, 2018 etc.) and it served as a stepping stone to set the basis of the current study.

The current study investigates the potential of ASR (Google keyboards) for providing corrective feedback to learners and hence facilitating autonomous pronunciation practice, raising learners' awareness and pronunciation improvement. The purpose of the study is to test the ASR program and examine the possibility for using this feature for pronunciation practice for EFL learners. The study focuses on Macedonian learners and provides detailed comparison between the Macedonian and the English vowel systems adapted from Kirkova-Naskova (2012). Based on the comparison, four vocalic contrasts were selected /i - ɪ/, /æ - ε/, /u - ʊ/, and /ɑ - ʌ/, and a list of 30 words was created. The two primary research questions were: (1) What is the potential of the ASR program for improving learners' pronunciation of vowels? and (2) Does ASR feedback have a positive impact on autonomous learning and raising learners' awareness of challenging vowel contrasts?

The research included four phases: (a) linguistic background questionnaire, pre-test (speech samples of nonnative speakers); (b) having the listeners transcribe non-native speech (c) Treatment (practice using ASR) and (d) Post-test (second set of speech samples) and American native listeners transcription. The participants in this study consisted of 2 groups: speakers and listeners. The speakers who took part in this research are 11 Macedonian EFL learners, aged 18-19. The listeners consisted of 3 American native speakers, graduate students in a linguistics department. The students' task consisted of practicing pronunciation of vowels by using the given vocabulary list in the ASR program in a duration of one week. They were recorded before the practice (pre-test) and after the practice (post-test). Their speech was transcribed by the listeners. The transcribed words were compared to the correct form, i.e. the listeners might have heard "PEN" when the learner was attempting to pronounce "PAN". A private Facebook group was created for easier communication where learners commented on their experience with the program.

The results were overall positive with respect to both research questions. The learners showed improvement on almost all individual vowels and reported satisfaction with the use of the ASR program for pronunciation practice. Swain's Output Hypothesis (Swain, 1985 in Ellis, 2017) provided a solid ground for our study because it touched upon all the areas of language production that we wanted to achieve with this study. I recommend its integration in ESL/EFL classrooms for facilitating more autonomous learning, raising awareness and intelligibility improvement of L2 learners.

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Acquisition of prosodic marking of information status by Mandarin-speaking learners of English: Phonological vs. phonetic properties

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Mennen (2007) differentiates phonological and phonetic properties in the acquisition of second language (L2) prosody and claims that acquisition of phonological properties of L2 prosody precedes acquisition of its phonetic properties. Some empirical studies (e.g., Mennen, 2007; Rognoni, 2014) have supported this claim with findings that learners tend to acquire phonological features of L2 prosody before they master the fine phonetic details.

The study reported here investigated the acquisition of phonological and phonetic features in prosodic marking of information status (broad focus, narrow focus, and given information) by Mandarin-speaking learners of English. Phonologically, broad focus and narrow focus in English are marked with prominence, while given information is marked with deaccentuation (Halliday, 1967; Ladd, 1996). Phonetically, narrow focus, broad focus and given information in English are marked with decreasing duration, F0 and intensity (Breen et al., 2010). One control group of 20 native English speakers and four groups of 80 Mandarin-speaking learners (each consisting of 20) at preliminary, lower intermediate, upper intermediate and advanced proficiency levels participated in this study by doing a reading task. In the task, the participants were asked to listen to a group of questions one by one and read the corresponding answer to each question according to the context. The participants were recorded individually, and three judges, two Mandarin-speaking phoneticians and one English-speaking naïve listener, analysed the recordings of the answer statements auditorily for prominence placement. Following the auditory analysis, all utterances with correct prominence placement were selected for acoustic analysis. Following Breen et al. (2010) and Mennen, Schaeffler and Dickie (2014), and considering the variation in sentence structure in the reading task, duration, average F0, maximum intensity, F0 range and intensity range of the stressed syllable in the target word under focus or as given information were extracted and measured against the syllable mean in each utterance. Then all five acoustic features were compared across groups.

The auditory analysis showed that the learners at upper intermediate level and above could mark the different information status with proper prominence patterns. The acoustic analysis revealed that unlike the native speaker group, who used all five acoustic features to mark information status, all learner groups used average F0, F0 range and maximum intensity and only the learners at lower intermediate level and above used all five acoustic features to differentiate the three types of information status, although the latter's performance differed from the native speaker group's performance. This suggests that once the learners had acquired the phonological property (prominence placement) of information status, they could use the phonetic properties to differentiate the information status, and that these learners' acquisition of phonetic properties of information status may precede their acquisition of the phonological property of information status.

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Incidental pronunciation strategies development: A secondary school case study

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The studies devoted to the so-called good language learners that emerged in the 1970s (Rubin, 1975) reveal that efficient learners fall back on an abundant and highly individualised array of techniques and strategic behaviours related to and employed while learning. The well-known taxonomies by Oxford (1990) and O'Malley and Chamot (1990) gave rise to analyses and investigations in the field of learner autonomy and self-development, also in pronunciation learning/teaching. As has been corroborated by empirical studies (Oxford, 2001a; Oxford, 2001b; Chamot, 2004) strategy training contributes to the increase in overall proficiency as well as to a number of invaluable benefits such as enhanced motivation, greater self-efficacy, anxiety reduction and more positive attitudes. Although studies dedicated to the relationship between learning strategies and pronunciation are still in their infancy, there are a number of investigations that set the directions for further research and development (Peterson, 2000; Pawlak, 2008; Pawlak and Oxford, 2018).

The paper presents results of a pilot study conducted in a secondary school that aimed at observing how learners develop pronunciation strategies as a result of regular pronunciation input and feedback from the teacher. It addresses a tentative assumption that explicit pronunciation training may contribute to the enhanced strategy use and consequently to better oral performance. Detecting and naming the strategies employed by the learners as well as selecting the most effective ones for more explicit application aided and boosted the learners' awareness and confidence, which was confirmed by data obtained from questionnaires and from participant observation.

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Pronunciation of English stops by three groups of bilinguals in Israel

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This research investigates the speech acoustics of two generations of U.S. *olim* (immigrants) in Israel, first generation immigrants, whose first language (L1) is American English (AE), and their second-generation children, for whom English is a heritage language (HL), as well as L1 Modern Hebrew speakers.

A specific HL accent has been demonstrated in the studies that have investigated the phenomenon, showing that heritage speakers have good control of phonetic/phonological contrasts between their two languages but demonstrate distinct patterns from both native speakers (NS) and second language (L2) learners (who both show L1 influence) (Godson, 2004; Chang et al., 2009, 2011; Kupisch et al., 2014; Lein et al., 2015).

The research focuses on issues of heritage language phonology and intergenerational multilingualism: What is the speech of HL speakers of AE in Israel like? How does this speech compare to the speech of their parents (their main source of input for AE)? How does Modern Hebrew (MH), their L2 or primary language, affect their AE? These questions are investigated through a language questionnaire and a picture naming task targeting voice onset time (VOT) in the AE and MH stops /b, d, g, p, t, k/, which differ in how phonological voicing/voicelessness is cued phonetically by VOT: AE voiced stops /b, d, g/ have short lag VOT (< 40 ms), while voiceless stops /p, t, k/ have long lag VOT (> 40 ms). In MH, voiced stops /b, d, g/ exhibit prevoicing (sometimes up to -100 ms or more), while /p, t/ have short lag VOT (< 40 ms) and /k/ exhibits long lag VOT (often greater than 60 ms).

A total of 7 HS of AE; 10 American *olim*; and 5 NS of MH participated in the experiment. Acoustic analysis demonstrates that HL speakers, echoing previous studies, have excellent control over phonetic and phonological contrasts in salient distinctions between their two languages, despite greater overall variability. VOT is within MH norms when speaking MH and within AE norms when speaking AE, results in line with Flege (1995)'s Speech Learning Model (SLM), which predicts that the younger the age of acquisition, the better phonetic discernment between the two languages will be, resulting in the formation of distinct phonetic categories for both languages. The American *olim*, rather than exhibiting purely L1 influence on the L2, show some L2 (MH) influence on the L1 (AE): Voiced stops, even in AE, tend to be produced as prevoiced, rather than short lag, a shift phenomenon that has been documented for other languages (Pavlenko, 2000). This is especially apparent for /b/, but some speakers produce /d, g/ with prevoicing as well. Language questionnaires taken by *olim* participants suggest that this L2 influence is the result of both extensive use of the L2 and cultural identification with their fellow Israeli Jews. NS of MH demonstrate typical L2 MH influence on their AE, but produce native-like AE values for voiceless stops /p, t, k/, likely because MH has long lag for /k/.

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Some phonotactic statements regarding production of English vowels sounds across Slovenian dialect regions

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The present paper discusses the influence of Styrian and Upper Carniolan Slovenian dialects on the pronunciation of English vowel sounds in Slovenia. Previous studies (Jurančič Petek, 2007) have established and confirmed the existence of such influence, while the present contribution wishes to elaborate on those qualitative and quantitative features of Slovene dialect vowels (especially broad and narrow /e/ sounds), and processes such as vowel reduction in different structural positions (also resulting from shifting of stress), which may be the cause for the greatest deviations in the pronunciation of English vowels by Slovene learners. Wieden's transfer model (Wieden and Nemser, 1991) will be applied in considering the possibilities of establishing some basic Slovene-English interlanguage rules for vowels via comparison of English vowel production across Slovene dialect regions (particularly Slovene Styria and Upper Carniola, where differences are most pronounced).

The study involves respondents participating in the 2002-2007 research (278 participants attending primary and secondary schools in all 8 Slovenian dialect regions, 32 from Upper Carniola and 40 from Slovene Styria), and those participating in the 2018 fieldwork investigation targeting Upper Carniola (35 respondents from 5th and 7th grades of primary school) and Slovene Styria (25 respondents also from 5th and 7th grades of primary school). Recorded materials in both studies were analysed auditorily multiple times and by at least two listeners. Results were statistically analysed and are presented in tables. The 2002-2007 study proved L1 dialect interference in the pronunciation of English by Slovene learners, particularly in the case of vowel sounds. The 2018 study up-graded the 2002-2007 one by exploring context related reasons in sound sequences both in the Slovenian dialects and in English for certain instances and types of the above mentioned L1 dialect interference.

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The effect of explicit web-based pronunciation instruction to improve students' perception and production skills: Designing and implementing a pronunciation course to teach word and sentence stress

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Many researchers claim that computer assisted pronunciation teaching can be advantageous and beneficial to support and assist learners acquire new skills by offering visuals, native speaker voices and models for students to follow and compare their production with (Celce-Murcia, Brinton, Goodwin and Grinner, 2011; Neri, Cucchiari, Strik and Boves, 2002; Pennington, 1999; Shirer, 2005, among others). On the other hand, many studies have labelled pronunciation as one of the most difficult skills for Spanish learners to acquire (Martínez-Flor and Usó-Juan, 2006; Aliaga-García, 2007; Calvo Benzie, 2016).

Following these notions, this study examines the effectiveness of the use of explicit web-based instruction in the teaching of pronunciation among Spanish/Catalan speakers. The study explores students' progress in English pronunciation as far as word and sentence stress are concerned. All the materials the participants made use of were original, created specifically for this particular group of population bearing in mind the typical mistakes many Spanish/Catalan speakers make because of the interference of their first languages. In order to test the effectiveness of the web-based pronunciation course, two groups of 24 first year university students participated in this study. Both groups received exactly the same amount of instruction, the only difference was the methodology used to teach pronunciation. While the control group did all the activities in a conventional way, using pen and paper, the experimental group made use of an online tool for learning pronunciation. The activities were divided into four sections: overview, background, perception and production. In each section, students were required to do a set of interactive activities in which they had to reflect on the difference between stress in their language, syllable-timed, and English, stressed-timed. Besides, after finishing the activities, they had to first record themselves and then listen to their production and compare it to a native speaker. Thus, it was hoped such practice would result in higher awareness about their mistakes and an improvement in their pronunciation. In order to analyse and evaluate their progress, both groups took a level test, to test their initial level of English, and a pre-test, in which they recorded themselves reading some words, phrases, sentences, a short text and then described a picture. After finishing the course, they answered a qualitative questionnaire, and did a post-test, in which they read the same activities again. To assess their fluency, their recordings were evaluated by ten native English teachers and professors who used a 6-point Likert scale to evaluate the participants' production task by means of comprehensibility, accentedness and fluency, (Munro and Derwing, 1995).

