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SOUNDS AND MELODIES UNHEARD: ESSAYS IN MEMORY OF RASTISLAV ŠUŠTARŠIČ

Neslišani glasovi in melodije: razprave v spomin Rastislavu Šuštaršiču

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IN MEMORIAM

RASTISLAV ŠUŠTARŠIČ
(1953–2014)

FOREWORD

This special issue of *Linguistica* is dedicated to the late Professor Rastislav Šuštaršič, who spent most of his career in the English Department at the Faculty of Arts, University of Ljubljana, researching and teaching English phonetics and phonology. Rastko was an inspired teacher, trusted colleague, and dear friend. His loss was felt by many – the guest editors of this volume were deeply moved by the response to the call for papers published for this issue. This is also reflected in the number and variety of the contributions that were submitted in his memory.

The special issue opens with a section on Professor Šuštaršič's life and work, as presented by Smiljana Komar ("Professor Rastislav Šuštaršič (24 October 1953 – 2 March 2014")), Vesna Požgaj Hadži and Tatjana Balažic Bulc ("Rastislav Šuštaršič and Current Issues of Standard Slovene Language"), and Kristina Pegan Vičič ("Rastislav Šuštaršič: Bibliography"). The introductory section is followed by a selection of twenty-three articles that, in various ways, mirror Professor Šuštaršič's academic interests. They encompass works on segmental phonetics, prosody, teaching of pronunciation, phonology, dialectal variation, lexicography, and speech audiometry. The papers in the volume are arranged in alphabetical order by author, although they could also be grouped by their content.

Five authors present their work on segmental phonetics. Biljana Čubrović writes about "The Acoustic Characteristics of Non-native American English Vowels" in native speakers of Serbian who live in the United States. Damir Horga ("The Influence of the Assimilation Operator, Speech Rate and Linguistic Boundary on the Production of /z/ in Croatian") analyses the coarticulation of Croatian /z/ with /s/, /z/, /š/ and /ž/ in connected text. Smiljana Komar's "The Relationship between the Perception and Production of Four General British Vowels by Slovene University Students of English" presents a production study examining the influence of orthography and phonemic transcription on the production of GB vowels. A treatise on the BATH words is presented by Inger M. Mees and Christina Høøck Osorno in their contribution "The Complexity of BATH Words in Cardiff English" – the authors examine this issue in terms of the speakers' social class and age/time differentiation. Finally, Brian Mott contributes a discussion on the different approaches to defining the syllable ("Approaches to the Syllable: An Assessment").

Prosody and prosody-related phenomena are the focus of six articles. In the article "Unruly Intonation" by Michael Ashby and Patricia Ashby, the value of the rules concerning intonation for English learners is re-examined. Damjan Huber explores the characteristics of sentence stress in the speech of politicians ("Sentence Stress in Slovene Media Speech"). In the article titled "Prosody and Paralanguage in Speech and the Social Media: The Vocal and Graphic Realisation of Affective Meaning," Alan James uses corpora to present how prosodic and paralinguistic features are mirrored in the 'graphic' modality of text messaging and microblogging. A contrastive analysis of English and Slovenian adjectives is tackled by Monika Kavalir, who investigates the differences in the prosody of adjectival structures ("Prosody and Absolute vs. Relative Uses of English and Slovene Adjectives"). How prosody can become a significant part of the paralinguistic information in conversation is

explored by Barbara Pihler Ciglič in her article "The Role of Prosody in the Expression of Irony in Spanish." Another facet of prosody is addressed by Andrej Stopar, who in his article "The Prosody of Focus: Non-Contrastive, Contrastive and Verum Focus in Slovenian, English and Russian" discusses the intonation contours of different types of focus.

The seven contributions on the value of teaching pronunciation include the work by Gwen Brekelmans, who, in her article "The Value of Phonetics and Pronunciation Teaching for Advanced Learners of English," looks into English pronunciation stability and the problematic pronunciation features for Dutch learners. Eva Estebas-Vilaplana contributed the article "The Teaching and Learning of L2 English Intonation in a Distance Education Environment: TL_ToBI vs. the Traditional Models," in which she presents how using an adapted version of ToBI can be beneficial in a distance learning context. Nataša Hirci embarks on a quest to identify Slovenian trainee translators' views on the pronunciation of English, in an article titled "Investigating Trainee Translators' Views on the Pronunciation of English: A Slovene Perspective." Various aspects of pronunciation teaching in an L2 classroom are also addressed in the article "Teaching pronunciation in Spanish/FL A1–B2 Textbooks" by Marjana Šifrar Kalan, who analyses a set of pronunciation tasks in Spanish textbooks. The suitability of similar tasks in French textbooks is examined by Meta Lah in her contribution "'You Have a Bit of an Accent' – Teaching Pronunciation to Slovenian Learners of French as a Foreign Language." The teaching of pronunciation is also the focus of the contribution co-authored by Blažka Müller Pograjc and Jasmina Markič, "Nasal Vowels and Diphthongs in European Portuguese: A Problem for Slovene Speakers," in which the authors reveal how L1/L2 differences can affect the production of nasal vowels. The importance of long-term, systematic and intensive phonological competence development programmes is also highlighted in Anja Zorman's contribution "Phonological Competence Development in Italian as Second/Foreign Language."

The topics covered by the remaining five articles in the special issue are varied. Jasmina Markič contributes the text "Phonetic and Phonological Aspects of Colombian Spanish," which presents some phonetic and phonological characteristics of Colombian Spanish. Tatjana Marvin, Jure Derganc and Saba Battelino present a treatment of the Freiburg word test for Slovenian used in speech audiometry ("Adapting the Freiburg Monosyllabic Word Test for Slovenian"). Katarina Podbevšek's "The Expressive Potential in a Dramatic Text: Brecht's *A Respectable Wedding*" discusses the expression of speech intention in plays. Sonia Vaupot's contribution "Phonetic and Phonological Characteristics of French Spoken in Europe and Quebec" highlights some features of French in Quebec. Finally, in their article "A Brief Historical Overview of Pronunciations of English in Dictionaries" Jack Windsor Lewis and Inger M. Mees present on overview of the evolution of pronunciation in British English dictionaries.

The guest editors would like to thank the authors for their contributions and the reviewers for their dedicated help in reviewing and improving the papers. We would also like to express our gratitude to the journal editor, the publisher and the proof-readers for their help and patience.

Smiljana Komar and Andrej Stopar
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PROFESSOR RASTISLAV ŠUŠTARŠIČ
(24 October 1953–2 March 2014)

Rastislav Šuštaršič, Professor of English language at the English Department, Faculty of Arts, University of Ljubljana, passed away in the early hours of the first Sunday in March 2014 after a short but severe illness. We lost a specialist in general phonetics and phonology, an expert in English pronunciation and prosody, respected colleague and very dear friend.

Rastislav Šuštaršič was born in Ljubljana, where he attended the elementary and secondary school as well as the Faculty of Arts, University of Ljubljana. In 1978 he graduated in English language and literature and French language and literature. Nine years afterwards he joined his former professors at the English department and continued his post-graduate studies in linguistics. In 1989 he defended his M.A. thesis entitled *Borrowing of English Dictionary Entries into Slovene – Phonological Adaptation*. In 1993 he defended his doctoral dissertation, entitled *Contrastive Analysis of English and Slovene Sentence Intonation,* which was dedicated to the elusive phenomenon of prosody and was the first contrastive study of its kind in Slovenia. In 2006 he became a Professor of the English language.

The research work of Professor Šuštaršič was ground-breaking in the field of contrastive analysis of English and Slovene phonology and phonetics. In his doctoral dissertation he tried the seemingly impossible and compared two prosodic systems which have little in common. In his later studies he preferred less elusive and more tangible topics, which included research in acoustic phonetics and general phonology. A large amount of his research was dedicated to finding the most efficient and effective ways of transmitting research findings in teaching practice. Years of intensive and varied research culminated in his monograph entitled *English-Slovene Contrastive Phonetic and Phonemic Analysis and Its Application in Teaching English Phonetics and Phonology.* This is a meaningful and carefully written work which focuses on general, acoustic, perceptive and articulatory phonetics and phonology. Its added value is the application of theoretical and empirical findings to the teaching of English pronunciation at all levels of the education system.

As a teacher, Professor Šuštaršič was highly professional and exacting, yet was able to spice up his classes on English pronunciation with humour and wit. He often found examples whose pronunciation-based puns remained in the memory for a long time. He was very popular with his students due to his honest, impartial and fair attitude.

Rastko was a reliable and trust-worthy colleague, with a noble and deeply humane attitude to all. He was a caring advisor, who always tried to find the best possible solution to our problems and concerns. My close working relation with Rastko very soon developed into a sincere friendship. Although we both worked in the same field, we were not rivals. On the contrary, we studied together and shared experiences. Our cooperation was pleasant, educational and creative.

Those who deserve to stay forever, depart too soon. Rastko was loved by his colleagues and admired by his students. We miss him at work and in free time. Those

of us who knew him well were enriched by him. Personally, I remain grateful to Rastko for his friendship and professional support, which lasted nearly a quarter of a century.

Smiljana Komar

Vesna Požgaj Hadži[*]
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RASTISLAV ŠUŠTARŠIČ AND CURRENT ISSUES OF STANDARD SLOVENE LANGUAGE

1 INTRODUCTION

Language from the inside and *language from the outside* are two different approaches to the study of language. The first (native) language is most commonly studied through *the view from the inside*, which also applies to the studies of the standard Slovene language. However, *the view from the outside*, i.e. the view from the position of a foreign/second language enables new and different understandings of language. One of scientific and research methods offering such a view is contrastive linguistics, which was used in the research carried out by Rastislav Šuštaršič, who we dedicate this paper to.

Contrastive studies of languages in contact have a rich tradition in Croatia, since they started back in the 1960s with the studies of Croatian (Serbo-Croatian) and foreign languages conducted under the supervision of R. Filipović, the doyen of contrastive linguistics, in today's Institute of linguistics at the Faculty of Philosophy, University of Zagreb. Up until the 1990s these studies were associated with three main themes: contrastive analysis, languages in contact, and a series of small phraseological dictionaries of Croatian and foreign languages. The synthesis of these studies is represented by a collection of papers (Filipović 1985; Filipović/Bratanić 1990; Ivir/Kalogjera 1991) where the authors deal with synchronic and diachronic studies of languages in contact at all language levels (phonetic and phonological, morphological, syntactic, lexical, phraseological, pragmatic, sociolinguistic, and so on). When it comes to the phonetic and phonological level, which is of interest to us in this paper, we should emphasize the *Zagreb Phonetic School*. Within this school numerous authors (P. Guberina, I. Škarić, B. Vuletić, M. Pozojević-Trivanović, D. Horga, V. Josipović, N. Desnica-Žerjavić et al.) investigated, both theoretically and experimentally, the system of phonetic errors in foreign languages in comparison with Croatian (*cf.* Požgaj Hadži/Balažic Bulc 2012: 15–19). As opposed to Croatia, contrastive linguistics in Slovenia did not become a common approach until as late as the 1980s, when papers on Slovene-(Serbo)Croatian contrastivity emerged. In these papers authors like V. Kalenić, J. Dular and others identify the similarities and differences between language systems and underline possible errors, while neglecting the analysis of errors. Experimental studies of different language levels of the (Serbo)Croatian and Slovene languages, one of which is phonetic and phonological, started in the mid-1980s within the projects of the Scientific

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Research Institute of the Faculty of Arts at the University of Ljubljana (Požgaj Hadži 2002: 25–33). In the second half of the 1990s they expanded to sociolinguistic and corpus themes (*cf.* Požgaj Hadži/Balažic Bulc 2012: 17–21).

It is interesting to note that phonetic and phonological levels have always been neglected, or even omitted, in contrastive studies of languages in contact. In contrast to the studies of other language levels (morphological, syntactic, lexical), a series of experimental limitations is linked to phonetic and phonological levels, especially related to spoken language. Taking into consideration the learning and teaching of foreign or second languages, and even the first language (especially its pronunciation or error correction), not enough attention was given to the phonetic level for a number of reasons. For example, it is the most difficult part of language learning, communication is possible despite bad pronunciation, and numerous teachers have never mastered pronunciation of the language they teach (*cf.* Požgaj Hadži et al. 2007: 97–98).

2 SLOVENE-CROATIAN PHONETIC AND PHONOLOGICAL CONTRASTIVE RESEARCH

A lack of systematic research at the phonetic and phonological level of the Croatian and Slovene languages, together with insufficient equipment for such research at the Faculty of Arts in Ljubljana, encouraged us to start working in teams on the two projects based on The Agreement on Slovene-Croatian Bilateral Cooperation in the Field of Science and Technology, as well as *Slovene-Croatian Phonetic and Phonological Relation*s (2000–2002) and *Croatian and Slovene in Psycholinguistic and Sociolinguistic Contact* (2004–2005). The partner institutions within these projects include the Faculty of Arts, University of Ljubljana and the Faculty of Philosophy, University of Zagreb, with the two project leaders of D. Horga from the Department of Phonetics in Zagreb and V. Požgaj Hadži from the Department of Slavistics in Ljubljana, along with many other researchers.[1] In addition, the Department of Phonetics in Zagreb celebrated its 50th anniversary in 2014; hence it has a rich tradition, especially in scientific and research work, which was from the very beginning both experimental and interdisciplinary. In contrast, there is no Department of Phonetics at the Faculty of Arts in Ljubljana; instead, the courses related to phonetics and phonology are taught at different departments, one of the most prominent being the Department of English, where R. Šuštaršič taught different courses on general and English phonetics and phonology, contrastive and acoustic phonetics, speech sound acquisition, and more. The

1 The researchers from Zagreb were mainly from the Department of Phonetics, namely, J. Bakran, I. Ivas, N. Lazić, M. Liker, E. Pletikos, I. Škarić, G. Varošanec-Škarić; but also N. Desnica-Žerjavić from the Department of Romance languages and literature; V. Erdeljac from the Department of Linguistics and V. Josipović from the Department of English Language and Literature. The researchers from Ljubljana were from different departments: S. Komar and R. Šuštaršič from the Department of English, J. Markič and P. Vitez from the Department of Romance Languages and Literatures, H. Tivadar from the Department of Slovene Studies and T. Balažic Bulc and E. Premk from the Department of Slavistics.

above-mentioned projects are significant, because of the network of researchers from different departments at the two institutions, the exchange of experiences, and above all, the joint work on particular research topics, for which we mainly used the equipped laboratories at the Department of Phonetics in Zagreb.

2.1 Slovene-Croatian Phonetic and Phonological Relations

As was already emphasized, there was no systematic research in Slovenia related to the phonetic and phonological relations of the Croatian and Slovene language until the year 2000; therefore, we wanted to explore these issues further within three main themes of the first bilateral project (2000–2002), entitled *Slovene-Croatian Phonetic and Phonological Relations*.

Within the first theme – describing the phonetic and phonological features of the Croatian and Slovene languages separately and then comparing them – the following relations were observed: a) the previous phonological descriptions of Croatian and Slovene[2] were systematically and critically reviewed and a potentially new description was proposed; b) the previous acoustic descriptions of Croatian and Slovene were compared and new segments which were not completely described were added (e.g. prosody); c) the fluctuations in standard prosody were investigated, specifically, the system of four pitch accents in Croatian and the dynamic and tonemic accentuation in Slovene; d) the system of intonation nucleus was explored at the level of sentence and discourse, and e) the relationship between lexical and phonetic words was investigated in connected speech. Within the second theme we observed a contact between two languages in the process of learning Croatian, in particular when Slovene or Croatian native speakers learn it, in the following two ways: a) by examining the system of phonetic errors of two languages when they get in contact in different ways, whether it is learnt or imitated experimentally; and b) by investigating the ways of phonetic and phonological adaptation of foreign proper names in both languages. Within the third theme, using the same theoretical basis as within the second, we observed the transparency of Croatian and Slovene at the phonetic level in English and French, by exploring how students who learn either English or French make errors considering also their first language – Slovene or Croatian. These two error systems were compared by measuring acoustic parameters, not only auditory, which was the common approach before this.

The value of the project lay in the fact that each of these two studied languages were observed both *from the inside* and *from the outside*. Namely, from the theoretical perspective *the view from the outside*, i.e. from the perspective of the other language, as was already indicated in the introduction, enables new and different understanding of language compared to the perspective when it is only viewed *from the inside*. For that purpose, the following objectives were proposed for this project: a) a comparative description of phonological systems of Croatian and Slovene; b) a comparative acoustic

2 The list of topics is given only for informational purposes, and thus we do not cite literature for each topic separately.

description of the standard phonetic system of Slovene and Croatian (sonants, word accent, sentence prosody, the features of spontaneous speech); c) sociolinguistic valorisation of standard elements in Croatian and Slovene and determination of value of orthoepic "errors;" d) a description of the phonetic errors of Croatian speakers who are in contact with the Slovene language and Slovene speakers in contact with Croatian; and e) a description of the phonetic errors of Croatian and Slovene speakers learning English and French. In order to accomplish these aims, the spoken material was collected in public electronic media or recorded in studios and experimental settings. The research studies were conducted in Slovenia for the Slovene language and in Croatia for the Croatian language, while the data were processed using speech analysis software depending on the experimental equipment used in the project.

2.2 Croatian and Slovene in Psycholinguistic and Sociolinguistic Contact

The second project (2004–2005), entitled *Croatian and Slovene in Psycholinguistic and Sociolinguistic Contact*, continued the work on some of the open issues, and primarily the analyses of the collected spoken material.[3]

What is especially emphasized in this project is the fact that the research into these two closely related and neighbouring languages, Croatian and Slovene, is associated with the development of a multilingual European area, which is characterized by the coexistence and equality of languages. In other words, we researched both the speech of two languages in contact and their relations with French, English and Spanish (the latter was not included in the first project). In terms of the systematic characteristics, we provided a detailed description of phonetic segments and their postulates in spoken language use, as well as a description and systematic analysis of some difficulties in their realisation in particular languages as first/foreign/second from the sociolinguistic perspective. Furthermore, we tried to answer questions related to the perceptive abilities for certain phonetic characteristics of one language with regard to speakers of another, which represents a psycholinguistic approach to the contact of Croatian and Slovene. The following topics were hence explored: segmental differences between the two systems in contact, tonic differences of word accents in Croatian and Slovenian (speech production and perception), the comparison of typical intonational forms of both languages in different communicative situations, verbal fluency and the influence of interference of the first language on the foreign language. Taking into consideration the results of the first project, the objectives of the second project were: a) a comparison between the existing phonological and acoustic description of Croatian and Slovene, with the description based on the spoken material which was analysed within the first project; b) a description of phonetic errors of Slovene speakers whose first language is Croatian and vice versa; c) verbal fluency in the first and foreign language; and d) a comparison between the systems of phonetic errors made by Croatian and Slovene speakers who learn English, French and Spanish.

3 It is interesting to note that the research teams were continuously working on the chosen topics regardless of the fact that there was a two-year gap between the two approved projects.

As was already stated, from the beginning of this millennium the contrastive research on Croatian and Slovene has been expanded by sociolinguistic and corpus studies, considering both theoretical and practical aspects. For that reason, the preparation of a phonetic activity book was planned for Croatian and Slovene as a foreign/second language, which would compensate for the lack of such books over the last five decades. In fact, except for two manuals,[4] the phonetic level was present only in certain types of exercises in textbooks of Croatian and Slovene as a foreign/second language. Although the draft of a phonetic activity book was prepared for the Croatian language (*cf.* Požgaj Hadži et al. 2007: 97–110), unfortunately it remains unpublished. Regarding the Slovene language, H. Tivadar and U. Batista wrote a university textbook entitled *Fonetika 1* [Phonetics 1], which is currently in press. Apart from theory, it contains a practical part – conversational exercises (from words, sentences to a text) for beginners and advanced learners, with special attention devoted to the supportive use of music, i.e. songs.

3 OPEN ISSUES OF STANDARD SLOVENE PRONUNCIATION

When we consider the relationship between linguistic norms prescribed in normative handbooks, or as Silić (2006: 19) puts it "how one *should* speak,"[5] and language use, i.e. "how one *usually* speaks," most frequently debated is their constant discrepancy on all language levels. Without any exaggeration, we could describe this relationship as a constant conflict between the two approaches, a traditional (conservative) one which insists on "regulating" linguistic reality and even the language itself, and a liberal one which takes linguistic reality as it is. In this regard, two questions arise: on the one hand, how that relationship is "reflected" in normative handbooks,[6] and on the other, how speakers of a particular language "manage" to use them. As such, their standard language expression is based on two opposite foundations: the first is a "set of language rules" which they acquire during institutionalized language education, and the second is a "speaker's assessment of whether one or another linguistic fact is common in use" (Matešić 2013: 39). If we question that relationship in the case of Slovene and Croatian, we conclude that an orthoepic level has long been particularly "problematic" in both languages.

Regarding the orthoepic level, we should emphasize the research by R. Šuštaršič in which he often refers to the relationship between the (explicit) norm and language use, where the usage can be seen as a "parallel" norm, which has not yet been codified due to a variety of reasons, not necessarily linguistic ones (Matešić 2013:

4 Here we refer to a monograph *Slovensko pravorečje* [Slovene Orthoephy] by M. Rupel published in 1946 in Ljubljana and a course book for learning pronunciation *Srpsko-hrvatski jezik* [Serbo-Croatian Language] by S. Ivšić and M. Kravar, published in 1955 in Zagreb.

5 The italics in Silić's quotations are used here by the authors.

6 We draw attention to the work by M. Matešić (2013) on the representation of usage examples in normative handbooks in Croatian: to what extent they become part of the norm (codification), how they are described and what their status is.

41). The discrepancy between linguistic norms prescribed in normative handbooks and the actual usage was already addressed by Šuštaršič (1993) in his PhD thesis, which deals with sentence intonation in Slovene and English. It focuses on the interdependence of tone and tonicity (positions of the nucleus) and the attitudes of speakers in dialogues by comparing Slovene and English. The results show that the normative handbooks (in particular, the Slovene grammar by Toporišič (2000)) offer too generic and/or inadequate rules without taking into consideration the language use.

Let us consider some open issues of the standard Slovene pronunciation – which is actually the title of one of the papers by Šuštaršič, written and co-authored with H. Tivadar (Tivadar/Šuštaršič 2001). The importance of researching the orthoepic norm lies in the fact that in the second half of the 20th century in Slovenia, after the initial enthusiasm of J. Toporišič, a representative of the *Zagreb Phonetic School,* experimental phonetic and phonological research was not carried out (especially during 1970s and 1980s). Then, in the 1990s, the research intensified, later to expand internationally in the 21st century (*cf.* Tivadar 2013). Beyond any doubt, as we have already mentioned, the inability to study phonetics as a linguistic discipline further resulted in, among others, a small number of phoneticians and phonologists, and consequently, a lack of spoken corpora, which are prerequisites for such research studies. Nonetheless, Slovene linguists and grammarians addressed problems of standard pronunciation (e.g. S. Škrabec, M. Rupel, J. Rigler, J. Dular, J. Toporišič), related to normative handbooks: grammars, orthography handbooks, and dictionaries, largely neglecting descriptions based on the spoken corpus. The exception is the above-mentioned monograph by Rupel dedicated to the pronunciation of the standard Slovene language, but published more than 60 years ago (see footnote 4).

We agree with Tivadar and Šuštaršič (2001: 119) that it is counterproductive to codify language (both written and spoken) while ignoring linguistic reality (usage), and disregarding descriptions of that reality which are based on examples from the corpora. The current written and spoken norms of the Slovene language do not carefully consider the usage, which the authors exemplify not only on a segmental level, indicating "elkanje" (the pronunciation of <l> as /l/) and "vekanje" (the pronunciation of <v> as /v/), sibilant voicing, the pronunciation of vowels, etc., but also on a prosodic level, which will be discussed later. The problem lies in the fact that in the relatively small area of Slovenia there coexist numerous accents and dialects, hence the standard Slovene pronunciation is influenced by regional pronunciations. Moreover, there is a conflict between "cultivated" literary expressions and colloquial speech (which, of course, differs from dialect to dialect). For some occasions a strictly regulated standard may sound too "formal," whereas colloquial "folk speech" is sometimes considered too "informal" or it can even characterize a speaker as an uneducated "yokel" (Tivadar/Šuštaršič 2001: 118).

Considering the prosodic level of Slovene, one of the burning questions is related to the two types of accentuation: dynamic and tonemic. While Toporišič's grammar (2004: 63) prefers tonemic accentuation, the *Slovene Orthography* (2001: §622) states

that both types of accentuation are equal.[7] The problem lies in the fact that tonemic accentuation is required in the standard pronunciation, although it is typical only for the central Slovene dialects (in the regions of Dolenjska, Gorenjska and Koroška) and is difficult to acquire in the educational process, since it requires the ability to differentiate between different pitch heights and movements. After all, Slovene speakers acquire tonicity spontaneously and unconsciously in the process of language acquisition (Šuštaršič/Tivadar 2005: 23). According to this, the Slovene grammar prescribes something that is contrary to the actual language use, while the Slovene orthography is "more tolerant and performs the task of uniting speakers more efficiently at the same time not widening the gap between amateurs and 'language experts'" (Tivadar/Šuštaršič 2001: 118–119).

Tonicity remained a leitmotif in the works of Šuštaršič. With regard to this, Šuštaršič and Tivadar (2005) conducted three research studies on the attitudes of students of the Slovene language at the Faculty of Arts in Ljubljana towards tonicity in the standard language, particularly in public speech (reading the news on radio and television), using the perception test (playing a set of recorded short sentences). The main aims of the research were the following: a) perception of tonemic and non-tonemic intonation considering the dialectal origin; b) the level of acceptability of tonemic intonation in public presentations, in affirmative and interrogative sentences (the first two surveys) and in statements (the third survey); c) the level of acceptability of intentionally incorrect intonation of individual lexical items within intonation units. While the aim of all three surveys was the same – to obtain students' responses regarding the (in) appropriateness of tonemic intonation in public addresses – the methodology varied (the number of students, corpus and scoring system were different). In the third survey only, the authors added a questionnaire about the dialectal origin of the subjects and their attitudes regarding standard language and non-standard dialects. The results showed that 95% of the subjects were in favour of the standard Slovene pronunciation in public addresses (radio, television). The most surprising were the results about the subjects' attitudes to Slovene dialects; as many as 65% of the subjects characterised them by using typical stereotypes and referring to them as 'ugly,' 'more beautiful,' 'difficult to understand,' etc., while only 35% "held the democratic (and scientifically sound) view of 'all dialects being equal'" (Šuštaršič/Tivadar 2005: 26–27). Some generalizations can be suggested regarding the attitudes of the subjects towards tonicity in public addresses and their awareness, i.e. whether they perceive 'misplaced' tonemic accents (the circumflex – a falling tone instead of the acute – a rising-falling tone): a) the circumflex in statements is always marked better than the acute; b) an 'inappropriate' circumflex in statements is marked better than an 'appropriate' one; c) there is a minimal difference in favour of an 'appropriate' compared to an 'inappropriate' acute in statements; and d) the circumflex in questions has lower marks than in statements, and lower marks than the acute in questions. The authors conclude that the subjects exhibit a low level of awareness of Slovene tonicity, and thus tonicity as an essential

7 *The Slovene Orthography,* 2001: http://bos.zrc-sazu.si/c/sp/sp2001_pravila.pdf (20 September 2016).

part of standard Slovene is disregarded, which questions its status as an obligatory part of standard pronunciation (Šuštaršič/Tivadar 2005: 32).

R. Šuštaršič also discusses the problem of tonicity in his paper "Position of the Nucleus in an Intonation Phrase in English and Slovene," which was published in 2010 in the monograph *Proizvodnja i percepcija govora* [Speech production and perception] honouring D. Horga on the occasion of his 70th birthday (Šuštaršič 2010: 351–362). The paper compares tonicity, i.e. the position of the nucleus (the tonic syllable) in an intonation phrase in English and Slovene, in non-verbal and verbal structures in English and Slovene. The main findings are confirmed and extended by comparing tonicity in the dialogues given in O'Connor and Arnold and in Wells.[8] The main differences between the two compared languages are observed in wh-questions (nucleus on the wh- word in Slovene but not in English) and sentences in the negative form (nucleus on the negating word in Slovene but not in English).

R. Šuštaršič (2013) explores tonicity in partial questions with the pronoun *what* (wh-questions) in Slovene, also including examples from the spoken corpus GOS.[9] In contrast to the traditional explanation in normative handbooks – that partial questions have falling intonation and that the nucleus is on the interrogative pronoun – he believes that the type of discourse (frequent rising intonation in private discourse compared to the public one) should be considered together with participants in communication and the structure of interrogative words.

4 INSTEAD OF A CONCLUSION

What can be noticed even from this brief overview of research on the problem of tonicity in the standard Slovene language is the persistent discrepancy between how one *should* speak, i.e. codification, and how one *usually* speaks, i.e. usage, which is the issue R. Šuštaršič constantly highlighted. What is also apparent is that he approached his research in an interdisciplinary manner, and that he explored certain problems from different theoretical perspectives by studying them in different ways. He was a researcher whose studies were characterized by solid theoretical foundations and detailed insights into previous research. In addition, Šuštaršič was always able to skilfully incorporate theoretical results into applied ones. Furthermore, a clear and tolerant attitude is evident in his study papers, especially towards numerous open issues of the standard Slovene pronunciation, including "elkanje" or "vekanje," or the place of accent (especially by insisting on the traditional difference between short and long accented vowels). By being sincere, cooperative and open-minded, R. Šuštaršič contributed significantly to the teamwork that was seen in the above-mentioned projects, and was a favourite co-speaker in scientific and professional circles, as well as more friendly and informal ones.

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8 Šuštaršič cites *Intonation of Colloquial English* (1973) by J. O'Connor and G. F. Arnold and *English Intonation: An Introduction* (2006) by J. C. Wells.

9 GOS – the corpus of spoken Slovene: www.korpus-gos.net.

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Abstract
RASTISLAV ŠUŠTARŠIČ AND CURRENT ISSUES
OF STANDARD SLOVENE LANGUAGE

By studying languages in contact, we can observe one language while revealing hidden features of another. This was the original idea of the two Slovene-Croatian phonetic and phonological bilateral projects, which connected various Slovene and Croatian phonologists. This paper highlights the work of Rastislav Šuštaršič, who continued his contrastive research of English and Slovene in contact within these projects. Several open issues of the Slovene standard language were also at the centre of his research interests, including the issue of tonemic accent in Slovene, which he studied mainly in collaboration with H. Tivadar. The findings of their works underlined a gap between the explicit norm and language use, which future codifiers of the Slovene standard language should take into consideration.

Keywords: contrastive linguistics, English and Slovene in contact, phonetics, phonology, tonemic accent

Povzetek
RASTISLAV ŠUŠTARŠIČ IN SODOBNA VPRAŠANJA
STANDARDNE SLOVENŠČINE

Študij jezikov v stiku nam omogoča opazovanje enega jezika in hkratno razkrivanje skritih lastnosti drugega. To je bila tudi izvirna zamisel, na kateri sta temeljila dva slovensko-hrvaška fonetična in fonološka bilateralna projekta, ki sta združila več slovenskih in hrvaških fonologov. Prispevek izpostavi delo Rastislava Šuštaršiča, katerega kontrastivne raziskave angleščine in slovenščine so povezane s tema projektoma. V svojem raziskovalnem delu se je loteval tudi različnih odprtih vprašanj standardne slovenščine, med katerimi je tonemsko naglaševanje (pri tem je sodeloval predvsem s H. Tivadarjem). Rezultati teh študij so osvetlili vrzeli med predpisanim standardom in jezikovno rabo, ki bi jih morali upoštevati tudi pri določanju jezikovnih standardov v prihodnosti.

Ključne besede: kontrastivno jezikoslovje, angleščina in slovenščina v stiku, fonetika, fonologija, tonemsko naglaševanje

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UNRULY INTONATION

1 INTRODUCTION

Learning the intonation of English as a foreign language involves considerably more than becoming familiar with, and reproducing, the physical form of English pitch-patterns. It is also necessary to develop some understanding of the systems of choices in English intonation, so that the learner can select suitable intonations in spontaneous speech or when reading aloud. Influential accounts of English intonation for EFL (e.g. Wells 2006) present the choices in tonality, tonicity and tone as being extensively governed by grammatical and pragmatic regularities which can be taught and learned.

But in this paper we call into question the value of 'rules' concerning intonation to the learner of English. Are there predictive rules of sufficient generality and power to make them worth learning explicitly, or would learners' time be better spent on habit-forming drills of common patterns? We inquire whether widely taught rules are universally valid, or work well only with materials artificially contrived to exhibit them.

The utility of rules has been assessed experimentally using a written dialogue of a type suitable as an examination test passage for advanced students. Three expert judges provided intonation notations of plausible treatments of the passage. A comparative analysis of the three versions reveals a very high degree of agreement among the judges, enabling a consensus version to be determined. The features of this version are then evaluated against supposedly well-established principles of English intonation, to determine how successfully those principles predict the outcomes actually observed. It is shown that in many cases the judges are in agreement over the selection of a particular pattern even though no established rule or principle seems to account for the choice they have made.

The experiment is not unlike what was suggested by House (1987: 365): 'perhaps a more objective measure [of the effectiveness of a set of 'rules' for intonation] could be obtained by inviting a number of competent speakers to record an identical text in near-identical circumstances and using their range of prosodic choices as a yardstick' – except that in the present case the 'competent speakers' were able to notate their own intonation choices directly, rendering the recording stage redundant.

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2 METHOD AND MATERIALS

A dialogue of approximately 160 words was devised. No attempt was made to disguise the contrived style of the dialogue, which, as already mentioned, is of a kind suitable for use as an examination transcription passage by advanced students of English phonetics and phonology. The dialogue is given below.

A: Where's that report for the newsletter you were supposed to be letting me have by the end of the month?
B: Well, admittedly today's the 31st, but I've only got a bit of final editing to do – and it is only breakfast time.
A: The 31st? Of April?
B: Ah. Good point. I was going by my watch.
A: What's the use of having half a ton of stainless steel world-time chronometer strapped round your wrist if it doesn't know how many days there are in the month?
B: Be fair. It doesn't claim to do months. You have to change it manually. I remembered to do it in February.
A: I should hope so, or you'd be half a week out by now. Anyway, stop fiddling with the stupid thing and switch your laptop on. I only need a couple of paragraphs.
B: Hey, hang on! Look! You didn't actually specify BST. It's still the 30th in Alaska, and I've got an hour to spare.