The results show that, while both the control group and the experimental group showed improvement in their pronunciation of stress, the improvement was more evident in the experimental group. This seems to provide evidence of the usefulness of explicit web-based instruction in the learning of English pronunciation.

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Critical listening and type of corrective feedback in a large-group classroom: Students' preferences and views

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The success of learning pronunciation depends on learners having the right concept of what it is that they are practising – they need help to form appropriate concepts so that they can perceive and categorise new sounds more easily (Fraser, 2006a). In doing so, understanding the auditory quality of sounds is of crucial importance and it should be described in a way that is logical for the learners i.e. by developing a socially-constructed metalanguage (Couper, 2011). Critical listening is a teaching technique that allows for the development of such teacher-learner metalanguage and enhances learners' noticing skills of phonological categories and their boundaries by comparing and contrasting learners' own L2 speech (Fraser, 2006b; Couper, 2011). In addition, providing appropriate corrective feedback positively facilitates the process of sound internalization (Lee, Jang and Plonsky, 2015; Saito, 2012).

This study investigates the effectiveness of three approaches to critical listening as part of a larger study which tested the influence of a perceptual training on the perception and production of English front vowels /i:, ɪ, e, æ/ by Macedonian learners of English ($N=31$). In all three approaches participants' pre-recorded dialogues were jointly listened to for critical evaluation but it was the way they were analysed (joint discussion vs. individual self-evaluation) and the corrective feedback that was given (peer vs. teacher feedback) that varied and were combined. The participants were interviewed post training to obtain qualitative data.

The analysis of participants' self-reported views shows overall increased sensitivity to their pronunciation errors resulting in a general feeling of raised awareness (even when no improvement was achieved) and concern for one's L2 speech, which implies that critical listening as a pronunciation learning technique may work well with large group classes. Results also indicate preference to individual self-evaluation and teacher corrective feedback. These findings suggest that enhancing learners' noticing skills is an important step in the process of L2 sound acquisition and facilitates categorical development. The findings also point toward the practical implications of such teaching practices for the L2 classroom.

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Contextual and individual variation in pronunciation learning strategies

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Learning strategies are actions, techniques and thoughts employed by the learner to improve their own progress (Oxford 1990, Pawlak 2010). There has been a lot of research concerning learning strategies in general, but studies are less common in the area of second language (L2) pronunciation (see, e.g., Szyszka, 2017). Learning strategies are individual learner differences and dynamic in nature (Dörnyei, 2009). Few studies so far have focused on the dynamic nature of pronunciation learning strategies. In addition, most earlier studies have focused on the macro-perspective with many participants. The more qualitative micro-perspective, acknowledging individual and contextual factors for strategy use, is still under-researched within the field of L2 pronunciation (Pawlak 2016).

This study focused on a group of university-level EFL learners ($N=25$) who had three pronunciation tasks to prepare for: they practised a reading aloud text at home without time limitations, a similar task in class in ten minutes, and prepared for a spoken reaction task for two minutes. With this method, we were able to examine individual and contextual variation. After performing these tasks in class, we asked our participants to respond to a general questionnaire on pronunciation learning strategy use and to explain in their own words the strategies they had used in three different tasks. We also divided the participants into proficiency groups based on their L2 pronunciation skills.

According to the analysis, learner profiles can be identified and both individual and contextual variation was found. The participants varied in the number of strategies they identified. More proficient learners were more active and used cognitive strategies. There were few differences between preparing at home or in class when the pronunciation task itself was the same. Different strategies were used for the reaction task.

Knowledge of learners' pronunciation learning strategy use, including individual and contextual variation, is essential to incorporate them in teaching and, accordingly, to encourage their wider use to facilitate L2 pronunciation learning. Our analysis highlights the importance of the micro-perspective to gain more information on learning strategies.

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Learner awareness of their segmental errors when listening to a model voice

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For second language (L2) learners, it is important to notice the areas in which their speech production differs from the pronunciation of native speakers of the target language in order to improve. This kind of language awareness also involves noticing pronunciation differences. Awareness of learners' segmental errors in L2 speech can be easy in cases of two completely different phonetic categories, but it can become challenging if the two phonetic categories are similar yet different. Additionally, it becomes even more challenging for L2 learners to notice differences in speech to which they have never been exposed (Best and Tyler, 2007; Flege, Munro and MacKay, 1995). There is little information about how conscious and sensitive L2 learners are to pronunciation differences when they are asked to compare sentences they have produced with the same sentences produced by another speaker. This study examined the awareness of L2 learners to pronunciation differences between their own production of English sentences and production of the same sentences by a synthesized model voice that used native segmental and prosodic features.

We examined the pronunciation error awareness of 36 Chinese learners of English. In the initial recording phase, fifty sentences from the CMU ARCTIC sentence collection were produced by the L2 learners. These sentences were chosen because they contained pronunciation features that are thought to be difficult for native speakers of Chinese languages (e.g., Avery and Ehrlich, 1992; Swan and Smith, 2001). Ten of these sentences were selected for the mispronunciation detection phrase based on a recent L2-ARCTIC pronunciation corpus (Zhao et al., 2018). Each sentence was 12-14 syllables long and had been demonstrated to elicit 4-6 pronunciation errors by native Chinese speakers in the corpus. In the mispronunciation detection phase, participants listened to their 10 recorded sentences, whose errors were determined by agreement among four phonetically-trained raters, along with the same sentences produced by one of two model voices: a golden speaker (a synthesis of the L2 learners' voice identity features with native acoustic and articulatory characteristics). Then they identified the syllables in which they noticed segmental pronunciation differences between their recording and that of the model voice.

Results showed that learners found both synthesized voices equally useful overall for noticing differences between their own production and the model voice, but listeners were more likely to notice errors in stressed syllables. The results also indicated that this type of noticing, which is assumed to be possible in most pronunciation-oriented listening practice, was actually quite difficult for the listeners, who on average accurately noticed only around one-fourth of the errors identified by experts. This suggests that noticing pronunciation deviations from a model voice is likely to be successful only if feedback is provided that calls attention to likely errors. The findings are useful for teachers as they provide understanding of how well learners compare their speech to that of a model. We also suggest ways for learners to improve their ability to notice errors in their own speech.

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‘deter-mine’ [‘di:-‘ta‘main] and ‘exa-mine’ [‘ɛg-‘za‘main] as sociolinguistic variables in contemporary English pronunciation among educated South Africans

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This study is based on recurrent observations that the English words *determine* /dɪˈtɜːmɪn/ and *examine* /ɪgˈzæmɪn / appear to be pronounced [‘di:-‘ta‘main] and [‘ɛg-‘za‘main] by some educated South Africans (post-Matric), in spite of sufficient primary linguistic data around, which would suggest more standard pronunciations (Robinson, 1995; Kennedy and Trofimovich, 2010).

A read-aloud task of a short text and a word list containing these words (and words with similar endings), recordings of casual conversations (n=10), and interviews are adopted as methods on subjects purposively selected in Pretoria (N=120: 60 male, 60 female), who are profiled, in terms of their demographics, linguistic histories, social class, and educational backgrounds. Possible correlations are analysed (using Spearman rank) in relation to variables of race, ethnicity, gender, age range, social class, residential area, type and location of schools attended, and L2 learning motivation and attitudes toward English. Explanations of this phenomenon are explored using the concepts and notions of fossilisation (Selinker, 1972; Selinker and Lamendella, 1978), English L2 learning motivation and attitudes (Masgoret and Gardner, 2003) and the Input Hypothesis (Krashen, 1985). The preliminary evidence suggest that this is a case of (fossilised) transfer of training.

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Phonetic training effects on the lexical encoding of L2 English vowel contrasts

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Much research on the acquisition of L2 phonology and L2 phonetic training alike has focused on the acquisition of segmental phonological contrasts for confusable L2 sounds that are perceptually matched to a single L1 native category, such as /r/ and /l/ for Japanese learners of English (Bradlow, 2008; Cutler et al., 2006). However, phonetic training studies have not examined the extent to which training benefits resulting in increased perceptual sensitivity and production accuracy lead to a more robust lexical encoding of such phonological contrasts. In addition, there is ongoing debate on whether accuracy of L2 phonological representations translate necessarily into their accurate encoding in the mental lexicon (Broersma, 2012; Darcy et al., 2012; Hayes-Harb and Masuda, 2008; Ota et al., 2009; Pallier et al., 2001). The present study examined whether an intensive phonetic training program based on non-word stimuli increased sensitivity and production accuracy in words for a pair of confusable L2 vowels, and tested whether improvement had occurred in the lexical encoding of the vowel contrast.

A group of 30 L1-Catalan/Spanish learners of L2 English were trained (4 x 45 min. sessions) on the perception and production of two difficult L2 vowel contrasts (/i:/-/ɪ/ and /æ:/-/ʌ/) through identification, AX discrimination, and imitation tasks based on 1- and 3-syllable minimal-pair non-words produced by 4 native English speakers (2 female). Learners' gains in perception were assessed through an ABX categorization task that included trained and untrained non-words as well as untrained words to test for generalization of training gains to the perception and production of the vowel contrasts in a lexical context. In addition, learners were pre- and post-tested on their ability to accurately encode the vowel contrasts lexically through a lexical decision task. Gains in production were assessed through spectral distance and duration difference scores between the contrasting vowels for non-words and words elicited through a delayed non-word repetition task, which was also administered to a control group that did not do the training.

The results revealed an overall improvement in discrimination accuracy and speed for the target contrasts, both for trained non-words and untrained non-words and words. Therefore, phonetic training based on non-words increased sensitivity to the contrasts lexically also. However, such gains did not extend to improvement in lexical encoding (lexical decision scores), suggesting that perceptual learning that occurs without form-meaning mappings cannot modify the lexical encoding of a contrast (Escudero et al., 2008). Whether training with words might have achieved such changes remains an empirical question. As for production, larger vowel quality difference gains between contrasting vowels were shown for trained and untrained items, while duration differences were maintained, suggesting that learners' improvement was based on quality rather than duration differences. These findings provide partial support for the lexical encoding deficiency hypothesis (Darcy et al., 2013) by suggesting that learners may acquire L2 phonological contrasts and still encode them lexically in a fuzzy way. Pedagogical implications about the use of non-words and words in the design of pronunciation teaching tasks will be discussed.

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Training L2 English vowels in noise: The role of auditory selective attention

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When a second language is being learned in a classroom setting, there tends to be little auditory interference. However, phonetic training in noise has been shown to enhance the formation of robust sound categories (Cooke and García-Lecumberri, 2018) and may prepare learners for out-of-class communication (Woods et al., 2015). Studies eliciting clear speech through the presence of environmental noise (Grynpas et al., 2011) have revealed that hyper-articulation counteracts adverse listening environments by enhancing the expansion of vowel spaces and the full realization of articulatory targets (Hazan and Baker, 2011). Thus, although effortful listening conditions are a source of cognitive load and negatively impact speech processing, they also accordingly force adjustments in the speech perception and production system leading to speech learning (Mattys et al., 2012). Given the limited capacity of the human attentional system and the demands listening in noise places on the central attentional system (Mattys and Wiget, 2011), the potential benefits of background noise for L2 speech production may be mitigated by learners' ability to shift, focus and maintain their attention to relevant speech dimensions for L2 sound identification (Mora and Mora-Plaza, forthcoming). The present study examines the effects of inducing intelligible speech through multi-talker babble to enhance gains in L2 vowel production accuracy, and assesses the role of auditory selective attention (ASA) in explaining inter-learner variability in training gains.