Possible prosodic treatments of the dialogue were notated by one of the authors (shown as *E* in what follows), and independently by two judges, *J1* and *J2*, who are two colleagues with particular expertise in English intonation.[1] All used a framework of analysis and notation system similar to those of Wells (2006). All three provided judgements of tonality (division into intonational phrases[2] (IPs)), tonicity (location of nuclear accents), and tone (pitch treatment of nuclei). Both *E* and *J1* also marked the onset and type of head in each IP. The three notated versions are reproduced in full in the appendix to this paper.

As expected, the three versions show a very high degree of similarity. The convergence among the versions will be considered separately under the headings of tonality, tonicity and tone.

3 RESULTS: AGREEMENT IN TONALITY

The numbers of IPs used in the versions of the passage were: *E* 29, *J1* 28, *J2* 29. Of these, 20 are terminated by a turn-end, or, if within the turn, by the major punctuation marks period (.), dash (–), question mark (?), or exclamation mark. These cases are not considered further.

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1 We are grateful to Jill House and John Maidment for their willing collaboration.

2 Wells (2006) writes *intonation phrase*, though *intonational phrase* (with *–al*) is more usual in the literature.

The correspondences in the locations of the remaining IP boundaries in the three versions are summarized in Table 1. A black circle indicates the presence of an IP boundary at a certain point in the text, and a white circle indicates its absence. There are seven possible patterns of correspondence: a given IP boundary may be present in all three versions (row *a* of the table), in any selection of two versions but not the third (rows *c, d* and *g*), or in one version only (rows *b*, *e*, and *f*). The horizontal bars indicate the relative frequency of each case, with the actual count, *N*, shown in the final column.

Table 1: Correspondences in locations of IP boundaries

	E	J1	J2		N
a	●	●	●		8
b	●	○	○		1
c	●	●	○		0
d	●	○	●		0
e	○	●	○		0
f	○	○	●		1
g	○	●	●		0

It is evident that the three versions agree very closely. The average number of potentially variable IP boundary locations is 8.66, and of these 8 are found in the same location across all three versions, representing a 92.4% agreement.

Of the 8 IP boundaries which appear in all three versions (row *a*), 5 correspond to a comma in the text. The correspondence between punctuation and IP division is not quite perfect, however, since the text does contain one example of a comma which is not treated as an IP boundary in any of the three versions (in *Well, admittedly today's the 31st*).

All versions agree in inserting IP boundaries at three locations which are not marked by punctuation:

... chronometer strapped round your wrist | if it doesn't know how ...
... fiddling with the stupid thing | and switch your laptop on ...
It's still the 30th | in Alaska ...

There are just two cases in Table 1 (rows *b* and *f*) where one version inserts an IP boundary which is not used by the others. In one of these cases, the extra boundary is probably no more than a notational variant: *E* has *half a \week out by /now*, with two nuclear tones ('fall plus rise') in a single IP, while *J2* notates the same pattern as *half a \week out | by /now*. The other case is a boundary inserted by *E* after *newsletter* in the first line of the dialogue. *E* confirms this division is optional, and that the single-IP treatment given by *J1* and *J2* may indeed be preferable.

4 RESULTS: AGREEMENT IN TONICITY

The total number of nuclear-tone marks in all three versions taken together is 87. This is equal to the total number of IPs identified (29 + 28 + 29), plus one more because *E* marked two nuclear tones ('fall plus rise') in one IP. The correspondences among the choices for location are summarized in Table 2, where the indications are used in the same manner as in Table 1. Note that the bars (and the numbers in *N*) represent the number of distinct choices, not the number of tokens. Thus, the 24 choices of nucleus position in row *a* (those used in all three versions) account for 72 tokens of nucleus allocation, since each choice is repeated in all three versions. In the same way, each choice of the types shown in rows *c*, *d*, or *g* will contribute 2 to the count of nuclear tone marks, since it occurs in 2 of the 3 versions.

Table 2: Correspondences in location of nuclear syllables

	E	J1	J2		N
a	●	●	●	■	24
b	●	○	○	■	1
c	●	●	○	■	1
d	●	○	●	■	2
e	○	●	○	■	1
f	○	○	●	■	1
g	○	●	●	■	2

Again, it is evident that the three versions agree closely. Twenty-four nuclear syllables are in the same positions for all three versions. Since the mean number of nuclear syllables is 28.66, we may say that 83.7% of the tonicity choices follow the same pattern.

At the same time, and again as in the case of tonality, there are some small differences between versions. As Table 2 shows, each of *E*, *J1* and *J2* makes at least one tonicity choice which the others do not follow, and there are also cases of agreement between two of them, to the exclusion of the third.

5 RESULTS: AGREEMENT OF TONE

One might make a case for recognising some measure of general similarity of tone in corresponding IPs without perfect alignment, but in the interests of objectivity agreements have only been counted in those cases where tonicity also corresponds exactly. From Table 2 it is evident that (counting both 2- and 3-way agreements) there are 29 instances of corresponding tonicity, and thus there are 29 opportunities for matching tone choices to be made. Table 3 shows the 2- and 3-way tone agreements found in the data.

Table 3: Correspondences in tone choice

	E	J1	J2		N
a	●	●	●		18
b	●	○	○		
c	●	●	○		1
d	●	○	●		4
e	○	●	○		
f	○	○	●		
g	○	●	●		6

Note: Rows *b*, *e* and *f* are retained, but are shown greyed out since it is logically impossible for correspondences to occur in them.

Table 3 indicates that for 3-way agreements, we find 18 out of a possible 24, an agreement rate of 75%. Overall, of the 29 possible 2- or 3-way tone agreements in the data, 29 are in fact found.

6 CONSENSUS

It is plain from this analysis that the test passage was successful in eliciting a very high degree of inter-observer agreement. Whether we consider tonality, tonicity or tone choices, the agreement in every case takes the form of (i) a large proportion of choices – more than 83% – made in exactly the same fashion by all observers, and (ii) a smaller number of discrepant choices, at least some of which turn out on examination to be little more than notational differences or optional variants. It is therefore possible to construct a consensus version, in which the majority of choices incorporated are supported by all three versions, and all the choices by at least two. The only instance where such consensus fails is the IP *It doesn't claim to do months*, for which there is no agreement over tonicity.

The consensus version is as follows:

A: Where's that report for the \newsletter you were supposed to be letting me have by the end of the month? |

B: Well, admittedly today's the 3\/1st, | but I've only got a bit of final \/editing to do | – and it is only \/breakfast time. |

A: The 3/1st? | Of /April? |

B: \Ah. | Good \point. | I was going by my \watch. |

A: What's the use of having half a ton of stainless steel world-time chro\/nometer strapped round your wrist | if it doesn't know how many \days there are in the month? |

B: Be /fair. | ~~It doesn't claim to do months~~ (no consensus). | You have to change it \manually. | I remembered to do it in \/February. |

A: I should hope \so, | or you'd be half a \week out by /now. | \Anyway, | stop \/fiddling with the stupid thing | and switch your \laptop on. | I only need a couple of \/paragraphs. |

B: \Hey, | hang /on! | \Look! | You didn't actually specify BS\/T. | It's still the \30th | in A\/laska, | and I've got an hour to \spare. |

It seems clear that such a degree of agreement could only arise from shared 'knowledge' among the observers, and presumably the knowledge they share must be of prosodic 'rules'. Accounts of English intonation attempt to establish and teach such rules, so it is reasonable to ask, in relation to each of the regularities, which 'rule' it exemplifies.

7 ASSESSING RULES FOR TONALITY

A number of conclusions can be offered on the basis of the findings concerning tonality. The first observations concern punctuation. Though warnings about the 'notorious' inconsistency of punctuation practices are regularly issued (Tench 1996: 21), the simple fact, amply illustrated by the present experiment, is that punctuation is an excellent guide to IP division. As House says (1987: 365), '…the availability of punctuation to guide intonational phrasing is not trivial; real speakers certainly use it, existing text-to-speech systems rely heavily on it'. In reading aloud from a prepared script, or in supplying intonation for a written text, the learner's task is precisely that of text-to-speech conversion (TTS).

Yet intonation handbooks appear to contain very limited guidance about punctuation. Wells (2006: 60) has some discussion of the exclamation mark, and the practical guide to making intonation mark-ups (pages 251–258) contains a few remarks. But the learner actually needs an explicit step-by-step procedure. A comprehensive account of the history and current status of the relationship between the comma and IP division is given by Cruttenden (1991), and from that analysis it is plain that an excellent heuristic for the learner is to introduce an IP division at every written comma. The only example in the present text of a comma which does not signal an obligatory IP division is that in *Well, admittedly today's the 31st*. In this connection we may note (i) that to introduce an IP division at this point would not be a major defect, and (ii) that *Well,* is such a ubiquitous sentence-opener, especially in spoken texts,[3] that a learner might profitably be told that it is generally written with a comma though commonly spoken without a corresponding IP division.

In our experience, to sidestep the punctuation question, and ask learners to read from, or to transcribe, unpunctuated text – as has sometimes been tried (Tench 1996: 52) – is

3 A search in the British National Corpus (BNC) for "**well,**" reveals that stretches beginning this way are almost 3.5 times more frequent in spoken texts than in written. The BNC was queried using the BNC*web* interface at http://www.natcorp.ox.ac.uk/.

to set them a completely irrelevant linguistic puzzle (*cf.* Crystal 1976: 9). Reading aloud is reading from text – and text is punctuated.

Further observations concern the relationship between IP and clause. All intonation handbooks point out a general correspondence between the IP and clause, and schemes of varying degrees of complexity have been worked out which predict intonational phrasing in a text if provided with a syntactic parsing (Crystal 1975; Alternberg 1987). But before the learner invests time in becoming familiar with such a scheme, there are several issues to be addressed. For a start, the worth of this kind of approach depends not on its overall success rate (which may appear very high), but on what could be called its added value – that is, its success rate in those cases where a learner will fail when using a simple heuristic (such as following the guidance provided by punctuation). Furthermore, this must be considered in conjunction with the text frequency of the relevant structures in the types of discourse with which the learner is dealing (since there is plainly little profit in learning to deal with clause types which are only rarely encountered).

A specific case is the example of relative clauses. Intonation handbooks invariably dwell on the distinction between 'defining' and 'non-defining' relative clauses, and the accompanying prosodic differences (Wells 2006: 202–203; Tench 1996: 40–41). But it can be pointed out that examples such as *my sister | who lives in Canada* (Wells) or *my brother | who lives in Nairobi* (Tench) belong predominantly to written language anyway. As a simple test of this claim, a search was conducted in the BNC for the sequence ", who lives".[4] Only three hits (0.29 instances per million words) were found in spoken texts, and only one of the three appears to introduce a non-restrictive relative clause. By contrast, 269 hits (3.06 instances per million words) were found in written texts, and most are clearly at the beginning of non-restrictive clauses. If, as this suggests, non-restrictive clauses are predominantly a feature of the written language, it is simpler to regard the prosodic treatment accorded to them as a result of reading aloud the way they are conventionally written rather than the reverse. In fact, the treatment follows straightforwardly from taking each comma as marking an IP division.

The test passage used in this study contains one example of a relative clause: *you were supposed to be letting me have by the end of the month*. The consensus treatment, supported by two judges, *J1* and *J2*, and acknowledged as entirely plausible by *E*, places this in the same IP as what precedes: *Where's that report for the \newsletter you were supposed to be letting me have by the end of the month?*

If we ask what 'rules' might lead to this treatment, we encounter some considerable difficulty. Suppose that *J1* and *J2* choose to treat the relative clause as 'defining', and that for this reason they integrate it into the same IP as its antecedent, *newsletter*. This might possibly account for the consensus tonality choice – although the outcome appears to go against at least two other principles. First, the resulting IP is unusually

4 We are grateful to an anonymous reviewer for suggesting that we test this claim against corpus data. As that reviewer correctly notes, the frequency of "**who lives**" (no comma) is approximately equal in written and spoken material in the BNC. The imbalance regarded as significant here is found only when the comma is included as part of the search string: "**, who lives**".

long (*J1* actually added a comment on the length of the resulting tail), and secondly *that report for the newsletter* appears to be a relatively 'heavy' noun phrase (Wells 2006: 198), and thus a candidate to be given its own IP.

Besides, the distinction between 'defining' and 'non-defining' (or 'restrictive' and 'non-restrictive') is itself problematic once a wider range of more realistic examples is considered (Huddleston/Pullum 2005: 188). Although the consensus tonality choice may seem to suggest that the clause in question is being treated as 'defining', the distinction does not appear to be particularly relevant. As far as can be gathered from the context, any of *that report*, *that report for the newsletter*, *that report for the newsletter you were supposed to be letting me have*, or *that report for the newsletter you were supposed to be letting me have by the end of the month* would identify the likely referent equally well. The purpose of the clause *you were supposed to be letting me have by the end of the month* is evidently not to narrow down the likely referent, but to remind B of a promise which has not been kept. The reminder seems to work equally well in either of the suggested tonality treatments.

8 ASSESSING RULES FOR TONICITY

Probably more has been written about tonicity (especially the selection of the nuclear accent location) than about any other aspect of English intonation. Among the principles most widely mentioned are:

1. A 'general tendency for the nucleus to be towards the end of the IP' (Wells 2006: 95), specifically 'within the last lexical item in the intonation unit' (Tench 1997: 56), a rule which has been claimed to account for more than 80% of nucleus placements (depending on the precise nature of the material considered).
2. A preference for certain parts of speech, specifically favouring content words over function words, and nouns over other classes of content word, such as verbs (Wells 2006: 97–99; 170). Successful implementation of this as a 'rule' relies on establishing agreement over the relevant classes.
3. The deaccenting of 'old' or 'given' information (Wells 2006: 109 etc.) repeated at the end of an IP, resulting in a leftward shift of the nucleus, seen in such examples as *D'you object to dogs?– No, I a\dore dogs*.
4. The marking of so-called contrastive stress – variously also called contrastive focus or narrow focus (Wells 2006: 119 ff; Tench 1996: 60). This is allowed to override other principles, resulting for instance in the accenting of function words in such examples as *I can send a fax \/to him, | but I can't receive one \from him. |*

If we now attempt to match the tonicity choices which were actually made against the principles that supposedly guide them, numerous difficulties are revealed.

The problems begin in the first line of the dialogue. Supposing the tonality choice to be made (as discussed above) in favour of a single IP, why is the nucleus then not straightforwardly placed on the last content word of the whole IP, i.e. *month*, in accordance with the most basic rule of all (Wells 2006: 95; Tench 1996: 56)?

Indeed, a nucleus can be placed on *month,* but only if the nucleus on *newsletter* is also retained, with the consequent division into two IPs. This was the version anticipated by *E* when the passage was devised:

> *Where's that report for the \newsletter | you were supposed to be letting me have by the end of the \month?*

Comparison of the two treatments – which are both acceptable – suggests that the nucleus on *newsletter* is felt to be obligatory, while the nucleus on *month* is optional. So it would be pointless to attempt to justify the relatively early nucleus on *newsletter* as resulting merely from the deaccenting of what follows (Wells 2006: 109). Evidently, it is positively required that *newsletter* be in focus, regardless of what follows, and regardless of the prosodic treatment of that following material. We are not able to identify any principle, or combination of principles, which will lead to this result.

The rules similarly fail to predict why the nucleus is not simply placed on the last word in each of the following

- *but I've only got a bit of final editing to do*
- *what's the use of having half a ton of stainless steel world-time chronometer strapped round your wrist*
- *if it doesn't know how many days there are in the month*

In the case of *and it is only breakfast time* the observed tonicity does appear to accord with the principles, but specific lexical knowledge is needed to confirm that *breakfast time* is a compound noun (contrast *breakfast television*).

There is also at least one place where there is a danger of over-generalization (hypercorrection). Assignment of the correct tonicity in the IP *stop fiddling with the stupid thing* depends on recognising that *the stupid thing* is 'empty' and hence unaccented (Wells 2006: 150). How is the learner to know that the same principle does not apply in *Good point*? After all, he or she will have encountered phrases such as *nice one*, *good one*, and *point* is commonly encountered unaccented, as in *one of her good points*. Again, guidance must come from the dictionary rather than the intonation handbook. There can be fewer more discouraging experiences for a learner than the careful application of a 'rule' which results in a wrong output.

9 ASSESSING RULES FOR TONE

It will not be a surprise that, as was the case with tonality and tonicity, the degree of agreement over the choices of tones is greater than would appear to follow from known 'rules' governing tone choice. In B's first utterance, for example, the three judges were unanimous in using the fall-rise nuclear tone in all three IPs:

> *Well, admittedly today's the 3\/1st, | but I've only got a bit of final \/editing to do | – and it is only \/breakfast time. |*

The speaker is perceived as making limited concessions (*admittedly ... only ... only*) while at the same time appealing to A to be reasonable.

But probably it would be too much to claim that one of the 'uses' of the fall-rise is specifically 'in concessions which are designed to persuade' or something of the sort (*cf.* Maidment 1990: 19). Perhaps the most we might claim is that the fall-rise carries the 'implication' (Wells 2006: 27) that the hearer must look for an interpretation beyond the simple literal one. On the other hand, Kingdon's characterisation of the meaning of the fall-rise appears to come close to the meaning of the present examples: '[it] gives the impression that the speaker wishes to convey some insinuation in making the statement, expecting his hearer to understand more than is said … It is the natural tone for giving a warning or offering an apology' (1958: 29–30).

10 CONCLUSIONS

In this paper we have repeatedly called into question effectiveness of 'rules' concerning English intonation. Widely varying relative weight has been placed at different times on practice drill material and rule-based exercises. This is seen, for example, by comparing the largely drill-based material of O'Connor and Arnold (1973) with the rule-based problem solving favoured by Wells (2006).

By examining intonation notations provided by expert judges for a typical test passage designed for advanced students, we have shown that 'rules' seem to account only for a proportion of the 'right' or expected answers (if the 'right' answers are taken to be those represented by a consensus of native speaker judgments). There are plentiful instances where native speakers agree over the selection of a pattern, though no known rule seems to guide their choice. No doubt in certain cases they are merely following habitual idiomatic patterns (*cf.* Ashby 2006), but in others the native speakers may be following 'rules' much more complex and nuanced than those which find their way into intonation handbooks, and hitherto covert lexical, grammatical, semantic or pragmatic categories may be at work. It is doubtful whether these can be rendered accessible to the learner.

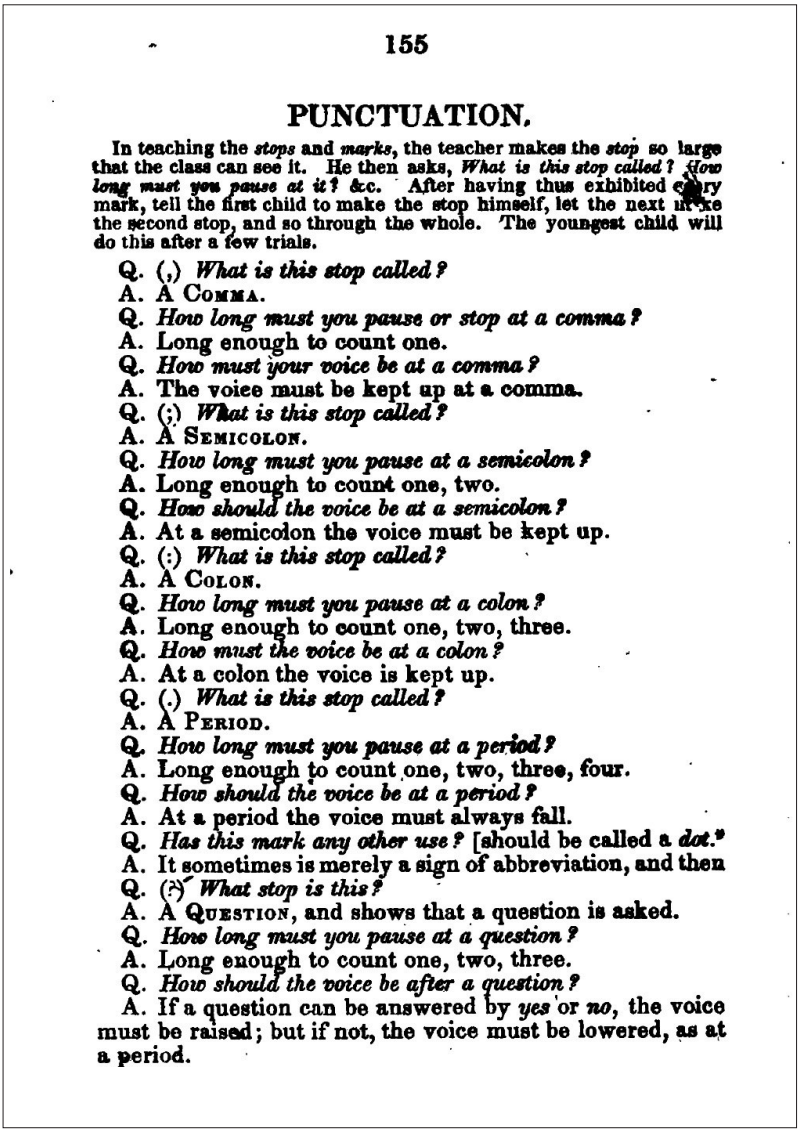
The morals for the teaching of intonation would seem to be:

(1) Before teaching a 'rule' and reinforcing it with (often artificial) examples we should consider not only the satisfying explanatory power it seems to have in those cases to which it applies, but also the actual frequency with which it is likely to be used, and the potential harm it can do if overgeneralised.

(2) Due attention must be given to the idiosyncratic accentual behaviour and prosodic patterns of particular lexical items and 'fixed expressions'. Paradoxical as it may seem, a good learner's dictionary is an important tool in the learning of intonation.

(3) We must as a first priority provide learners with practical heuristics which can be applied quickly and which lead to intelligible default realizations (for example, in reading aloud, divide into IPs by following the punctuation, accent the last word in the IP, use a fall at sentence-end and non-fall between clauses). Such advice is conspicuously missing from intonation handbooks. No doubt the

authors of such works feel obliged to advance respectable linguistic arguments, and practical heuristics are not easily cast in 'linguistic' terms. In this, we have something to learn from the humble prescriptions to be found in long-outdated elocution and spelling books. We conclude with an example from Fowle (1829), and pose the question whether the terminological and methodological complexities of – say – Wells (2006) or Tench (1996) bring the learner any real advantage.



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PUNCTUATION.

In teaching the *stops* and *marks*, the teacher makes the *stop* so large that the class can see it. He then asks, *What is this stop called? How long must you pause at it?* &c. After having thus exhibited every mark, tell the first child to make the stop himself, let the next make the second stop, and so through the whole. The youngest child will do this after a few trials.

Q. (,) *What is this stop called?*
A. A COMMA.
Q. *How long must you pause or stop at a comma?*
A. Long enough to count one.
Q. *How must your voice be at a comma?*
A. The voice must be kept up at a comma.
Q. (;) *What is this stop called?*
A. A SEMICOLON.
Q. *How long must you pause at a semicolon?*
A. Long enough to count one, two.
Q. *How should the voice be at a semicolon?*
A. At a semicolon the voice must be kept up.
Q. (:) *What is this stop called?*
A. A COLON.
Q. *How long must you pause at a colon?*
A. Long enough to count one, two, three.
Q. *How must the voice be at a colon?*
A. At a colon the voice is kept up.
Q. (.) *What is this stop called?*
A. A PERIOD.
Q. *How long must you pause at a period?*
A. Long enough to count one, two, three, four.
Q. *How should the voice be at a period?*
A. At a period the voice must always fall.
Q. *Has this mark any other use?* [should be called a *dot.*"
A. It sometimes is merely a sign of abbreviation, and then
Q. (?) *What stop is this?*
A. A QUESTION, and shows that a question is asked.
Q. *How long must you pause at a question?*
A. Long enough to count one, two, three.
Q. *How should the voice be after a question?*
A. If a question can be answered by *yes* or *no*, the voice must be raised; but if not, the voice must be lowered, as at a period.

Figure 1: A page from Fowle (1829)

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Abstract

UNRULY INTONATION

In this paper we call into question the value of 'rules' concerning intonation to the learner of English. Are there predictive rules of sufficient generality and power to make them worth learning explicitly, or would learners' time be better spent on habit-forming drills of common patterns? Examining a typical test passage for advanced students, we show that in all three systems of tonality, tonicity and tone, known 'rules' account only for a proportion of the 'right' or expected answers. There are plentiful instances where competent native speakers agree over the selection of a pattern, though no rule seems to guide their choice. We recommend that the utility of 'rules' should be evaluated in relation to the frequency of occurrence of the structures to which they apply, in the relevant types of discourse; that more attention be given to idiomatic expressions, and the prosodic patterns associated with particular lexical items; and that learners should be equipped with simple practical heuristics (e.g. for using punctuation as a guide to intonation when reading aloud).

Keywords: English intonation, applied phonetics, tonality, tonicity, tone

Povzetek
NEUKROTLJIVA INTONACIJA

Članek kritično presoja pomen intonacijskih pravil za učence angleščine. Ali obstajajo predvidljiva pravila, ki so dovolj splošna in močna, da bi se jih veljalo naučiti? Ali bi morda ne bilo časovno bolj učinkovito uriti splošno veljavne intonacijske vzorce? Na primeru testnega besedila za napredne študente bomo pokazali, da pravila za določanje tonalnosti, toničnosti in tonskih potekov lahko razložijo samo nekaj pravilnih oziroma pričakovanih odgovorov. Obstaja veliko primerov, kjer se kompetentni rojeni govorci strinjajo glede izbranega intonacijskega vzorca, čeprav ni nobenega pravila, ki bi utemeljeval izbor tega vzorca. Zato predlagamo, da se uporabnost pravil oceni glede na pogostost pojavljanja struktur, na katere se pravila nanašajo, upoštevaje ustrezne diskurze; da se posveti več pozornosti intonacijskim vzorcem v idiomatskih izrazih in določenih leksikalnih enotah; ter da se učencem predstavi preproste in praktične smernice (npr. upoštevanje ločil pri glasnem branju intonacije).

Ključne besede: angleška intonacija, uporabna fonetika, tonalnost, toničnost, ton

APPENDIX: THE THREE NOTATED VERSIONS

***E*'s version:**

A: ˈWhere's that report for the \newsletter | you were supposed to be letting me have by the end of the \month?
B: Well, ad\mittedly today's the 3\/1st | but I've only got a bit of final \/editing to do | and it \is only \/breakfast time.
A: The 3/1st? Of \/April?
B: \Ah | Good \point | I was going by my \watch |
A: What's the use of having half a ton of stainless steel world-time chro\/nometer strapped round your wrist | if it ˈdoesn't know how many \days there are in the month?
B: ˈBe /fair | it doesn't \claim to do /months | You have to change it \manually. I re\membered to do it in \/February.
A: I should \hope so | or you'd be half a \week out by /now | \Anyway | stop \/fiddling with the stupid thing | and switch your \laptop on | I only need a couple of /paragraphs.
B: \Hey | ˈhang /on! | \Look | You didn't actually \/specify BST | It's \still the 30th in A\/laska | and I've got an hour to \spare

***J1*'s version:**

A: {hh}Where's that report for the \newsletter you were supposed to be letting me have by the end of the month? (That's *some* tail, huh?)
B: Well, ad{fh}mittedly today's the 3V1st, | but I've {fh}only got a bit of final Vediting to do – and it {fh}is only Vbreakfast time
A: The 3/1st? Of /April? (high rises)
B: \Ah. {hh}Good \point. I was {hh}going by my \watch.
A: {fh}What's the use of having half a ton of stainless steel world-time chroVnometer strapped round your wrist | if it {rh}doesn't know how many days there are in the \month?
B: {fh}Be Vfair. It doesn't \claim to do months. You {hh}have to change it \manually. I re{fh}membered to do it in VFebruary.
A: I should hope \so, | or you'd be {rh}half a \week out by now. >Anyway, | stop \fiddling with the stupid thing | and switch your \laptop on. I {fh}only need a couple of Vparagraphs.
B: \Hey, | {hh}hang /on! \Look! You {fh}didn't actually specify BSVT. It's {hh} still the \30th | in AVlaska, and I've got an {hh}hour to \spare.

{fh} = falling head
{hh} = high head
{rh} = rising head

***J2*'s version:**

A: Where's that report for the *fall* newsletter you were supposed to be letting me have by the end of the month? |

B: Well, admittedly today's the 3 *f-r*1 st, | but I've only got a bit of final *f-r*editing to do |—and it is only *f-r* breakfast time. |

A: The 3 *low rise* 1st? | Of *high rise* April? |

B: *fall* Ah. | Good *fall* point. | I was going by my *fall* watch. |

A: What's the use of having half a ton of stainless steel world-time chro *f-r* nometer strapped round your wrist | if it doesn't know how many *fall* days there are in the month? |

B: Be *low rise* fair. | It doesn't claim to *f-r* do months. | You have to change it *high fall* manually. | I remembered to do it in *f-r* February. |

A: I should hope *high fall* so, | or you'd be half a *(rise)-fall* week out | by *low rise* now. | *high fall* Anyway, | stop *f-r* fiddling with the stupid thing | and switch your *fall* laptop on.| I only need a couple of *f-r* paragraphs. |

B: *high fall* Hey,| hang *low rise* on!| *high fall* Look! |You didn't actually specify BS *f-r* T. |It's still the *high fall* 30th | in A *f-r* laska, | and I've got an hour to *(rise)-fall* spare.

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THE VALUE OF PHONETICS AND PRONUNCIATION TEACHING FOR ADVANCED LEARNERS OF ENGLISH

1 INTRODUCTION

Pronunciation tends to take a back seat in both second language acquisition research and secondary and higher education all over the world (Underhill 2013). When learners study English at university, however, they generally receive proper pronunciation coaching, which can help them acquire a more native-like pronunciation. Once they have acquired this, however, the challenge is maintaining it. This study explored how learners go about maintaining their pronunciation by investigating the influence of the discontinuation of pronunciation teaching on the upkeep of a near-native accent, based on an RP pronunciation model, in advanced Dutch learners of English.

In particular, this study investigated whether the English pronunciation of those advanced Dutch learners improved, deteriorated, or remained stable over time once explicit pronunciation had ceased, by means of a longitudinal study of the speech of Dutch university students who were studying English. The speech of a cohort of learners was sampled at several points during their undergraduate degree by means of making audio recordings of several tasks; importantly, the explicit phonetics and RP pronunciation instruction they received during their degree stopped after the second year. The main sub-questions that were investigated were, therefore, whether degree year and task type were of any influence on the learners' pronunciation. This study also explored any possibly confounding influence of the amount of exposure to English learners received by taking into account the number of English-taught courses that they took during their undergraduate degree, and whether they spent a term abroad in an English-speaking country. The hypothesis was that the pronunciation of third-year students would become less native-like than it was before, with their pronunciation not being as native-like as it was at the end of the second year, but more native-like than at the end of the first year. Read speech was expected to be more native-like in pronunciation than spontaneous speech, and the possible confounder of having more exposure to English in general, whether through courses or going abroad, was expected to have a positive influence on the students' pronunciation.

In attaining L2 proficiency, even relatively limited explicit instruction has been shown to be beneficial to a learner's pronunciation. Lord (2005) and Lipinska (2013) found that explicitly teaching segmental phonetics improved learners' production, while

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Kennedy, Blanchet and Trofimovich (2013) showed that after a short course focussing on suprasegmentals, learners of French only improved their segmental and not their suprasegmental production while their perception improved overall, indicating that it might take longer for perception to extend into all aspects of production. This matches the results from Saito (2011), who found that learners' comprehensibility improved significantly after as little as four hours of phonetic instruction, while their accentedness did not change. He thus demonstrated that some but not all aspects of production showed signs of improvement after a short period of instruction. Gordon, Darcy and Ewert (2013) added to this by showing that a more intensive three-week pronunciation course resulted in significant improvements when learners were explicitly taught about both segmentals and suprasegmentals. In compiling an overview of similar studies investigating the effects of explicit instruction on L2 pronunciation, Saito (2012) found that most studies showed that learners improved significantly after receiving explicit instruction. Interestingly, all of these works showed improvements in controlled speech, but indicated that spontaneous speech required more specific teaching methods.

A commonly held idea is that learners' pronunciation will improve as long as they practise both in and outside of the classroom. Szpyra-Kozlowska (2015) added to this by stating that nowadays, with limited time dedicated to teaching pronunciation, individual learning is a vital part of acquiring L2 pronunciation. Grant (2014) argued against the idea that practice alone will determine a learner's level of pronunciation, and stated that individual learner characteristics were much more influential: the learner's L1 and the amount of exposure to the L2 were especially important. In line with this idea, Iverson and Evans (2007) demonstrated that having a larger vowel inventory in the L1 than in the L2 was more beneficial to acquiring the vowel system than vice versa, as the former would result in separate mappings of L2 vowels onto L1 vowels, while the latter resulted in overlaps. Exposure to the L1 has also been shown to have a direct influence: increased L1 use can have a negative effect on a learner's accentedness (Flege/Frieda/Nozawa 1997), as can a continued use of the L1 when compared to learners who no longer use the L1 at all (Piske/MacKay/Flege 2001).

Another possibly influential factor is best described by accommodation theory. As first described by Giles (1973), two speakers can adapt their speech to each other to sound more similar. This convergence is often used as a means of gaining social approval (Coupland 2010), as speakers tend to converge to those people they like or admire. Divergence, on the other hand, is used to create distance between speakers. In this study, accommodation theory could explain the potential changes in participants' pronunciation. While there is no direct communication with another speaker in the recording itself, participants are aware the recordings will only be listened to by the pronunciation teacher, a speaker of RP. This means she is their target audience, opening up the possibility of there being convergence, in particular for their speech in response to open questions. After explicit instruction is stopped, there are essentially three ways in which the participants' pronunciation might develop: it could remain on the same level as it was before, it could improve and come to sound more RP-like, or it could deteriorate and become more Dutch. If the students' pronunciation were to

remain at a similar level as it was before, this would indicate that it has become stable. If it were to revert to a more Dutch variant, this stability would not have been achieved yet, while if it were to become more RP-like this would indicate they have achieved a level of awareness that enables them to improve their pronunciation without explicit feedback. Key to accommodation theory is that convergence tends to occur when people want to converge (Byrne 1971; Pardo et al. 2012). In the case of these participants, it is unlikely that they would want to sound more Dutch, indicating that any change towards Dutch was not a conscious decision to converge. Instead, if any conscious convergence took place, the participants would likely want to sound more like native speakers. It is important to note that while the participants chose the British pronunciation track, and thus chose to study RP instead of General American, their answers to what they thought of their pronunciation indicated that they valued sounding native-like, though none of them stated they necessarily wanted to sound fully RP-like. It should, therefore, be taken into account that the motivation to sound RP-like might not have been as high as the motivation to sound more generally native-like, leading to the possibility of the participants converging to a preferred variety of British English, and not to RP English in particular.

2 METHODOLOGY

In order to investigate the pronunciation stability of advanced learners of English, recordings were made of Dutch undergraduate students of English. These recordings were made in their third year, and were compared to existing recordings of the same students made during pronunciation exams in the first and second years, after which the students' pronunciation was analysed and rated for RP-like-ness in three different task types on the basis of a set of pronunciation features.

2.1 Participants

Twelve native Dutch learners of English voluntarily participated in the study. Their mean age was 22 years (SD = 1.7). These learners were third-year undergraduates of English at Radboud University Nijmegen, had all chosen the British English pronunciation track, and came from the same cohort that started their degrees in 2012. Importantly, all participants were in their third year, as at Radboud University undergraduate students of English in this year no longer receive courses in phonetics or pronunciation, while they do in the first and second years. During those previous two years, the students received weekly pronunciation training sessions consisting of drills as well as listening and imitation, and they received additional weekly training in basic articulatory phonetics during their first year.

In addition to no longer receiving explicit instruction in pronunciation and phonetics, the third-year students also have a varying number of English-taught courses: in their third year, the programme mainly consists of electives and these could be in either English or Dutch (*Studiegids Engels)* depending on individual choices. These electives are often offered by different departments than the English one, and thus it is much less likely that the lecturers are using RP in their teaching, if they are even taught in

English at all. In contrast, the first and second years have a fixed number of courses taught in English for all students: in year 1, 55 ECTS are English-taught, while in year 2 45 ECTS are taught in English. The varying number of English-taught courses in the students' third year could thus be a potentially influential confounding variable on the overall RP-like score, with more courses possibly leading to a higher score.

A third of the participants spent the first term of their third year abroad in England (three participants) or Ireland (one participant). During this term they would have had an increased amount of exposure to English, which could mean that participants who spent time abroad outperform their peers who did not go abroad. While this exposure might not necessarily have been to RP English, it could still have had a beneficial effect on their pronunciation: the features on which the students' pronunciation was judged were not always specific to RP English only, as some were particularly focussed on not sounding Dutch. For example, all three participants who spent time in England attended universities in largely non-rhotic areas of the country, and while there might have been slight differences in the exact use depending on the area, all four participants would have come across native speakers using weak forms in their speech. This means that other native varieties of English that they might have come into contact with could have contributed to an improvement in some of the features of their pronunciation. As such, time abroad was considered a possibly influential confounding variable in the analysis.

2.2 Materials

Participants were given three tasks to record, designed to elicit both read speech and more spontaneous speech to be able to investigate the task-specific effects of speech style. The first task was reading a phonetically balanced text familiar to the students from previous exams ("Arthur the Rat"). The second task consisted of a set of ten sentences also used in pronunciation exams; each sentence contained features of RP English that are particularly tricky for Dutch learners (e.g. *The first few moves looked good* for the difference between the vowels /u:/ and /ʊ/). Finally, the third task consisted of three open questions about the students' thoughts on their courses, their pronunciation, and time they spent abroad, which provided useful background information for the analysis.

The process of recording was identical to the procedure during the undergraduate pronunciation exams to minimise differences in the recording setting. The recordings were then compared to previous recordings of the same set of students made during the pronunciation exams of the previous two years. The materials used in the new recordings only differed from the pronunciation exams in the content of the open questions.

2.3 Procedure

The recordings took place in the language lab at Radboud University in a setting identical to the exam recordings. However, no more than five students were recorded each session, as pilot recordings revealed having more students in the room to be distracting.

This differed from the exam recordings, as those were recorded with 20 students in each session due to time constraints.

During the session, participants were seated at a desktop computer with a headset. They were provided with the recording sheet, and were asked to perform the tasks while speaking naturally. There were no time constraints on any of the tasks. Because of the similarity to previous exams, it was stressed their performance would not influence their undergraduate results. After recording, the participants were provided with a brief background questionnaire. In total, the recording session took approximately ten minutes.

2.4 Analysis

Recordings were analysed based on a list of features of RP pronunciation used to grade students' pronunciation exams, as shown in Table 1. The list, developed by the pronunciation teacher at Radboud University, focusses on those features that are difficult for advanced Dutch learners of English to master (Hedy Kamara, personal communication, 19 February 2015). For this reason, these features are dealt with extensively during phonetics and pronunciation classes, mostly using Gussenhoven and Broeders (1997).

In acquiring an RP-like accent, the participants learnt about the differences between English and Dutch. Clear differences are found in the vowel inventories: some vowels, such as /e/, have a slightly different position in English than in Dutch, while others, such as /æ/, do not have a Dutch equivalent at all (Collins/Mees 2003). The English consonant inventory is more similar to Dutch than its vowel inventory, but the dental fricatives /θ/ and /ð/ do not occur in Dutch at all, while phonemes such as such as /g/ and /ʒ/ only occur marginally, and may cause problems for Dutch learners. Some of the English consonants, while similar in nature to their Dutch equivalents, differ in the precise manner of articulation, leading to potential obstacles, such as the contrast between /f/ and /v/, or /s/ and /z/.

There are also several important speech processes that differ between the two languages. Dutch does not have a syllable-final contrast between fortis and lenis consonants (commonly referred to as 'final devoicing'), while English does, so learners need to learn to make this distinction, in particular in the energy of articulation and in the length of the voiced portion. Importantly, Broersma (2005) showed that Dutch learners are able to categorise these English final consonants in a native-like manner while not producing them as such themselves. English voiceless stops are aspirated in onset and preglottalised before consonants in coda, neither of which happen in Dutch (Gussenhoven/Broeders 1997), so this needs to be learnt. These processes are essential for learners to acquire, as Cruttenden (2008) argued that the use of aspiration is even more important than the presence or absence of voicing, as it is a stronger cue for differentiating phonemes in English.

Finally, prosody differences may also be problematic. Using incorrect stress patterns can cause communication to break down, as shown in Reinisch and Weber (2012), among others. In combination with stress patterns, the correct use of weak forms is crucial for a proper understanding, especially in fast speech (Cruttenden 2008). Finally, English has a wider pitch range than Dutch, and this might be difficult for learners to

learn, as it is known that they tend to compress their pitch range when speaking a foreign language (Collins et al. 2011).

Table 1: List of RP pronunciation features used to analyse the participants' pronunciation.

Feature	Specific difficulty for Dutch learners	Example of Dutch error	Means of analysis
vowel quality	/æ, ʊ, ʌ, ɒ, ɔː, ɜː/	/æ/ realised as [ɛ]	auditory & acoustic
word and sentence stress	compounds	/leɪ ˈaʊt/ for /ˈleɪ aʊt/	auditory
duration of voiced portions	voiced portion length before fortis vs. lenis endings	same VP for /bit/ and /bid/	auditory & acoustic
consonants	articulation of /θ, ð/ /s/ vs /z/ /f/ vs. /v/ final devoicing initial devoicing	/tri/ for /θri/ /bet/ for /bed/	acoustic
voiceless stops	aspiration preglottalisation	[pɪt] for [pʰɪt]	acoustic
non-rhoticity	distribution of /r/	/fɑːr/ for /fɑː/	auditory
undesirable assimilations	regressive voicing /b,d/ progressive voicing /v,z/ intervocalic voicing	/ˈfuːdbɔːl/ for /ˈfuːtbɔːl/	acoustic
strong vs. weak forms	lack of weak forms	/ænd/ for /ən(d)/	auditory
liaison	overuse of glottal stop for unemphasised speech	[ənd ʔaɪ] for [ənd aɪ]	acoustic
intonation	flat intonation overuse of rising terminal	uptalk	auditory & acoustic

Each of the features was analysed either auditorily or acoustically using Praat (Boersma/Weenink 2015), or both, as indicated in Table 1. For each feature, the author determined an RP-likeness score based on the percentage at which the participant produced the feature in an RP-like manner. These individual scores were collated to compare within and between participants over the years, and to see if there was a difference between task types and features. For the purpose of this study, all features contributed equally to the final RP-like score, though in reality certain features of Dutch-accented English are more detrimental to communication and are rated more negatively by native speakers than others (van den Doel 2006; Koet 2007).

3 RESULTS

3.1 Influence of Year and Task Type

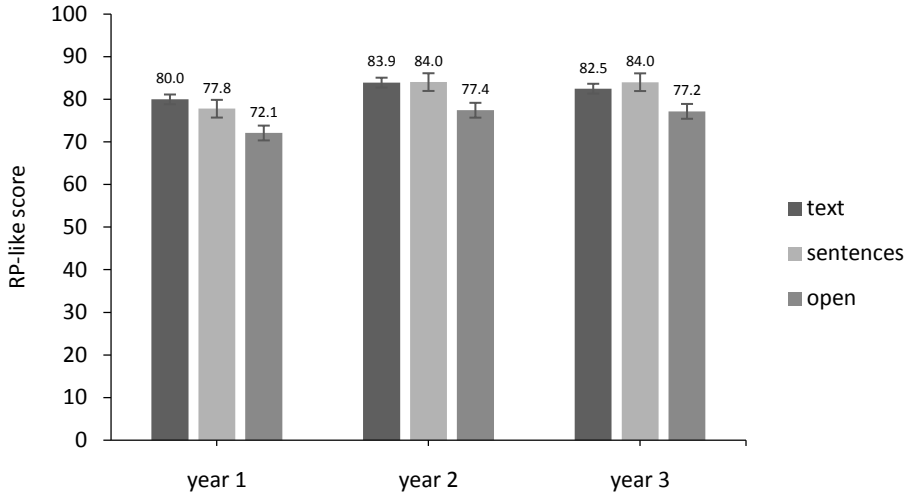

Figure 1: The overall RP-like score per task type, shown for each year. Error bars show two standard deviations from the mean.

A 3 by 3 repeated measures ANOVA was performed to investigate the effects of year and task type on the participants' RP-like score. The results of the ANOVA show that there was a significant main effect of task, with the RP-like score being significantly affected by the type of task that was being performed, $F(2, 22) = 17.24$, $p < .001$. There was also a main effect of year, with the year of study the recording was made in significantly influencing the RP-like score, $F(2, 22) = 18.12$, $p < .001$. However, there was no significant interaction between task type and year of study, indicating that the participants showed similar patterns of performance on the different tasks throughout their studies, $F(4, 44) = 1.19$, $p = .33$. This pattern can be seen in Figure 1, which shows that in all three years the participants received a lower RP-like score for the open questions than they did for the other two tasks.

Post-hoc Bonferroni pairwise comparisons showed that for task type the RP-like score for the open questions (M = 75.58, SD 2.01) was significantly lower than for both the read text (M = 82.12, SD 1.98; Bonferroni -6.56 ± 1.17 points, $p < .001$) and sentences (M = 81.94, SD 2.09; Bonferroni -6.38 ± 1.47 points, $p = .003$). However, the read text and sentences did not differ significantly in RP-like scores (0.174 ± 1.16 points, $p = 1.00$).

For the year of recording, a post-hoc Bonferroni pairwise comparison revealed that the RP-like score in year 1 (M = 76.63, SD 2.17) was significantly lower than it was in year 2 (M = 81.77, SD 1.85; Bonferroni -5.14 ± 1.11 points, $p = .002$) and year 3 (M = 81.23, SD 1.86; Bonferroni -4.60 ± 1.04 points, $p = .003$), but that the difference in RP-like score for years 2 and 3 was not significant (0.54 ± 0.56, $p = 1.00$).

A further look at the data showed that the different features and subfeatures did not develop in the same way over time. Vowel quality and liaison generally seem to be difficult for the participants, as the percentages for these features remain relatively low. Strikingly low scores occur for subfeatures that are notoriously difficult for Dutch learners of English (Collins/Mees 2003), in particular the TRAP vowel (which peaks at 58% in year 2), dental fricatives (starting at 67% and declining), and preglottalisation (starting at 65% and declining to 49% by year 3). These learners still struggle with these features in their third year of studying English, even though they are considered advanced learners, and in fact partially deteriorate for these specific features. However, they seem to pick up other features more quickly, in particular stress patterns (around 98% throughout) and rhoticity (the lowest score being at 90%), as performance is near ceiling even in their first year and they remain stable throughout. In comparison, other features, such as the various vowels, are much more variable over time.

3.2 Influences of Confounding Variables: Exposure to English

To find out if variation in the amount of exposure to English played a confounding role in any change in the participants' pronunciation, a regression model was fitted to the data in which the confound was taken into account. The possible confounding influence on the overall RP-like scores of the participants was split up into two parts: the influence of studying abroad and the number of English-taught courses taken during the third year. In the model, the independent variables had to be entered separately from the confounding variables, so a hierarchical regression was chosen. In the first step, year of study was controlled for, as well as the task type, and the specific feature (e.g. vowel quality, rhoticity) and subfeature (e.g. aspiration, intervocalic voicing of voiceless consonants). Section 3.1 showed that these factors played an important part in the RP-like score, so they were controlled for to find out whether in step two the number of courses and time spent abroad improved the model's prediction of the participants' scores.

As seen in Table 2, below, the model that controlled for year of study, task type, and pronunciation feature explained 3.3% of the variance in the data. Adding the number of courses and time spent abroad to the model resulted in a significant R^2 change = 0.003, $p = .014$. Interestingly, the factors only explained a very small part of the variance, even though the models were a good fit to the data, as the p-values of the regression ANOVA are all $p < .001$. Cook's distance showed there were no influential outliers in the model, and there was no multicollinearity.

As can be seen in step 2 of Table 2, the number of English-taught courses a participant took in their third year was a significant predictor of their RP-like score when controlling for year, task type, feature, and subfeature, but time spent abroad did not significantly add to the fit of the model. When inspecting the data more closely, see Figure 3, there does seem to be a trend for participants who went abroad to continue increasing their RP-like score even after explicit instruction was stopped, but the difference is very small and not significant.

Table 2: Linear model of predictors for RP-like score, with 95% CI in parentheses (b = unstandardized coefficient; SE B = standard error of b; β = standardised coefficient).

	b	SE B	β	p
Step 1				
Constant	87.883 (84.060, 91.707)	1.950		
Year of study	2.319 (1.313, 3.324)	0.513	.088	.000
Task type	-3.060 (-4.069, -2.051)	0.514	-.116	.000
Feature	-1.081 (-1.467, -0.695)	0.179	-.113	.000
Subfeature	-0.104 (-0.200, -0.009)	0.049	-.044	.033
Step 2				
Constant	91.104 (86.556, 95.653)	2.320		
Year of study	2.315 (1.311, 3.319)	0.512	.088	.000
Task type	-3.060 (-4.067, -2.053)	0.514	-.113	.000
Feature	-1.081 (-1.466, -0.696)	0.197	-.113	.000
Subfeature	-0.104 (-0.200, -0.009)	0.049	-.044	.033
Number of English-taught courses	-0.540 (-0.916, -0.164)	0.192	-.056	.005
Time spent abroad	0.052 (-0.390, 0.495)	0.225	.005	.816

Note: $R^2 = 0.033$ for step 1; $\Delta R^2 = 0.003$ for step 2 ($p = .014$).

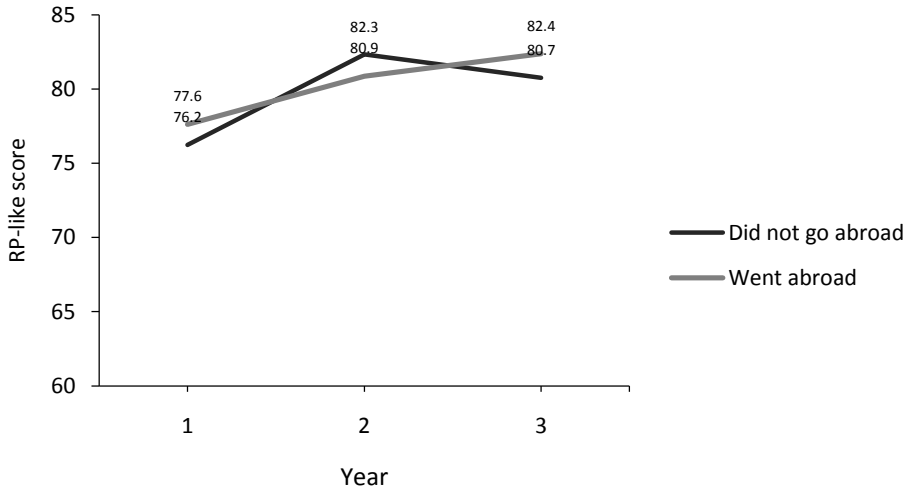

Figure 3: Average RP-like score per year for the participants who went abroad and those who did not. Score out of 100.

4 DISCUSSION

This study investigated whether the English pronunciation of advanced Dutch learners improved, deteriorated, or remained stable over time once explicit pronunciation had

ceased. Sub-questions to this main research question were whether there was any influence of the degree year the learners were in and the task they were asked to perform, as well as whether there was any confounding influence of the varying levels of exposure to English due to different courses and spending time abroad. It was hypothesised that after pronunciation teaching had stopped, the learners' pronunciation would deteriorate over time. Additionally, read speech was thought to be more native-like than spontaneous speech, and an increased exposure to English in general was thought to have a positive confounding influence on learners' pronunciation.

4.1 Effects of Year and Task Type

The results show that the year in which the participants were recorded had a clear influence on their RP-like score. In the first year the participants were least RP-like, but they improved from the first to the second year. However, unexpectedly, once explicit phonetics and pronunciation teaching was stopped, the participants did not change significantly in their RP-like score and the expected deterioration was not found. It seems that the participants' pronunciation was thus stable enough to remain on the same level even without instruction. Importantly, however, the score did not improve in the third year. This means that there was no clear evidence of a long-term effect of convergence in either direction, even though possible motivations to converge to either English native speakers or Dutch speakers were present (Coupland 2010).

Strikingly, not all features developed in the same way over time. Some features seemed more robust than others, and remained stable throughout, while others appeared more difficult. A feature consistently low in its RP-like score was liaison, which is not present in Dutch: where Dutch inserts a glottal stop at the beginning of words, English connects them (Gussenhoven/Broeders 1997). Subfeatures that remained low throughout were those that are notoriously difficult for Dutch learners: dental fricatives /θ/ and /ð/, which tend to be stopped, and the TRAP vowel /æ/, which is usually replaced by Dutch /ɛ/ (Collins/Mees 2003). Conversely, features that were picked up relatively quickly, such as stress patterns and rhoticity, tend to be rule-governed in their realisation, making it easier to acquire them (Gussenhoven/Broeders 1997).

In addition to a difference through the years, there was also a clear task effect: participants were less RP-like in their pronunciation for the open questions than for the read text and sentences. This is likely due to task demands: the open questions not only required the participants to speak English, but they also had to come up with an answer on the spot. This means that their cognitive load would have been higher than in the other two tasks, where they only had to read out a text or sentences, and they would likely have focussed less on their pronunciation.

4.2 Confounding Variables: Exposure to English

The regression model showed that, when controlling for the independent variables, the number of courses a participant took in their third year was a significant predictor of their RP-like score, while spending a term abroad was not. The controlled factors

explained 3.3% of the variation in the data, with number of courses explaining an additional .3% of the variation. Remarkably, the number of courses a participant took was a significant influence on their RP-like score, while in the third year none of the courses explicitly taught pronunciation or phonetics. Moreover, not all courses the students took were taught by speakers of RP, so there would not always be a direct benefit from the increased input. Since the participants still benefited from the increase in exposure, this seems to support Grant (2014) in the claim that more L2 exposure is beneficial to pronunciation, though it remains to be seen how much of this benefit truly adds to the accent quality, as it has mainly been shown to relate to fluency and general comprehensibility.

Whether participants spent time abroad did not significantly influence their RP-like scores. This might be because the additional exposure was mostly in areas that might not have helped much in these tasks: the participants might have developed their interaction skills by talking to native speakers, the majority of whom might not have spoken RP, as well as by talking to non-native speakers. However, the tasks used in this study did not involve any direct interaction. It is quite possible that their pronunciation skills in reading out loud would not have benefited enough from the general increased English exposure to improve. Moreover, it is very plausible that the participants' pronunciation became more native-like while not necessarily becoming more RP-like, and the participants might have picked up features of other native English varieties through coming into contact with speakers from various areas. While this could potentially explain changes in the participants' pronunciation, it was beyond the scope of this study to investigate this in more detail.

5 CONCLUSION

Overall, and contrary to expectation, this study showed that for the investigated cohort of advanced Dutch learners of English, discontinuing explicit pronunciation teaching was not a significant influence on the maintenance of a near-native accent. It seems that the instruction they received before teaching was discontinued was enough to allow the learners to achieve a stable pronunciation level. The amount of exposure the learners received turned out to be a confounding influence: when participants took more English-taught courses, their pronunciation was more RP-like. A stay abroad, however, did not affect their performance. The value of pronunciation teaching thus seems to be quite high for advanced Dutch learners of English, as they improved during the first years when they received explicit instruction, but once they managed to reach a certain level it seemed that their pronunciation managed to stabilise enough for them to maintain it without receiving any further such instruction.

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Abstract

THE VALUE OF PHONETICS AND PRONUNCIATION TEACHING FOR ADVANCED LEARNERS OF ENGLISH

Pronunciation is an essential part of acquiring a second language, but far too often little time is spent on teaching it (Kelly 1969). It seems as if it is generally thought that

pronunciation is something that will develop on its own, yet learners are still assumed to maintain a certain level. This paper investigates the effects of explicit pronunciation and phonetics teaching on the English speech production of advanced Dutch learners of English. The pronunciation of advanced university learners was investigated at several points over a period of three years, halfway during which their pronunciation teaching was stopped. The effect this termination had on their speech production was investigated, as well as any task-specific differences in read versus spontaneous speech. Also studied was the potential influence of studying abroad and taking English-taught courses. Overall, this study shows that explicit teaching has a clear effect on the pronunciation of the learners. Some features of pronunciation turn out to be more robust than others, and the task type has an unmistakeable influence on the native-like quality of the learners' pronunciation, while there was only a minor effect of general exposure to English. Altogether, the value of explicit phonetics and pronunciation teaching turns out to be quite high for advanced second language learners, and once they acquire a certain level they are able to maintain a stable accent.

Keywords: EFL, phonetics, pronunciation, pronunciation teaching, pronunciation stability

Povzetek

VREDNOST POUČEVANJA FONETIKE IN IZGOVARJAVE ZA NAPREDNE UČENCE ANGLEŠČINE

Izgovarjava je ključni element učenja tujega jezika, vendar se njenemu poučevanju prepogosto posveča premalo časa (Kelly 1969). Zdi se, da velja prepričanje, da se bo izgovarjava sčasoma razvila kar sama od sebe, hkrati pa se pričakuje, da bodo učenci vendarle dosegli določen nivo. Članek obravnava učinke eksplicitnega poučevanja izgovarjave in fonetike na tvorjenje angleškega govora pri naprednih nizozemskih učencih angleščine. V obdobju treh let se je izgovarjava pri naprednih študentih večkrat preverjala. Sredi triletnega obdobja pa se je poučevanje izgovarjave prenehalo. Ugotavljali smo, kako je prekinitev poučevanja izgovarjave vplivala na tvorjenje govora in ali je bilo moč opaziti specifične razlike med branjem in spontanim govorom. Upoštevali smo tudi vpliv študija v tujini in spremljanja predavanj v angleškem jeziku. Naša študija dokazuje, da ima eksplicitno poučevanje izgovarjave jasen učinek na razvoj le-te pri učencih. Nekatere izgovorne značilnosti so bolj izrazite kot druge, prav tako tudi vrsta naloge nedvomno vpliva na podobnost učenčeve izgovarjave izgovarjavi rojenih govorcev. Količina izpostavljenosti angleščini ima manjši učinek na izgovarjavo. Vrednost eksplicitnega poučevanja fonetike in izgovarjave je pri naprednih učencih tujega jezika precej visoka. Ko enkrat dosežejo določen nivo, so ga sposobni tudi ohraniti.

Ključne besede: angleščina kot tuji jezik, fonetika, izgovarjava, poučevanje izgovarjave, stabilnost izgovarjave

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THE ACOUSTIC CHARACTERISTICS OF NON-NATIVE AMERICAN ENGLISH VOWELS

1 INTRODUCTION

It is a commonplace to say that non-native speakers (NNSs) differ in how they pronounce their L2 sounds from native speakers (NSs). Some studies have shown that speakers of different language backgrounds have difficulty acquiring the vowel contrasts of English whose vowel inventory is rather dense. Spanish learners of English find it challenging to discern the difference between English /i:/ and /ɪ/ (Flege et al. 1997; Escudero/Boersma 2004) probably because they both sound like the Spanish /i/. A similar acoustic and perceptual pattern is reported for Mandarin (Thomson et al. 2009), and Norwegian (Iverson/Evans 2007).

The two groups of speakers whose vowels are analyzed in this study belong to different native language backgrounds with noticeable differences in the vowel inventories. Serbian[1] is traditionally described as a language that has five vowels, /i e a o u/, which counts as one of the statistically preferred vowel inventories in the languages of the world. The consonants are much more diversified (twenty-five in number). The prosodic system of Serbian tends to be somewhat complex and is based on the notion of pitch accents that are according to the Vukovian tradition four in number: short falling (SF), short rising (SR), long falling (LF) and long rising (LR), e.g. *pita* (Eng. *pie*), *voda* (Eng. *water*), *moda* (Eng. *fashion*), and *mada* (Eng. *though*), respectively. According to the traditional linguistic approach, set up by Vuk Stefanović Karadžić in the nineteenth century, pitch accents and vowel length are merged and represent a single phonemic category. In short, this approach presupposes that vowel quantity is a prosodic phenomenon, which makes Serbian an isolated case. To the best of my knowledge, the category of phonemic length in the languages of the world is not interpreted as part of the prosodic system. In line with this, some notable attempts have been made to re-interpret the prosodic system of Serbo-Croatian and bring it closer to the current linguistic understanding, which presupposes that tone and vowel quantity are not merged into a single category. Jakobson 1937 [1962] proposes a novel approach where quantity and

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1 The language that was once referred to as an official language of Yugoslavia was Serbo-Croatian. I will use the newer term, Serbian, in this study, which is an official language of Serbia. However, when analysing the viewpoints of other linguists, I will retain the term that they originally used. The coinage Bosnian-Croatian-Serbian (often abbreviated to BCS) is another widespread term used outside of the region of former Yugoslavia, but it has not gained ground in Bosnia, Croatia or Serbia.

pitch of the Serbian vowels are factored out as two distinct dimensions, which was later adopted in several studies on the suprasegmental properties of this language (Browne/ McCawley 1965; Inkelas/Zec 1988).

Considering other L2 studies that investigate various phonetic properties of English and Serbian, Sokolovic-Perovic (2009) recognizes 10 vowels in the Serbian vowel system, adopting the Jakobsonian approach in her study. On the other hand, Krebs-Lazendic and Best (2013) oppose to this view accepting the Vukovian traditional approach of the description of the Serbian vowel system.

I will adopt the Jakobsonian approach that presupposes the existence of ten different vocalic segments which can be combined with tones (high or non-high). Another phonetic issue arises when short and long vowels are subgrouped into two separate phonemic categories. The debate relates to the possible difference in the vowel quality of long and short vowels, but I will not discuss this in detail in this paper. Serbian is described as one of the quantity languages, and its vowel inventory contains ten vowels (five long and five short): /a e i o u/ and /a: e: i: o: u:/. The dialect of Serbian investigated here is the Belgrade dialect and it utilizes all ten vowel segments. On the other hand, some dialects of Serbian (e.g. the speakers in the region of the city of Pirot in south-eastern Serbia) do not always use the long-short phonemic distinction.

The American English vowel inventory is much more complex than Serbian. This study focuses on nine of its monophthongs, as produced by NSs of English and NNSs of English with a substantial length of residence[2] in the States. A full set of American English monophthongs contains eleven different segments (Yavaş 2011: 77–78), /i ɪ e ɛ æ ʌ u ʊ o ɔ ɑ/, in the words *beat, bit, bait, bet, bat, but, boot, put, boat, bought*, and *pot* respectively. These vowels are usually treated as simple vowels, even though some may be diphthongized, /e/ and /o/ in particular and /i/ and /u/ also, but to a smaller degree. Yavaş (ibid.) points out that the vowels of *bite*, *bout* and *void* are the main diphthongs in AE.

Furthermore, AE makes use of the phonological distinction tense/lax in the description of vowels. One of its component parts is the difference in the phonetic duration between tense and lax vowel segments. This much debated phonological distinction has been widely used in AE, and it is one of the pairs of binary features (tense/lax) that distinguishes the vowel of *beat* from the vowel of *bit*. Lax vowels are usually shorter, but the vowel of *bat* is phonetically long even though it is lax.

This study will explore the acoustic features of nine AE monophthongs out of eleven. The vowels of *bait* and *boat* are eliminated from the experiments due to several reasons. Firstly, they are somewhat diphthongal in AE. Also, the participants in this study who are originally Serbian were almost exclusively taught the British variety of English at school and would probably diphthongize these vowels even more.

The phonetic vowel quality is acoustically analyzed with the help of vowel formants. The first three formants are usually employed to point out even the most subtle phonetic differences. However, many phonetic studies use only the first two formants to specify the vowel quality of every vowel segment, and these are referred to as F_1 and

2 The term *length of residence* is usually abbreviated to LOR. The acronym is used henceforth in this paper.

F2. When F_1 and F_2 are presented on a graph, they resemble a vowel diagram which is based on the articulatory features of vowels. This semblance enables easier identification of vowels in acoustic studies and this principle will be adopted in this study. The first formant is inversely related to tongue height. The higher the vowel, the lower the first formant. The second formant is related to the degree of backness. The more front the vowel, the higher the second formant.

Earlier research on the acoustic characteristics of American English vowels provides measurements of vowel formants, which can be compared to the F_1 and F_2 obtained in this study. The most widely cited experiment on the acoustics and perception of English vowels was carried out by Peterson and Barney (1952). They recorded 2 repetitions of 10 vowels in the phonetic environment /hVd/, as spoken by 33 male speakers, 28 female speakers and 15 children. They measured the first three vowel formants (F_1–F_3), formant amplitudes and fundamental frequency for every token. The measurements were made subjectively, at a time slice that they judged to be "steady state," which is one of the most important limitations of this study. Coarticulation could not be taken into account, as it usually occurs at segment boundaries. Peterson and Barney's experiment triggered further phonetic research on the acoustics of vowels, theories of vowel recognition and perception. Hillenbrand et al. (1995) conducted a very similar study with more speakers of American English, who were also screened for dialect (87% came from the state of Michigan). Their experiment included 12 vowels of AE in the same phonetic context as the Peterson and Barney study dealt with, but vowels in Hillenbrand et al's experiment were also recorded in isolation. Acoustic measurements were taken from a steady state portion of each vowel in order to replicate Peterson and Barney's experiment. Table 1 shows the measurements of F_1 and F_2 of those vowels which are the focus of the present study. Only the acoustic values for male speakers are taken from Hillenbrand et al. (1995: 3103) and given below, also in compliance with the present study.

Table 1: Mean values of F_1 and F_2 of vowels produced by 45 men (adapted and taken from Hillenbrand et al. (1995)

	/i/	/ɪ/	/ɛ/	/æ/	/ʌ/	/u/	/ʊ/	/ɔ/	/ɑ/
F_1	342	427	580	588	623	378	469	652	768
F_2	2322	2034	1799	1952	1200	997	1122	997	1333

2 EXPERIMENT

2.1 Participants

Ten NSs of Serbian who live in the United States and four NSs of American English took part in the experiment. All fourteen participants are male.

At the beginning of the recording session, each participant was asked to fill out a questionnaire. The Serbian participants were asked to report the LOR in the United States and language(s) spoken at home. The Serbian participants were also asked to rate their own English fluency on a scale from 1 to 5 (5 being the highest) at the time

of relocation from Serbia and at the time of recording. They were all born in Belgrade, Serbia (except for one participant who was born in the south of Serbia, but lived in Belgrade for 27 years prior to moving to the US) and lived there until they moved to the States. They all live in Atlanta, GA. Their age ranges from 35–44. Nine of them had lived in Atlanta for more than 12 years at the time of the recording. Seven out of ten speakers mostly speak Serbian at home, the other three speak Serbian at home as well (but interchangeably with other languages). The fact that all ten Serbian speakers use their mother tongue at home is important for this study because the phonetic interference from this language may influence the pronunciation of English vowels. Nine Serbian participants speak exclusively English at work. Speaker IS speaks English and Serbian at work. Therefore, all participants use both English and Serbian on a daily basis.

NSs were asked to report on their place of residence and languages spoken. All 4 live in the North-East of the United States. Two were undergraduate students at Cornell University, Ithaca, NY, and two were employees (former and present) of the same University. The assumption is that age differences will not affect the production of vowels. Table 2 summarizes this information.

Table 2: Background information on participants

Subject	Sex	Age	L2 fluency (self-evaluated) then/now	Place of residence	Length of residence	Language(s) spoken at home
Serbian NSs (NNs)						
GV	M	40	4/5	Atlanta, GA	12	Mostly Serbian
SG	M	41	3/5	Atlanta, GA	23	Serbian/English
MR	M	40	2/5	Atlanta, GA	14	Mostly Serbian
MS	M	40	1/4	Atlanta, GA	15	Mostly English
IS	M	44	2/4	Atlanta, GA	15	Mostly Serbian
NC	M	37	2/4	Atlanta, GA	16	Mostly Serbian
VG	M	42	2/3	Atlanta, GA	8	Mostly Serbian
NN	M	36	2/4	Atlanta, GA	13	Mostly Serbian
MP	M	35	N/A	Atlanta, GA	14	English/Spanish
UZ	M	45	3/4	Atlanta, GA	16	Mostly Serbian
English NSs						
MB	M	19		New York City, NY		English
TC	M	70		Ithaca, NY		English, some French
PI	M	19		Pittsburgh, PA		English
MI	M	73		Ithaca, NY		English

2.2 Materials and Recording Procedures

The acoustic experiments target nine vowels of AE in the following monosyllabic words: *beat*, *bit*, *bet*, *bat*, *but*, *boot*, *put*, *bought* and *pot*. The words were all embedded in the frame sentence "Say ___ again," and repeated three times in a random order, giving a total of 270 (10 speakers x 3 repetitions x 9 vowels) tokens for Serbian NSs and 108 (4 speakers x 3 repetitions x 9 vowels) tokens for English NSs, totalling 378 repetitions.