L1 Catalan/Spanish adult learners of English ($N=55$) were trained (4 x 40 min. sessions) on the perception and production of a difficult L2 vowel contrast (/æ/-/ʌ/) through discrimination, identification and imitation tasks based on high-variability word and non-word stimuli. Half of the participants ($N=28$) did the production training tasks in noise (multi-talker babble) and half ($N=27$) did them in the quiet. Learners' gains in production between pre-test and post-test (increased spectral distances between /æ/ and /ʌ/) were assessed through a delayed word repetition task, which was also administered to a control group ($N=12$) not doing the training. Individual measures of ASA were obtained through an L2 task based on single-talker competition consisting of 64 pairs of sentences presented simultaneously (target vs. competing) by a male and a female voice (Humes et al., 2006).

Preliminary results from data currently under analysis reveal that production training in noise results in sustained increased vocal effort to produce perceivable acoustic differences during auditory monitoring, eventually leading to increased amplitude and greater articulatory contrast for /æ/ and /ʌ/ (Hazan et al., 2018). In addition, individual differences in auditory selective attention appear to play a significant role in explaining the differential extent to which learners trained in noise and those trained in the quiet could benefit from the production training. These preliminary findings suggest that including ambient noise in pronunciation learning tasks may lead to more accurate L2 speech production. Implications for L2 phonetic training methodology and pronunciation teaching pedagogy will be discussed.

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Formant frequencies and duration of /ɪ/ vs. /i:/ English vowels produced by native French speakers in normal and fast speaking rate

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The aim of this study is to discuss issues related to English vowel production by native French learners. The paper concentrates on two high front vowels which are the most frequently confused: short vowel /ɪ/ (*kit*) versus long vowel /i:/ (*fleece*) produced in normal and fast speaking rates, first by a British native speaker and then by 5 French female students. Speech rate is varied in order to evaluate the robustness of the phonological contrast.

Given that French speakers' productions are beset with serious issues related to a lack of phonological distinctiveness between vowel quality and vowel quantity, our assumption is that learners' production strategy seems to be fossilized whatever the production context (normal or fast speech rate).

The experimental procedure included stimuli with vowels /ɪ/ and /i:/ placed in the context of two voiceless consonants /sVt/ within a standard carrier phrase. The carrier sentence was used to control the phonetic environment for each vowel. The data analysed in this paper is part of a large corpus of ten lexical items repeated ten times with normal then fast speed rate. The recordings were done in a sound-treated room.

The participants in the study were five female French students who performed a recording by reading aloud ten phrases including the targeted vowels /ɪ/ and /i:/ (*sit, seat*). The same recording was performed by a native British female speaker. The targeted lexical items were analysed to allow the measurement of vowel formants (F1, F2) and duration (in ms) by using Praat Software.

Preliminary results show that the native speaker's production does not show great difference in duration between long and short vowels /i:/, /ɪ/ in both contexts of speech rates, whereas French learners' productions show a significant difference between the long and the short vowel in both speech rates. Long vowel duration can almost reach twice the short vowel length, (124 ms, compared to the native speaker 76 ms for the vowel /i:/). However, this vowel length does not seem to be jeopardized in fast speech rate in spite of the vowel compression. F1 and F2 values for the native speaker correspond to the norms indicated in the literature for both vowels /i:/ and /ɪ/ in Hz and respecting the vowel diagram levels (aperture) as a high, front and close /i:/ and a mid, high mid close vowel /ɪ/. French learners show similar production for both vowels with a fronting phenomenon for the short vowel /ɪ/ and a tendency to produce a more close /ɪ/ vowel.

It seems that French speakers' strategy to differentiate between short and long vowels /ɪ/ and /i:/ is mainly based on vowel quantity rather than on vowel quality. Despite a significant duration compression in fast speech rate, this does not seem to lead to a change in French learners' production.

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The influence of L1 Albanian on L2 English vowel pronunciation

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L1 Pronunciation is a matter of firmly established habits that strongly influence L2 pronunciation. As a result of this, the L2 learner does not hear the language through the sound system of the foreign language but “filters” the foreign sounds through their own sound system (Flege, 1995: 233-76). L1 and L2 sounds with similar (but not the same) quality can easily assimilate and fall into a merged category (Best and Tayler, 2007). Correspondingly, the perceptual categories of L1 Albanian strongly influence the learner’s hearing of the foreign English sounds and affects their pronunciation. Vowels are particularly problematic – given that certain English and Albanian vocalic categories are perceptually similar, their interpretation seems misleading and results in Albanian learners substituting English long vowels with Albanian short vowels and then pronouncing them with additional length.

The aim of this paper is to identify the main difficulties of Albanian learners while pronouncing English vowels and to account for the reasons why such mispronunciations occur. First, Albanian and English vowels are contrasted with regard to their total number, their similarities and differences in vowel classification, allophonic variation as well as differences in length according to their distribution. For instance, Albanian has fewer monophthongs than English, which means that these six vowel phonemes /ɪ, æ, ʌ, ɒ, ʊ, ɜ:/ pose pronunciation difficulty for the Albanian learners when they attempt to acquire new categories and ‘squeeze’ them into their existing vowel space. Using the contrastive analysis method, English vowels have been grouped according to the difficulty of pronunciation by Albanian learners of English: a) group 1 consisting of /ʌ/ /e/, /ə/; b) group 2 consisting of /ʊ/, /u:/, /ɔ:/, /ɒ/, /ɑ:/, /æ/, /i:/, /ɪ/; and c) group 3 consisting of /ɜ:/. Albanian learners of English are often not aware that the crucial difference between the vocalic contrasts /ɪ/ - /i:/, /ɒ/-/ɔ:/ and /ʊ/ - /u:/ is in fact in their quality and not in their quantity, more specifically in the part of the tongue raised and the degree of raising. In the final section of the paper, practical advice is given as to how such mispronunciations might be overcome.

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The role of visual monitoring in training L2 vowels

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Previous research on the acquisition of second language (L2) sound contrasts has shown that perceptual training with audiovisual stimuli presenting L2 learners with native talkers' facial gestures (lips in particular) is superior to perceptual training with auditory-only stimuli, leading to larger training gains and improvement in pronunciation (Hardison, 2003; Hazan et al., 2005). Moreover, phonetic training research has demonstrated the effectiveness of visual articulatory feedback during production training in learning to produce L2 sound contrasts (Bliss et al., 2018). Feedback types include, among others, visualizations of spectrograms (Garcia et al., 2018), simplified formant-based visual representations of tongue position (Kartushina et al., 2015), or ultra-sound images (Wilson, 2014). However, to the best of our knowledge no research to date has examined the role of *visual monitoring* (i.e. observing one's own lip-movement gestures) during vowel production training.

We investigated the role of visual monitoring in training advanced L1-Spanish/Catalan bilingual adult learners of English ($N=54$) to produce a difficult L2 vowel contrast, /æ/ vs. /ʌ/. Although /æ/ and /ʌ/ differ acoustically in duration and F1 and F2 frequency (Deterding, 1997) and visually in degree of lip aperture (Wang et al., 2013), L1-Spanish/Catalan learners perceptually map them onto a single L1 low vowel /a/ and often fail to distinguish them in production (Cebrian et al., 2011). Participants took part in a high-variability phonetic training program consisting of 4 40-minute sessions. They were randomly assigned to either a visual monitoring (VM) or an auditory monitoring (AM) production training condition. In each training session, participants in the VM condition ($N=27$) first imitated 8 minimal-pair practice word trials presented audio-visually, and then performed a 32-trial immediate repetition task administered auditorily only in a *listen-repeat-listen-repeat* sequence while watching their lip gestures on a screen monitor. Participants in the AM condition ($N=27$) performed the same task without visual monitoring. We hypothesized that visual monitoring of lip gesture differences between /æ/ and /ʌ/ in the VM condition would help enhance the integration of visual and acoustic cues distinguishing these vowels and would result in greater training gains for the VM group. For both groups, production training was preceded by perception training of the same target contrast through AX discrimination and identification tasks. In addition, individual differences in proficiency were controlled for through an elicited imitation task (Ortega et al., 2002).

Production accuracy gains were assessed before and after training through a delayed word repetition task, which was also performed by a control group ($N=12$) that did not do the training. A normalized Bark-converted spectral distance metric (Flege et al., 1997) was used to assess learners' gains in qualitatively distinguishing /æ/ from /ʌ/ in production. Preliminary results from the production data currently under analysis reveal production accuracy gains for the VM and AM groups, with the VM group obtaining slightly larger spectral distance scores than the AM group. These findings will be discussed in relation to its pedagogical implications, suggesting the use of visual monitoring as an effective technique in the teaching of L2 pronunciation.

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Second language acquisition of stress by learners with stressless L1s

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It has been argued that languages like Turkish and French differ from most languages, including English, in that they do not require prosodic words to be footed (Özçelik, 2014; 2016a). Accent in these languages is instead assigned through ‘intonational prominence’, instead of foot-based ‘stress’, falling on the last syllable of prosodic words or phrases. This proposal has later been extended to second language (L2) acquisition, claiming that learners of footless languages like Turkish whose L1 requires feet, as in the case of English-speaking learners of L2 Turkish, will be unable to expunge the Foot from their grammar, given that positive evidence is unavailable in the footed-to-footless direction (Özçelik, 2016b; 2018). That is, although such learners are expected to be able to make various changes to their L2 phonological grammar (such as producing iambic/right-headed feet in L2 Turkish instead of using trochaic/left-headed feet like in L1 English), they will always have foot structure in their L2 productions, even if they are eventually able to produce words with final accent.

This hypothesis has so far been tested only in one direction, i.e. with L1 footed learners of L2 footless languages. It remains to be seen, however, whether L1 footless learners of L2 footed languages, as with Turkish-speaking learners of L2 English, would be able to successfully *add* the Foot to their L2 phonological grammar. As this is a direction in which positive evidence *is* available and ample, in the form of syllables that bear greater intensity and duration, as well as higher F0 (correlates of trochaic stress, see e.g. Hayes, 1981; 1995; McCarthy and Prince, 1986; 1995), we hypothesize that this should not only be possible but easy.

In order to investigate these predictions, a semi-controlled production experiment was conducted with Turkish-speaking learners of L2 English ($N=18$), of various proficiency levels. The stimuli, composed of various bisyllabic and trisyllabic nouns with combinations of Light-Light or Heavy-Light syllables, were uttered in a carrier sentence.

The results largely confirm our predictions. All of the Turkish-speaking subjects were able to add the Foot to their grammar; greater duration and/or intensity, correlates of foot-based (trochaic) stress, accompanied word-level prominence in their productions. They were, in addition, able to make various changes to the prominence structure of their individual utterances, such as resetting the parameter Extrametricality from *No* to *Yes*, thereby avoiding word-final stress, and later, Foot-Type from Iambic to Trochaic, thereby having increasingly more word types with English-like non-final stress. In fact, most of their errors were in the form of generalizing the English stress pattern to place word-initial stress, even when word-final stress was (exceptionally) required, as in the word *risti*. Likewise, the parameter whose value was most commonly set incorrectly was End-Rule, likely another overgeneralization error; although this parameter is set to *Right* in English, thereby ensuring that the rightmost stressed syllable (within a word composed of multiple stressed syllables) bears main stress, as in *Atlánta*, many learners had set it to *Left*, just like other stress-related parameters (such as Head-Directionality), leading to incorrect productions such as *Átlánta*.

In conclusion, as was hypothesized, Turkish-speaking learners of English were able to add foot structure to their productions in English, and was in addition able to set most foot-related parameters correctly. That is, their productions were not only phonetically target-like, but also phonologically correct. Errors, when occurred, were mostly overcorrection errors.