All Serbian English recordings were made using Sennheiser noise-cancelling headphones and a Sony laptop computer in Praat, Version 5.3.51 (Boersma/Weenink 2013). The NSs of American English were recorded in a sound-attenuated booth in the Phonetics Laboratory at Cornell University. Participants were given the set of sentences in a Power Point presentation, and only one sentence was presented on a slide at a time. They were also given the opportunity to familiarize themselves with the sentences before the recording started. After they had got acquainted with the materials, the participants were instructed to read the sentences "as naturally as possible."

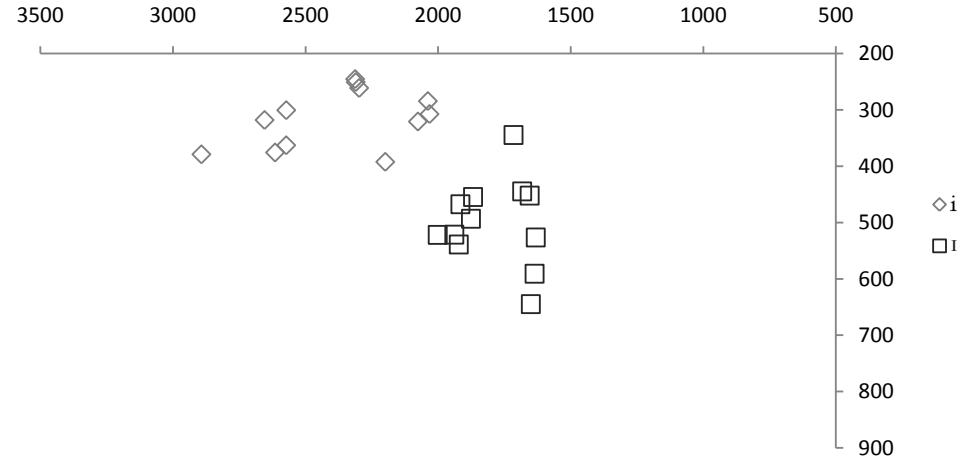
2.3 Analysis and Discussion

The recordings were digitized at 22,000 Hz and analyzed using the Praat software for acoustic analysis of speech (Boersma/Weenink 2013). All elicited materials were first manually labelled and vowel segmental acoustic features measured with the help of a script designed by DiCanio (2013). This script generated 8 acoustic measures: vowel duration, F_1, F_2, F_3, center of gravity, standard deviation, skewness, and kurtosis. Only F_1 and F_2 are analysed in the present study. For both F_1 and F_2, the mean value from each of three equal intervals over the duration of the vowel was extracted. All values that were unexpectedly high or low were checked manually by the author and corrected wherever necessary. The mean values of F_1 and F_2 for every token are shown in all the graphs that follow.

The vowels are presented in groups in the analysis that follows. The acoustic measurements of the first two formants for NSs are given first. They are followed by those of NNSs. F_1 is plotted on the vertical axis, and F_2 on the horizontal one in graphs. Each marker in graphs represents one repetition. Wherever necessary, comments are provided for individual speakers' idiosyncratic speech or possible phonetic interference from their mother tongue.

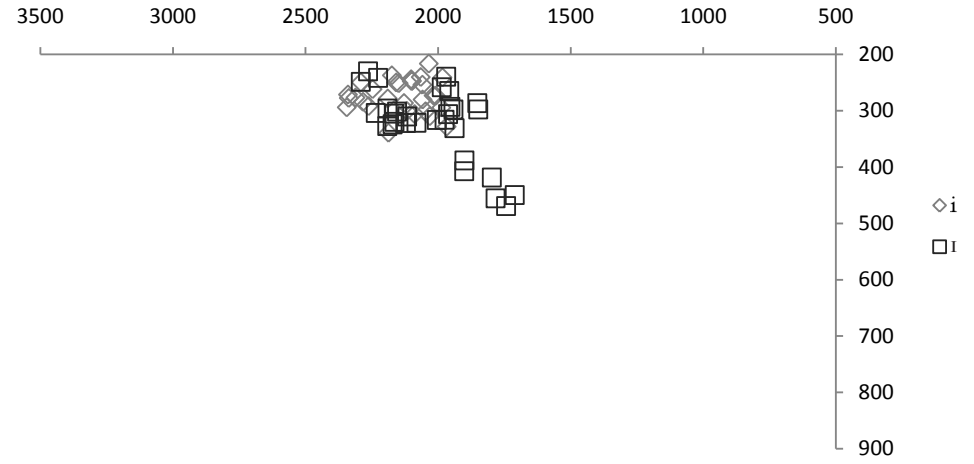
2.3.1 High Vowels /i ɪ/

The first pair of vowels are those of *beat* and *bit*. These two vowels are treated as long and short respectively in British English. In AE, they are most often described as tense and lax. NSs clearly differentiate between the two, which is shown in Graph 1. On the other hand, NNSs have a tendency to merge the two vowels. Another observation is related to the span of F_2 values for NSs. It is wider for /i/ when compared to NNSs, and it ranges from 2032 Hz to 2892 Hz. F_1 values are relatively close in the two groups of participants (see Tables 3 and 4).



Graph 1: F_1 and F_2 of /i ɪ/ for NSs

NNSs' vowel merger of high vowels /i/ and /ɪ/ may be accounted for by the fact that Serbian language background speakers rely heavily on the phonetic duration when distinguishing between these two vowels. They transpose this phonetic property from L1 (Serbian) into L2. The merger is not observed in speaker SG, who has the longest LOR in the States (23 years). Similarly, the acoustic characteristics of /ɪ/ of speaker MS, whose LOR is 15 years, approximate the NSs production of this vowel.



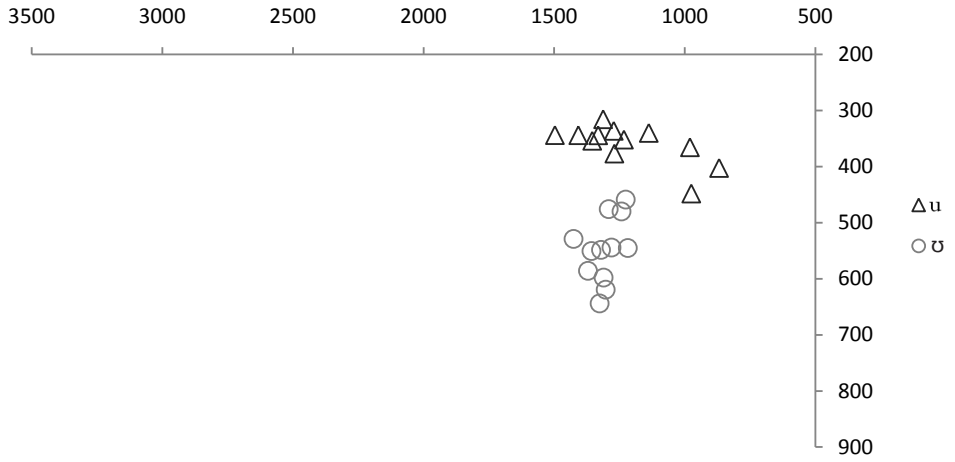
Graph 2: F_1 and F_2 of /i ɪ/ for NNSs

2.3.2 High Vowels /u ʊ/

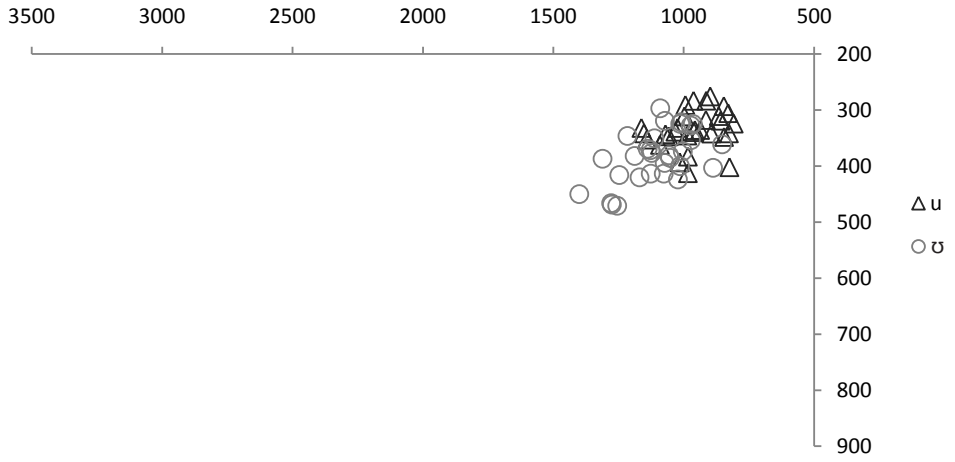
The next pair of vowels are the vowels of *boot* and *put*. Similar to /i ɪ/, these two vowels are treated as long and short in British English. In AE, /u/ is tense and /ʊ/ is lax. NSs

clearly differentiate between the two, which is shown in Graph 3, i.e. there is no overlapping of /u/ and /ʊ/.

On the other hand, NNSs have a tendency to merge the two vowels, where they should produce an /ʊ/ vowel-like quality. The non-native speaker participants consistently produce F_1 of /ʊ/ with a lower frequency. This makes this vowel quality a higher vowel and closer to /u/ in the speech of the NS group. NNSs obviously disregard the quality difference between the two English vowels and rely more on the phonetic duration, similar to the /i/–/ɪ/ pair.



Graph 3: F_1 and F_2 of /u ʊ/ for NSs

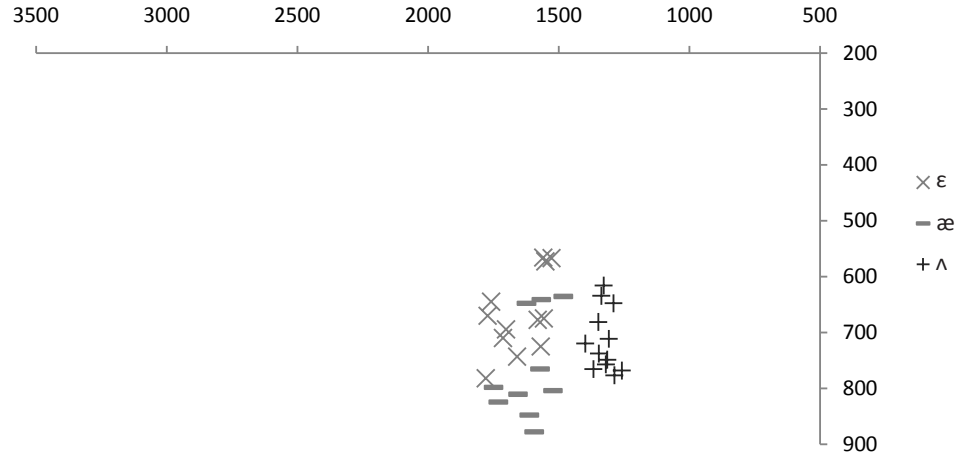


Graph 4: F_1 and F_2 of /u ʊ/ for NNSs

It is observed that not all NNSs systematically merge their /u/–/ʊ/. Speaker SG invariably relies on the differences in the vowel quality of these two vowels, approximating the pronunciation of NSs of English with a mean value of 469 Hz for the first formant. However, the native speaker MB has an unusually low values for the first formant with an average measurement of 471 Hz.

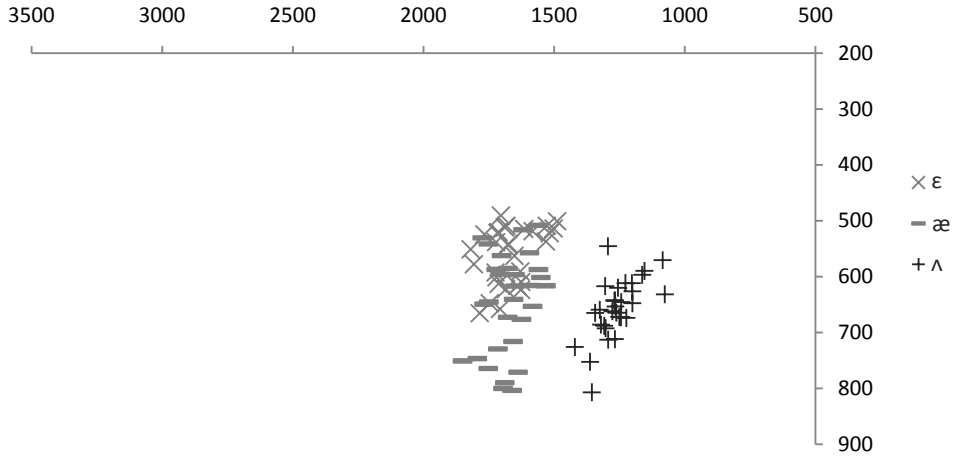
2.3.3 The Vowels /ɛ æ ʌ/

Vowel data elicited from *bet* and *bat* are analyzed next. It has been spotted that there is more variation in the acoustic vowel space even in the case of NSs. There is a tendency, though, for the /ɛ/ to be produced with a lower F_1, which makes it a higher vowel than /æ/ in AE native speech. Three tokens of all three vowels that have consistently lower values of F_1 are all produced by speaker MB. This may be due to his vocal tract length, which is longer in tall people. This reduction in F_1 values in one speaker may be seen as his idiosyncratic characteristic.



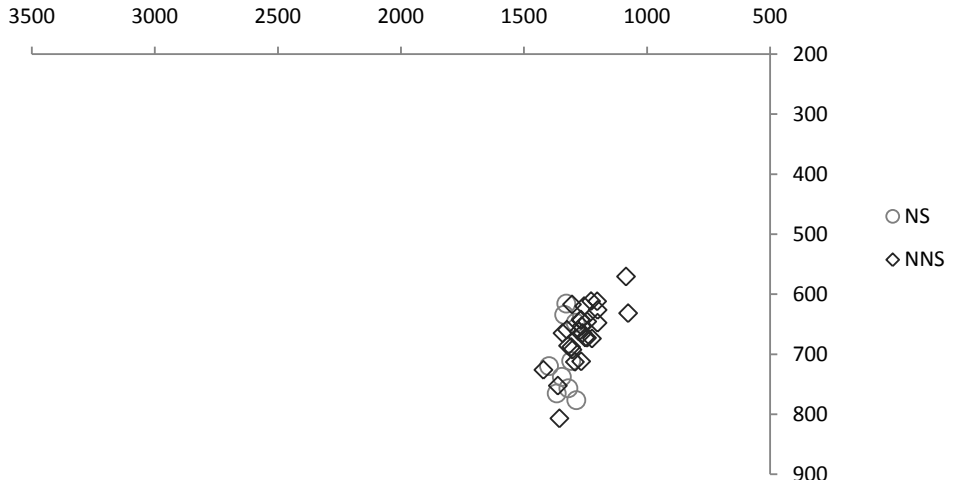
Graph 5: F_1 and F_2 of /ɛ æ ʌ/ for NSs

The NNS participants in this study tend to merge /ɛ/ and /æ/ into one vowel, i.e. they do not clearly differentiate between the two. Both vowels are new sounds to Serbian language speakers. However, there are nine tokens of the *bat* vowel in Graph 6 that have higher F_1 values and they are repetitions of 3 speakers, SG, NN and UZ. Two of these participants have a relatively long LOR in the States, 23 and 16 years. The speaker NN has lived in the States for 13 years, which is slightly under the mean value for LOR in the study – 13.5 years.



Graph 6: F_1 and F_2 of /ε æ ʌ/ for NNSs

A similar dispersion between the two groups of participants is observed for the F_1 values of /ʌ/ – mostly between 600 and 800 Hz. However, one NNS consistently lowers the F_1 values, keeping them steady at slightly below 600 Hz. This feature is treated as a speech habit of speaker NN. The same speech habit is observed in 2 tokens of speaker IS. On Graph 7, all tokens of /ʌ/ for both native and non-native speakers are plotted, except for speaker NN who systematically produced this vowel as higher. The two rightmost tokens represent the speech of speaker IS.



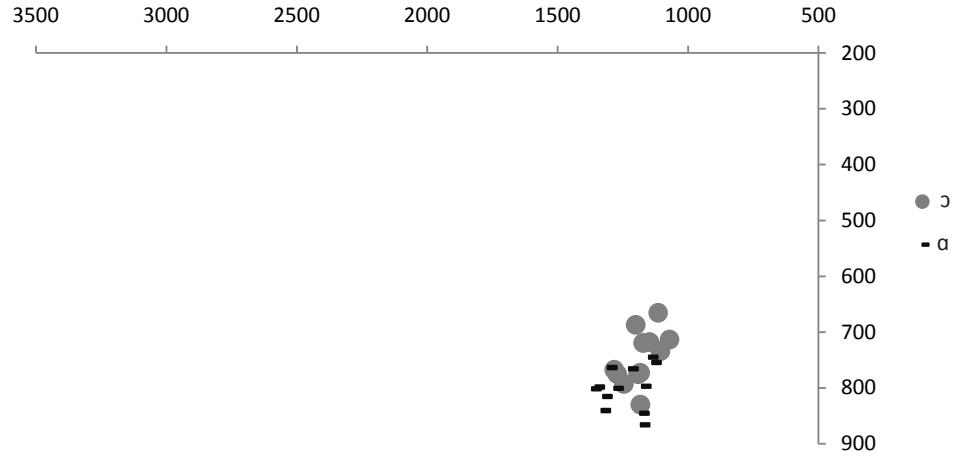
Graph 7: /ʌ/ in 4 NSs and 9 NNSs

2.3.4 The Vowels /ɔ ɑ/

Both /ɔ/ and /ɑ/ are described as back vowels in AE. However, in AE a *cot–caught* merger is observed in many regions. As a result of this phonological process, the two vowels become one (homophonous). This speech characteristic is also typical of other varieties of English, Canadian English in particular.

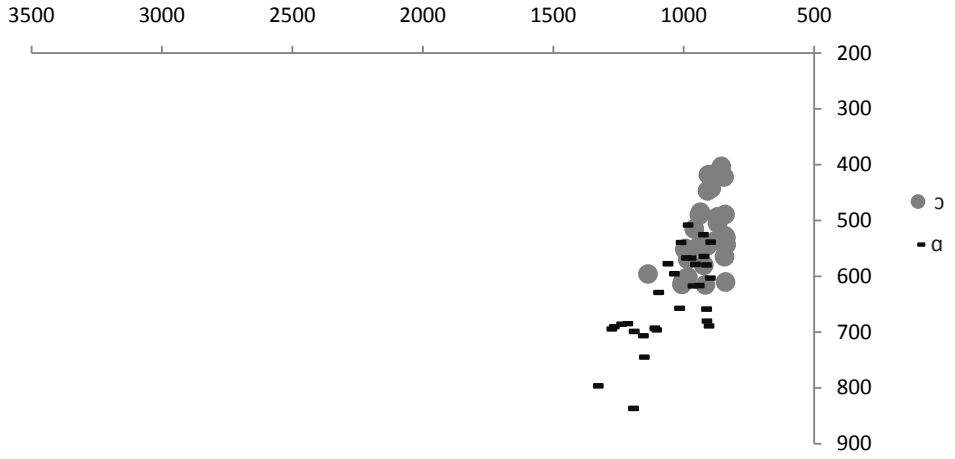
The NS participants of this study mostly differentiate the vowels in the corpus, i.e. in the words *bought* and *pot*. The NNSs utilize the same speech habit as NSs. However, the /ɔ/ vowel is articulated with a lower F_2 by most subjects in the NNS cohort. This implies that the NNS /ɔ/ is a more back vowel than in native AE speech. The mean values of the second formant for the two groups are 1181 Hz (NSs) and 885 Hz (NNSs). In addition, the measurements of F_1 for the NS group are significantly higher compared to the non-native speaking participants, which implies that /ɔ/ is a lower vowel in the native AE speech.

The vowel of *pot* shares the same phonetic characteristics as /ɑ/ in the two groups of participants in this study. The values for both formants are lower in the NNS. This vowel is, therefore, produced as a higher vowel and with a larger degree of backness.



Graph 8: F_1 and F_2 of /ɔ ɑ/ for NSs

A glimpse at the individual speakers reveals more interesting acoustic data that needs to be discussed. Namely, three NNS speakers drift towards the higher values of F_1 and F_2, i.e. they are moving towards a more native-like pronunciation of the vowels /ɔ ɑ /. These are speakers SG, MS and NN. The LOR is, indeed, longer for SG and MS, and NN's LOR is 13 years. LOR may be considered an important factor progressively leading to a more native-like pronunciation of L2.



Graph 9: F_1 and F_2 of /ɔ ɑ/ for NNSs

3 GENERAL DISCUSSION AND CONCLUSIONS

The tables that follow summarize the mean values of the first two formants for all nine vowels investigated in this research study. The measurements for native American English speakers are given in Table 3.

Table 3: Mean values of F_1 and F_2 of vowels produced by NSs

	/i/	/ɪ/	/ɛ/	/æ/	/ʌ/	/u/	/ʊ/	/ɔ/	/ɑ/
F_1	316	500	668	765	713	359	548	745	799
F_2	2857	1791	1644	1610	1325	1220	1306	1181	1252

The acoustic data from Hillenbrand et al. (1995) differs significantly from the F_1 and F_2 measurements in this study. There is no clear pattern in the differences between the acoustic measurements in their study and the present study. This may be accounted for by the method that was used in obtaining the measurements. This vowel study applies a different methodological approach to acoustic measurements, which extracts dynamic vowel data over three points in time. The average vowel frequencies for the speakers of Serbian language background are provided in Table 4.

Table 4: Mean values of F_1 and F_2 of vowels produced by NNSs

	/i/	/ɪ/	/ɛ/	/æ/	/ʌ/	/u/	/ʊ/	/ɔ/	/ɑ/
F_1	273	321	561	647	656	334	383	507	640
F_2	2139	2020	1666	1672	1259	960	1103	885	1068

The biggest differences in the acoustic measurements of the two groups lie in those vowels where NNSs merge two vowel qualities of American English, abolishing the contrast. This merger is observed in three pairs of vowels: /i ɪ/, /u ʊ/, and /ɛ æ/. The neglect of the vowel quality differences between the two vowels in each pair is compensated by non-native speakers' choice to rely on the phonetic duration solely – the phonological property they transferred from their mother tongue. The /ʌ/ vowel seems to display the least acoustic differences in native and non-native speech. Finally, /ɔ/ and /ɑ/ are consistently produced as more back and lower vowels in NNs than in NS.

As a final note, with the exception of /ʌ/, which is a good match in the non-native speaker group, it seems that only 4 participants from the NNS cohort approach the acoustic characteristics of native AE speech. This is especially noticeable in their tendency to avoid mergers of vowels, which is the main characteristic of American English speech of non-native speakers of Serbian language background. The LOR of three of these speakers (SG (23y), UZ (16y) and MS (15y) is longer than the average LOR in this study and it may have influenced the resistance to the non-native merger of similar vowel qualities.

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Abstract

THE ACOUSTIC CHARACTERISTICS OF NON-NATIVE AMERICAN ENGLISH VOWELS

This study aims at discussing the phonetic property of vowel quality in English, as exercised by both native speakers of General American English (AE) and non-native speakers of General American English of Serbian language background, all residents of the United States. Ten Serbian male speakers and four native male speakers of AE are recorded in separate experiments and their speech is analyzed acoustically for any significant phonetic differences, looking into a set of monosyllabic English words representing nine vowels of AE. The general aim of the experiments is to evaluate the phonetic characteristics of AE vowels, with particular attention to F_1 and F_2 values, investigate which vowels differ most in the two groups of participants, and provide some explanations for these variations. A single most important observation that is the result of this vowel study is an evident merger of three pairs of vowels in the non-native speech: /i ɪ/, /u ʊ/, and /ɛ æ/.

Keywords: American English, Serbian, monophthong, non-native vowel merger, vowel acoustics

Povzetek

AKUSTIČNE ZNAČILNOSTI SAMOGLASNIKOV PRI TUJIH GOVORCIH AMERIŠKE ANGLEŠČINE

Članek obravnava fonetično lastnost kvalitete samoglasnikov v angleščini pri rojenih govorcih ameriške standardne angleščine in tujih govorcih ameriške angleščine srbskega porekla, ki živijo v Združenih državah Amerike. V ločenih poskusih smo posneli deset moških govorcev srbščine in štiri moške govorce ameriške angleščine. Posnetke

smo akustično analizirali in ugotavljali signifikantne fonetične razlike v naboru devetih angleških enozložnih besed, ki so vsebovale devet samoglasnikov ameriške angleščine. Glavni cilj poskusa je bil ovrednotiti fonetične značilnosti ameriških samoglasnikov s posebnim poudarkom na vrednostih F_1 in F_2. Ugotavljali smo, kateri samoglasniki se najbolj razlikujejo pri govorcih obeh skupin, ter poskušali ugotoviti razloge za te razlike. Posebej pomembna ugotovitev, ki izhaja iz te študije samoglasnikov, je zlitje treh samoglasniških parov v govoru tujih govorcev ameriške angleščine: /i ɪ/, /u ʊ/, in /ɛ æ/.

Ključne besede: ameriška angleščina, srbščina, enoglasnik, zlitje samoglasnikov pri tujih govorcih, akustika samoglasnikov

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THE TEACHING AND LEARNING OF L2 ENGLISH INTONATION IN A DISTANCE EDUCATION ENVIRONMENT: TL_TOBI VS. THE TRADITIONAL MODELS

1 INTRODUCTION

1.1 Intonation Models and the Teaching of Intonation

For more than eighty years, most of the training materials for the teaching of English intonation to L2 students have been designed within the tenets of the British School of intonational description, which started with the works of Palmer (1922), Kingdon (1958) and Crystal (1969) and developed in the studies of Couper-Kuhlen (1986), Cruttenden (1986), Gimson (1980), O'Connor and Arnold (1973), Tench (1996), and more recently, Wells (2006). In this paper, the tenets of the British School are presented following O'Connor and Arnold (1973) and Wells (2006).

The British School of intonation is characterized by a *configurational* analysis of the pitch contour, i.e. each intonation phrase is divided into a nuclear configuration and a pre-nuclear configuration. The nuclear configuration contains the only obligatory element of an intonation phrase, namely, the *nucleus* which consists of the last (or only) accented syllable. Any unaccented syllables after the nucleus make up the *tail*. The pre-nuclear configuration is optional and consists of a *head* and a *pre-head*. The head contains all the syllables from the first accent up to the syllable before the nucleus. The pre-head includes the unaccented syllables before the first accent. An example is provided in (1) for the sentence *She can come on Monday* which has two stressed syllables, marked with an asterisk, that are accented (i.e. produced with relevant pitch movement).

(1)

She can	*come on	*Mon	day
Pre-head	Head	Nucleus	

Furthermore, the British School of intonation describes the F_0 contours by means of pitch movements and thus its inventory of tones is based on pitch trajectories, such as, *rise*, *fall*, *fall-rise*, etc. However, the tonal categories differ depending on their location on the

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intonation phrase. Thus, the tones associated to the nuclear syllable are different from those associated to the pre-nuclear ones. This is so because the nuclear tones have to account not only for the pitch movement on the last accented syllable but also for the pitch pattern till the end of the intonation phrase. Thus, whereas tones, such as *rise*, *fall*, *fall-rise* or *rise-fall* only occur in the nuclear position, other tones, such as *high* and *low,* are only associated to the pre-nuclear accents. The pitch contour in (1) shows a high pre-nuclear accent followed by a high-fall nuclear accent, transcribed with the diacritics presented in (2).

(2) She can ˈcome on ˋMonday.

Even though the benefits of the British model for the teaching of intonation have been widely attested, this framework is difficult to be used in a distance learning environment where students have neither face-to-face tuition nor immediate feedback on their learning outcomes. One of the main problems of the British model in an autonomous learning context is that students find it difficult to grasp the alignment of pitch-trajectory tones to the segmental string and cannot read and interpret the annotation conventions easily. This is particularly difficult with nuclear tones which vary in form and alignment depending on the number of unaccented syllables in the tail.

Given the difficulties in using the British tradition conventions of intonational description in a distance learning setting, Estebas-Vilaplana (2009) considered the possibility of using a teaching methodology based on the other main tradition of intonational analysis, namely, the American School and in particular, one of its latest theories, i.e. the Autosegmental-Metrical approach (Pierrehumbert 1980) and the follow-up ToBI (*Tone and Break Indices*) system (Beckman/Hirschberg 1994).

The American School of intonation (Pike 1945; Wells 1945; Trager/Smith 1951; Liberman 1975; Leben 1976) differs from the British tradition in two important characteristics: 1) the way of describing tones and 2) the interpretation of the final pitch movements of the intonation phrase. Whereas the British School describes tones by means of their pitch trajectories, the American School represents intonation as a series of tone levels (or tonal targets), which in the latest theories, such as the Autosegmental-Metrical approach (Pierrehumbert 1980; Ladd 1996; Gussenhoven 2004; among others) or ToBI (Beckman/Hirshberg 1994; Beckman/Alam-Eyers 1997) are specified as H (high) or L (low). H and L tones can be associated to stressed syllables or to the edges of the intonation phrases. When the tones are associated with stressed syllables, they are marked with an asterisk. Thus, H* and L* indicate that a high pitch and a low pitch occur within an accented syllable. The final movements of a pitch contour are described by means of boundary tones which can be of two kinds depending on whether they signal the edge of a higher prosodic domain (the *intonation phrase*) or a lower prosodic domain (the *intermediate phrase*). The tones at the end of an intonation phrase are called *boundary tones* and are marked with % (i.e. L% and H%), whereas the tones at the end of an intermediate phrase are known as *phrase accents* and are signalled with the symbol - (i.e. L- and H-).

The tenets of the Autosegmental-Metrical approach and the ToBI system have been used to describe the intonation patterns of a great variety of languages. The great impact

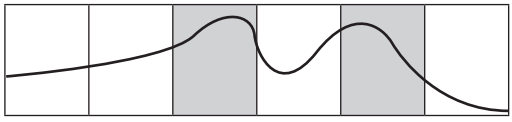
of this framework is due to a number of reasons, such as its concise tonal description tools, reduced to two tones, and the clear-cut location of such tones with respect to the segmental layer (tones are only associated to stressed syllables and to the end of phrases). Despite the several advantages of the Autosegmental-Metrical approach and the ToBI system, it has never been used for pedagogical purposes. When it comes to teaching the intonation of (especially) foreign languages, some of the pros, such as the reduced number of tones, may turn out to be a drawback since it is really difficult for untrained students to grasp the meaning of categories that look pretty much the same (e.g. H*, L+H*, L*+H, H*+L, L+!H*, etc.). Thus, despite the great impact of the ToBI system on intonational modeling, the teaching and learning of English intonation have rarely benefitted from its insights and thus the only model that is still at stake is the British School.

Given the pros and cons of both traditions, Estebas-Vilaplana (2009) designed a new methodology for the teaching and learning of intonation with the aim of helping students who specifically work in a self-tuition context. The new model combines some of the conventions of both traditions. In short, the new proposal, called TL_ToBI (*Teaching and Learning ToBI*) adopts the association conventions of the original ToBI with a reduced number of tonal entities and maintains the types of tunes and nuclear configurations of the British approach. A more thorough description of TL_ToBI proposal is included in the next section.

1.2 TL_ToBI

Students that learn intonation in a distance learning setting by means of TL_ToBI will first be presented with the audio input of the utterance along with a graphic representation which outlines the pitch contour in relation to the syllabic structure of the sentence. This is illustrated in (3). Each box stands for a syllable and the shaded boxes represent stressed syllables that have a relevant pitch movement and thus become accented. The overlapped representation of the pitch contour with the syllable division helps students to realize where exactly the relevant pitch movements take place in the segmental string.

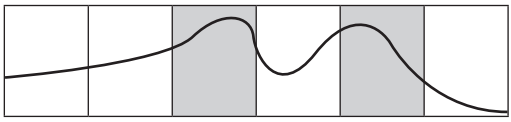
(3)



As far as the notation conventions are concerned, TL_ToBI presents four main differences with respect to the original ToBI system (Estebas-Vilaplana 2013): 1) the representation of the metrical information vs. the tonal information, 2) the number of pitch levels, 3) the number of phrases, and 4) the modeling of the nuclear and the pre-nuclear accents.

The phonological categories proposed by the original ToBI system include not only tonal information (H and L) but also metrical information. Thus, for example, H* indicates an H accent associated to a stressed syllable. H- and H% signal the end of a minor and a major prosodic phrase respectively. In TL_ToBI, the metrical and the tonal information are kept apart so that the students concentrate on the characterization of the pitch movements alone. Thus, the metrical structure does not accompany the tone but is indicated in the segmental string by means of an asterisk, as illustrated in (3). By keeping the asterisk on the segmental string, students can clearly see the potential sites to associate a tone. Tones will then be located under the syllables marked with the asterisk and at the end of the sentence, as presented in (4). The syllable with the final accent is underlined. This shows the most prominent syllable of the contour and it also indicates that the tones located after this syllable are no longer pitch accents but correspond to categories that account for the tonal movements at the end of the phrase. When a phrase ends with an oxytone word, the pitch accent and the boundary tone are located on the same syllable.

(4)

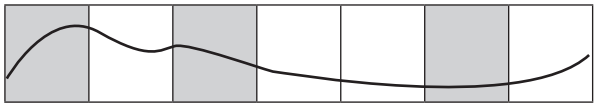


She can *come on *Monday
H H L

As far as pitch levels are concerned, the original ToBI system describes pitch movements by means two tones only (H and L). Whereas L tones usually correspond to a rather constant F_0, H tones show more variation in their scaling and are sometimes *downstepped* (!H) or *upstepped* (¡H), i.e. produced at a much lower or much higher F_0 levels than a previous H. Traditionally, downstep and upstep have been described as relational features since the presence of !H or ¡H seemed to depend on the scaling of the previous H. More recently, several studies, such as Vanrell (2006) for Catalan or Estebas-Vilaplana and Prieto (2008) for Spanish, have shown that in some languages differences in the scaling of H tones are contrastive and thus a three-tonal inventory (High, Mid, Low) has been incorporated in the system. A model of three tonal categories (H, M and L) was also presented in the work of Liberman (1975), which preceded Pierrehumbert's (1980) proposal of reducing the inventory into H and L.