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Comparison between L1 Greek and L1 English vowels: How similar or different are they and what are the teaching implications?

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For many decades researchers have been trying to capture and understand the way children acquire and finally produce their native language as well as a second one. First language acquisition comprises an extensively researched area proving the infants' ability to distinguish speech sounds of various languages, whether native or non-native ones. Yet, by the end of the first year of life, infants' phonetic perception is altered from a language-universal pattern to a more language-specific one, primarily due to exposure to the mother tongue. According to Kuhl's (2000) Native Language Magnet Theory, prototypes (i.e. best category exemplars of a phonetic unit) function as perceptual magnets attracting adjacent units which are assimilated by the prototype. Hence, the perceptual space is divided into phonetic categories resulting from the magnet effect exerted by the prototype. On account of this initial mapping, learning or mastery of a second/foreign language has been shown to be rather challenging, especially in terms of phonetic contrasts and phonological attainment (Kuhl, 2000; Kuhl, Stevens, Hayashi, Deguchi, Kiritani and Iverson, 2006). In the same line, several theories of L2 phonological acquisition have been put forth, including the Speech Learning Model (Flege, 1995) among others, trying to provide explanations on how learners produce non-native sounds and to what extent accuracy/mastery of the L2 phonological system can be achieved.

Thus, drawing on the aforementioned theories, this paper aims to explore the Greek-English interlanguage, whose phonetics has not been widely investigated (with the exceptions of Dawson, 2003; Efstathopoulou, 2009; Lengeris, 2008, 2009; Tsiartsioni, 2011), by examining the two vowel inventories. Undoubtedly, the two vowel systems are different both in size and complexity, as the Greek system is a simple five-vowel one, while the English language comprises twelve monophthongs which are also marked by duration differences. To that end, twenty native Greek speakers aged 9 and 15 years old as well as twelve English-Greek bilingual ones of the same age groups were recorded reading a list of sentences containing words with the relevant vocalic sounds. All the data was analysed acoustically via the PRAAT programme (Boersma and Weenink, 2011), focusing on the first two formants and the duration values of the vowels. Additionally, F1 and F2 were normalised using the modified Watt and Fabricius (2011) method through the online normalization tool NORM (Thomas and Tyler, 2007). Finally, SPSS was employed to perform statistical analyses. The comparison between L1 Greek and L1 English vowels revealed three patterns pertaining to quality; substantial overlap, little overlap and medium-range overlap. Regarding quantity contrasts, important differences were reported between the two languages, especially for the younger speakers. Overall, the findings of the study provide useful insights as regards the areas that can cause difficulty to Greek learners of English and the features that need to be prioritised during pronunciation teaching.

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Focus on focus: Prosodic signals of utterance-level information structure in L1 English, L1 Serbian, and Serbian L2 English

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The communicative importance of ‘information structure’ (Halliday, 1967) or ‘information packaging’ (Chafe, 1976), i.e., the ways in which speakers distinguish between ‘new’ and ‘old’ information, “assumed by the speaker to be shared by him and the hearer” (Jackendoff, 1972: 230), embodied by the pragmatic-semantic concept of *focus*, is typically observed in speech in relation to expressing prosodic prominence, and the tonicity (Wells, 2006) or highlighting function of intonation (Grice and Bauman, 2007). However, even the well-documented focus-signalling prosodic mechanisms show cross-linguistic variation (Büring, 2009; Cruttenden, 2006), particularly in distinguishing between the types of focus: broad (whole clause) focus vs. narrow (one-word) focus, and contrastive vs. non-contrastive (informational) focus (Chen, 2012), while the phonetic realization of the prosodic signals can also be language-specific (Y. Xu and C. Xu, 2005). Therefore, prosodic information-structure marking can present a real difficulty in L2 contexts (cf. Yang and Chen, 2014a, b), where the influence of L1 prosody may defy years of L2 experience (Mennen, 2006; Mennen and de Leeuw, 2014).

This study addresses the way prosodic cues are used to signal utterance-level information structure: focus vs. background, and broad vs. narrow vs. contrastive focus, aiming to identify some general patterns of usage and possible problematic areas for Serbian EFL students. The prosodic cues of pitch (F0) and intensity were examined as used in 3 read-aloud tasks by 4 male L1 British English speakers, and 4 male EFL students, L1 Serbian speakers. The acoustic analysis included local prosodic cues (pitch maximum, minimum, mean; pitch range; intensity minimum, maximum, mean), measured at several points: at the beginning of the focus domain, i.e. the *focus onset*; at the *focus exponent*, i.e. the nuclear syllable; and on the left-edge *pre-focus* and the right-edge *post-focus* parts of intonation units.

The results show that in L1 Serbian, compared to L1 English, intensity may play a more important role as a focus-signalling cue, as well as pitch height, but not the pitch-range expansion of the focus exponent. In the EFL data, Serbian L1 influence was manifested as an inappropriate phonetic realization of the intended prosodic signal of pitch-range expansion, and the ‘overuse’ of the cue of intensity.

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Learning English as a foreign language: The effect of the amount of exposure to English on the production of vowels by university learners from different levels

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Second language (L2) English learners who have Spanish as their native language face several challenges on English vowel pronunciation. In addition to the phonological differences between English and Spanish vowel inventories (Stevens, 2011), there are many other factors that have proven to drastically impact on segmental acquisition, such as the role of input (Flege and Wayland, 2018), the L2 language experience (Flege, Bohn and Jang, 1997; Baker and Trofimovich, 2006) and the age of learning (Munro, Flege and Mackay, 1996). Research on L2 English vowel acquisition has focused predominantly on naturalistic setting studies (where English is spoken as a native language), only few studies have been done on perception and production of English as a foreign language (EFL) (e.g. Rallo and Romero, 2012).

The present study aims to advance the knowledge of factors affecting the acquisition of English as foreign language, by examining the effect of the amount of exposure to target language on the production of English vowels by Ecuadorian Spanish learners. We quantified here the amount of exposure in terms of the number of years of instruction the subjects have received in English. The students were in the second and seventh semester of the EFL teaching program at a public university in Ecuador, and they have never lived in an English-speaking country. They were asked to produce 40 monosyllabic words containing the English vowel contrasts /i:/-/ɪ/, /u:/-/ʊ/, /ɛ:/-/æ/, /ʌ/-/ɑ/ in a CVC and CVCC context, a 5 disyllabic words were added as a control group. A picture-naming task was used to elicit target vowels and the picture and its relative label in Spanish were presented together on a computer screen. The same task was performed by the English teachers, which represent the models the Ecuadorian learners were exposed to in the course of their instruction. In order to compare the spectral and temporal characteristics between the two groups of learners and the teachers, we manually annotated the vowels, measured their duration and the first two formants F1 and F2 by means of Praat.

The preliminary results show that there is no significant difference between the two groups of learners in terms of formants F1 and F2 and vowel duration. One possible explanation for these findings could be attributed to the lack of intensive use of the target language or insufficient training in the perception and production of L2 sounds.

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French primary school teachers and secondary school teachers of English: Pedagogical practices and training in pronunciation teaching

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Many researchers agree that English teachers generally lack adequate skills to teach pronunciation properly (Macdonald, 2002; Chen and Goh, 2010), and that “there is a definite need for more courses for ESL teachers” (Derwing, 2010). As Celce-Murcia (2010: 8) pointed out: “Teachers of English as a foreign language who are not native speakers of English and who expect to serve as the major model and source of input in English for their students fall within the group of learners who need pronunciation instruction”. Huart (2010) underlined that most French teachers of English also experience lack of training.

As far as France is concerned, to train secondary school teachers might not be sufficient, as children start to learn English by the age of 5 in primary school. Thus, the role played by primary school teachers in the acquisition of a good pronunciation by French pupils is significant, as they are often the first model of English these children have. This way, Derwing (2010) suggested that “an increased focus on pronunciation should extend to K-12 classroom teachers as well, even though they are not necessarily designated as language teachers per se”.

Thus, we propose to present a survey that was conducted with 40 French primary school teachers and 40 French secondary school teachers of English. Through questionnaires, this survey focused on teachers’ self-efficacy (i.e their “individual beliefs about their own abilities to perform [the teaching of English pronunciation] (...) and achieve specific results” (Chen and Goh, 2010), on how the teachers working in these schools were trained (or not) to teach English pronunciation, and on how they are used to working on pronunciation and oral comprehension in their classes. The data collected should make it possible to see if the arguments put forward by Huart (2010) and Derwing (2010) are well-founded. We will also be able to give an overview of French teachers’ pedagogical practices when it comes to teaching English pronunciation and comprehension, and to discuss the limits and/or benefits of such practices.

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Raters' judgments and acoustic analysis: Challenges for the assessment of foreign language pronunciation research

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A growing interest in the Intelligibility Principle (Levis, 2005) emerges from recent L2 pronunciation teaching studies (Derwing and Munro, 2015). Hence, many researchers nowadays advocate for the instruction of pronunciation features that improve students' intelligibility and comprehensibility to guarantee successful communication.

It has been difficult to provide quantitative measures that help L2 pronunciation research assessment to benefit from a more scientific approach. In fact, assessment tools vary depending on the aspect being analyzed. Regarding comprehensibility, numeric Likert scales have arisen as the most reliable tool (Derwing and Munro, 2015; Thomson, 2018: 20). Besides, Derwing and Munro (2015: 7) renounce acoustic analysis since intelligibility is essentially conceived by both the listener's perception and the speaker's production. However, it is not always easy to find a large amount of listeners willing to participate in research studies, particularly in EFL contexts. Consequently, the reliability of the results is sometimes challenged.

The present study explores the advantages of using results from rater judgments in combination with well-established acoustic measurements of rhythm as an attempt to obtain a more comprehensive picture of the efficacy of explicit rhythm instruction to improve engineering students' prosody in English. For this purpose, a pronunciation module was embedded into an existing technical English course. The module consisted of ten weekly sessions of thirty minutes held within the class schedule. Sessions were designed, on the one hand, according to the technical framework of the course and, on the other hand, following Celce-Murcia, Brinton and Goodwin's steps to teach communicatively (1996: 36). The participants of this study were 42 Spanish/Catalan first-year undergraduate engineering students classified into two groups according to the instruction received: an experimental group, which received explicit rhythm instruction, and a control group, which did not. They all were recorded before and after the training.

On the one hand, seven experienced listeners assessed the comprehensibility of students' extemporaneous speeches using a 5-point Likert scale. Results were analyzed using a mixed ANOVA, revealing no improvement for the experimental group. Nevertheless, after re-running the mixed ANOVA without the 13 high-level students, both groups showed signs of improvement, possibly due to a ceiling effect. However, results were not significant ($p = 0.275$).

On the other hand, sentences were analyzed acoustically using Praat and measures of rhythm (Varco-V) were obtained. Both Varco-V figures and the corresponding effect sizes were compared using mixed ANOVAs and t-tests. Results revealed that students who took rhythm instruction showed an increase in Varco-V after training, approaching English rhythm, while those who did not work on rhythm presented inconsistencies. Despite these results not reaching significance, an analysis of the effect sizes for the t-tests comparing before and after Varco-V values for the experimental vs. the control group did show a significant difference: $T(16) = -2118, p = .05$.

Therefore, the acoustic analysis detected a positive evolution of the experimental group, which is interpreted as providing support for the effectiveness of the instruction, despite the lack of clear results in the analysis of the rater judgments.

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Cognate and task effects on English pronunciation by Spanish-Catalan learners at intermediate levels

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In first language (L1) acquisition children start learning literacy skills at the age of 6 (Burnham, 2003; Burnham, Tyler and Horlyck, 2002). At this age, typically-developing Spanish-Catalan bilingual children have already acquired the phonology of their L1 and are ready to learn literacy skills. This process involves mapping a sound to a letter in a perfect one-to-one correspondence. Previous literature has shown that literacy development has positive effects for phonological awareness. Specifically, learning to read benefits the development of perceptual phonological categories for L1 sounds but, to date, it is unclear how orthographic knowledge facilitates or attenuates perceptual sensitivity to non-native sounds.

The role of orthography in foreign language (FL) speech learning is a complex one. It has been hypothesized that transparent orthographies facilitate and opaque orthographies attenuate phonological processing (Burnham, Tyler and Horlyck 2002, p. 293). Spanish-Catalan speakers learning English in classroom settings are given massive written input but they often receive little auditory exposure. This practice poses a challenge to young learners of English in that they are faced with learning the literacy skills of a transparent L1 with a one-to-one correspondence between sounds and letters (Spanish and Catalan) and coping with an opaque FL that violates the sound-letter rules of the L1. Thus, when reading English, students tend to apply the rules of the L1. This triggers inaccurate pronunciation patterns which tend to fossilize throughout the life span. Prior research in FL pronunciation outcomes in classroom settings (Gallardo del Puerto et al., 2009; García Lecumberri and Gallardo, 2003; Rallo Fabra and Garau, 2011; Rallo Fabra and Jacob, 2015), has shown the limitations of Spanish EFL learners in terms of pronunciation outcomes.

In the present study, we investigate whether the opaque nature of English is indeed a barrier for Spanish-Catalan bilinguals learning English. A group of 18 intermediate EFL adolescent learners were recorded producing a corpus of cognate and non-cognate words in two different conditions: a reading aloud task and a delayed repetition task. In the reading aloud task, the target words were presented as visual prompts in a carrier phrase. In the delayed repetition, words were presented aurally and participants repeated them after a 2-second delay followed by an audio prompt. The words were phonemically transcribed using PHON (Rose and MacWhitney, 2015). Pronunciation accuracy was measured in terms of APCC% (aligned percentage of consonant correct), APVC% (aligned percentage of vowels correct).

The results showed that the pronunciation of English consonants was neither affected by the task nor by the cognate status of the target words. In contrast, the pronunciation of vowels was influenced by both, the condition and the cognate status. Participants produced a significantly higher percentage of target-like vowels in the delayed repetition task relative to the reading aloud task. As predicted, non-cognates were pronounced more accurately than cognates. These results suggest that attention to spelling might interfere with the way learners process the phonological forms of words.

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First language interference in Spanish EFL learners' intelligibility: English rhythm in the spotlight

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Nowadays there is growing interest in the importance of oral communication skills, focusing particularly on pronunciation instruction and acquisition in English as a foreign or second language (Derwing and Munro, 2015). Suprasegmental features, and particularly rhythm, have been found to pose great difficulties among Spanish EFL/ESL learners (Flege and Bohn, 1989; Gómez González and Sánchez Roura, 2016). In line with this, Sánchez-Muñoz (2017) analyzed Spanish EFL learners' opinions on pronunciation instruction and acquisition and concluded that rhythm was perceived as the most widely encountered difficulty in pronunciation classrooms. Numerous researchers have emphasized the important role of English rhythm in speech since it is key to mastery of spoken language (Gilbert, 2008). From a pedagogical stance, researchers affirm that rhythm should gain a central role in pronunciation training (Gilbert, 2008).

Given the need for more research on suprasegmental features (Thomson and Derwing, 2015), this paper aims at analysing the intelligibility of modified English rhythmic sound stimuli by a group of Spanish EFL learners. 10 students from the language centre at the University of Murcia were randomly allocated into 2 groups and presented with modified sound stimuli to examine their intelligibility. Students were asked to transcribe the sound-stimuli heard. Group 1 transcribed a set of English rhythmic modified stimuli spoken by an English native speaker and group 2 transcribed the same recordings but spoken by Spanish native speakers with a B2-level of English to compare differences in intelligibility of stress-timed and syllable-timed English. The students' answers were analysed by scoring the number of words correctly identified and providing an index of the listener's intelligibility (Munro, Derwing and Morton, 2006). A Mann-Whitney test was conducted to compare the two groups' scores.

The results show that the performance by group 2 (syllable timed English recordings spoken by native speakers of Spanish with a B2-level of English) was significantly superior to that of group 1 (stress-timed recordings spoken by native speakers). The data suggests that intelligibility breakdowns could be attributed to rhythmical interference of the participants' native language and interlanguage processes such as L1 interference.

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Corrective feedback and unintelligibility: Do they work in tandem during tandem interactions?

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Determining the relative salience of pronunciation errors – however an error is actually defined – has been one of the recurrent themes in the field of L2 English phonetics in the past few decades (e.g. Gynan, 1985; Munro and Derwing, 2006; Jenkins, 2007; Kang, 2010). Among the criteria invoked in this context, the intelligibility of learner speech and the strength of listeners' remedial reaction to that speech feature prominently. The aim of the paper is to identify types of errors that are highlighted by our empirical studies into both these domains, carried out on the English data from the SITAF tandem corpus collected at the University of Paris 3 (Horgues and Scheuer, 2015).

The corpus contains video and audio recordings of face-to-face conversational exchanges held by 21 pairs of undergraduate students, with each such 'tandem' consisting of a native speaker of English and a native speaker of French. The tandems were recorded in two sessions separated by a 3-month interval, each time performing collaborative reading and semi-spontaneous conversation tasks (story-telling and debating) in both languages. By virtue of containing largely unscripted L1-L2 productions, the corpus offers ample opportunities for various types of analyses of NS-NNS interactions.

We have previously reported on the corrective feedback (CF) given by the native speaker to their NNS tandem partner (Horgues and Scheuer, 2018a), as well as on communication breakdowns arising from the speech of either participant (Horgues and Scheuer, 2018b). We are therefore now in a position to relate the results of both sets of studies, with a view to determining areas of convergence and divergence between them. Our main research questions are:

- (1) What is the relative share of pronunciation-related issues in the overall CF mass, compared to their relative contribution to generating communication breakdowns in our corpus data (as opposed to e.g. lexical or morphosyntactic issues)?
- (2) Which specific phonetic problems come to the fore in each analysis?

The general results point to a greater role played by pronunciation problems in impeding intelligibility than in inviting corrective feedback from the native English partner: 36% of cases where NNS speech was misunderstood appear to be due to phonetics, whereas only 20% of all CF instances targeted pronunciation. While the above statistics are not directly comparable, they nevertheless suggest that L2 phonetics affects NS-NNS communication more than the native interactants and the L2 learners may realise. As for the specific types of pronunciation errors identified in each set of studies, word stress emerges as an area largely underrepresented among the phonetic CF instances (27%) compared to communication breakdowns, where it was a trigger in the majority of pronunciation-induced cases.

We hope the results yielded by our study may have implications for further discussion of pedagogical priorities for L2 English pronunciation instruction, also by highlighting the areas of the English sound system whose role in leading to misunderstandings has perhaps been underestimated.

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Golden Speaker Builder, an interactive tool for pronunciation training: User studies

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Computer-assisted Pronunciation Training (CAPT) can provide learning opportunities that a face-to-face class cannot. The opportunities include, but are not limited to, large amounts of input, a comfortable learning environment, and the use of personalized voices (Probst, Ke and Eskenazi, 2002). Probst et al. (2002) suggest that second language learners imitating a model voice which shares features with their own voice would make pronunciation learning easier. Therefore, it seems that the type of model used in CAPT is a crucial factor in the quality of practice and the amount of uptake by language learners. This study examines the use of Golden Speaker Builder (GSB), a synthesized voice for pronunciation training that mirrors the learner's own voice, a so-called golden speaker.

We studied the progress of 15 advanced Korean learners of English who took part in three weeks of CAPT training using 24 English sentences that were synthesized for the training. Learners took part in a pretest, training, posttest and delayed posttest. Their productions of the trained sentences were rated by naïve English-speaking undergraduate students for accentedness, comprehensibility, and fluency. In addition, learners were interviewed about their experience using the training interface. Statistical analyses were based on fitting linear mixed-effects regression models to predict dependent variables (i.e. ratings of comprehensibility, fluency, and accentedness) based on their performance on the pre-test, immediate post-test, and delayed post-test. For qualitative research, learners' interviews were transcribed and coded, and these qualitative results were used to enhance the quantitative findings.

The results of the study showed a significant improvement in learners' fluency and comprehensibility at the posttest. Improvement was sustained at the delayed posttest for fluency but not for comprehensibility. Our qualitative findings supported the quantitative findings on fluency improvement because learners thought the GSB training was most helpful for their fluency.

Learners' suggestions about the GSB and our quantitative results suggest considerations for future iterations and for design features that should be improved for the GSB. Such changes include both the acoustic quality of the golden speakers and the design of the learning interface.

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Stop insertion in educated Southern British English pronunciation

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According to some phoneticians (e.g. Wells, 2011; Cruttenden, 2014), when nasal + fricative sequences are found in English words, as in *prince*, a plosive homorganic with the nasal and sharing the voicing with the fricative is inserted by many native speakers making *prince* homophonous with *prints*. Wells (2008) considers this phenomenon so common and widespread that in his *Longman Pronunciation Dictionary* numerous words are transcribed with an epenthetic stop. Other phonetic sources (e.g. Roach, 2010; Carr, 2012) do not mention this process, which suggests its marginal character. Phoneticians who do, however, discuss plosive epenthesis differ in their views concerning the details of its occurrence. Thus, controversies concern such issues as the place of articulation of the two conditioning consonants, the voicing of the fricative, the morphological structure of the words in which it takes place and the possibility of stop insertion between a lateral and a fricative, as in *false*.

The present paper attempts to verify these claims empirically on the basis of an experiment in which 30 speakers of Educated Southern British English were asked to read aloud a set of sentences containing 60 words with nasal + fricative clusters including alveolar and non-alveolar sequences, with voiced and voiceless fricatives, located in single morphemes and across morpheme boundaries. Our goal has been to establish how often stop insertion is employed by the participants as well as the contexts in which it occurs and fails to take place. The obtained results show, however, that in none of the 1800 tokens with potential plosive insertion sites has this phenomenon been observed. In other words, no participants employed this feature in any of the provided items. This can be attributed to the experimental design which involved reading the diagnostic material and not spontaneous speech or to a considerably limited use of stop epenthesis, contrary to the claims found in various phonetic sources.

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Activity-based pronunciation learning strategies - how effective are they?

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Research investigating the role of language learning strategies (LLS) in second language (L2) acquisition has attracted the attention of many scholars and language teachers since 1990s (Cohen and Macaro, 2007; Griffiths, 2008, 2013; O'Malley and Chamot, 1990; Oxford, 1990, 2011). More recently, LLS have been approached from a situated learning perspective of self-regulation. In other words, self-regulated L2 learning entails the choice of strategies that learners use in order to improve their L2 competence. This selection of LLS depends, among other factors, on the activities and the learners' goals to accomplish them (Oxford, 2017). Following this line of inquiry, scholars have already researched LLS for listening (Zeng and Goh, 2018), writing (cf. Manchón, 2018) and speaking (Pawlak, 2018). The data yielded the outcomes confirming differences in the deployment of LLS regarding more and less successful completion of specific language learning activities understood as actions "that learners do that involves them using or working with language to achieve some specific outcome" (Scrivener, 2011: 37). Despite the insightful evidence collected in the abovementioned research, little is known about the use of pronunciation learning strategies (PLS) deployed for the purposes of accomplishing specific activities for pronunciation learning. Moreover, studies investigating PLS in general, not to mention an activity-based perspective, have received little attention so far (cf. Pawlak and Szyszka, 2018).