Within the British tradition, the presence of categories such as *high-fall* or *low-fall* corroborate the necessity to incorporate three levels of pitch description. For example, whereas a *high-fall* indicates a HL (high to low) movement, a *low-fall* stands for a ML (mid to low) trajectory. The new TL_ToBI proposal considers necessary to include a mid level tone (M) since its notation is much more transparent than !H. Thus, TL_ToBI uses three tonal categories: H, M, and L. These tones can occur both on stressed syllables and at the end of a pitch contour, as in (5).

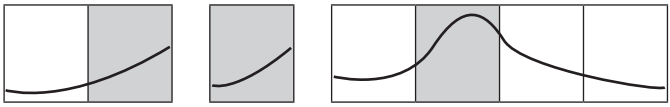
(5)



*Can	you	*give	it	to	*Sa	rah?
H		H			L	M

With respect to phrasing, even though the original ToBI system distinguishes two domains of phrasing, associated to different kinds of edge tones (boundary tones and phrase accents), the TL_ToBI proposal does not maintain the two-domain approach. Alternatively, students should only focus on the presence of a boundary, no matter whether it signals a major or a minor domain. For example, an enumeration is usually described as a series of intermediate phrases or minor domains ending with an Intonation Phrase or major domain. In the enumeration presented in (6), the end of each phrase is described in the same way, irrespective of whether it is a major or a minor phrase.

(6)



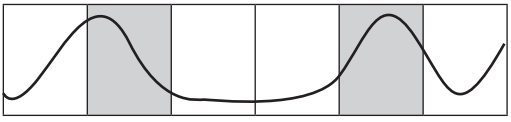
She's	*tall,	*blonde	and	*beau	ti	ful.
	LM	LM		H		L

As far as the modelling of the nuclear and pre-nuclear accents is concerned, TL_ToBI maintains from the original ToBI system the idea that the same tones can be linked to both final and non-final accented syllables. Thus, contrary to the British tradition, there are no differences in the treatment of nuclear and pre-nuclear accents. However, relevant changes have been incorporated with respect to the original ToBI tonal entities. In ToBI, pitch accents can be both monotonal and bitonal whereas edge tones are only monotonal. In the TL_ToBI proposal, the reverse pattern is put forward since it includes monotonal pitch accents and boundary tones that can be both monotonal and bitonal.

As pointed out in Estebas-Vilaplana (2013), the idea to use only monotonal pitch accents is linked to the differences in the semantic load of the nuclear and the pre-nuclear parts of a pitch contour. Even though the pre-nuclear component obviously contributes to the creation of a tune, it is the nuclear configuration that is usually responsible for the final meaning of the sentence (Face 2007). According to this, the TL_ToBI methodology prompts students to focus on the pitch movements of the final part of the contour (last pitch accent and boundary tone), and hence reduces the detail in the description of pre-nuclear accents. The inventory of tones for both the final and the non-final accented syllables is L, M and H.

In TL_ToBI, the inventory of boundary tones not only includes monotonal entities (L, M, H) but also bitonal tones (LH, HL). Bitonal tones have been incorporated to account for complex final F_0 movements, consisting of two tonal targets. In the original ToBI system, edge tones were only monotonal because complex F_0 movements could be described by the combination of a phrase accent and a boundary tone. Since the new proposal only considers one level of phrasing, only one type of edge tones is put forward, namely, boundary tones. The presence of final complex movements creates the necessity of including boundary tones with two targets. Bitonal boundary tones have already been attested in other ToBI systems, such as Sp_ToBI (Estebas-Vilaplana/ Prieto 2008) for Spanish, and Cat_ToBI (Prieto et al. 2009) for Catalan. An example of a sentence with a final bitonal boundary tone is provided in (7), which illustrates a declarative sentence with a nuance of reservation.

(7)



She's	*com	ing	on	*Mon	day
	H			H	LH

Despite the different annotation conventions, the combinations of tones used in TL_ ToBI are in line with the tonal configurations (nuclear and pre-nuclear) of the British tradition. With respect to the pre-nuclear configuration, only two tones were used (high and low), even though the model of O'Connor and Arnold (1973) includes other head tones, such as rising and falling, which also contribute to the meaning of the whole tune. The decision to reduce the number of head tones into two was to help distance learning students to concentrate on the nuclear configuration which tends to be much more relevant than the pre-nuclear one as far as the meaning of the sentence is concerned (Face 2007). The correspondences between the two systems are presented in Table 1, as presented in Estebas-Vilaplana (2013).

Table 1: TL_ToBI tonal combinations and their correspondences with the conventions of the British School

British School	**TL_ToBI**		**British School**	**TL_ToBI**
Nuclear tones	*Pitch accents*	*Boundary tones*	*Pre-nuclear tones*	*Pitch accents*
High-fall	H	L	High	H
Low-fall	M	L	Low	M or L
High-rise	M	H		
Low-rise	L	M		
Mid-level	M	M		
Fall-rise	H	L H		
Rise-fall	L	H L		

The second part of this paper explores the advantages and disadvantages of using TL_ToBI as an intonation teaching model in a distance learning environment and compares the intonation patterns of two groups of L2 students trained with different teaching methodologies, namely, the British School of intonational description and TL_ToBI.[1]

2 THE EXPERIMENT

The aim of this experiment is to compare the productions of English intonation by two groups of Spanish speakers who have been trained with different teaching methodologies, the British School and TL_ToBI, so as to so examine which model is more beneficial for acquiring some basic English intonation patterns in a distance learning environment.

2.1 Informants

The informants were 746 Spanish students of English phonetics registered in the *English Pronunciation* course offered at the Distance Learning University in Spain (UNED), as part of the *Degree in English Studies*, in the academic years 2012–2013 and 2013–2014. This course involves 150 hours of distance learning tuition distributed in four months. The aim of the course is to give students guidelines, tools and methodological resources for the autonomous learning of English pronunciation. The syllabus includes: 1) English Vowels, 2) English Consonants, 3) Combination of Sounds and Connected Speech Processes, 4) Stress and Rhythm, and 5) Focus and Intonation. 546 students were registered in 2012–2013 and 657 in 2013–2014. Only the students that sat for the final oral exam took part in this experiment, i.e. 334 students in 2012–2013 and 412 in 2013–2014. The age of the students was rather heterogeneous. This situation is typical of a distance learning environment which hosts students with very different backgrounds. The age of the students ranged from 21 to 74 years old in 2012–2013 and from 23 to 66 in 2013–2014. Students came from all over Spain being the biggest group from Madrid and its surroundings. The gender of the students was more balanced, with 54% of female students vs. 46% of male students in year 2012–2013 and 57% of female students vs. 43% of male students in year 2013–2014. The students had at least a B1+ level of English according to the CEFR. Their first language was Spanish.

2.2 Teaching Methodology and Corpus

The students in year 2012–2013 learned English intonation according to the tenets of the British School, whereas those in year 2013–2014 followed the TL_ToBI methodology. The training materials used to present the two methodological approaches were specifically prepared by the teaching staff of the course so that they were as similar as possible. As stated before, the theoretical explanations of the British School were based on O'Connor and Arnold (1973) and Wells (2006) and included the division of

1 The results of this investigation have been presented at the *Phonetics Teaching and Learning Conference 2015*, London 5–7 August (see Estebas-Vilaplana 2015).

the pitch pattern into a nuclear and a pre-nuclear configuration. The nuclear and pre-nuclear tones presented to the students are those specified in Table 1. As for the TL_ToBI system, the theoretical explanations were based on Estebas-Vilaplana (2009), which consisted in a simplification of the ToBI system, as presented in section 1.2. The tones used within this approach are also exhibited in Table 1.

The two models could not be tested simultaneously due to the limitations of the distance learning platforms since each course only allows for one virtual space where all students share the same teaching materials and participate in the same forums. The corpus of sentences and the teaching procedures presented in the two academic years were exactly the same, the only difference being the teaching methodology. For each course, students were presented with some theoretical explanations on English intonation following the premises of either the British School or the TL_ToBI model. The same examples and ear-training exercises, annotated with the conventions of one of the two frameworks, were used in the two courses.

The British School theoretical explanations and audio files were included in the virtual classroom of the *English Pronunciation* course. The TL_ToBI materials were part of the book *Teach Yourself English Pronunciation* (Estebas-Vilaplana 2009) which also consists of an application with an interactive software. An example of the learning platform of this application is presented in Figure 1.

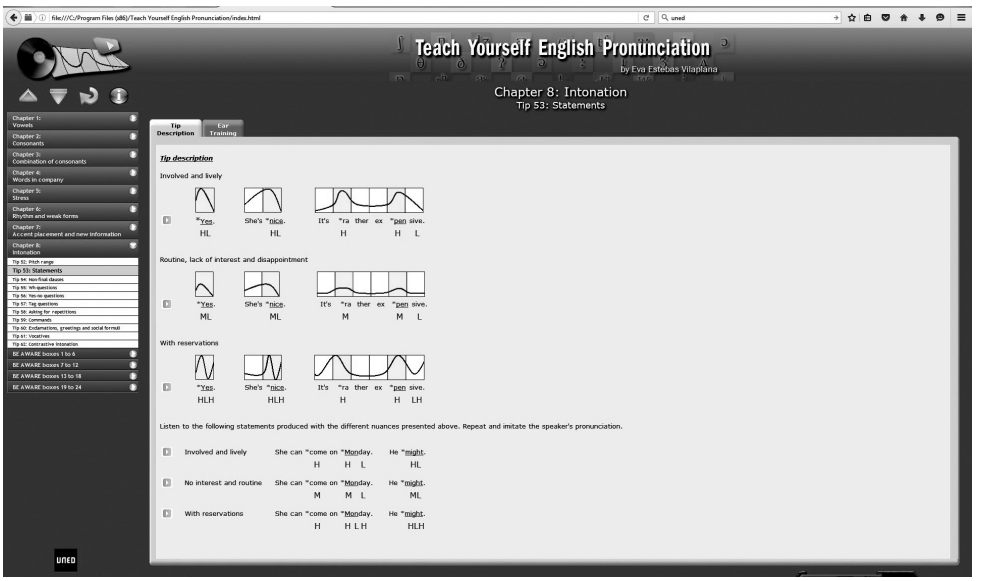


Figure 1: Illustration of the *Teach Yourself English Pronunciation* learning platform with some examples of the TL_ToBI teaching materials

For this particular investigation, four sentence types were taken into consideration: declaratives (D), yes-no questions (YN), wh-questions (WH), and imperatives (I),

produced both with neutral (N) and marked intonation (M). An example of each sentence type is presented in Table 2 with the British School and the TL_ToBI annotations.

All sentences analyzed in this study were made of one pre-nuclear pitch accent followed by a nuclear configuration which contained one pitch accent and a boundary tone. Each sentence type had the same segmental string for the neutral and the marked readings and they only differed in the intonation patterns. For each sentence type students listened to four examples presented in pairs, neutral (N) and marked (M). The ear-training exercises consisted of three listening activities of ten entries each in which the students had to identify, discriminate and reproduce the intonation patterns.

Table 2: English sentence types and examples presented with the annotation conventions of the British School and TL_ToBI

Neutral declarative	She can ˈcome on ˋMonday.	She can *come on *Monday. H H L
Marked declarative (with reservations)	She can ˈcome on ˇMonday.	She can *come on *Monday. H H L H
Neutral yes-no question	ˈAre you ˏcoming?	*Are you *coming? H L M
Marked yes-no question (confirmation seeking)	ˈAre you ˋcoming?	*Are you *coming? H H L
Neutral wh-question	ˈWhat's your ˋname?	*What's your *name? H HL
Marked wh-question (polite)	ˈWhat's your ˏname?	*What's your *name? H LM
Neutral imperative	ˈDon't ˎtouch it.	*Don't *touch it. H ML
Marked imperative (warning)	ˈDon't ˇtouch it.	*Don't *touch it. H HLH

2.3 Experimental Procedure

The data was gathered as part of the *English Pronunciation* course final oral exam. Every year this exam is recorded by means of the *E-oral* application, which is a software designed at the UNED to do oral exams on-line (López et al. 2006). Students need to have a computer with a microphone and a webcam. Figure 2 shows an example of the E-oral application used in the on-line oral tests.

For the oral exam, students can see the questions on the screen. The exercises consist in reading a series of phonetic contrasts that include both segmental and suprasegmental features. Students can repeat the recording a maximum of three times and finally choose the sample they consider more appropriate and reject the other two. The examiner only assesses the selected version. The oral test is divided in three parts: 1) the production of English vowels, consonants and clusters, 2) the production of English

stress, rhythm, focus and intonation patterns, and 3) the reading of a phonetic transcription. For this study, only the data on intonation was analyzed.

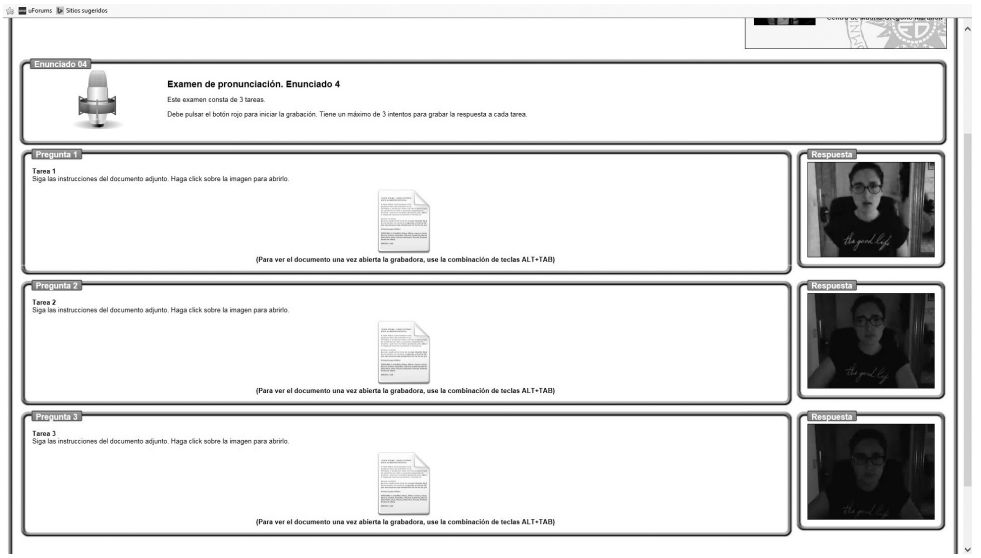


Figure 2: Image of the E-oral application used at the Distance Learning University in Spain (UNED) for on-line oral exams

There were seven models of oral tests which appeared randomly in the application. The types of questions were exactly the same in all models, the only difference being the data included in each question so that students could not know the precise words or sentences they were expected to produce. With respect to the intonation patterns, sentences were presented as in the teaching materials, that is, they were accompanied by the prosodic annotations used in each intonation model. In addition, for each sentence, the expected nuance (e.g. polite, warning, etc.) was also indicated. An example of the type of exercise is illustrated in (8) and (9) with the British and the TL_ToBI conventions respectively.

(8)

Read the following sentences with the intonation patterns used to convey the different meanings or nuances.	
Statements	
I 'hope you ˋlike it.	neutral
I 'hope you ˇlike it.	with reservations
Wh-questions	
Which 'book will you ˋbuy?	neutral
Which 'book will you ˛buy?	polite

(9)

Read the following sentences with the intonation patterns used to convey the different meanings or nuances.

Statements

I *hope you *like it. H H L	neutral
I *hope you *like it. H H LH	with reservations

Wh-questions

Which *book will you *buy? H HL	neutral
Which *book will you *buy? H LM	polite

The recording of the final oral exam was done at the end of the course. Each student had to produce eight sentences as the ones presented in Table 2. A total of 5968 sentences were assessed, 2672 in year 2012–2013 and 3296 in year 2013–2014.

3 DATA ANALYSIS

The students' productions in the oral test were analyzed perceptually by three members of the teaching team, including the main lecturer and two backup tutors, one of them English. The three judges were the same in the two academic years and assessed the same sentence types in each year, even though the teaching methodology was different. For each sentence type they had to decide whether the productions of the Spanish students followed the expected English pitch patterns according to three positions: 1) the nuclear configuration, 2) the pre-nuclear accent, and 3) the whole tune.

Before assessing the productions, tutors were instructed about the expected differences and similarities between English and Spanish intonation for the various sentence types, so as they could better perceive cases of possible interference. The pitch configurations presented to the tutors for the two languages are exhibited in Table 3, which shows that the pre-nuclear accent is different for all sentence types. In the Spanish pre-nuclear configurations, the symbol > indicates that there is a peak in the post-tonic syllable. Thus, L> and H> stand for a low tone and a high tone respectively in the accented syllable with a peak in the post-accented one. These tones correspond to L*+H and L+>H* in the Spanish ToBI system (Sp_ToBI). For both languages, the nuclear configuration is the same in neutral and marked yes-no questions, in marked wh-questions and in marked imperatives. For each production, the assessments of the three teachers were contrasted. In case of disagreement, sentences were analyzed again by the three judges.

Table 3: Differences (≠) and similarities (=) in the pitch patterns of the pre-nuclear and nuclear configurations of various E(nglish) and S(panish) sentences. > indicates a peak in the post-tonic syllable

Sentence types	Language	Pre-nuclear		Nuclear	
N-D	E	H	≠	H L	≠
	S	H>		L L	
M-D	E	H	≠	H LH	≠
	S	H>		H M	
N-YN	E	H	≠	L M	=
	S	L>		L M	
M-YN	E	H	≠	H L	=
	S	L>		H L	
N-WH	E	H	≠	H L	≠
	S	H>		L L	
M-WH	E	H	≠	L M	=
	S	H>		L M	
N-I	E	H	≠	M L	≠
	S	H>		L L	
M-I	E	H	≠	H LH	=
	S	H>		H LH	

4 RESULTS

The percentages of expected English intonation patterns produced by Spanish students after being trained with one of the two models, British School (BS) or TL_ToBI, are presented in Table 4 for the whole tune as well as for the nuclear and the pre-nuclear configurations. The results show that in all cases students trained with TL_ToBI (412 students) produced more native-like intonation patterns than those instructed with the British model (334 students). Two-tailed t-tests comparing the data showed significant differences in all cases ($p<0.01$).

Table 4: Percentages (%) of expected English pitch patterns produced by Spanish students trained with the British School (BS) and TL_ToBI

	Whole tune		**Nuclear C.**		**Pre-nuclear C.**	
	BS	TL_ToBI	BS	TL_ToBI	BS	TL_ToBI
%	52.2	65.1	57.8	73.1	53.3	67.1

The percentages of expected English intonation patterns according to sentence type are exhibited in Figure 3 for the overall tune. For all sentence types, the results show a higher percentage of native-like pitch patterns for those students trained with TL_ToBI than for those trained with the British system. Two-tailed t-tests presented significant differences in all cases ($p<0.01$).

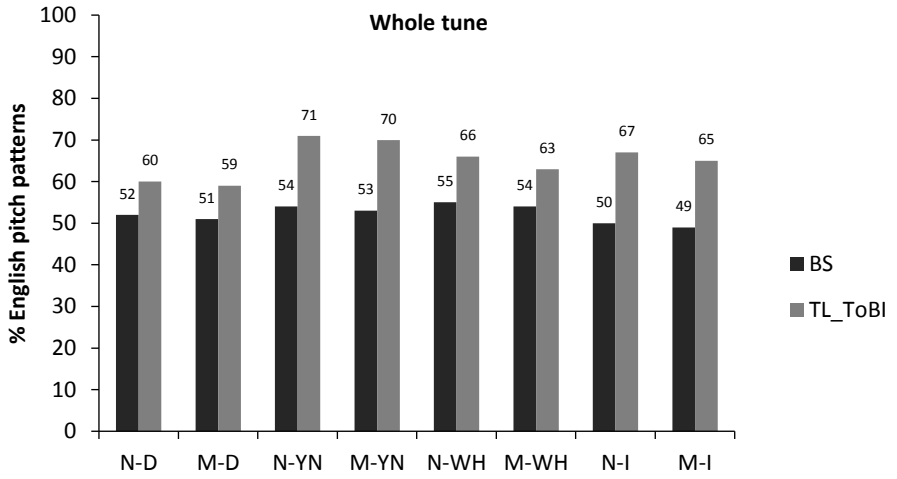


Figure 3. Percentage of English intonation patterns produced by Spanish speakers trained with the British School (BS) and TL_ToBI

Figure 4 displays the percentages of expected English intonation patterns for the nuclear configuration. As before, the results for all sentence types show that the pitch patterns are significantly better ($p<0.01$) for those students who followed the TL_ToBI methodology than for those that were trained in line with the British framework.

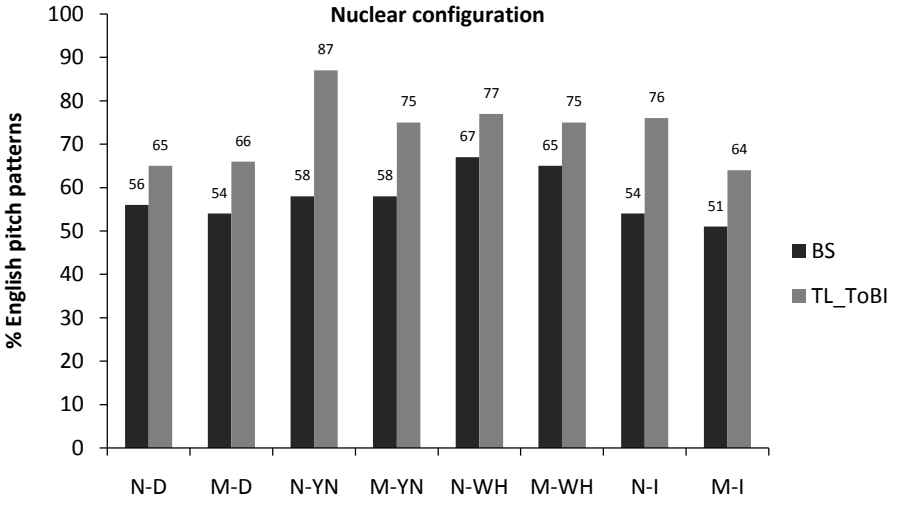


Figure 4. Percentage of English intonation patterns in the nuclear configuration produced by Spanish speakers trained with the British School (BS) and TL_ToBI

Finally, Figure 5 shows the percentages of expected English intonation patterns for the pre-nuclear accent, which also present significantly better results ($p<0.01$) in all sentence types for the students trained with TL_ToBI. These findings suggest that a system based on visual aids and the association of tonal targets with the metrical structure has more benefits in the acquisition of L2 prosody in a distance learning environment.

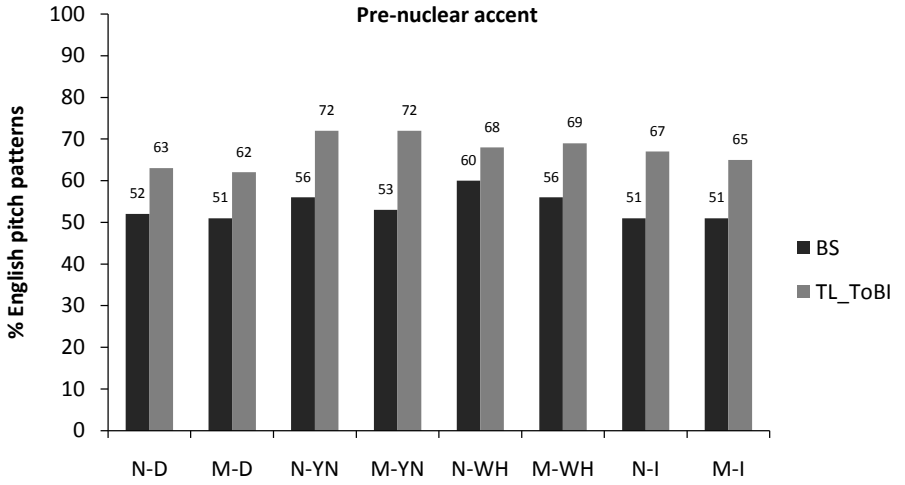


Figure 5. Percentage of English intonation patterns in the pre-nuclear accent produced by Spanish speakers trained with the British School (BS) and TL_ToBI

When the three graphs are compared, the percentage of native-like pitch patterns increases for the nuclear configuration variable, which shows better results than those of the pre-nuclear accent and the whole tune for all sentence types. The comparison between the results of the pre-nuclear accent and those of the whole tune presents very similar patterns. Two-paired t-tests showed non-significant differences in these cases ($p>0.01$), suggesting that the cause of a foreign intonation is often derived from the unexpected production of the pre-nuclear configuration. These results indicate that even though L2 students produce the nuclear configuration of several sentence types with the expected pitch pattern, L1 speakers still judge those sentences as inaccurate, given the unexpected pronunciation of the pre-nuclear configuration. Thus, although the nuclear pattern has been shown to be the most important one to convey the meaning of a sentence (Face 2007), the pre-nuclear configuration should not be neglected in intonation teaching since it is the cause of a strong non-native accent effect.

Furthermore, in all Figures, the highest percentage of native-like pitch patterns is obtained in questions, with the highest score (over 80%) in the nuclear configuration of neutral yes-no questions. This might be explained by the similarities in the final intonation of some question types in English and in Spanish, such as the final rise (LM) in neutral yes-no questions and in marked wh-questions or the high-fall (HL) in marked yes-no questions.

5 DISCUSSION AND CONCLUSIONS

The teaching of intonation to L2 students has often been an arduous task due to both the difficulty in finding an appropriate methodology that helps students to grasp prosodic features easily and to the intrinsic ability of the students to perceive and produce the pitch patterns. It has been observed that students with musical skills tend to identify and reproduce the pitch contours more effortlessly than students with a minor musical talent (Barreiro/Estebas-Vilaplana/Soto 2005). Given the different degrees of innate capacity students have to assimilate the L2 prosody, it is crucial to use a teaching and learning methodology simple enough to reach all kinds of audiences. The autonomous learning of intonation in a distance learning environment enhances the idea of using straightforward techniques and notation conventions to facilitate the acquisition of the intonation of the main sentence types.

The British School of intonational description has been at the lead of English intonation teaching for almost a century. Its insights have been used both in specialized courses on English prosody and in L2 teaching materials aimed at a broader audience. Despite the enormous impact of the British School on the teaching and learning of English intonation, its tenets did not entirely work for autonomous learning, since students could not easily understand the link between the segmental structure and the intonation patterns. Similarly, despite the great impact of the ToBI systems for the prosodic annotation of a huge variety of languages, it has never been used for teaching and learning given its big number of entities sometimes used to show phonetic detail rather than phonological generalizations.

In this study, a new methodology for the teaching of English intonation to non-native speakers (TL_ToBI) has been presented and compared with one of the traditional models for prosodic training, namely, the British School. TL_ToBI proposes an adaptation of the annotation conventions of the original ToBI system to account for the main types of tunes and nuclear configurations described within the British approach.

The results of this study have shown that students instructed with TL_ToBI produced more native-like intonation patterns than those that followed the British system, confirming the benefits of a methodology based on tonal targets and their explicit association to some parts of the segmental string. Despite the better results obtained with TL_ToBI, more work needs to be done to further improve the students' productions as well as to present them with a wider range of tunes and nuances. One of the measures that will be taken into account in future courses is to present students with the intonation patterns of the L1 along with those of the L2. A comparison between the L1 and the L2 intonation patterns can be a further step for a successful learning of the L2 prosody since students will be aware of the cross-linguistic differences and this might help them in their self-assessment and evaluation processes.

Studies on second language acquisition have shown that sometimes explicit knowledge on phonetic issues can be beneficial to improve L2 production accuracy (Piske/Mackay/Flege 2001, Lord 2005, and Fullana 2006, among others). Similarly, the *Noticing Hypothesis* states that L2 learners cannot grasp the features of a language unless they notice them and that that noticing is the essential starting point for acquisition

(Schmidt 1993, 2010). This paper has shown that, in the case of L2 intonation, not only explicit knowledge and noticing contribute to its proficiency but also different methodologies can play an important role on the results. This investigation has shown that a system based on tonal targets and their association to the metrical structure, such as TL_ToBI, has more benefits for the acquisition of the L2 intonation in a distance learning environment than an approach based on pitch trajectories, such as the British School. The workability of TL_ToBI in other settings, such as in a face-to-face classroom, is an issue for future research.

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Abstract

THE TEACHING AND LEARNING OF L2 ENGLISH INTONATION IN A DISTANCE EDUCATION ENVIRONMENT: TL_TOBI VS. THE TRADITIONAL MODELS

The teaching of intonation to learners of a second language (L2) tends to be an arduous and often neglected task even in specialized phonetic classes. This difficulty generally increases in a distance learning environment where students have to approach prosodic issues in an autonomous way. This paper tests the advantages and disadvantages of using a new model to teach English intonation to Spanish speakers in a self-tuition context, called TL_ToBI (*Teaching and Learning ToBI*), and compares the benefits of this proposal with the traditional methodologies. Two groups of Spanish students of English phonetics in a distance learning environment took part in this study. Each group was trained with a different methodology: 1) the British School of intonation and 2) TL_ToBI, which involves an adaptation of the ToBI conventions for teaching purposes. The intonation of four sentence types was assessed: declarative, yes-no question, wh-question, and imperative, produced both with neutral and marked readings. The results showed that those speakers trained with TL_ToBI produced more native-like intonation patterns than those instructed with the other model. These findings suggest that a system based on tonal targets and their association to the metrical structure has more benefits for the acquisition of the L2 prosody in a distance learning setting.

Keywords: L2 intonation, distance learning, TL_ToBI, British School, English

Povzetek

POUČEVANJE IN UČENJE INTONACIJE V ANGLEŠČINI KOT DODATNEM JEZIKU V OKOLJU UČENJA NA DALJAVO: TL_ToBI *proti* TRADICIONALNIM MODELOM

Poučevanje intonacije drugega jezika je naporna in pogosto spregledana naloga celo v razredih, specializiranih za fonetiko. Težavnost se še poveča v okolju učenja na daljavo, kjer študenti spoznavajo prozodične vsebine samostojno. Članek obravnava prednosti in pomanjkljivosti rabe novega modela za poučevanje angleške intonacije španskih govorcev v procesu samostojnega učenja, imenovanega TL_ToBI, ter primerja njegove koristi s tradicionalnimi metodami. V študiji sta sodelovali dve skupini španskih študentov angleščine na daljavo. Vsaka skupina se je učila angleško intonacijo po drugi metodi: 1) britanski šoli intonacije in 2) TL_Tobi metodi, ki je pouku prilagojen model ToBI. Presojali smo intonacijo v štirih vrstah povedi: trdilnih, da/ne vprašanjih, k/č vprašanjih in velelnikih, ki so bile izrečene v nezaznamovanem in zaznamovanem kontekstu. Rezultati so pokazali, da so študenti, ki so se učili intonacijo po metodi TL_ToBI, uporabljali intonacijske vzorce, ki so bolj

podobni intonacijskim vzorcem angleških domačih govorcev, kot študenti, ki so se učili po drugi metodologiji. Te ugotovitve kažejo, da ima metoda, ki temelji na tonskih ciljih in njihovi povezavi z metrično strukturo, več koristi za usvajanje intonacije dodatnega jezika v okolju učenja na daljavo.

Ključne besede: intonacija dodatnega jezika, učenje na daljavo, TL_ToBI, britanska šola, angleščina

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INVESTIGATING TRAINEE TRANSLATORS' VIEWS ON THE PRONUNCIATION OF ENGLISH: A SLOVENE PERSPECTIVE

1 INTRODUCTION

English has long been recognised as a global language (*cf.* Crystal 1997), adopted as the leading means of international communication. This is why Lord (2008: 374) maintains that "the increasing demand for global competence and international communication and collaboration in today's world makes achieving proficiency in a second or foreign language increasingly more prominent," foregrounding the importance of accurate and acceptable pronunciation in addition to vocabulary and grammar.

Pronunciation is a central factor in communication settings where learners wish to be successful communicators (*cf.* Elson 1992). English language learners with a good grammatical and lexical proficiency feel frustrated when communication breaks down due to their poor pronunciation (*cf.* Kelly 2000; Hismanoglu 2006). This is why pronunciation teaching needs to play a major role in language teaching. While excellent pronunciation skills for language professionals are indisputable, research attention has focused mainly on the pronunciation skills in the training of EFL teachers (*cf.* Abercrombie 1991; Brazil 1994; Collins et al. 2014; Crystal 2000, Cruttenden 1986; Celce-Murcia/Brinton/Goodwin 1996; Fraser 1999; Gimson 1980; Jenkins 2000; Kenworthy 1987; Morley 1998; Roach 1991; Tench 1996; Wells 2008; to mention just a few), while translator training has been somewhat neglected in this respect. However, it is not only the teachers of foreign languages who are engaged in cross-cultural communication; translators and interpreters are also faced with a tough competition in the global market, and those with poor pronunciation skills are at a considerable disadvantage.

Developing good pronunciation skills should therefore not be neglected in translator and interpreter training. It is undeniable that learner needs of future teachers of English, who will be instructors on proper communication skills, are quite specific. Their attention in phonetics courses has to be drawn to a detailed knowledge of the phonemic system, as well as prosody and intonation patterns associated with standard English pronunciation required for language teaching. Learner needs of future translators and interpreters are quite different: the issues of intelligibility, communicability and familiarity with both native and non-native English are foregrounded. While pronunciation skills are important for professional translators, as they are directly related to their prospects of employment, they are even more essential for interpreters.

In his AIIC [1] report, Moser highlights the importance of issues such as speaking "in a lively and animated way" (1995: 28), and having "a pleasant voice" was deemed

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much more important to the users of interpreting services than speaking with a native-sounding accent (ibid.: 28). In addition, intelligibility, a key element of communicability, needs specific attention both in research and pedagogy (*cf.* Halliday, McIntosh/Strevens 1964), in particular since "[i]ntelligibility is the single most important aspect of all communication. If there is no intelligibility, communication has failed" (Munro 2011: 13). It is thus surprising that the subject of phonetics and phonology in translator and interpreter training remains so under-researched.

This paper discusses the relevance of pronunciation to trainee translators at the University of Ljubljana in Slovenia by highlighting the importance of pronunciation instruction in translator training.