This presentation aims to discuss the results of research that partially fills this existent gap. The study examined types of PLS used by high- and low-achieving L2 pronunciation learners, selected from the group of 64 EFL students participating in the phonetics course of Standard British pronunciation at the tertiary level in Poland, who had completed six different activities focusing on L2 vowel recognition and the broad application of the International Phonetic Alphabet (IPA). These activities prompted an indirect form of L2 pronunciation learning. They were distributed in paper along with an open-ended questionnaire eliciting the participants' PLS deployed for a specific activity. Subsequently, the individuals were tested following the same instructions but different content in order to designate high- and low-achievers in the group. The results revealed a considerable divergence in the strategy choice for different activities and a frequent use of strategy chains in both groups of high- and low-achievers. However, a wide range of PLS was evidenced only among those who accomplished the activities successfully.

The findings unquestionably inform pronunciation teaching area and programmes for PLS instruction with the intention to support the arduous process of L2 pronunciation learning.

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L2 English: Oral proficiency vs. comprehensibility and accentedness

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Second language comprehensibility (i.e. ratings on how easy or difficult a speaker is to understand) and foreign accentedness (i.e. ratings on how weak or strong foreign accent a speaker has) have been topics of numerous studies. Research has shown, for example, that comprehensibility ratings reflect actual intelligibility better than accentedness ratings (e.g. Derwing and Munro, 1999), and that comprehensibility is related to several domains of language, whereas accentedness is strongly tied with aspects of pronunciation (Saito et al., 2016). A study by Trofimovich and Isaacs (2012) sheds light on features that relate to comprehensibility and accentedness, but research with new L1 groups is needed, as results may prove different. From the point of view of language assessment, comparing overall oral proficiency with comprehensibility and accentedness would also be welcome, as research with such an approach is scarce.

This study focusses on comprehensibility and accentedness of L2 English spoken by learners from two L1 groups, which have not been previously explored in this type of research: Finnish and Finland-Swedish. The aim is to investigate whether comprehensibility and accentedness ratings reflect the speakers' overall oral proficiency, and whether there are differences between the ratings received by learners from the two language groups. If differences are found, a more in-depth investigation will be conducted to reveal factors explaining the differences.

In the present study, L1 speakers of English (n=34) rated 20-second samples of L2 English for comprehensibility and accentedness. The speakers were L1 Finnish (N=20) and L1 Swedish-speaking (N=20) teenagers from Finland, previously assessed as for their overall oral proficiency as part of a national language assessment (Härmälä et al. 2014). Half of the speakers in both language groups were A2-level speakers of English on the CEFR scale, whereas the other half were B1-level speakers. The comprehensibility and accentedness ratings were analysed in terms of how they reflect the speakers' proficiency level and whether the two language groups receive similar ratings.

The results reveal that comprehensibility and accentedness ratings reflect the speakers' proficiency level: B1-level speakers receive better scores in the ratings. Further, listeners do not differentiate between L1 Finnish and L1 Swedish-speakers' English at proficiency level A2. At the B1 level, however, L1 Swedish-speakers receive significantly better ratings compared to L1 Finnish-speakers. Hence, an equal oral skills proficiency assessment does not necessarily mean equal perceived accentedness or even comprehensibility. To conclude the presentation, I will discuss my ongoing research regarding the reasons behind the difference, including findings from a variety of pronunciation and fluency measures. Knowing the factors influencing comprehensibility and accentedness for specific L1 groups is crucial for designing pronunciation teaching, which aims for comfortable intelligibility.

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Development of learners' self-assessment of comprehensible speech in an instructed setting: A focus on second language French

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Second language (L2) learners' self-assessment in oral tasks is often weakly or not at all related to external listeners' evaluations of the same tasks (Lee and Chang, 2005; Patri, 2002), which is consistent with the theoretical views (such as the Dunning–Kruger effect) that meta-awareness is crucial for peoples' accurate evaluations of their performance (Dunning, 2005). Similar lack of alignment between learners' self-perceptions of their performance and external listeners' assessments has been reported for various aspects of pronunciation (Lappin-Fortin and Rye, 2014; Trofimovich et al., 2016), including comprehensibility (ease of understanding). This suggests that learners are often unaware of the aspects of L2 speech that make their speech comprehensible to listeners and, more importantly, that they may not readily focus on these aspects of speech through experience or training. Although training in self-reflection and self-assessment has been shown to help learners align self-evaluations with teachers' assessments (Babaii et al., 2016; Chen, 2008), there is little evidence in L2 pronunciation research about how learners' self-assessment develops in instructed settings. This study's goal was thus to examine the effectiveness of a pedagogical intervention designed to help L2 learners align their self-perception of L2 speech with the judgment of external listeners.

The learners, who included 47 speakers of L2 French from multiple language backgrounds, were enrolled in a university-level French course in a French-medium university, focusing on academic listening and speaking skills, with 32 learners in the experimental group and 15 learners in the control group. The control group proceeded with regular instruction during a 13-week term, completing three audio recordings (at the beginning, middle, and end of the term) and self-evaluating their oral performance after each. The experimental group followed the same instruction and assessment schedule but additionally—prior to the second recording and self-evaluation—also engaged in a benchmarking activity followed by peer assessment. For this activity, learners (working in small groups) were given 3–5 audio samples (30–45 seconds in length) selected from previous semesters so that they could identify which aspects of speech were associated for them with various levels of comprehensibility and could discuss what they valued as important for comprehensibility. Across both groups, self-assessment criteria included comprehensibility as well as four linguistic dimensions of speech (accuracy of vowel and consonant production, grammar accuracy, vocabulary appropriateness, and speech flow), evaluated through 100-millimeter continuous scales. The same scales were used by 10 native French speakers (all students in a French teacher training program) to evaluate all L2 learners' performances throughout the term.

Analyses focused on the L2 learners' self-assessments across the term in the experimental and control groups and the degree of convergence of the learners' self-assessments with external listeners' evaluations. Preliminary analyses indicated that the L2 learners in the experimental but not in the control

group became more aligned with external listeners in evaluation of their L2 speech for all targeted dimensions (particularly L2 comprehensibility). We discuss how these findings have implications for learner awareness of L2 speech, self-assessment, and the development of L2 pronunciation in instructed settings.

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EFL learners' and teachers attitudes towards teaching English pronunciation

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The increasing use of English in the world as a Lingua Franca (ELF) begs the need for qualified English teachers as crucial factors for a successful learning process. For years the prevalent notion has been that an ideal speaker is a native speaker of that language. However, studies have shown that the idea of a non-native speaker being a 'deficit model' with limited access to attributes possessed by a native speaker no longer works in modern world (Davies, 2004). In addition to RP or General American, the version of pronunciation taught in EFL classrooms should be a variety known under the term 'International English' (Henderson et al., 2012).

This study focuses on Croatian EFL learners' and teachers' attitudes towards their English pronunciation. It investigates students' accent and pronunciation self-awareness, the importance of their teachers' accent and pronunciation, their ability to differentiate between English accents, as well as their attitude to learning pronunciation. It also offers the teachers' perspective on their accent and pronunciation, the type of training they received, their preferred models for teaching pronunciation, the ways they approach segmental and suprasegmental levels of pronunciation, potential areas of students' pronunciation problems as well as their insights into learners' aspirations, motivations and preferences for certain varieties of English.

The participants were 152 Croatian students and 12 elementary school teachers who answered an anonymous questionnaire (adapted and based on Josipović-Smojver and Stanojević, 2013, and Pae, 2017). Likert scale (1-5) items were used, as well as yes-no questions followed by a request for more information. There were some open questions, including questions with several answers chosen from the list to obtain both qualitative and quantitative data.

The results reveal that students find pronunciation very important and want to sound as native-like as possible, which is in line with Pilus's (2013) findings, but at the same time many have no problems having a slight or sometimes even strong foreign accent. American English seems to be preferred by students when it comes to their own pronunciation, although the results show that many of them have major difficulties in differentiating between different accents and varieties of English. On the one hand, they expect their teacher to have a pronunciation close to a native-like model; on the other hand, they do not believe a native-speaker teacher would help them acquire better pronunciation. The reason may lie in students' admission that the greatest influence on their pronunciation comes from online exposure. Teachers understand the importance of a good role-model for pronunciation, recognize the value of teaching pronunciation and give pronunciation instructions (Tergujeff, 2012), but in the majority of cases their focus is somewhere else rather than on teaching pronunciation or sensitizing students to different varieties of English due to the comprehensiveness of the curriculum. These results shed light on the current pronunciation teaching and learning practices in the context of Croatian elementary schools.

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Effectiveness of teaching English prosodic features in Czech children

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Pronunciation is still regarded a “Cinderella” in teaching a foreign language (Underhill, 2013; though see Levis, 2019), and experts remark upon a continuing rift between scientific findings and pedagogical practice (Levis, 2016). Studies which have addressed the teaching of pronunciation and its effectiveness (see Thomson and Derwing, 2015 for a review) have mostly focused on adult students, whether in a naturalistic (immigrant) or educational context. Only very few studies dealt with the acquisition of pronunciation in little children, who are only just beginning to learn a foreign language.

The aim of the current study is to find how children in the first grade of primary school (in other words, children who cannot yet read) will acquire the prosodic features of English. Nowadays, the emphasis in EFL classes is usually put on speaking and writing without grammatical errors, but not as much on helping children to acquire the aspects of prosody such as rhythm and intonation. It is clear that these two aspects are especially appropriate target phenomena for such young learners. In addition, prosodic features have been shown to be of greatest importance for communication (Derwing and Rossiter, 2003). More specifically, focusing on prosodic features in class helps learners to follow more easily not only the natural melody of speech of native speakers but also their intentions, as well as connections between speaker’s ideas (Gilbert, 2008).

English lessons were part of the children’s regular curriculum at a private primary school. English lessons were held once a week, and the whole teaching day was dedicated to English (such a day included four 45-minute teaching lessons). An experimental group of 13 children aged 6-7 was recorded three times during the school year (in October, February, and May). The targeted instruction in prosody focused on both perception and production. In their production, the children attempted to imitate the pronunciation and specifically melodic and temporal patterning of the language material as closely as possible. The listening activities comprised short stories, songs and chants produced by native speakers of English. In the three test recordings, the children were asked to replicate the prosodic patterns of the chants they had learned, and also to do an elicited imitation session (Campfield and Murphy, 2014). A control group is currently being recorded which uses the same teaching materials as the experimental group but receives no regular targeted instruction in the prosodic features of English. The presentation will compare and discuss the experimental and control groups’ performance in the “mid-term” (i.e., February) recordings.

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/maɪ/ or /waɪ/? Investigating the status of the voiceless labiovelar fricative as used in American English variety

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This study was inspired by William Labov's research of rhoticity in New York City that offered evidence on the existence of the correlations between linguistic variables and social variables (Labov, 1972). As a result, the main objective of the research is to investigate the voiceless labiovelar fricative - /ɱ/ according to IPA standards – in reference to social context. It is an intriguing variable because, in many sources, it is often perceived as a regional characteristic or as a remnant of the past (Wells, 1992). However, this study attempts to investigate the actual status of the voiceless labiovelar fricative in today's American English variety by looking whether its use is dependent solely on the regional background or age of the speakers, or if it is subject to formality of the context or prestige that speakers ascribe to this feature.

The project begins with a brief overview of sociolinguistic background (Trudgill, 1975; Hudson, 2007; Romaine, 2000). Subsequently, it focuses on the complex history of the linguistic variable in question by looking at its origins, its transformation, and its spread into the American English variety (Hickey, 2004).

The study itself focuses on the analysis of the context, in which voiceless labiovelar fricative is used. Its presence in speech will be analyzed with reference to selected sociolinguistic variables, such as age of the speakers, their regional background, but also the formality of the context in which the variable was used. The subjects of the research will comprise both the speakers who use this feature as natural element of their speech, as well as actors, who adopt it for their performance.