2 LITERATURE REVIEW

2.1 Pronunciation Teaching in EFL

Language contacts in the globalized world and multi-lingual communication have resulted in many new varieties of English (Jenkins 2000; Vishnevskaya 2009). The pronunciation norm of English constantly changes under the influence of various speech variation factors (Wells 2008). Taking into account an abundance of English accents, it is valid to raise the question of which variety to choose in the teaching of English as a foreign language (EFL). Following the attempts to foreground either segmental or supra-segmental features an integrative communicative approach was made prominent in English pronunciation teaching in the late 1980s (*cf.* Morley 1991; Celce-Murcia/Brinton/Goodwin 1996; Himanoglu 2006), which has somewhat diminished the role of pronunciation teaching per se and made it part of other language classes promoting communicative competence. Yet it has also led to the turning from the ideal of perfect native-like pronunciation to the more realistic goal of developing functional intelligibility (*cf.* Abercrombie 1991; Morley 1991; Celce-Murcia/Brinton/Goodwin 1996; Jenkins 2000).

In the last two decades, theoretical discussions in English phonetics have revolved around two models of teaching pronunciation: teaching standard varieties of English, i.e. standard British or American, or teaching Lingua Franca Core (LFC) proposed by Jenkins (2000), who advocates teaching only a selection of phonetic features in English as an international language (EIL) or English as a Lingua Franca (ELF) settings. The LFC approach gives more prominence to the teaching of segmentals (individual vowels and consonants) rather than suprasegmentals (rhythm, words stress, and intonation), although, according to Dauer (2005: 543–545), the latter is otherwise favoured in the texts written from the native speaker (NS) perspective. Such texts generally foreground the teaching of prosody as "the most efficient way of achieving some measure of fluency, which seems to be highly correlated with NS's perceptions of intelligibility" (Dauer 2005: 545) rather than focusing on the non-native speakers' communication needs, adding that Jenkins "aptly notes that the research showing the importance of suprasegmentals in intelligibility has been based entirely on NS listeners, who may process speech differently from NNSs" (ibid.: 546).

Since the basic motivation for learning English in the 21st century is undoubtedly no longer communication with native speakers (NSs) alone, but much more

frequently communication with nonnative speakers of English (NNSs), this is a valid point.

Nonnative speakers need to acquire English for daily communication with both NSs and NNSs, which essentially makes intelligibility one of the major goals of English language acquisition (*cf.* Levis 2005).

As it seems unnecessary for all foreign learners, with the prominent exception of future language teachers, to acquire perfect English pronunciation, which, as suggested by Abercrombie (1991) is in fact an unrealistic goal, raising awareness about intelligible pronunciation is increasingly advocated as a key component of English pronunciation teaching. Thus Abercrombie (1991) defines *comfortable intelligibility* of spoken English as pronunciation understood with little or no conscious effort on the part of the listener; pronunciation teaching should therefore have "a *limited* purpose which will be completely fulfilled: the attainment of intelligibility" (Abercrombie 1956: 37). Similarly, Wells (2008: 109) suggests concentrating "on the matters that most impede intelligibility while encouraging fluency," with Morley (1991) underlining that the overall aim is for the learner to develop spoken English that is easy to understand, serves the learner's individual needs, and allows a positive image of a speaker (*cf.* also Elson 1992; Kelly 2000; Levis 2005; Hismanoglu 2006; Brawn 2010).

Wells rightly points out that "Jenkins's proposals still require the mastery of a fair number of difficult pronunciation points that are not in practice mastered by many users of EIL" (2008: 106). Whether embracing the LFC approach or dismissing it altogether, it is necessary, however, to first establish the level of proficiency and expectations of the target audience. In the reflections on how to teach pronunciation in the EFL classroom Remiszewski (2008: 307) maintains that primarily

> […] the debate must embrace the attitudes and beliefs of the learner. Paradoxically, proposals centered around LFC are claimed to be designed for learner's benefit, but at the same time we still know so little about the learner's actual point of view. This must change, as the data which are already available show that a more thorough analysis of learners' motivations and beliefs can cast some new light on the discussed problem.

It is increasingly argued that acceptable pronunciation for many professional domains is not necessarily synonymous with having a British or an American accent (Brawn 2010). Speakers actually attain acceptable pronunciation when other participants in a conversation can understand them without any major difficulties; the speakers are thus *comfortably intelligible* (*cf.* Abercrombie 1991). However, different students may have different "personal aims and aspirations in language learning" (*cf.* Wells 2008: 102). Thus, in certain areas of expertise, language mediators included, the learners' accents should still be close to standard varieties, since "an accent that deviates too far from a recognized standard has the risk of becoming distracting and unpleasant" (Gilakjani 2012: 98). Any serious deviation from the standard may result in unsuccessful communication; even if communication is successful, the speaker may be judged

negatively (Brawn 2010). While poor pronunciation can devalue good language skills and deprive learners of their "deserved social, academic and work advancement" (Varasarin 2007: 45), good pronunciation can contribute to easier, more relaxed and more successful communication (*cf.* Morley 1998; Fraser 1999; Munro 2011).

2.2 The Role of Pronunciation in Translator and Interpreter Training

Although EFL pronunciation teaching has received wide research attention focusing on a variety of angles (Brazil 1994; Collins et al. 2014; Crystal 2000; Cruttenden 1986 Celce-Murcia/Brinton/Goodwin 1996; Fraser 1999; Gimson 1980; Halliday/McIntosh/Strevens 1964; Jenkins 2000; Kenworthy 1987; Jurančič 2007; Komar 2008a; Morley 1998; Roach 1991; Šuštaršič 2005; Tench 1996; Wells 2008), no specific studies have been conducted on the role of phonetics and phonology in translator and interpreter training. This is surprising considering the fact that pronunciation skills are undeniably crucial especially for interpreters. Apart from studies on the expectations of the users of interpreting services (Moser 1995: 8), where pronunciation is addressed only briefly, hardly any research has endeavored to provide an in-depth account of the issues relevant to pronunciation teaching. However, a recent report by the BBC[2] suggests that much more attention to issues connected with aural processing is required in interpreting, as it plays such a significant role in international institutions. In the exam mandatory for professional interpreters the AIIC tests the candidates' pronunciation among other things. Some of the marking criteria focus on diction, accent, pace of delivery, use of the voice, intonation, whether the delivery was agreeable to listen to and fluency.[3] While pronunciation skills may appear somewhat less crucial for translators, they should certainly not be neglected. Good pronunciation is essential for all language professionals, as it is directly related to their prospects of employment: at job interviews, good oral communication skills are highly valued by most employers, and inadequate pronunciation skills can make job applicants appear less credible, no matter what their language proficiency might be otherwise. Thus EFL speakers with high language proficiency as well as suitable pronunciation skills are much more likely to make a good impression on their potential employers.

In recent decades a substantial body of research on English phonetics has given prominence to contrastive studies of English and Slovene and the teaching of EFL in Slovenia (*cf.* Srebot-Rejec 1988; 1992; Petek/Šuštaršič/Komar 1996; Šuštaršič 1995; Komar 1997, 1999; Šuštaršič 1999; Hirci 1999; Šuštaršič 2003; Komar 2004; Šuštaršič 2005; Komar 2006; Jurančič 2007; Komar 2008a, 2008b; Šuštaršič 2009, 2012; Jurančič 2012; Jurančič Petek 2014; Komar 2015; Stopar 2015 to mention just a few).

Šuštaršič and Komar, together with Collins (2014[4]), are also the authors of key literature on English phonetics designed explicitly for the Slovene students of English.

2 For more details see http://www.bbc.com/news/world-europe-35501198 (6 February 2016).

3 *Cf.* European Parliament: http://europa.eu/interpretation/accreditation_en.htm (5 February 2016)

4 First edition in 2002.

Building on the findings of these studies, it seems necessary to address the specific aspects of English phonetics in translator and interpreter training.

2.3 The Study

The present study is a first step towards gaining a better understanding of the specific needs of trainee translators/interpreters.[5] It aims to focus on trainee translators' perceptions of their own pronunciation and their views on the pronunciation requirements of professional translators and interpreters. The main research questions are:

- What are trainee translators' expectations with regard to learning English pronunciation?
- What are trainee translators' views on the role of pronunciation in translator training and the impact of English phonetics on their pronunciation?
- What is trainee translators' understanding of the significance of pronunciation skills and their relevance for professional translators and interpreters?
- What importance do trainee translators ascribe to intelligibility and good pronunciations skills?

3 METHODOLOGY

3.1 Participants

The participants of the study were first year undergraduate trainee translators of the University of Ljubljana in Slovenia enrolled in English phonetics. This course is offered at the Department of Translation as part of the English language course and covers 15 weekly 45-minute sessions dedicated to the theoretical background on English phonetics, and another 15 sessions dedicated to practical phonetics classes. Although eighty-three students were enrolled at the time of the study, those repeating the year, and international students on the Erasmus exchange programme were excluded from the study to ensure that the participants had very similar background and exposure to English phonetics. Thus fifty-seven students were invited to participate, of whom fifty-four filled out the questionnaire. In the course, students are introduced to basic segmental and supra-segmental features related to English phonetics: the system of English vowels and consonants, word stress, strong and weak fluency forms, as well as basic concepts related to the English intonation system.

3.2 Data Collection

A questionnaire, designed to establish the trainee translators' perceptions of their pronunciation and views on the importance of English phonetics, was administered to participants during week 6 of their English phonetics. The questionnaire consisted of several 5-point Likert-type statements and additional open questions. In the Likert-type statements, the participants responded by using the scale with five description

5 Henceforth the term trainee translators will be used to cover both trainee translators and trainee interpreters participating in this study. While the two groups of students have somewhat different learner needs, their training is not yet diversified at this level.

categories ranging from ‘extremely’ to ‘not at all’ (with ‘very’, ‘fairly’ and ‘not much’ options in between). In the open-ended questions the participants provided their own impressions.

4 RESULTS AND DISCUSSION

The results of the study are presented and discussed in sections 4.1 to 4.3. Section 4.1 provides data on the participants’ background with their self-perception on pronunciation and attitudes towards English accents. Section 4.2 covers results on the participants’ expectations related to pronunciation instruction, while Section 4.3 presents their views on the skills required for professional translators.

4.1 Participants’ Background, Self-perception and Attitudes towards English Pronunciation

Age and Gender

Almost three quarters of the participants were 19 at the time of our study, while other participants’ age ranged from 18 to 22. Of the 54 participants who completed the questionnaire, 45 were female and 9 male.

Years of Learning English

Half of the participants (n=27) have been learning English for 9 or 10 years, 11% for 8 years, while 17% have had English for over 11 years. The remaining 22% reported learning English for over 12 years.

Participants’ Perception of their Own Pronunciation Skills

Table 1 reports on the participants’ perception with their own intelligibility; 70% stated they have never been misunderstood due to their NNS English accent, while about one third admitted to having been misunderstood, but only occasionally.

Table 1: Participants’ perception

	Ever misunderstood (%)	**Mind being recognised as NNSs (%)**
Yes	16 (30)	11 (20)
No	38 (70)	43 (80)
TOTAL	54 (100)	54 (100)

Most participants (80%) responded they actually do not mind being recognised as NNSs; those who do, mind it only when NSs recognise them as NNSs, but are not preoccupied with this issue in communication with NNSs.

Contact with and Attitudes towards Different NS Varieties of English

The participants replied they have had most contact with British (41%) and American (53%) speakers of English, some in fact with both these groups, while 6% also reported having contact with Irish, Australian and Scottish varieties (*cf.* Table 2).

Table 2: Varieties of English

	Most contact (%)	Variety liked most (%)
British	26 (41)	43 (80)
American	33 (53)	8 (15)
Other	4 (6)	3 (5)

When asked about the English accent they like most (*cf.* Table 2) the vast majority (80%) expressed British English was their favourite accent, compared to the 15% with a preference for American English. The remaining 5% like Australian, Irish and Scottish, while Canadian and other varieties were not mentioned. The responses on why they favour a particular accent ranged from "it is sophisticated," "elegant" and "classy," "sounds more polite," "it is pleasing to the ear" or "it sounds the best" for British English, to "it's funny" for Scottish and "sounds interesting and amusing" for Irish varieties. Those who prefer American English find this accent most natural due to hearing American English in films and music. However, some added they would prefer to adopt a British accent, since "we live very near." This shows a great discrepancy between the variety of English they most frequently encounter through the mass media, mainly TV and the Internet (i.e. 41%), and the variety of English they like best (i.e. 80%). Although over one half of the participants had most contact with American English, only 15% actually favour this accent.

In light of considerable exposure to the American film and music industry and wide accessibility of new technologies, somewhat different results were anticipated: they were expected to be more in line with other studies observing "the influence of exposure to the most popular English variety, namely American English" (*cf.* Jurančič Petek 2014: 47). The results suggest, however, that the participants of this study are aware of the geographical proximity of Great Britain and its role within the European context. The results perhaps also reflect the educational settings related to phonetics instruction in Slovenia where Standard British English is "the established variety of English taught in Slovene schools" (Jurančič Petek 2014: 49); as evident from the literature required in English pronunciation instruction in Slovenia, this is the case not only at primary and secondary levels, but also at the university level pedagogy, having Collins et al. (2014) set as key literature in teacher training as well as translator training at major Slovene universities.

4.2 Expectations Related to Pronunciation Learning

Participants' Awareness of IPA

Almost three quarters of participants (39 out of 54) stated they had been unaware of all the phonemes in English prior to English phonetics, and only 15 knew all the phonemes.

Table 3: Pronunciation learning

	Happy with their accent	Learning IPA necessary	Expectation of significant improvement	Enjoy pron. learning in class
	No. of participants (%)	No. of participants (%)	No. of participants (%)	No. of participants (%)
Extremely	1 (2)	15 (28)	22 (41)	23 (43)
Very	4 (7)	28 (52)	27 (50)	22 (41)
Fairly	26 (48)	7 (13)	5 (9)	8 (15)
Not much	22 (41)	4 (7)	0	1 (2)
Not at all	1 (2)	0	0	0
TOTAL	54 (100)	54 (100)	54 (100)	54 (100)

Necessity of Pronunciation Learning
When asked about the benefits of English pronunciation learning, 80% stated it was necessary to know all the phonemes (*cf.* Table 3). Another 13% believed this was fairly necessary, while only 7% ranked it as not very important.

Participants' Views on Phonetics Class
Only 9% of the participants (n=5) are happy with their current English accent (*cf.* Table 3), whereas almost half (i.e. 49%) are only fairly satisfied with it. About 40%, however, expressed a certain dislike of their accent. The information obtained from the open-ended questions reveals that the participants' reasons for such impressions ranged from their belief that their accent is "too non-native" to "not British enough." The participants reported they would like to change their accents so as "to sound more like a native speaker of English," "to sound like a professional/native speaker," "to sound more sophisticated," "to better fit in," "to sound more authentic," "to sound more educated," "to speak like native speakers," "to be a better speaker of British English," "to speak properly, with no hint of the fact that I'm a non-native speaker," "to have a feeling that I really speak proper English." An overwhelming majority (91% in all) agreed very strongly that they expect a considerable improvement of pronunciation skills after the English phonetics course. As evident from Table 3, a vast majority also responded that they enjoy learning English phonetics in class.

4.3 Requirements for Professional Translators and Interpreters

As evident from Table 4, the participants ascribe great importance to good pronunciations skills of professional translators and interpreters: all the participants ranked good pronunciation skills as either 'extremely' or 'very' important. Even at this early stage, the participants are strongly relating good pronunciation with job opportunities, since almost all are convinced better pronunciation skills bring better chances of employment.

When asked about the variety of English required for professional translators and interpreters, 70% of the participants replied that it is 'extremely' or 'very' important that such professionals speak with a NS accent.

Table 4: Requirements for translators and interpreters

	NS accent	**Easy to understand**	**Good pron. skills**	**Better pron.-better job**
	No. of participants (%)	**No. of participants (%)**	**No. of participants (%)**	**No. of participants (%)**
Extremely	10 (18)	18 (33)	38 (70)	26 (48)
Very	28 (52)	32 (59)	16 (30)	24 (45)
Fairly	12 (22)	3 (6)	0	4 (7)
Not much	3 (6)	1 (2)	0	0
Not at all	1 (2)	0	0	0
TOTAL	54 (100)	54 (100)	54 (100)	54 (100)

However, 92% of the participants maintained that it is 'extremely' or 'very' important for professional translators to adopt an easy-to-understand accent. This illustrates that while having a high regard for nativeness, the participants feel that intelligibility is even more crucial for professional translators and interpreters.

5 CONCLUSION

The main goal of this paper was to foreground pronunciation instruction relevant to trainee translators and to provide an overview of their perceptions and expectations related to this issue. The findings of the questionnaire administered to the trainee translators participating in the study suggest that they consider pronunciation as an important element of their speaking proficiency, highlighting both nativeness as well as intelligibility as essential components of communicative competence.

The results of the study reveal a prevalent liking for the British accent among the participants. Some believe that the aim of learning pronunciation is to acquire a NS accent. This is "a worthy individual goal" (Gilakjani 2012: 98), but it is not achievable for all learners (Abercrombie 1991). However, virtually all participants of our study consider intelligibility to be crucial for their future profession. Although they were not familiar with the concept of *comfortable intelligibility* (*cf.* Abercrombie 1991), this notion is clearly reflected in their responses.

Similar discussions concerning pronunciation instruction are emerging among researchers from this field: an entire issue of *TESOL Quarterly* (39/3) was dedicated to nativeness and intelligibility, with a growing number of researchers also foregrounding pronunciation teaching as vital in gaining full communicative competence (Levis 2005: 370). While the NS model generally remains the norm for future language teachers, a focus on intelligibility may be even more important for professional language mediators. Achievable, realistic goals have to be set, which are suitable for the communication

needs of future translators and interpreters. These needs vary, as it is the listener and the context that "determine the extent of the listener's tolerance towards the intelligibility of the speaker's pronunciation" (Brown 1991: 48).

One of the limitations of this study is that the data are based only on the trainee translators' self-evaluation and personal impressions. Additional studies on employer needs, market demands, and professional interpreters' views would be needed to obtain a more complete picture. This study is thus the first step towards gaining a better insight into learner needs in translator training.

As professionals, trainee translators will eventually be working in an international environment which will require daily communication in English with both NSs and NNSs. This needs to be reflected also in their pronunciation instruction by focusing on intelligibility and communicability, vital for successful communication of professional translators and interpreters in the 21st century.

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Abstract

INVESTIGATING TRAINEE TRANSLATORS’ VIEWS ON THE PRONUNCIATION OF ENGLISH: A SLOVENE PERSPECTIVE

While the importance of excellent pronunciation skills for language professionals is indisputable, research attention has focused mainly on the pronunciation skills of teachers. Nevertheless translators, and even more so interpreters, who are constantly engaged in multi-lingual communication with their clients, face a tough competition in the global market and those with poor pronunciation skills are at a considerable disadvantage. Developing good pronunciation skills is thus an aspect that should not be neglected in the training of translators and interpreters, since it may directly affect their prospects of employment. The paper explores the views of Slovene trainee translators on the pronunciation of English. Their self-perception of English pronunciation skills and expectations concerning their pronunciation are examined by using a questionnaire

administered to trainee translators at the University of Ljubljana. The questionnaire results provide an insight into the participants' perceptions of their attained pronunciation proficiency and their attention to pronunciation instruction. The analysis of the replies reveals that trainee translators view pronunciation as an important element of their speaking proficiency, highlighting the issue of intelligibility as an essential component of communicative competence. The findings raise interesting issues important for pronunciation teaching in translator training, underlining the necessity to identify specific learner needs of future translators and interpreters.

Key words: good pronunciation skills, English pronunciation learning and teaching, intelligibility and comprehensibility, translator and interpreter training

Povzetek

POGLED BODOČIH SLOVENSKIH PREVAJALCEV NA SPECIFIKO ANGLEŠKE IZGOVARJAVE

Odlična izgovarjava je nedvomno eden od ključnih elementov jezikovnega znanja vseh, ki se profesionalno ukvarjajo z jeziki. Kljub temu, da se raziskave s tega področja večinoma osredotočajo na učitelje jezika, nikakor ne moremo mimo dejstva, da so v medjezikovno komunikacijo nenehno vključeni tudi prevajalci, še posebej pa tolmači. Ti so obenem izpostavljeni hudi konkurenci na mednarodnem trgu in se zaradi slabe izgovarjave lahko znajdejo v bistveno slabšem položaju. Pri izobraževanju bodočih prevajalcev in tolmačev torej nikakor ne bi smeli zanemarjati razvijanja govornih kompetenc in izgovarjave, saj so prav te veščine neposredno povezane z njihovo zaposljivostjo. V članku se osredotočamo na percepcijo govora in poglede bodočih slovenskih prevajalcev in tolmačev na angleško izgovarjavo. S pomočjo vprašalnika, ki smo ga razdelili med študente Oddelka za prevajalstvo v Ljubljani, raziskujemo, kakšno je njihovo zavedanje o lastni izgovarjavi v angleškem jeziku in kakšna so njihova pričakovanja. Rezultati vprašalnika ponujajo vpogled v to, kako študenti zaznavajo doslej usvojene govorne veščine in kakšno pozornost namenjajo izboljšanju svoje izgovarjave pri urah angleške fonetike. Analiza rezultatov kaže, da študenti prevajalstva dojemajo izgovarjavo kot izjemno pomemben element svojih govornih sposobnosti, jasnost in razumljivost pa se jim zdita ključna elementa komunikacijske kompetence. Rezultati raziskave obenem potrjujejo pomen specifičnih učnih potreb študentov, kar je nujno upoštevati tudi pri poučevanju izgovarjave v izobraževalnem procesu bodočih prevajalcev in tolmačev.

Ključne besede: odlične izgovorne sposobnosti, učenje in poučevanje angleške izgovarjave, jasnost in razumljivost, izobraževanje bodočih prevajalcev in tolmačev

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THE INFLUENCE OF THE ASSIMILATION OPERATOR, SPEECH RATE AND LINGUISTIC BOUNDARY ON THE PRODUCTION OF /Z/ IN CROATIAN

1 INTRODUCTION

1.1 Speech Production Process

In defining the fundamental feature of speech as communication, the speaker represents an informational processor that simultaneously produces and receives information, using the system of signs and a medium by means of which they are communicated. The most widely used and effective system of signs is a natural language, and the most natural medium is speech.

Mechanisms of speech production are defined by different models that follow the process of reshaping information using different codes or a materially shaped signal on the way from the source to the receiver of information. Jeager (2005) assumes that the speaker must have, on the one hand, built programmes of speech production that make up the representational level in which not only the speaker's knowledge of the world is stored, but also the knowledge of language-speech mechanisms, thus enabling the speaker to shape information in speech. On the other hand, the speaker must master the processor level by which the representational components from the long-term memory are evoked, selected and activated, and these are then installed in the actual utterance.

Hierarchical or modular models of speech production (Levelt 1989; Horga 2008; Horga/Liker 2016) assume the existence of conceptual, linguistic and articulatory levels, and a whole range of feedback loops that control speech production. On the conceptual level the speaker plans the informational content of the utterance. The final result of the activity of the conceptualizer is information shaped by an algorithm characteristic for that level as a preverbal plan that is not linguistically shaped, but is available to the speaker's language code and enables the information to be linguistically shaped. The formulator shapes preverbal information using the linguistic code of a specific natural language, building the grammatical surface structure which enables the phonological processor to join phonological segmental and prosodic units to the surface structure. The final result of language coding is a phonetic plan. A phonetic plan is an input for the articulator whose assignment is, by means of neural commands for speech organs, to turn this plan into speech movements and a speech sound as the final result of speech production. The conceptualizer, formulator and articulator in speech production correspond to the auditory-receptive, linguistic and interpretation levels of speech perception.

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In each of these levels the information is coded with a special system of signs and the whole communication chain has to meet the basic requirement to ensure sameness/uniformity in order to achieve the final communication goal, namely that the listener receives the exact information the speaker has sent. Given that the speaker/listener is not an ideal mechanism and has a range of articulatory and acoustical limitations, the whole process of speech communication is not ideal, with interruptions in the transmission of information occurring in different parts of the communication chain. One of the ways to ensure the efficiency of spoken communication is coding it with a high degree of redundancy.

Unlike the hierarchical models of speech production, other models are based on theories of spreading activation in which speech production is shown as an entwined system of units of various speech production levels depending on their degree of activation (Stemberger 1985; Dell 1986; Erdeljac 2009). The network is pictured as a range of levels in which the units of each level are presented as knots connected to other units of the same level with associative connections, and the unit that is activated to the maximum spreads its activation to the next level. This demands timely activation of the needed unit, inhibition of used and other at the moment unnecessary units, as well as the appropriate activation transmission to the next unit. Errors in speech production are interpreted by inadequate activation of needed units, and inadequate inhibition of realised units.

1.2 Articulatory Joints

Given that speech in its horizontal timeline can be divided into speech units (Škarić 2007; Horga 2005) that have their own correlates on the linguistic level, a question can be asked as to how particular units are joined together, i.e. how articulatory joints are organised. An articulatory joint is defined as a spoken realisation of two sounds where two speech units of the same hierarchical level meet, with a linguistic boundary passing between them (Horga 2005, Horga/Liker 2006). For example, in the sentence *Doputovao je iž Zagreba* /z#z/ represents a proclitical articulatory joint that connects the proclitic *iž* and the full word *Zagreb*, and between these two /z/ phonemes passes a proclitical linguistic boundary /#/. Theoretically, we can talk about the following articulatory joints: discourse (connection between two discourses: *…To ti je priča o Snjeguljici.#Sada ći ti ispričati priču o Crvenkapici…*), paragraphic (connection between two spoken paragraphs: *...U Splitu je proveo dva mjeseca.#Nakon povratka u Zagreb nastavio je studij. Upisao je…*), sentence (connection between two sentences: *Čekao sam ga na kolodvoru. Vlak je kasnio.*), clausal (connection between two clauses: *Kad sam došao na kolodvor,# saznao sam#da vlak kasni*), word phrase (connection between two word phrases: *Doputovao je#brzim vlakom.*), lexemic (connection between two spoken words: *...brzim#vlakom…*), clitical (connection between a full word and a clitic that can be either a proclitical: *iz#Splita*, or enclitical: *doputovat#će*) joint, morphological (connection between two morphemes), which means a compound in the production of compounds (prefixal: *iz#govor*, suffixal: *mlad#*ost, and ending: *doputova#la*), syllabic (connection between two syllables: *Za#greb*) and sound-related (connection between two sounds in a syllable: *Z#a#g#r#e#b*). The boundary between the first and second members of an articulatory joint can be of different degrees of

exposure. The clearest boundary between two members of a joint is a pause. The duration of a pause is shortened from those joints that connect larger units towards those that connect shorter units. and that is why the pause will probably not appear in sound, syllable and clitical joints and will be regular in discourse, sentence and clausal joints, while in word phrase and lexemic joints the use of a pause could be freer (Horga/Liker 2006). Even from the standpoints of speech production and receiving speech, the important question is whether the boundaries between particular members of articulatory joints are encoded into spoken sound. or are erased because of coarticulatory influences. Therefore, the speaker is trying to produce the most economical articulatory movement in connecting articulatory gestures characteristic for the neighbouring segments, but at the same time aiming to preserve their linguistic distinctiveness so that the listener can understand what is being said (Lindblom 1979).

1.3 Coarticulation

Both in speech production and speech perception the important question is the dichotomy between the physical articulatory-acoustic level of spoken signal and its representational level. The following fundamental communicational question can thus be asked: in what way is the sameness of the information sent by the source, and the one the listener perceives, realised in spite of such reshaping? (Horga/Požgaj Hadži 2012) On a linguistic representational level, the information is presented by the system of abstract, invariant and discrete units, i.e. phonemes. The reshaping of this abstract representation into a spoken acoustic signal is made on a performative-articulatory level, with movement of speech organs that conduct changeable, continuous and partially simultaneous motor patterns that result in an equally variable, continuous and non-discrete acoustic signal. The variability of an acoustic spoken signal and the inability to achieve its segmentation into clearly separated representational discrete units is a consequence of, on the one hand, the specificity of human articulatory abilities, and on the other the universal speech phenomenon of coarticulation defined as a systematic and reciprocal activity of neighbouring spoken segments during their articulation, as they are connecting into larger speech sequences. This means that coarticulation assumes that every spoken segment contains the influence of neighbouring segments, but also that each segment is affecting its neighbours. The articulatory apparatus as a multi-componential mechanism enables the freedom of particular articulatory organs to make anticipatory movements for the next segment, and thus operate on the actual segment in a coarticulatory way. It is also possible for the articulator, active in pronunciation of the neighbouring sounds, to make a movement that is a compromise between the requirements of different neighbouring sounds. In this way, coarticulatory phenomena can be characterized as temporal or spatial.

Due to the coarticulatory influences of neighbouring sounds, different degrees of adaptations and segmental assimilations can be realised. Coarticulation processes can be explained in different ways (Farnetani/Recasens 2013). Glide hypothesis explains coarticulation as simply the mechanical inertia of speech organs that need time to shift from the pronunciation position of one sound into that needed for the next one. According to

Lindblom's theory of "adaptive variability" and the theory of "hyper and hypo speech," speech variability occurs because of the constant adjustment of speech production to the requirements of the specific communicational situation. In some communicational situations it is necessary to produce a spoken signal which, from the point of view of the listener, has a maximum degree of contrast, meaning that "hyper speech" mechanisms are activated. On the other hand, in other situations a lesser degree of contrast between segments is allowed, and "hypo speech" mechanisms prevail in articulating the utterance. These are the reasons why pronunciation varies from hyper-correct to inaccurate and careless. Coarticulation mechanisms enable fluent speech production because, just like any other motor behaviour, they satisfy the principles of economy of motor effort. Therefore, the speaker is trying to produce the most economical articulatory movement in connecting articulatory gestures characteristic for the neighbouring segments (Lindblom 1979). According to the "distinctive features spreading" theory, coarticulation is not conditioned only by the mechanical limitations of the pronunciation apparatus, but makes up a constituent part of the phonological level in which the input commands for realisation of variable spoken segments have already been defined. Therefore, the coarticulatory influence of segments is also assumed and planned on the representational level. From the standpoints of speech production and receiving speech, the important question is whether the linguistic boundaries among particular joints are coded into a speech sound or are erased because of coarticulatory influences.

All these mechanisms on the levels of production and perceiving speech function effectively if the coder of the speaker and decoder of the listener are working effectively. Due to a lack of such abilities, speakers of a foreign language will be recognised as native speakers of another language because of their foreign accents. The speaker's skills to reorganise their motor articulatory programmes with regard to the pronunciation of a foreign language include the abilities to follow the rules of transforming the representational linguistic level into the performative articulatory level, and acquiring coarticulatory rules that can be language-specific are needed to reduce their foreign accent.

2 AIMS OF RESEARCH AND METHODOLOGY

2.1 Aims of Research

The aim of this research was to analyse some characteristics of coarticulation on the example of the sound /z/, behind which, as coarticulatory operators, follow the sounds /s/, /z/, /š/ and /ž/ in a connected text read at a natural and then a fast speech rate. The participants were instructed to read the text as quickly as possible but to keep intelligibility at an acceptable level. Apart from sound operators and speech rate, the influence of different types of boundaries between the first and second members of an articulatory joint on coarticulation was also examined.

2.2 Methodology and Procedure

Twenty female students of the Faculty of Humanities and Social Sciences of Zagreb University, native speakers of Croatian with a regular speech status, were involved in

the research. Only female students were chosen to make a homogeneous sample with regard to general acoustic characteristics. The spoken material was a connected text (1 page) in which the sound /z/ was the first member of the articulatory joint, while other members were sounds /s/, /z/, /š/ and /ž/, and the boundary between parts of the joint were sentence, clausal, lexemic or proclitical. A total of 32 articulatory joints were analysed for each participant (two joints for each lexical boundary in the natural and the fast speech rate), or a total of 640 articulatory joints for the 20 participants. The participants read the text at the natural speech rate (5.14 syl/s) first and then at the fast (6.71 syl/s) speech rate, with the latter being 30.5% faster than the former. They had three minutes for reading preparation for each speech rate. The text reading was recorded under laboratory conditions that enabled a quality acoustic analysis. The analysis of six acoustic variables in all occurrences of the articulatory joints, namely of the duration, spectrum centre of gravity, standard deviation of the centre of gravity, spectral skewness, spectral kurtosis and harmonic to noise ratio (Kent/Read 2002; Jones/Nolan 2007; Jones/McDougall 2009), was done using the Praat software (Boersma/Weenink 2015). The acoustic variables were measured after segmenting and annotation of the components of the articulatory joints (Figure 1). The spectrum noise centre of gravity is a measure of the biggest concentration of energy in the spectrum, and it approximately matches the central frequency of the analysed segment. Spectral skewness of sound is a standard deviation of the centre of gravity and the illustration of the spectral skewness of sound around the central frequency. Spectral kurtosis is a statistical deviation of the spectrum centre of gravity, and it shows the location most of the energy skewed around the centre of gravity: if most of the energy is below the centre of gravity, then the value is closer to zero or is negative, and if most of the energy is above the centre of gravity then the value is higher and positive. The prominence of the main amplitude is a statistical measure for the relative intensity of the most prominent part of the spectrum in relation to the neighbouring parts of the spectrum. Finally, the harmonic to noise ratio is a measure of the sonority of sounds, and the higher the coefficient the more intensive the harmonic component in the sound is.

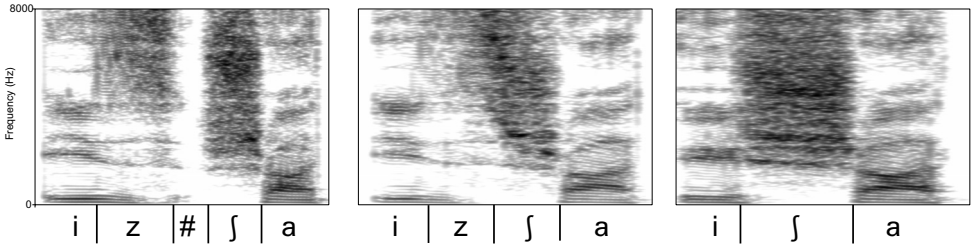


Figure 1: Annotation of the articulatory joint /zš/ realised as /z#š/, /zš/ and as /š/ in the sentence: *Izašla je iz šatora*.

3 RESULTS AND DISCUSSION

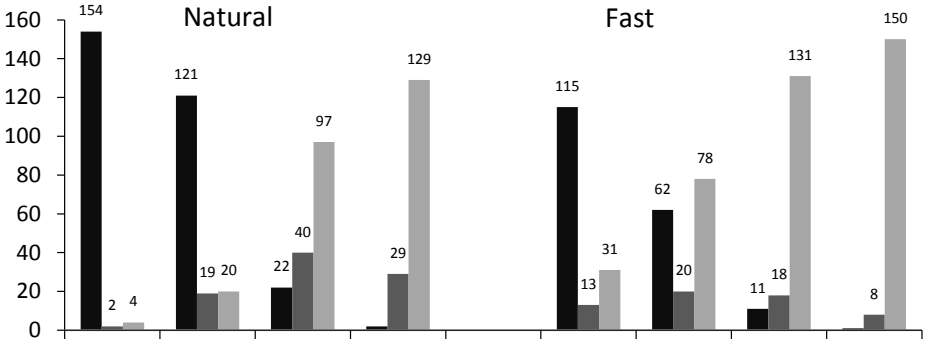
The issues of the influences of the sounds /s, š, z, ž/ as the assimilation operator, types of lexical boundaries inside the articulatory joint and speech rate on acoustic characteristics of the sound /z/ analysed in this paper fall into the general research of phonotactics, coarticulation, adaptation and assimilation that occur in connected speech. By analysing assimilation mechanisms as parametric, Škarić/Kišićek (2006) confirm in their research that "the speaker's conflicts that they investigate (i.e. the pronunciation of unpronounceable phonemes DH) are solved in a compromised manner, so that sometimes an assimilation request prevails, striving towards smooth and economical pronunciation, and sometimes the request for clear performance of phonemes, striving to articulate a hint by which the speaker would mark phonemic representation, and that would, along with redundancy, help the listener to reconstruct it." This conclusion is in accordance with Lindblom's views on communicational conditioning of coarticulatory processes, and research has shown that the activity of assimilation operators can be different in particular speaking situations, i.e. that the represented phonemic features could be realized or that the assimilation mechanisms can efface them.

To understand connected speech the listener must build a hierarchy of language units from sounds, syllables, words, word phrases or sentences. This process of perceptive segmentation also involves the revelation of the linguistic boundaries in articulatory joints. Analysis of the influence of linguistic boundaries on the pronunciation of articulatory joints of same phonemic content, but with different positions of lexical boundary (Horga 1996), shows that it has the biggest influence on the duration of consonants (stops were analysed), because in the utterance V#CV their duration is significantly longer, and on average is 83.5 ms, than in the utterance VC#V, where it is shorter and 69.5 ms on average. Therefore, the duration of the consonants has been shown to be a significant hint of the position of the linguistic boundary, while the duration and intensity of the vowel and explosion of stops were not statistically significant parameters in determining this. Horga and Liker (2006) examined the influence of lexical boundaries on the pronunciation of members of articulatory joints using electropalatography. The results showed that a possible indicator of lexical boundaries in lexemic articulatory joints for the consonants /t/ and /k/ was the index of duration of tongue-palate contact. The lexical boundary was also marked by the duration of a pause. The weight indexes of tongue-palate contact were found to be the indicator of lexical boundaries, while the indexes of alveolar and velar contact and the centre of gravity of the contact were not found to be important in determining the position of these. This conclusion is in accordance with Linblom's views on the communicational conditionality of coarticulation processes. The current research has shown that the influence of assimilation operators can be different in particular speaking situations, i.e. that supposed phonemic features could be realised, or that assimilation mechanisms to diminish or even enface them can be at work. These views of coarticulation are in accordance with the features of articulatory phonology in which phonological units are defined as planned movements and dynamic phonetic gestures with an intrinsic temporal dimension, in which

the overlapping of particular gestures is allowed (Farnetani/Rascasens 2013). This can explain the even bigger overlapping of articulatory gestures in the faster speech rate, and the larger coarticulatory influence which was also confirmed in this research, based on the observed acoustic variables.

3.1 Realisation of Particular Segments of the Articulatory Joint

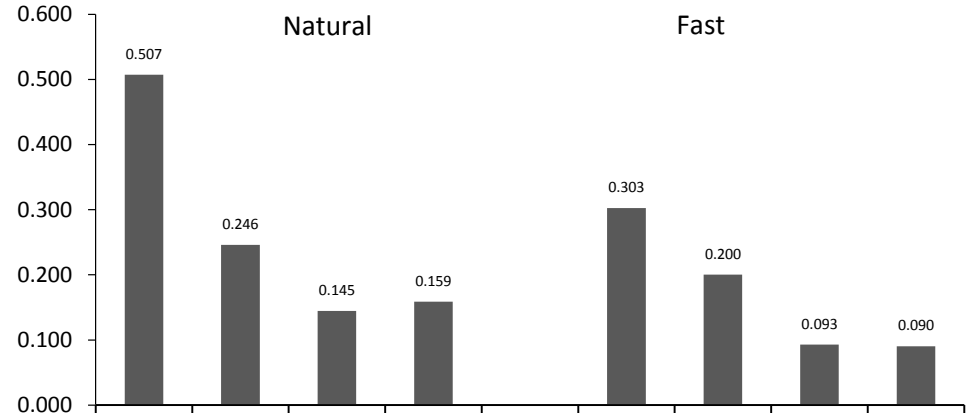
The articulatory joint can be realised with three segments (first member, pause, second member), with two segments (first member, second member) and as the one segment (first and second member of a joint connected and realised as one segment). Therefore, in the first case the linguistic boundary between members of the joint is clearly expressed with a pause, while in second case it is acoustically possible to divide first and second segments and the linguistic boundary is found in that division. Finally, in the third case the linguistic boundary is erased because two segments are realised as one under the influence of the assimilation operator. The growth of the activity of the assimilation operator can be expected to have the same order, i.e. that it is the lowest when a pause is realised and biggest when the articulatory joint is realised as one segment. The results on the number of articulatory joints regarding their content are presented in Table 1 and Figure 2, and they illustrate that the influence of the assimilation operator is bigger in the faster than the natural speech rate, and that it grows from the sentence, then from clausal and lexemic to proclitical joint, in which it is the highest ($\chi^2 = 266$, p=0.00).



	sent	clau	lexe	proc		sent	clau	lexe	proc
s1-p-s2	154	121	22	2		115	62	11	1
s1s2	2	19	40	29		13	20	18	8
s1	4	20	97	129		31	78	131	150

Table 1 and Figure 2: The number of articulatory joints realised with a pause (s1-p-s2), as two segments (s1s2) and as one segment (s1), regarding the type of the linguistic boundary: sentence (sent), clausal (clau), lexemic (lexe) or proclitical (proc) and regarding the speech rate: natural or fast.

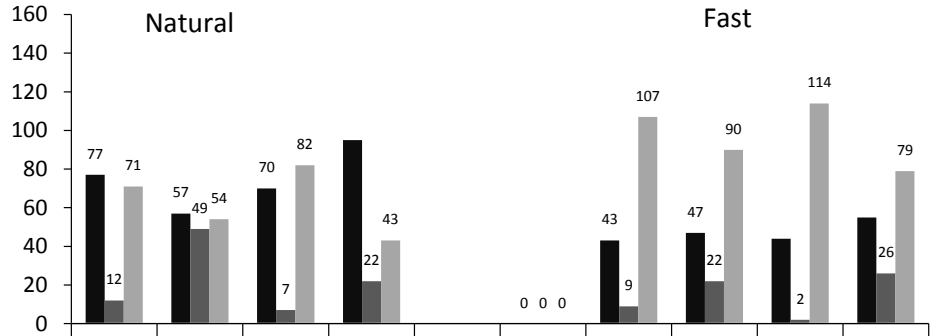
The average duration of a pause in the articulatory joint can be analysed in the same direction as the influence on the degree of assimilation, when it is realised, as can be seen in the Table 2 and Figure 3 (t=7.50, p=0.00). Namely, it can be said that the longer the pause, the lower the influence of the assimilation operator. It is seen that the average duration of a pause is longer for the natural rather than the fast speech rate, and that the duration of a pause is shortened from the sentence, to the clausal, lexemic and proclitical, without any significant difference between the last two.



	sent	clau	lexe	proc		sent	clau	lexe	proc
pause	0.507	0.246	0.145	0.159		0.303	0.200	0.093	0.090

Table 2 and Figure 3: Average pause duration (in ms) if it represents sentence (sent), clausal (clau), lexemic (lexe) or proclitical (proc), and regarding the speech rate: natural or fast.

The influence of the assimilation operator, i.e. the second member of the articulatory joint on the first member, is shown in Table 3 and Figure 4, which illustrates that, generally, the degree of assimilation is higher at the fast speech rate (χ^2 186.12; p=0.00), but that at both rates the assimilation is greater, i.e. the pronunciation of both members of the articulatory joint as one sound for sounds /s/ and /z/ is more common than for sounds /š/ and /ž/. Therefore, it is possible to conclude that the similarity or commonality of the place of articulation will contribute to the influence of the assimilation operator on the degree of assimilation.



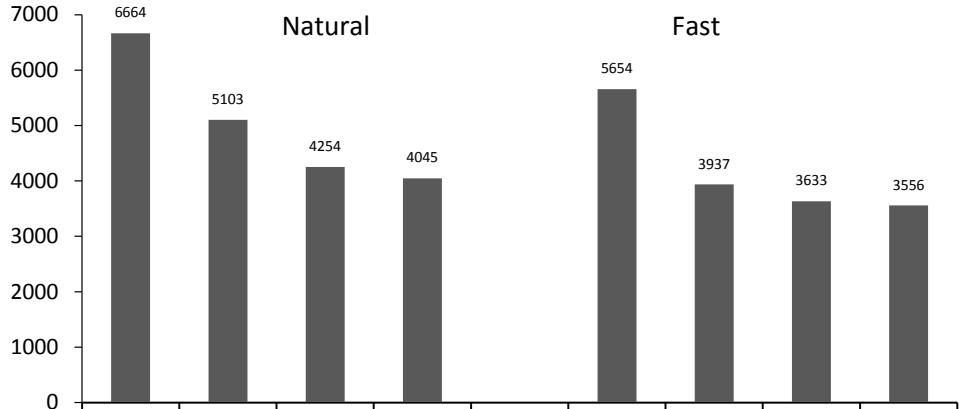
	s	š	z	ž		B	s	š	z	ž
s1-p-s2	77	57	70	95		0	43	47	44	55
s1s2	12	49	7	22		0	9	22	2	26
s1	71	54	82	43		0	107	90	114	79

Table 3 and Figure 4: The number of articulatory joints realised with a pause (s1-p-s2), as two segments (s1s2) and as one segment (s1), depending on the second member of the articulatory joint: /s/, /š/, /z/ or /ž/, and regarding the speech rate: natural or fast.

3.2 Spectrum Centre of Gravity

Table 4 and Figure 5 show that the spectrum centre of gravity regardless of the type of linguistic boundary in the natural speech rate is shifted towards higher frequencies in comparison to that seen with the fast speech rate (t=6.65; p=0.00). This can be explained with the realisation of the complete articulatory movement and with the realisation of the necessary articulatory conditions for making the intensive and high frequency friction that is characteristic of fricatives. This can also be assigned to the greater influence of the higher frequency affricates /s/ and /z/ as assimilation operators (Table 1, Figure 2). When it comes to the influence of the linguistic boundary between members of a joint, that shift of the spectrum centre of gravity towards higher frequencies is greater for sentence and clausal boundaries than for lexemic and proclitical ones. Sentence and clausal boundaries are most commonly realised with a pause, so the first member of the joint, /z/, is found in the final sentence or clause position that enables that sound to become voiceless and with it the shift of the spectrum centre of gravity towards higher frequencies. By measuring acoustic parameters, Bakran (1996) concludes that in the Croatian language vowels and consonants within a syllable before a pause are significantly longer, regardless of the duration of the pause, and states that this lengthening at the end of the word is on average an extra 12% for vowels and 6–12% for consonants. Therefore, in the current research the more significant shift of the spectrum centre of gravity in front of sentence and clausal boundary in articulatory joints can be attributed to the lengthening of the /z/ sound in front of a pause, which is more common in this type of the articulatory joint than in lexemic and proclitical joints.

It is worth mentioning the factor of making the sound /z/ voiceless in sentence and clausal joints in front of a pause, which contributes to the heightening of the spectrum centre of gravity for two reasons: on the one hand, the noise component of the sound becomes higher in frequency and, on the other, with the absence of voicing that is lower in frequency, the part of the spectrum that would usually shift the spectrum centre of gravity towards areas with lower frequencies is absent.

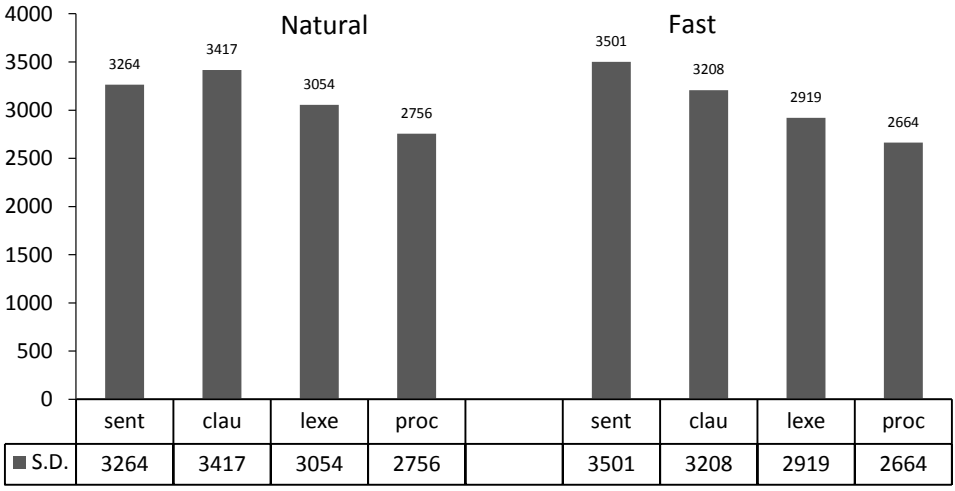


	sent	clau	lexe	proc		sent	clau	lexe	proc
COG	6664	5103	4254	4045		5654	3937	3633	3556

Table 4 and Figure 5: Spectrum centre of gravity (in Hz) regarding the type of linguistic boundary: sentence (sent), clausal (clau), lexemic (lexe) or proclitical (proc), and regarding the speech rate: natural or fast.

3.3 Spectral Skewness

When it comes to spectral skewness regarding speech rate (Table 5 and Picture 6), it can be said that the difference is significant only for /z/ in the sentence joint, because it is bigger at the faster speech rate than at the natural one, and it can be explained by a bigger articulation variability in the articulation of the sound /z/ allowed by a pause, which is very frequent in the sentence joint. This also explains the overall reduction of spectral skewness due to stronger connections between joint members and the bigger assimilation influence of the operator. In general, it can be said that the spectral skewness did not show statistically significant difference in the two observed speech rates ($t=0.20$; $p=0.84$), which can be assigned to the weaknesses of the measure itself. Namely, this measure was evaluated as ineffective in research on the acoustic characteristics of fricatives in the speech of people wearing dental braces (Horga et al. 2013).

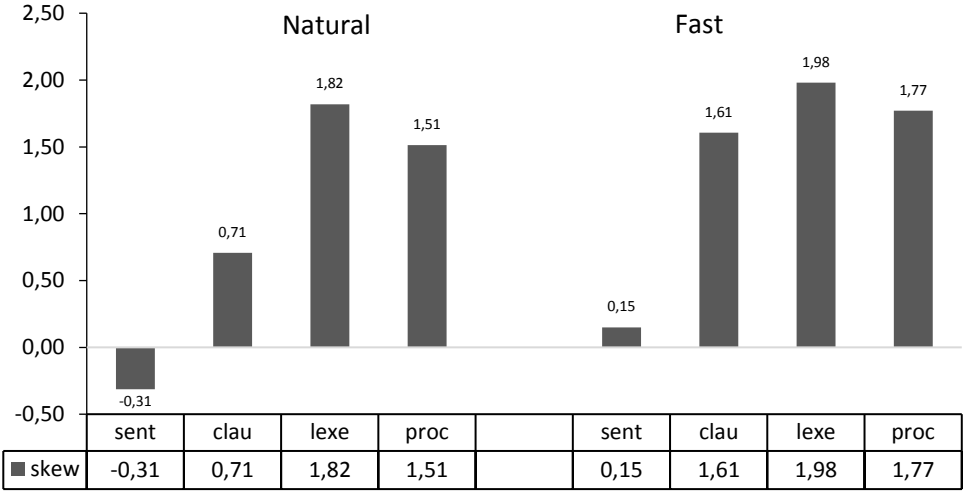


	sent	clau	lexe	proc		sent	clau	lexe	proc
S.D.	3264	3417	3054	2756		3501	3208	2919	2664

Table 5 and Figure 6. Spectral skewness (in Hz) regarding the type of linguistic boundary: sentence (sent), clausal (clau), lexemic (lexe) or proclitical (proc), and regarding the speech rate: natural or fast.

3.4 Spectral Kurtosis

The values of spectral kurtosis (Table 6 and Figure 7) are generally higher at the fast speech rate than the natural one (t=5.61; p=0.00). Given that the spectrum centre of gravity at the natural speech rate is shifted towards higher frequencies, there is more space left at the lower frequencies for spectral kurtosis towards that lower frequency



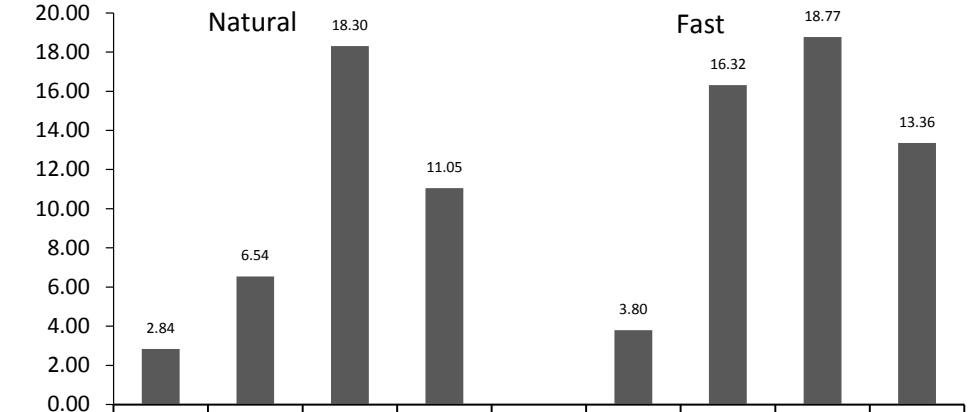
	sent	clau	lexe	proc		sent	clau	lexe	proc
skew	-0,31	0,71	1,82	1,51		0,15	1,61	1,98	1,77

Table 6 and Figure7: Spectral kurtosis regarding the type of linguistic boundary: sentence (sent), clausal (clau), lexemic (lexe) or proclitical (proc), and regarding the speech rate: natural or fast.

area. The different behaviour of spectral kurtosis in sentence and clausal joints, unlike that seen with lexemic and proclitical ones, is again prominent, especially in the natural speech rate. Namely, in sentence and clausal joints the kurtosis is placed towards lower frequencies, and in lexemic and proclitical ones towards the higher frequencies. To a certain extent, clausal joints at the fast speech rate are an exception.

3.5 Prominence of Amplitude

The prominence of amplitude (Table 7 and Figure 8) shows simultaneous movement of values as well as spectral kurtosis (t=2.11; p=0.04). The amplitude is bigger at the fast speech rate than at the natural speech rate, and it is bigger for lexemic and proclitical joints than for sentence and clausal ones, which shows a higher coarticulatory influence with the fast speech rate.



	sent	clau	lexe	proc		sent	clau	lexe	proc
kurtosis	2.84	6.54	18.30	11.05		3.80	16.32	18.77	13.36

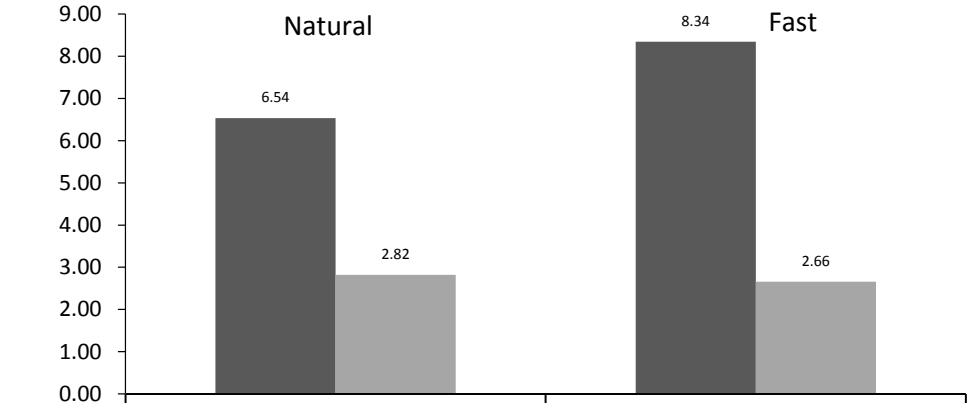
Table 7 and Figure 8: The prominence of amplitude regarding the type of linguistic boundary: sentence (sent), clausal (clau), lexemic (lexe) or proclitical (proc), and regarding the speech rate: natural or fast.

3.6 Harmonic to Noise Ratio

The harmonic to noise ratio (Table 8 and Figure 9) also shows that the coarticulation influence is higher at the fast speech rate because the ratio of harmonic sound in the sound /z/ is under the influence of the voiced assimilation operators /z/ and /ž/ at the fast speech rate, which is higher than at the natural speech rate, while under the influence of voiceless /s/ and /š/ it is somewhat lower (t=5.97; p=0.00).

Horga et al. (2013) applies the abovementioned set of acoustic variables to investigate the influence of dental prosthetics on the articulation of fricatives. The results of the paper can be summarised in three points: firstly, speech with braces was closer to the speech of the eugnatic participants; secondly, in speech without braces the

participants had fewer possibilities for compensational articulatory mechanisms; and thirdly, speech with prosthetics differed from the speech of eugnate speakers because prosthetics, as foreign bodies in the mouth, influence pronunciation. This research is mentioned because it showed that we can observe the characteristics of pronunciation of fricatives with these types of acoustic variables. It is also interesting that the spectrum centre of gravity was shown to be the most useful variable in this earlier research.



	Natural	Fast
voiced	6.54	8.34
voiceless	2.82	2.66

Table 8 and Figure 9. Harmonic to noise ratio in sound /z/ at the natural and fast speech rates depends on whether the assimilation operators are voiced sounds /z/ or /ž/ or voiceless sounds /s/ and /š/.

4 CONCLUSION

The results of this research can be summarised as follows:

- the acoustic variables of spectrum centre of gravity, spectral skewness and kurtosis, as well as the prominence of amplitude, show that a faster speech rate has a higher assimilation influence on the members in the articulatory joint;
- the sentence and clausal lexical boundaries between members of articulatory joints preserve the inherent phonemic features of the sound /z/, while lexemic and proclitical boundaries allow a higher influence of the assimilation operator;
- the sounds /s/ and /z/ as assimilation operators, due to their similarity to the sound /z/ as the first member of the articulatory joint, have a greater assimilation influence than the sounds /š/ and /ž/, which differ from the sound /z/ when it comes to the place of articulation;
- the assimilation influence of the sounds /z/ and /ž/ on /z/ is greater than that of the voiceless sounds /s/ and /š/ because of the same voicing, resulting in the higher harmonic to noise ratio of /z/;
- the set of acoustic variables used in this work are proven to be good measures for use in research on assimilation influences.

The next phase of this research could be an in-depth analysis of observed articulatory joints, and a comparison with the results of an acoustic analysis in order to get a more complete insight into the assimilation processes. Furthermore, it is possible to imagine a whole range of research that would analyse the assimilation relations of other sounds in the articulatory joint. Certainly, research into the physiological parameters of the activity of particular articulators, and a comparison with the results of acoustic and perceptive methods, would give a more thorough insight into the coarticulation phenomenon.

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Abstract

THE INFLUENCE OF THE ASSIMILATION OPERATOR, SPEECH RATE AND LINGUISTIC BOUNDARY ON THE PRODUCTION OF /z/ IN CROATIAN

It is widely accepted that invariant and discrete phonological units at the linguistic level are transformed into variable and continuous movements of speech organs, which in turn results in equally continuous acoustical results. The variability of phonemic units depends on neighbouring phonetic units, but also on the various linguistic, communicational and pragmatic contexts of a particular speech act. The influence of phonetic units upon each other results in adaptations, coarticulations and assimilations. By means of assimilation at least one distinctive feature of a phoneme is changed, so the observed phoneme becomes similar to its neighbouring sound – the assimilation operator. This paper is aimed at analysing the influence of speech rate on assimilation processes in the voiced fricative /z/, when it is preceded by sounds /s, z, ʃ, ʒ / in four different types of articulatory joint: sentence, clausal, lexemic and proclitical. The articulatory joint refers to the production of two phonemes separated by different types of linguistic boundaries. Twenty female native speakers of Croatian with no history of speech or hearing impairments read a text at both natural and fast speech rates. The acoustical recording was performed in a sound-treated room. The Praat software was used to analyse six variables in all occurrences of the sound /z/: duration, spectrum

centre of gravity, standard deviation of the centre of gravity, spectral skewness, spectral kurtosis, and harmonic to noise ratio. The results showed that various linguistic boundaries, speech rates and sounds as assimilation operators influence the degree of assimilation of the phoneme /z/, as measured by the acoustic variables.

Keywords: speech segment, coarticulation, assimilation, speech rate, articulatory joint

Povzetek

VPLIV ASIMILACIJSKEGA OPERATORJA, HITROSTI GOVORA IN JEZIKOVNE MEJE PRI PRODUKCIJI /z/ V HRVAŠČINI

Splošno sprejeto dejstvo je, da se na jezikovnem nivoju nespremenljive in diskretne fonološke enote pretvorijo v spremenljivo in neprekinjeno premikanje govornih organov, kar se odraža na akustičnem nivoju. Spremenljivost fonemskih enot je odvisna od sosednjih fonetičnih enot kakor tudi od različnih jezikovnih, sporazumevalnih in pragmatičnih kontekstov, v katerih se govorno dejanje odvija. Medsebojni vpliv fonetičnih enot se kaže v prilagoditvah, koartikulacijah in asimilacijah. V procesu asimilacije se spremeni najmanj ena razločevalna lastnost fonema, ki tako postane podoben sosednjemu glasu, to je asimilacijskemu operatorju. Cilj članka je analizirati vpliv hitrosti govora na asimilacijo zvenečega pripornika /z/, kadar se pred njim nahajajo glasovi /s, z, ʃ, ʒ/v štirih različnih vrstah artikulacijskih stičišč: povedno stičišče, stavčno stičišče, leksikalno stičišče in proklitično stičišče. Artikulacijsko stičišče se nanaša na izgovor dveh fonemov, ki ju ločijo različne oblike jezikovnih ločnic. Dvajset domačih govork hrvaškega jezika, ki niso nikdar imele nobenih govornih ali slušnih okvar, je prebralo besedilo v običajnem in hitrem tempu. Snemanje je potekalo v studijskih razmerah. Za analizo šestih spremenljivk glasu /z/ (trajanje, težišče spektra, standardni odklon težišča, asimetrija spektra, sploščenost spektra in razmerje med harmoničnostjo in šumom) je bil uporabljen program Praat. Rezultati so pokazali, da različne jezikovne ločnice, hitrost govora in različni glasovi v vlogi asimilacijskih operatorjev vplivajo na stopnjo asimilacije fonema /z/ z vidika merjenih akustičnih spremenljivk.

Ključne besede: govorni segment, koartikulacija, asimilacija, hitrost govora, artikulacijsko stičišče

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SENTENCE STRESS IN SLOVENE MEDIA SPEECH

1 INTRODUCTION

Prosody or sentence phonetics, which studies sentence stress, the partition of texts with pauses, intonation, register, speech tempo and tone, has been relatively little researched within Slovene linguistics. This is particularly true of spontaneous speech production, as the rare studies of Slovene speech are mainly based on researchers' subjective evaluation and an extremely limited corpus of non-spontaneous text formation, such as (literary) texts being read out (e.g. Toporišič 1972; Podbevšek 2006).

With the development of new computer tools for the transcription and analysis of speech production (e.g. Praat; Boersma/Weenink 2013), speech studies can also be based on real, spontaneous media speech that is classified as one of the bearers of formal speech in Slovenia. Programme presenters and their guests produce an *ideal* media speech norm, which has a relatively large influence on listeners and viewers. Since national radio and television stations also play the role of connecting people nationally, the presenters on RTV Slovenia are now trained and taught the *correct* speech, which means that "media speech is in principle the *'ideal speech realisation'*, the speech realisation most harmonised with the norm" (Vitez 1999: 42). Media speech is thus an ideal opportunity for observing how the speech of (trained) speakers deviates from an *ideal* or the linguistic norm presented in reference books.

2 RESEARCH PREMISES

In this paper, sentence stress is understood as emphasis within the flow of speech, or as a prosodically realised emphasis on the surface of the text, which is a reflection of the information structure of the text at the deep level (Duběda 2005: 183) and is phonetically realised through the combination of a number of acoustic factors: a change in the length of individual sounds, the tonal level or frequency of the fundamental frequency (F_0), the intensity and speed of speech, and the appearance of pauses before and/or after stresses, etc. Researchers do not agree which of these signals is the most important for the perception of sentence stress, while stress lies on the syllables of the words within certain segments, which interlocutors or listeners perceive as marked.[1]

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1 The decision which word will carry sentence stress depends mainly on the speaker's choice. As stress expresses the speaker's judgment about whether, within a certain moment and context, a particular word is most important to him with regard to the information he/she is conveying, those words are stressed in speech that represent the knowledge shared by the speaker and the listener (Komar 1996: 39–41).

The research into sentence stress presented in this paper is part of a wider study where sentence stress in speech-trained people (presenters of television programmes) and (probably) somewhat less trained speakers (politicians) in chosen TV Slovenia programmes was analysed with regard to the frequency of appearance, intensity, F_0, sound lengthening, predictability of word types, frequency of appearance in the selected language units (interrogatives, negatory elements, affirmatives, indicative pronouns, comparatives and superlatives)[2] and connections with pauses (Huber 2013). In addition, stresses can be researched with regard to the roles they play in speech, intensification and repetition of what has been said, non-verbal means, with regard to the connections with other prosodic characteristics, such as intonation, speed of speech and so on. During the study, the combined auditory-experimental method of analysing sentence stress was used.

2.1 Hypotheses

On the basis of three methodological approaches, research hypotheses based on the Slovene linguistic reality and observation of media (political) speech were examined. The *first hypothesis*, that the speech of politicians contains more examples of sentence stress than that of television presenters, and the *second hypothesis*, that sentence stress by politicians is on average more intense (dB) and has a higher F_0 (Hz) than that of presenters, were formed on the basis of the assumption that in general politicians are less well trained than presenters on national television, which has for decades been giving speech training to its journalists. Moreover, we assumed that presenters are better prepared for the discussion in a programme (spoken interventions are pre-written). Due to these two assumptions we can conclude that the speech of politicians is more spontaneous than that of presenters and thus also more subject to unexpected and uncontrolled sentence stress.

The *third hypothesis* assumes that with regard to the auditory perception of sentence stress the most important role is played by a change/increase in the intensity of speech, while raising F_0 or lengthening sounds is slightly less important, and is based on the assumption that in Slovene speech a greater role is played by the dynamic accent and sentence stress, i.e. the changing of speech intensity, while tonemic stress, i.e. the changing of F_0, appears more rarely in media speech, and generally not at all in trained speakers.

2.2 Material and Speakers

Sentence stress was analysed within a corpus of authentic and more or less spontaneous speech of chosen politicians and presenters in TV Slovenia talk shows with political content (*Intervju*, *Pogovor s predsednikom vlade*, *Vroči stol*, *Pod žarometom*, *Omizje*, *Studio City*). In the programmes shown between 2006 and 2007 during evening slots between 20.00 and 00.10, the guests (politicians) speak mostly spontaneously, while

2 In comparison with English, e.g. Šuštaršič (1995: 164–178) states that in Slovene negative phrases, the stress usually lies on the negation, while in English it follows the negation. In open interrogatives, in English the unmarked stress position is on the last lexical unit, and in Slovene on the interrogative word. Within an analysis of comparatives and superlatives, Šuštaršič found that in English stress lies after the comparatives *more* and *most*, and in Slovene on *bolj* (more), *najbolj* (most) and *nadvse* (exceedingly).

the presenters speak both spontaneously and non-spontaneously – the latter, for instance, when presenting the guests and the programme theme. The programmes include dialogues, multilogues and monologues that turn into dialogues, as well as formal and public speech units, recorded in the Ljubljana studios of TV Slovenia without an audience. The specialised speech corpus *Korp-2MeGo* of a total duration of over two hours (involving 3 male and 3 female politicians and 5 male and 4 female TV presenters) was created specifically for the purpose of this study, with emphasis on the analysis of spontaneous speech, that is particularly the speech of politicians (see Table 1). All the chosen speakers are well known media or political personalities.

Table 1: Speech duration with regard to the sex of the speakers

Speakers	**Male**	**Female**	**Male + female**
Politicians	44 min and 51 s	37 min and 51 s	82 min and 42 s
Presenters	20 min and 35 s	15 min and 23 s	35 min and 58 s
Simultaneous speech	/	/	3 min and 55 s
Total: 122 min and 35 s			

All the speakers, whose first language is Slovene, have a university degree in social sciences; they were born between 1941 and 1970, live and work mostly in Ljubljana, and spent their childhood and teenage years in various places around Slovenia. The speakers have no speech defects and in a neutral, non-emotional speaking situation use unmarked sentence stress.

3 RESULTS AND DISCUSSION

This section provides detailed results of the study of sentence stress with regard to the frequency of appearance in speech, intensity, F_0 and the lengthening of sounds.

3.1 Frequency of Sentence Stress in Speech

The first part of the study is aimed at an analysis of the frequency of sentence stress in speech. A similar study was carried out by Fox (1989), when he analysed the speech of the presenters and reporters in three national TV news programmes: the speakers at the BBC on average use sentence stress 39.16 times per hundred spoken words, at the German ARD 22.31 times and at the Croatian TV Zagreb, 18.68 times.