As the study does not focus on any specific group of speakers, samples for the analysis were obtained by means of the website youglish.com, which allows for searching for videos that include a selected phrase. In the case of this study, such expressions as *why*, *while*, *whale* and *White House* were examined. From available recordings, 22 subjects were selected for further investigation. When it comes to the actors, who apply this feature in their on-screen performance, the data was obtained through my own experience. The next step included a background research of the speakers, which meant investigating their age and native region. In most cases, all the necessary data was provided online.

Then, to provide different levels of formality, two recordings of every speaker were obtained from the website youtube.com. In case of the actors, the analyzed recordings are available on the streaming service Netflix. Subsequently, the recordings were transcribed using the Google Docs Voice Typing tool available on Google Drive. This allowed for a quick formation of the written text, which was later examined for mistakes, and analyzed for the occurrences of the variable. The number of *wh*-context words and actual production of the researched feature were compared. Lastly, the qualitative data was compared with the social variables – age, regional background, formality, and prestige.

The preliminary results show a tendency towards the voiceless labiovelar fricative speakers to come from the southern states of the USA, however, it is clearly not a rule. What is more, education and formality seem to have an impact on the frequency of the feature use, and, as suggested by many sources, the study proves that age is a vital variable. Interestingly though, the feature proves to be more prevalent in the speech of male speakers.

The results of the study can not only broaden the understanding of the voiceless labiovelar fricative and its use in American English, but may also have pedagogical implications as to whether the variable should be included in the phonetics courses on American English.

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An apparent-time study of /t/-glottalization in the British Royal Family

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Numerous studies have investigated /t/-glottalization in English around the world, with a strong focus on the UK, admittedly due to the variant's considerable social visibility there (e.g. Fabricius 2002; Schleeef 2013; Smith and Holmes-Elliott 2018, and many others). It is known that glottalization today is a regular feature of General British (Cruttenden's [2014] preferred term for RP), and that it is not particularly new (contrary to popular belief; cf. Collins and Mees, 1996). However, the details of the historical rise of glottalization, and its current patterns, are not well understood for the topmost socio-economic classes due to a dearth of research. Since /t/-glottalization is a change from below, at least in south-eastern England, it can be expected to have increased during the last half-century.

The present study follows loosely in the footsteps of Harrington et al. (2000), in two respects. Firstly, it investigates the speech of two members of the Royal Family. Secondly, it uses public recorded speech. One aim is to use any available data to verify whether glottalization has indeed increased between two generations of the Royal Family, in an apparent-time design. The second aim is to study the nature and patterns of glottalization, if found.

Televised interviews with Charles, Prince of Wales, and Prince William, Duke of Cambridge were located online. Audio of the two informants' speech was harvested using Audacity, with approximately 30 minutes of sound gathered per informant. The resulting recordings were transcribed into orthographic text, and then force-aligned using the online service of the Bavarian Archive for Speech Signals (Kisler et al., 2017). Regular expressions were employed to locate the contexts for glottalization valid for General British as per e.g. Cruttenden (2014); importantly, the word-final pre-vocalic /t/ was not included as a possible environment. This resulted in 580 possible environments for Prince Charles, and 624 for Prince William.

Each token was assessed impressionistically, and in case of any doubts, the spectrogram and waveform were inspected in Praat (Boersma and Weenink, 2018) for symptoms of glottalization (chiefly irregular glottal pulsing). Also, any inherently variable environments that were not identifiable automatically (e.g. pre-pausal ones) were assessed at this stage. Each token was coded as glottalized, non-glottalized or uncertain.

There was a clear difference between the two informants both in overall levels of glottalization, and in the contexts that favoured it. For Prince Charles, the overall rate was 17%, and /t/-glottalization was most likely before a plosive. For Prince William, the overall rate was 63%, with plosives, fricatives and /l/ as the three leading classes of following triggering context, which is roughly in line with studies such as Fabricius (2002).

It can be concluded that /t/-glottalization is in the final stages of the S-curve, having reached the topmost social strata within William's generation. The extent to which /t/-glottalization is a conscious attempt at more "popular" speech patterns can be studied by comparison with other Royals, in particular Prince Harry. In any event, the clear pedagogical implication is that glottalization needs a firmer presence in EFL teaching.

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Effectiveness of auditory training on improving English vowel identification in Cantonese-speaking learners

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Previous studies reported that intensive high variability perceptual training that used vowels produced by multiple speakers in multiple contexts significantly improve L2 vowel acquisition (Nishi and Kewley-Port, 2007). The training effect can be generalized to new words and new speakers (Lively et al., 1993; Nishi and Kewley-Port, 2007).

This study compared five high variability training programs in improving the identification of American English vowels in monosyllabic words in adult Cantonese speakers. Cantonese speakers have persistent difficulty learning English phonemes (Poon, 2009; Hung, 2000), particularly English vowel pairs with tense and lax contrasts (Chan, 2011; Chan, 2012). 85 (17-42 years old) native Cantonese speakers who did not identify 9 to 10 English vowels with 100% accuracy in a pretest were assigned to five training programs. Two “non-focused” groups received auditory training of the 10 vowels. One “focused” group received perceptually training on 5 pairs of confusing vowels. Two “hybrid” groups received both focused and non-focused training. One focused group and one hybrid group watched videos on the articulation of the vowels (i.e., tongue height, tongue advancement, lip rounding and vowel duration) in lieu of 2 blocks of auditory training. All participants attended five testing sessions and 10 training sessions. In the testing sessions, real words and pseudo words different from the training words produced by two speakers were presented for identification. In each training session, participants identified the vowels produced in novel words in 6 consonantal contexts (e.g., /z_mə/, /t_fə/) by five native speakers different from those in testing. Feedback of correct/incorrect was presented for each trial. When making a mistake, participants listened to the stimuli and the incorrectly selected vowel two times.

Results show that before training, no significant differences were found in English vowel identification accuracy among the five groups of participants and between the two pretest sessions. Mean vowel identification accuracy for the five groups ranged from 33%-37%. After training, mean accuracy of the five groups on the real and pseudo words ranged from 44%-53% and 40%-53%, respectively. After training, all five groups improved in vowel identification in untrained real words ($p < 0.05$, $r = 0.21$ -0.62). All groups but the focused group also improved significantly in untrained pseudo words ($p < 0.001$, $r = 0.44$ -0.69). The effects were retained 2 months later, except that the hybrid group without watching the articulation videos did not retain the effect in untrained pseudo words one month after training (Test 5 poorer than Test 4: $p = .01$, $r = .032$, Test 5 was not different from Test 1: $p = .051$, $r = .45$). Lax vowels remained more difficult to identify than tense vowels.

It can be concluded that after 10 training sessions, different intensive perceptual programs improved English vowel identification in Cantonese-speaking adults who had persistent difficulty identifying almost all English vowels. Training programs that provided articulation information and incorporate different perceptual training methods were relatively more effective. Yet, identification of most vowels had not reached ceiling after training. Future research is needed to explore training methods that can further improve L2 phoneme acquisition.

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POSTER PRESENTATIONS

Examining the interplay of individual learner differences and comprehensibility in L2 pronunciation

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The interrelationships of critical factors of individual learner differences (ILD) involved in the development of L2 pronunciation comprehensibility have been attracting scholarly attention in the past few years (Oxford, 2017; Pawlak and Szyszka, 2018), with some investigating the role of motivation in the learning process (Nagle, 2018; Saito, Dewaele, Abe and In'nami, 2018) and others exploring learning strategies as a significant predictor of pronunciation performance (Baker-Smemoe and Haslam, 2013; Sardegna, Lee and Kusey, 2017; Szyszka 2017). L2 pronunciation research in the last decade, however, indicates that only scant attention was paid to the mediating role of ILD, with the empirical evidence being scarce and inconclusive. Thus, there is an urgent need for more studies that would examine the role of ILD variables, as well as combination of the variables with respect to L2 pronunciation comprehensibility.

This study challenges the significant possibility that unveils the mechanisms through which L2 learners regulate their motivation and learning strategies, drawing upon the theoretical framework of self-regulated learning (SRL, Oxford, 2017) among 120 Japanese adolescent learners of EFL (Abe, in progress). SRL is defined as the notion in which “self-regulation of academic learning is a multidimensional construct, including cognitive, metacognitive, motivational, behavioral, and environmental process that learners can apply to enhance academic achievement” (Dörnyei, 2005, p. 191). Whilst it is critical that we understand why learners learn L2 pronunciation (e.g. motivated learning of L2 speech) and how they actually do so (e.g. strategic processes of learning L2 pronunciation), it is probably even more important to explore how these ‘why’ and ‘how’ factors work together. Accordingly, two major research questions have been formulated:

- RQ1: What structural model best represent the relation among motivation, the use of strategies and the comprehensibility?
- RQ2: Do the EFL pronunciation strategies for SRL predict the comprehensibility of L2 pronunciation?

The data are collected via a questionnaire, assessing learners’ SRL towards L2 English pronunciation learning, and an examination of L2 pronunciation comprehensibility, both of which are submitted to structural equation modeling (SEM) : a multivariate statistical analysis capable of revealing the multiple and complex relationships among observed and/or latent variables, under a hypothesized theoretical model, with the goal of establishing the extent to which the hypothesized model is supported by the response data. The empirical evidence lends preliminary support (1) that L2 pronunciation learning is a proactive process including motivation to learn pronunciation and an active use of cognitive pronunciation-learning strategies; and (2) that learning strategies play a mediating role in the effect of motivation on the attainment of comprehensibility.

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Vowel reduction in English function words: The case of Macedonian EFL learners

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The phenomenon of vowel reduction in the English language affects speech patterns leading some function words to have several pronunciation variants (strong and weak forms) in rapid speech. These being regarded as a key element of the English phonology (Rogerson-Revell, 2011) and studies pointing towards the lack of differentiation between stressed and unstressed syllables resulting in the inability to produce a correct weak form (Kirkova-Naskova, 2009) motivated the research into the pronunciation variants of the following English function word classes: auxiliary and modal verbs, pronouns, prepositions, conjunctions and the adverb *just* as pronounced by Macedonian EFL learners.

While the initial research aim was to determine which function word classes were more commonly used with their correct weak forms in connected speech, the results revealed a tendency for the vowel reduction to be affected by the vowel itself rather than the word class. Most correct weak form occurrences were noticed among the grammatical words containing strong vowels /ɒ/ in *was*, *of*, *because* and /ʌ/ in *does*, *us*, *some*, *but*, *just*. It seems that speakers have a more relaxed articulation, requiring less effort, in utterances containing words other than information carrying ones, and due to the two vowels' close proximity to the central schwa vowel /ə/, /ɒ/ and /ʌ/ more easily shift towards a centralized position (van Bergem, 1991). However, this was not applicable to every test word (*must* and *from* were the exception) nor was the strong vowel /æ/ replaced by the correct schwa vowel in *have*, *has*, *had*, *am*, *can*, *shall*, *that*, *than*, *and*, *at*, *as*. Here, a compensatory mid open /e/ was used to offset the near open /æ/.

These results, together with the low number of weak form occurrences among the rest of the tested function words, underline the importance of addressing the issue of vowel reduction in the English classroom since the weak forms are a result of the manner in which the language handles unstressed syllables (Dalton and Seidlhofer, 1994).

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Comprehensibility of international teaching assistants at a U.S. University

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This poster will present the basic aims and work-in-progress of a research study being conducted under the auspices of Columbia University. It proposes to address two questions:

1. What are the features of American English pronunciation in International Teaching Assistants (ITAs) that have the greatest impact on comprehensibility for a diverse group of students at a large U.S. university?
2. Does the language background of these students have an effect on their ratings of comprehensibility?

The data collected will be of both quantitative and qualitative nature. Using video samples, participants are asked to rate teaching assistants on a 9-point scale (Munro and Derwing, 2006). They will also list any languages that they speak well. Participants are then interviewed after each video viewing to test understanding of content and provide feedback on why certain scores were given, and specifically which features of the ITA's speech helped or hindered comprehensibility. They will be asked if the perceived L1 influence of the speakers' English was easier for them to understand based on the languages that themselves speak well. For analysis of the quantitative results, a mixed random coefficient model – MRCM (Kang, 2012) will be used to model the effects of the rater characteristics and speech features in one regression equation. The interview data will be used to substantiate and explain quantitative results. The end goal is to aid International Teaching Assistants and their instructors in effective practices. The resulting conclusions may assist them as they work on improved comprehensibility and effectiveness in their instruction with a diverse community of students/English users in an academic setting. As the data analysis is ongoing, and will not be completed by May, the poster will present some preliminary quantitative data based on analysis of the 9-point scale ratings per speaker.

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Production of English (L2) and Russian (L3) consonant clusters by Chinese learners

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The present study investigates the production of English (L2) and Russian (L3) onset consonant clusters by Chinese learners. Specifically, it examines the factors which are argued to play a role in the L2 acquisition of onset clusters: L1 transfer, typological markedness, and the role of the sonority distance between the two segments.

According to the Contrastive Analysis Hypothesis (CAH), the difficulty in the acquisition of an L2 can be predicted on the basis of L1 transfer (Lado 1957). The Markedness Differential Hypothesis (MDH) claims that the more marked the differences between the L1 and L2, the greater the difficulty there would be for acquisition (Eckman 1987). The sonority-based theory maintains that the higher the minimal sonority setting of a consonant string, the easier it is to acquire (Broselow and Finer 1991).

To test these hypotheses, we examined the production of English and Russian onset consonant clusters by Chinese learners. The English stimuli were monosyllabic nonce words with the following onsets: [voiced stop-liquid], [voiceless stop-liquid], and [voiceless fricative-liquid] clusters. The Russian stimuli contained [voiceless stop-voiceless stop], [voiceless stop-nasal], and [voiced fricative-nasal] onset clusters. The subjects were asked to read the items presented as new English and Russian words. Their productions were recorded and analyzed for pronunciation by two phonetically-trained linguists. The only possible onset cluster in Chinese is CG (C=consonant, G=glide) so that according to the CAH, all the clusters should be treated in the same way by Chinese learners, which is not borne out by the results of the study: different clusters present a different degree of difficulty for the subjects. The results of the multinomial regression model reveal that the type of the cluster significantly contributes to production results ($p < 0.001$).

With regard to *obstruent-liquid* clusters, the findings of our study demonstrate the following pattern (clusters to the right of > are more marked): [voiced stop-liquid] > [voiceless stop-liquid] > [voiceless fricative-liquid] clusters. The MDH predicts the following markedness hierarchy: [voiceless fricative-liquid] > [voiced stop-liquid] > [voiceless stop-liquid] clusters. According to the sonority theory, the proposed hierarchy of difficulty with respect to our data set looks as follows: [voiceless stop-voiceless stop] > [voiced fricative-nasal] > [voiceless stop-nasal] > [voiceless fricative-liquid] > [voiced stop-liquid] > [voiceless stop-liquid]. The results of the study deviate from the predicted pattern and can be ranged from most to least marked as follows: [stop-stop] > [voiced stop-liquid] > [voiceless stop-liquid/nasal] > [voiced fricative-nasal], [voiceless fricative-liquid].

The findings only partially support the MDH and the sonority theory: first, the most difficult cluster to acquire turned out to be a sequence of voiceless stops with epenthesis being the most common repair strategy; second, [voiced stop-liquid] clusters were more difficult to produce than [voiceless stop-liquid] clusters. However, contrary to the predictions, *fricative-liquid/nasal* sequences were characterized by more target-like pronunciations than *stop-liquid/nasal* sequences.

Unmarkedness of [fricative-sonorant] clusters was also observed in other studies (e.g., Morelli 1998, Chan 2006). To account for the results of the present study, we resort to the phonology of perceptibility effects (Steriade 2008) and argue that [fricative-sonorant] clusters are less marked compared to [stop-sonorant] clusters.

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Macedonian teachers' perspectives on English pronunciation teaching in EFL context

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In the broader context of pronunciation teaching research many studies have shown that pronunciation is a neglected area (Kelly, 1969; Isaacs, 2009; Lang, Weng, Shen and Wang, 2012; Henderson et al., 2012; Kirkova-Naskova et al. 2013; Henderson et al. 2015) with very few studies investigating the Macedonian context. These include the EPTiES series of papers which investigated the teaching practices in seven European countries, one of them being Macedonia (Henderson et al., 2012; Kirkova-Naskova et al. 2013; Henderson et al., 2015). This study aims to further examine teachers' perspectives towards pronunciation in the Macedonian educational system, more specifically to investigate the extent to which pronunciation is taught in Macedonia across different levels of education (primary, secondary and university level) and to examine teachers' approaches and beliefs.

The participants in the study were 25 teachers and university professors teaching in institutions across the abovementioned levels of education in Macedonia. Data was collected through anonymous Qualtrics survey distributed through social media. The survey was divided into two parts; in the first part, the teachers were given basic background questions concerning the level of students they work with, their educational background, familiarity with other languages, residency in a native-speaking country, etc. The second part included 18 questions regarding teachers' approaches towards pronunciation. This part included questions related to the pronunciation training they had received, the extent to which they incorporate pronunciation in their classrooms, whether they focus on segmentals/suprasegmentals, etc. Other questions addressed the use of materials and resources in EFL classroom (books, computer-assisted pronunciation training – CAPT, etc). Finally, the last set of questions touched upon the teachers' personal perspectives on accentedness, intelligibility, and identity issues.

Results show that pronunciation is seriously neglected in the Macedonian educational system. Pronunciation is least taught in primary schools, to some extent in secondary schools and to a larger extent at university level, which is the only instance when learners encounter pronunciation through phonetics and phonology courses. These courses, however, mainly focus on IPA and written transcription and do not provide specific instructions on teaching pronunciation. The EFL teachers reported lack of training and resources, as well as lack of time and most often, very large classes and difficulties in providing individual feedback. They also reported that the textbooks rarely have sections that focus on pronunciation, in addition to their lack of technology for using CAPT. In general, their attitude towards teaching pronunciation was positive but their perspectives towards accentedness and intelligibility were divided.

The study sheds light on the place pronunciation has in the instruction of English as a foreign language in the Macedonian educational system. At the same time, it detected the teachers' needs regarding training and resources to teach pronunciation in the EFL classroom. The pedagogical implications arising from this study point out that there is a need for reconsidering the place of pronunciation in English classes and the ways teachers approach pronunciation teaching.

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To what extent do phonological and non-phonological factors affect Hungarian learners' perception and production of English word stress patterns?

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The acquisition of English word stress patterns causes considerable difficulties for Hungarian learners of English (Nádasdy 2006), which is mainly rooted in the typological difference between the two languages, Hungarian being a syllable-timed language, while English has stress-timed rhythm (considering the debates about this model of isochrony described in Barrera-Pardo, 2008; Marks, 1999; Roach, 1982; etc. are beyond the scope of the paper, and the syllable-timed vs. stress-timed distinction is retained to highlight the complete lack of vowel reduction in Hungarian, which is the main source of the difficulties). Furthermore, as Hungarian has fixed stress on the the first syllable of words, and stress cannot be responsible for meaning contrasts within a morpheme (Siptár and Törkenczy, 2000), even the perception of English stress may be highly problematic for Hungarians: it may happen that learners perceive no differences in stress levels in English words, and thus are unable to distinguish between stress minimal pairs like *import* (v.) /ɪm'pɔ:t/ and *import* (n.) /'ɪmpɔ:t/ and generally have problems with the pronunciation of words with non-initial stress. This phenomenon is dubbed “stress deafness” (Dupoux et al., 1997), and is of particular interest in the contact of a Hungarian substrate and an English superstrate due to the above-mentioned issues.

This paper examines the factors affecting the acquisition of English word stress patterns by Hungarian learners of English, from the point of view of both perception and production. The analysis is based on Coetzee's (2016) model of phonological variation, according to which the possible variants in a pronunciation variety are determined by grammatical factors, and non-grammatical factors only contribute to the frequency of the variants. The grammatical (phonological) factors examined in the paper are transfer or interference and syllable weight, and the non-grammatical factors chosen are proficiency level, lexical bias, exposure to explicit pronunciation instruction, and musical aptitude or musicality. The relationship between musicality and foreign language pronunciation skills have been proved in numerous studies (e.g., Dolman and Spring, 2014; Gralińska-Brawata and Rybińska, 2017; Milovanov et al., 2010; etc.), and in the case under scrutiny I claim the effect of musicality to be especially decisive, as pitch plays an important role in determining English stress levels, and pitch perception is one of the components of musicality.

In the light of Coetzee's (2016) model, the paper aims to prove the following claims based on the examination of ten pre-intermediate (14-16 years old) and ten advanced learners (18-20 years old):

1. On pre-intermediate level and/or prior to exposure to explicit instruction, the perception and production of English word stress patterns are mostly determined by L1 transfer.
2. On advanced level the effect of syllable weight gains ground, which may even lead to hypercorrections.
3. Irrespective of proficiency level and exposure to explicit instruction, the degree of musicality positively correlates with the degree of the correct perception and production of stress.
4. The effect of lexical bias is able to override the effect of all other factors (both phonological and non-phonological).

The data collection instruments include a stress perception task (“underline the stressed syllable in the words you hear”) and a stress production task (“listen and repeat the words you hear”), both involving existing words and nonsense words with various stress patterns, as well as a musical aptitude test (viz. Jake Mandell's).

The results indicate that phonological and non-phonological factors govern variation in foreign language pronunciation acquisition in the same way as in native patterns.

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The intonation contour of non-finality revisited: Implications for ESL teaching

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Previous research shows that English prosody is difficult to master for L2 learners of English (Grosser 1993, Gut 2009, amongst others) and this for different reasons (attitudinal function, type of discourse, context, *etc.*). Herment *et al.* (2014) show that one of the main difficulties for French ESL learners does not concern the form of the nuclear contour. They show that French speakers of English have a tendency to assign a rising pitch movement at the end of prosodic words, which leads to a clear difference in rhythm as compared to natives. It is all the more difficult for learners as it is generally admitted that an incomplete statement will be realized with a rising contour. According to Wells (2006), non-finality is signaled by a non-fall, *i.e.* a rise or a fall-rise. Cruttenden (2014) reports that the falling tone is the most common in British English (50%), followed by the rising tone and the fall-rise (40%). However, he notes that in reading, rises and fall-rises are more frequently used to indicate that a sentence is not finished.

We tested these assumptions on the ANGLISH corpus (Tortel, 2008), which is a collection of read speech, repeated sentences and monologues recorded by 20 native English and 40 French learners of English divided into 2 groups (beginners and advanced). We examined the productions of 10 native English female speakers and compared two speaking styles: read speech and spontaneous monologues. In total, 40 read short stories (200 sentences, statements) and 10 monologues were analysed, which represents 8.52 min of read speech and about 23 min. of natural speech. For this study, the theoretical framework chosen is the British school of intonation, following the idea that a configurational approach is better adapted to teaching (see Herment, 2018). Gussenhoven (1983, 1984)'s tri-tonal approach is followed: fall (F), rise (R) and fall-rise (FR) are distinguished.

For native speakers, the results for the reading task show that the most common tone for statements is the falling tone with 70,95% of falls, followed by 14,79% of rises and 13,97% of fall-rises. Concerning non-final statements, we found that out of 142 tone units, 78% were produced with a fall. Contrary to what is generally admitted, the rising tone is not the most common contour for incomplete statements as only 22% were found. It is to be noted that rising tones are much more frequent in spontaneous speech, which induces that the type of speech has to be taken into account.

Our findings on the read speech have important pedagogical implications for French ESL learners. The teacher should encourage them to produce falling patterns in non-final statements, so as to help them avoid realizing those typically French rising contours on small units. More generally, this should constitute a guideline for teaching English intonation.

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