In determining the number of instances of sentence stress, i.e. establishing the average number of words connected by one example of sentence stress within one or more segments, all the words that were perceived as stressed through auditory perception were taken into account. At the same time, these words can also be the bearers of the syllable with the highest measured intensity and/or the highest measured F_0 within the segment – the starting point is thus the auditorily perceived examples of sentence stress. All the words spoken during simultaneous speech and all the forms of filled pauses (lengthening, repetition, false starts, etc.) were excluded from the study.[3] The main interest in this

3 On filled pauses, see Huber 2013: 375–382.

part of the study was the differences in the number of spoken words between two sentence stresses that appear in the speech of politicians and TV presenters. The hypothesis was put forward that in the politicians' speech there are more instances of sentence stress than in the speech of TV presenters – the latter were assumed to pronounce on average more words between two examples of sentence stress than the former.

Table 2 shows the number of spoken words in the corpus (16,629), the number of auditorily perceived examples of sentence stress (4,401) and the average number of words connected by one example of sentence stress within one or more segments (3.78). The results are shown by individual categories (politicians and presenters) and the speakers' gender.

The results show that in the speech of presenters, a slightly higher number of sentence stresses appear (every 3.71 words, i.e. sentence stress appears in 26.98% of all the spoken words) than in the speech of politicians (every 3.81 words, 26.23%). The study confirmed the first hypothesis about a slightly higher frequency of sentence stresses in politicians, i.e. speakers who are presumably less well trained in speaking and less well prepared for the discussion in the programme. In the case of men, it was shown that politicians used sentence stress more often (every 3.84 words, 26.07%) than presenters (every 4.04, 24.74%), while with female speakers the situation was completely different: female presenters use sentence stress more frequently (every 3.33 words, 29.99%) than female politicians (every 3.79 words, 26.40%). In general, male speakers use sentence stress less (every 3.90 words, 25.64%) than female speakers (every 3.64 words, 27.44%).

Table 2: Frequency of appearances of sentence stress in speech

Speaker[4]	Number of words spoken	Number of auditorily perceived sentence stresses	% stressed words	Number of words/ sentence stress
Male and female politicians				
Pm	5,945	1,550	26.07	3.84
Pf	5,466	1,443	26.40	3.79
Pm+Pf	11,411	2,993	26.23	3.81
Male and female presenters				
Jm	2,987	739	24.74	4.04
Jf	2,231	669	29.99	3.33
Jm+Jf	5,218	1,408	26.98	3.71
Male and female politicians and presenters				
Pm+Jm	8,932	2,289	25.63	3.90
Pf+Jf	7,697	2,112	27.44	3.64
P+J	16,629	4,401	26.47	3.78

4 Abbreviations: Spkr – male/female speaker. P – male/female politician. J – male/female journalist/presenter. m – male, f – female, individual numbers 1 – 22 are used for individual speakers.

Among the politicians, in one of the two analysed programmes where he features, speaker *SpkrPm5+16* used sentence stress the most frequently (every 3.61 words) of all the politicians: *SpkrPm16* (every 3.25 words, 30.75%), but in the other programme, as speaker *SpkrPm5,* he used it considerably less frequently (every 4.09 words, 24.42%). The example of the speaker *SpkrPm5+16* clearly shows a connection between (un)emotional speech and sentence stress, since in one of the programmes the speaker replied calmly to questions and thus used sentence stress much less frequently (*SpkrPm5*) than in the other programme, when he responded to questions more emotionally and hence used stress very frequently (*SpkrPm16*). In the programme where he used sentence stress more, he was emotionally responding to current events on the border with Croatia and criticising the work of the government's political option; emotional speech, by definition, is presumed to contain a more frequent use of sentence stress, probably including higher utterance intensity and F_0 (which will be examined in section 3.2). All the other politicians used sentence stress very constantly and comparably, namely, on 22.1 to 27.08% of the spoken words.

Among the presenters with fewest examples of sentence stress, the most noticeable is journalist *SpkrJm2*, who uses sentence stress on average every 5.19 words (19.28%), followed by the presenter *SpkrJm6+13*, who in one of the analysed programmes, as presenter *SpkrJm6*, used sentence stress every 4.92 words (20.33%). In the other analysed programme (*SpkrJm13*) he used sentence stress much more frequently, every 3.03 words (33.06%), which is the second highest percentage in the corpus. The most frequent use of sentence stress appeared in the female presenter *SpkrJf15* (33.33%).

Within one hundred spoken words, the average use of sentence stress was 26.47% – among politicians 26.23% and among presenters 26.98%. A comparison of these results with the study carried out by Fox (1989: 82) shows that the analysed presenters use sentence stress much less than the BBC speakers (26.98 per one hundred spoken words versus 39.16), slightly more than the ARD speakers (22.31) and considerably more than the speakers in the TV Zagreb news programmes (18.68). According to Fox's rule, which says that the span of the auditory memory is up to 15 words maximum and that for successful communication sentence stress must be used at least seven times per one hundred spoken words, the speakers whose speech was analysed in this study made good use of this prosodic characteristic with the aim of successful communication.

3.2 Intensity and F_0 in Stressed Words

In Slovene linguistics, both accent and sentence stress are most often defined primarily in terms of dynamic accent or intensification (pronunciation with a greater quantity of exhaled air) of a certain syllable or a longer speech unit, but instrumental analyses (particularly for other languages) have shown that expressiveness (accent or stress) depends on the combined influence of a number of characteristics, e.g. F_0, intensity, duration and quality of vowels (Palková 1997: 156–157). Sentence stress is thus phonetically realised through a combination of a number of acoustic factors, among which the literature most often mentions a change in the duration of individual sounds, F_0 and

intensity (more details in section 3.3), while with regard to the perception of sentence stress, various combinations of the above (acoustic) parameters are decisive.[5]

Although different researchers agree with the selection of the acoustic signals of emphasis, they do not fully agree which of the above signals is the most important for the perception of sentence stress. Some, such as Škarić (1991) believe that it is the change of intensity that plays the biggest role. Ladefoged (1975) claims that the length of the sound is most important, followed by intensity and, lastly, F_0. But Bolinger (1972) gives F_0 as the most important acoustic signal of sentence stress, since he believes that F_0 must almost definitely change if we wish to emphasise a word. He maintains that sentence stress is perceptually strongest in the cases when the change in F_0 within a sentence is very large or varies strongly. Information about sentence stress is thus encoded in the acoustic signal as the relative intensity of the speech segment, as duration, F_0 and the precision of articulation. The relative contribution of each of these characteristics in accent and stress, according to the data of various researchers, varies between zero and one hundred percent, so that the feeling of accentuation or stress of a segment can be achieved even with the change of just one of the above dimensions of sound, but most often there is a small change in each of the characteristics (Bakran 1996: 245–248).

Because F_0 and speech intensity rank among the most important signals of the perception of sentence stress, they were measured in this part of the study. In the calculation of the average values of F_0 and speech intensity, the highest values of the emphasised word (words) within a segment were taken into account,[6] whereby words can be emphasised auditorily (perceptively), in terms of intensity, and/or pitch. Each segment may contain one or more auditorily perceived words and only one peak in terms of intensity and one in terms of frequency, where the two peaks can lie on a syllable of one of the auditorily stressed words or on one of the auditorily unstressed words. Below is a test of the hypothesis that the sentence stress of politicians is on average stronger in intensity and that politicians have a higher F_0 than the sentence stress of TV presenters.

Table 3 shows the number of words that constitute peaks in intensity and/or pitch within individual segments – words that were perceived as emphasised only on the basis of auditory analysis (usually in cases when within one segment more emphasised words were auditorily perceived) were not included in this – average intensities and average values of F_0 in emphasised words in terms of individual category (politicians or presenters) and the speaker's gender.

The average intensity value of all 3,373 highlighted words in the corpus is 81.46 dB, while the average F_0 value is 205.04 Hz. Generally, emphasised (stressed) words in male

5 I am aware of the key role of sentence stress within sentence intonation and the inseparability of these two prosodic characteristics. In spite of this, I have tried to examine the characteristics of sentence stress independently of intonation patterns, i.e. to use intonation peaks in the interpretation of the results. The concrete connections between sentence stress and intonation patterns will need to be further researched in future (see also Šuštaršič 1995).

6 A segment is understood as part of the speech flow, i.e. a language string, delimited on both sides by a pause, spoken by the same speaker, irrespective of its length.

speakers measured lower values (80.91 dB, 149.33 Hz) than in female speakers (82.06 dB, 265.98 Hz). The difference in average intensity values of emphasised words is relatively small (1.15 dB), but it is more pronounced in the pitch of the F_0 (116.65 Hz). In a comparison of politicians and presenters, Table 3 shows that politicians emphasised words slightly more strongly, i.e. with greater intensity and higher F_0 (81.55 dB, 207.25 Hz) than presenters (81.27 dB, 200.25 Hz), which only partly confirms the second hypothesis as this statement applies only to the female speakers (female politicians 82.33 dB and 271.17 Hz, female presenters 81.46 dB and 254.27 Hz), while the speech of male presenters is stronger in intensity (81.12 dB) and higher in terms of tone (153.26 Hz) than the speech of male politicians (80.81 dB, 147.46 Hz). Although the two values were not measured in words that were not emphasised or stressed, on the basis of subjective auditory analysis it can, as expected, be concluded that the speech of female politicians and presenters is characterised by higher F_0 and higher intensity than that of male politicians and presenters. In the future it would be good to build upon the research and to measure the highest value of F_0 and the intensity of all the unstressed words; in this way we could ascertain what (if any) differences there are between the stressed and unstressed words in the speech of politicians and presenters.

Table 3: Average intensity (dB) and average F_0 (Hz) in emphasised words

Speaker	**Number of emphasised words**	**Average intensity (in dB)**	**Average F_0 (in Hz)**
Male and female politicians			
Pm	1,193	80.81	147.46
Pf	1,116	82.33	271.17
Pm+Pf	2,309	81.55	207.25
Male and female presenters			
Jm	569	81.12	153.26
Jf	495	81.46	254.27
Jm+Jf	1,064	81.27	200.25
Male and female politicians and presenters			
Pm+Jm	1,762	80.91	149.33
Pf+Jf	1,611	82.06	265.98
P+J	3,373	81.46	205.04

An examination of the intensity and F_0 in individual speakers led to the conclusion that the two values are mutually connected since when one increases, the other also increases. If in one speaker a relatively high average intensity of emphasised words was measured, that speaker's F_0 pitch, in comparison with the speech of other analysed speakers in the corpus, was relatively high, and if the average intensity was low, the average F_0 was usually also low. For example, in the case of politicians, the greatest intensity was measured in the female speaker *SpkrPf7* (85.54 dB), while the same speaker's average F_0 value was

also measured as the highest (299.35 Hz). In the case of presenters, the lowest average intensity of emphasised words was measured in the speaker *SpkrJm13* (79.66 dB), in whom the lowest average F_0 was also recorded (126.93 Hz).

The measured intensities and F_0 pitches are to a certain extent undoubtedly a reflection of the situation in which the speakers find themselves (whether they are appearing in a programme where they answer questions without any special surprises or whether they are responding emotionally to statements by the other guests) and, above all, on the personal characteristics of individual speakers (the characteristics of their voice and manner of speaking), which is particularly apparent in the politician *SpkrPm5+16*, in whom higher values were measured (82.49 dB, 171.74 Hz) than the average values of all the politicians (80.81 dB, 147.46 Hz) and presenters (81.12 dB, 153.26 Hz). The measured intensity is even higher than in the female politicians (82.33 dB) and the female presenters (81.46 dB), or in comparison to all the speakers in the corpus (81.46 dB). This applies to the values measured in the politician *SpkrPm3+12* (79.88 dB, 119.87 Hz), which are among the lowest in the whole corpus. The characteristic of the speaker *SpkrPm5+16* is a higher speech register and a lively manner of speaking, and the characteristic of the speaker *SpkrPm3+12* is just the opposite: low register and a monotonous manner of speaking, without any great variations in intensity and F_0 pitch.

The subjective auditory impression that the sentence stress of TV presenters is, on average, less pronounced than that of politicians was also confirmed in the measurements of intensity and F_0 pitch, but the differences were relatively small (81.55 dB and 207.25 Hz versus 81.27 dB and 200.25 Hz). There are greater differences between female and male speakers with regard to the measured values (82.06 dB and 265.98 Hz versus 80.91 dB and 149.33 Hz), which is not unexpected since among female speakers greater intensity is accompanied by an inherently higher F_0.

3.3 Sentence Stress – Higher F_0, Greater Intensity or a Lengthened Sound?

The data on F_0 pitch and speech intensity presented in section 3.2 gain meaning only in a specific context. This section is thus a continuation of the analysis from the previous one, ascertaining which of the mentioned phonetic characteristics has greater influence on the auditory perception of sentence stress: the raising of the F_0, increasing speech intensity or the lengthening of sounds. In a comparable study of Swedish speech it was shown that stronger sentence stress also means a higher F_0 (Strangert 2003: 613–615), which was also confirmed in section 3.2 of this study. The absolute values are less informative than the variations of individual values within the whole context. A greater influence of F_0 on sentence stress in comparison with the duration or intensity has also been reported by Volk (2011).

This part of the study takes into account only the sentence stress that was perceived by the auditory analysis of stresses (Stress-AP), ignoring the words within a specific segment which had the highest measured F_0 and/or the highest intensity, but which were not auditorily perceived as stressed. Thus the research parameters included intensity, F_0 and lengthened sound, as well as the various combinations of these three basic elements (Table 4). The analysis tests the hypothesis that in auditory perception of sentence stress the

most important role in the analysed material is played by the increase in speech intensity, while higher F_0 or the lengthening of sounds plays a slightly smaller role.

Table 4: Stress sentence in terms of a chosen acoustic characteristic – symbols and descriptions

Symbol	**Explanation of the acoustic characteristics of sentence stresses**
Stress-AP+IHP (1)	auditory stress resulting from increased intensity
Stress-AP+BHP (2)	auditory stress resulting from higher F_0
Stress-AP+BHP+SL (3)	auditory stress resulting from the co-influence of higher F_0 and sound lengthening
Stress-AP+IHP+BHP (4)	auditory stress resulting from the co-influence of an increase in intensity and higher F_0
Stress-AP+SL (5)	auditory stress resulting from sound lengthening in the AP position and simultaneously possibly also increased intensity and/or higher F_0
Stress-AP+IHP+BHP+SL (6)	stress emphasis resulting from the co-influence of an increase in intensity, higher F_0 and sound lengthening
Stress-AP1 (7.1)	intensity and/or F_0 are higher/sound lengthened on another auditorily perceived stressed word within the segment (phrase, sentence, etc.)
Stress-AP2 (7.2)	auditory stress within a segment, while the highest intensity and/or highest F_0 are measured (or perceived lengthened sound) on an auditorily unemphasised word or words within the segment; it could also be that no part of the segment deviates (considerably) from the average
Stress-AP+IHP+SL (8)	auditory stress resulting from the co-influence of intensity and sound lengthening

The results in Table 5 are shown separately by individual types of stress, by individual speaker category (politicians/presenters) and by the speakers' gender. In this part of the study, 4,401 emphasised words were studied (2,112 uttered by female speakers and 2,289 by male speakers, 2,993 by male/female politicians and 1,408 by male/female presenters). The study confirmed the assumption from section 3.2 that in Slovene the most important role in the perception of stress is played by a change in F_0 pitch, as in 830 auditorily perceived words (18.9% of all the analysed emphasised words) the highest F_0 value was also measured in an analysed segment (AP+BHP), and in addition as many as 1,716 auditorily perceived stresses (39.0%), which had at the same time the highest F_0 and the highest measured intensity (AP+IHP+BHP). The highest intensity appears as an independent category in 726 auditorily perceived emphasised words (AP+IHP; 16.5%), while a considerable number of auditorily perceived emphases were observed, which could not be supported either by the highest intensity or highest F_0 within the analysed segment; these are categories AP1 (16.4% of all the auditorily perceived emphasised words in the corpus), AP2 (7.1%) and AP+SL (0.7%).

Table 5: Prosodic/acoustic characteristics of sentence stresses

Speaker	AP+ IHP (1)	AP+BHP (2)	AP+BHP+ SL (3)	AP+IHP+ BHP (4)	AP+SL (5)	AP+IHP+ BHP+SL (6)	AP1 (7.1)	AP2 (7.2)	AP+IHP+ SL (8)	Total
	no./%	no./%	no./%	no./%	no./%	no./%	no./%	no./%	no./%	no.
Male and female politicians										
Pm	289/18.6	272/17.5	4/0.3	569/36.7	10/0.6	7/0.5	273/17.6	117/7.5	9/0.6	1,550
Pf	200/13.9	269/18.6	6/0.4	645/44.7	6/0.4	6/0.4	221/15.3	86/6.0	4/0.3	1,443
Pm+Pf	489/16.3	541/18.1	10/0.3	1,214/40.6	16/0.5	13/0.4	494/16.5	203/6.8	13/0.4	2,993
Male and female presenters										
Jm	123/16.6	146/19.8	4/0.5	265/35.9	7/0.9	8/1.1	133/18.0	50/6.8	3/0.4	739
Jf	114/17.0	143/21.4	4/0.6	237/35.4	6/0.9	5/0.7	93/13.9	59/8.8	8/1.2	669
Jm+Jf	237/16.8	289/20.5	8/0.6	502/35.7	13/0.9	13/0.9	226/16.1	109/7.7	11/0.8	1,408
Male and female politicians and presenters										
Pm+Jm	412/18.0	418/18.3	8/0.3	834/36.4	17/0.7	15/0.7	406/17.7	167/7.3	12/0.5	2,289
Pf+Jf	314/14.9	412/19.5	10/0.5	882/41.8	12/0.6	11/0.5	314/14.9	145/6.9	12/0.6	2,112
P+J	726/16.5	830/18.9	18/0.4	1,716/39.0	29/0.7	26/0.6	720/16.4	312/7.1	24/0.5	4,401

The sequence AP+IHP+BHP – AP+BHP – AP+IHP – AP1 – AP2, in terms of the frequency of appearance of different types of emphasis in the corpus, can be confirmed in both male and female speakers; smaller differences appear only in the percentages within individual categories, e.g. the category AP+IHP+BHP appears in female speakers in 41.8% and in male speakers in 36.4%. The category AP+IHP appears in female speakers in 14.9%, and in male speakers in 18.0%; the third difference greater than one and a half percent appears in the category AP1 (female speakers 14.9% and male speakers 17.7%). The sentence stress of male speakers is divided more among the categories AP+IHP and AP1 than the sentence stress of female speakers in the category AP+IHP+BHP. The highest percentage of sentence stresses in the category AP+IHP+BHP appears in female politicians (44.7%), and the lowest percentage in the female presenters (35.4%). It is in the female presenters that the highest percentage of sentence stress appears in the category AP+BHP (21.4%), while the fewest sentence stresses appear in the male politicians (17.5%). Sentence stress of the type AP+IHP appears most often in female presenters (17.0%) and least frequently in female politicians (13.9%). The stress category AP1 appears most frequently in male presenters (18.0%), least frequently in female presenters (13.9%), while stresses of the type AP2 are most frequent in female presenters (8.8%) and least frequent in female politicians (6.0%). With regard to most stress categories the differences between different groups of speakers (male and female politicians and presenters) are very small: in four categories they are less than one per cent (AP+BHP+SL 0.3%, AP+SL 0.5%, AP+IHP+BHP+SL 0.7%, AP+IHP+SL 0.9%) and in the next four less than 5 per cent (AP2 2.8%, AP+BHP 3.9%, AP1 4.1%, AP+IHP 4.7%), while the greatest differences arise in the category AP+IHP+BHP (9.3%), where female politicians in particular stand out, with 44.7 per cent use of this type of stress.

In the overview of the appearance of sentence stress in individual speakers, it is striking that in 12 out of 15 speakers stress of the type AP+IHP+BHP predominates, while stress of the type AP+BHP is usually (nine times) in second place; stress of the type AP+IHP is most often found in third or fourth place (six times). With a reduction of the percentage in the category AP+IHP+BHP, most was on average gained by the categories AP+BHP and AP+IHP, which even further strengthened the influence of F_0 on the successful perception of stresses. What is surprising is the (greatest) influence of intensity on the perception of stress in the speaker *SpkrPm3+12*, since in that place, due to the tonemic base of the accent of the analysed speaker, the greater influence of the fundamental frequency was expected (AP+IHP 26.5%, AP+IHP+BHP 26.1%, AP1 20.5%, AP+BHP 17.9%). The analysed material thus confirms the slightly greater influence of F_0 on the auditory perception of sentence stress, while the influence of change in intensity plays a slightly smaller role, in spite of the fact that in Slovene (particularly in the media and education) non-tonemic or dynamic accent is presumed to be more widespread. This overthrows the third hypothesis, which was to a certain extent already hinted at in Vitez's (1995: 39) analysis of French and Slovene sentence intonation:

> It is undoubtedly true that the pitch of the fundamental frequency [...] is by far the most significant prosodic parameter, which realises within a sentence the forms

of sentence intonation. This is why the fact that the key places of intonation patterns are precisely the syllables, the core of which consists of accented and stressed vowels, is that much more interesting. It is known that for their realisation particularly the higher values of the other two prosodic factors are typical, i.e. sound intensity and duration.

Type AP1 sentence stress, which is relatively common in most speakers, is characterised by the fact that the words with this type of stress were perceived as stressed, but at the same time other words within the same segment, on which lay the intensity and frequency peak of the segment (often, there was a difference of only a few hundredths or tens of a dB or Hz), were perceived as emphasised. This type of emphasis is also the bearer of relatively high intensity and frequency values, but the words with these values, due to the limitation of one intensity or frequency peak within a segment, were placed into a special category.

With regard to 312 stressed words, or 7.1% of all the auditorily perceived sentence stresses (of type AP2) within the corpus, it was impossible to ascertain, using our methodology, why they are in certain segments perceived as emphasised, as the highest F_0 and the highest intensities were measured on other, auditorily unstressed words. Because in these words not even lengthened sounds were perceived, the various internal and/or external factors of stress perception can only be speculated upon (Verschueren 2000). This confirmed the findings of a number of Slovene and foreign speech researchers that sentence stress "is realised not only with the most intensive sound, but also with a raised tone" (Podbevšek 2006: 112).

4 CONCLUSION

To study sentence stress in terms of frequency of appearance, intensity, F_0 and sound lengthening, a spoken corpus was created involving 15 politicians and TV presenters on 10 programmes with political content on TV Slovenia. The corpus has a total duration of 122 minutes and 35 seconds. The methodology used was based on approaches established in other European countries and adapted to the goal of the study. Three theoretical hypotheses were formulated and then tested on the chosen material. On the basis of the results of the study, it can be concluded that in the speech of male politicians and female presenters there is on average a slightly higher occurrence of sentence stress than in that of female politicians and male presenters. The sentence stress of female politicians and male presenters is on average slightly more intense and these speakers have a higher F_0 than male politicians and female presenters. In all the speaker categories (except male politicians) a change or increase F_0 plays a more important role in the auditory perception of stress than an increase in the intensity of speech. The study also showed that both values, i.e. intensity and F_0, are closely connected with each other since an increase in one often meant an increase in the other. However, caution is needed in the interpretation of the results as they may be influenced by various linguistic, extra-linguistic or completely personal traits of an individual speaker, such as the speed and manner of speaking, age, experience, emotional state and so on.

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Abstract
SENTENCE STRESS IN SLOVENE MEDIA SPEECH

Media speech, at least on national radio and television, is one of the bearers of standard speech in Slovenia. Thanks to its relatively wide distribution and influence on the speech habitis of a broad circle of viewers and listeners, research into media speech is easy to justify. In this contribution, on the basis of three methodological approaches and with the help of the programme Praat, an analysis is carried out into a hitherto poorly researched prosodic phenomenon in Slovene – *sentence stress*. The study focuses on *sentence stress* with regard to frequency, intensity, tone and sound lengthening. Using a corpus taken from 10 television programmes with political content, with a total duration of two hours, three hypotheses were examined: 1) that the speech of male/female politicians contains sentence stress more frequently than that of male/female TV presenters; 2) that sentence stress used by female/male politicians is on average stronger in intensity (dB) and has a higher F_0 (Hz) than sentence stress used by male/female presenters; and 3) that in terms of auditory perception of sentence stress, the most important role is played by a change/increase in speech intensity and a slightly smaller role by the raising of F_0 or the lengthening of sounds.

Keywords: auditory-experimental analysis, media speech, prosody/sentence phonetics, sentence stress

Povzetek
POUDAREK V SLOVENSKEM MEDIJSKEM GOVORU

Medijski govor (vsaj nacionalne radiotelevizije) uvrščamo med nosilce govornega standarda na Slovenskem. Zaradi njegove razmeroma velike razširjenosti in vplivnosti na govorne navade poslušalcev oz. gledalcev, tj. uporabnikov jezika, je raziskovanje jezika v okviru medijskega govora vsekakor smiselno. V prispevku na podlagi treh metodoloških pristopov ter s pomočjo programa za analizo govora Praat analiziramo eno izmed besedilnofonetičnih značilnosti – *poudarek* –, ki je v slovenskem jezikoslovju razmeroma slabo raziskana. Prispevek je usmerjen v raziskovanje *poudarkov* z vidika pogostosti pojavljanja, jakosti, osnovnega tona in podaljševanja glasov. V okviru dvournega korpusa desetih TV-oddaj s politično vsebino smo preverili tri teoretične hipoteze, 1) da je v govoru politikov/političark prisotnih več poudarkov kot v govoru voditeljev/voditeljic TV-oddaj, 2) da so poudarki politikov/političark v povprečju jakostno močnejši (dB) in imajo višji F_0 (Hz) kot poudarki voditeljev/voditeljic ter 3) da ima pri slušni zaznavi poudarkov najpomembnejšo vlogo sprememba/povečanje jakosti govora, nekoliko manjšo pa povišanje F_0 ali podaljševanje glasov.

Ključne besede: avditivno-eksperimentalna analiza, medijski govor, besedilna fonetika, poudarek

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PROSODY AND PARALANGUAGE IN SPEECH AND THE SOCIAL MEDIA: THE VOCAL AND GRAPHIC REALISATION OF AFFECTIVE MEANING

1 INTRODUCTION

The ubiquitous use of 'the new digital media' for casual communication and the accompanying – much commented on – new forms and styles of written language employed in 'texting,' 'posting' and 'blogging' compel a re-assessment of hitherto developed linguistic conceptualisations and understandings of informal interchange and their associated models of description. Accepting the fact that both formal and functional analyses of casual communication are overwhelmingly predicated on *spoken* interlocution, it is a matter of some urgency that the 'new' *written* mode of interaction exemplified in the social media of, e.g. text messaging, chat, Facebook and Twitter is addressed in linguistic analysis. The linguistic study of CMC (Computer-Mediated Communication) has often focussed on details of the neologisms and non-standard orthography characteristic of such casual written 'conversation' (Crystal 2006, 2008) to the exclusion of attention to the discoursal nature of such communication. One point of entry into the analysis of this 'typed conversation' (Vandekerckhove/Nobels 2010) has been to examine the extent to which this written, but nonetheless 'speech-like,' discourse (Tagg 2012) can be said to reflect the prosodic and paralinguistic features of oral communication. In particular, since the communicative orientation of such mediated discourse is by definition *social* one might even expect that it would evidence prosody-like and paralanguage-like constructions functioning to signal the affective and social meanings that these suprasegmental and paralinguistic systems can convey in speech. It will be the purpose of the discussion below to investigate this standpoint in some detail, ultimately also drawing attention to the ways in which these interpersonal meanings are expressed by this written mode *in its own right*.

2 PROSODIC AND PARALINGUISTIC FEATURES (IN SPEECH)

Modern linguistic interest in (prosodic and) paralinguistic features of language was first motivated in structuralist theory by the question of which types of vocal utterance belonged to language, i.e. were truly 'linguistic,' as opposed to those which were to be considered 'prelinguistic,' 'nonlinguistic,' 'metalinguistic' or as 'paralanguage' (Trager 1958). The criteria for this taxonomy were mainly formal, but also to some extent functional in nature. For instance, 'voice set,' classified by Trager as 'prelinguistic,' is described as "the idiosyncratic, including the specific physiology of the speakers

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and the total physical setting" (1958: 5). 'Voice qualities,' which constitute the main categories of 'paralanguage,' are "modifications of all the language and other noises" (sic), functioning in systematic association with language (1958: 5): they comprise pitch range, vocal lip control, glottis control, pitch control, articulation control, rhythm control, resonance and tempo. Trager posits a connection of 'voice qualities' to prelinguistic 'voice set' as together representing the "overall or background characteristics of the voice" (1958: 5). Thus whereas the physiology of a speaker's vocal tract forms the ultimate organic backdrop to the sound of his or her voice ('voice set'), the effects of this are filtered by the characteristic control the speaker exercises over the functional elements of voice production (pitch range, vocal lip control, glottis control, etc.) which physically derive from the vocal apparatus. Hence, this form of paralanguage is conceived as those patterns of vocal utterance which mediate between the physical prelinguistic and the meaningfully structured linguistic in speech production.

However, other categories of paralanguage are posited which are remote from any linguistic relevance, namely the 'vocalisations' (i.e. "variegated other noises, not having the structure of language" (1958: 5)) distinguished as 'vocal characterisers' (e.g. laughing, crying, sobbing, groaning, belching, etc.), 'vocal qualifiers' of intensity, pitch height and extent, and 'vocal segregates' such as hesitation noises, snorts and sniffs. In practice very little empirical analysis was conducted by Trager and his associates on paralanguage. Prosody was in structuralist linguistics in any case largely subsumed under suprasegmental phonology and only of theoretical relevance if amenable to phonemicisation.

In subsequent research, Crystal refines the analysis of the prosodic and paralinguistic features of English significantly (Crystal/Quirk 1964; Crystal 1969, 1975). Analysing recordings of spontaneous speech from the developing Survey of English corpus via both auditory judgements and spectrographic display, Crystal distinguishes the prosodic features or systems of 'tone (pitch direction),' 'pitch-range,' 'pause,' 'loudness,' 'tempo,' 'rhythmicality' and 'tension,' which is equally considered as a paralinguistic feature or system together with 'voice qualifiers' (including the phonation types 'whisper,' 'breathy' and 'husky' voice, 'creak' and 'falsetto') and 'voice qualifications' (laugh, giggle, 'tremulous,' 'sob' and 'cry') (Crystal 1969: 126–194). These 'voice qualifiers' and 'voice qualifications' are shown to be definable as the total of their values in the system of twelve articulatory and phonatory parameters responsible for continuous variation in vocal productıon such as air pressure, pulsation type, vocal cord amplitude, tension of supraglottals, etc. (1969: 132ff.) – see further discussion below. In this way paralinguistic features are shown to be the product of the same set of vocal parameters responsible for prosodic variation (and, one might add, segmental variation – see also further discussion below). Finally, Crystal also posits the 'non-linguistic features' of 'voice quality' (similar to Trager's 'voice set') and 'vocal reflexes' (comparable to Trager's 'vocal segregates').

Comparing these two most influential schemes of (prosodic and) paralinguistic features, one notes that Trager's 'voice qualities' correspond broadly to Crystal's 'voice qualifiers,' his 'vocal characterisers' to the latter's 'voice qualifications,' whereas the former's 'vocal qualifiers' are subsumed under Crystal's prosodic features (for an extensive critical comparison of Trager's and Crystal's schemes in the light of voice

characteristics in general, see James 1978). It will be apparent that Crystal's taxonomy offers an integrated treatment of paralinguistic and prosodic features, unburdened by structuralist requirements that to qualify as linguistically significant the latter must be analysable as segment-type distinctive contrasts. All the prosodic features are gradable: e.g. 'tone' as 'simple,' 'complex,' 'compound' nuclear tones; 'rhythmicality' as 'rhythmic'–'arhythmic,' 'spiky'–'glissando,' 'staccato'–'legato' much as the paralinguistic features are also multi-valued. Crystal expounds on all three features/systems at great length, drawing on empirical analysis and providing a number of illustrative prosodic and paralinguistic transcriptions of data from the Survey of English corpus. In addition to this analysis, Crystal also abstracts from the description of prosodic features a full theory of English intonation (1969: 195–308).

However, as might be deduced from this discussion, the field of inquiry into paralinguistic features might be seen to suffer from a certain arbitrariness of classification and general lack of theoretical underpinning (in comparison, the field of prosodic features is far further developed in theory and analysis and will not be expanded on greatly in the present context). Crystal himself takes the study of paralanguage to task for such shortcomings, listing seven different formulations in the literature of what vocal phenomena paralanguage is said to include (1975: 51–64), at the same time confirming that "there is a need for a more broadly-based view of the functional role of paralanguage and its relation to non-linguistic effects" (1975: 62). He adds at the same time – relevantly for the discussion below – that with regard to the existing literature of the time "[F]unctional definitions purely in terms of 'emotional' or 'affective' information are inadequate… and a social function for paralanguage is only occasionally (and vaguely) referred to" (1975: 62). However, concerning the general social embedding of paralanguage in communication, Crystal does note that it (and prosody, as non-segmental features) need to be seen together with other linguistic and non-linguistic 'vocal effects' within a 'semiotic frame' of communication for interpretation (1975: 92–95). To the extent that this frame of reference is understood to be indexical, then speaker characteristics with regard to sex, age, status, occupation and speech style (genre) can thus be signalled (1975: 85–92).

In conclusion it might be noted that despite this signalled 'semiotic turn' in structurally oriented linguistics starting in the 1960s and 1970s, there has been little progress in connecting the linguistics – and 'non-linguistics' – of voice characteristics with social meaning in this respect (but *cf.*, e.g., Henton/Bladon (1988) and the earlier programmatic remarks of Laver concerning the paralinguistic significance of 'settings,' i.e. voice quality, "in signalling affective information through tone of voice, and regulating the progress of conversational interactions" (1980: 3)). It is mainly the subsequent ever-expanding research into the linguistics of verbal exchange within sociolinguistics and related fields (*cf.* in particular Jefferson (1984) in the field of Conversation Analysis) that has facilitated a renewed interest in paralanguage (and a continuing one in prosody) as an expression of the *social* semiotics of participant interlocution. A more recent suitable and succinct definition of paralanguage is offered by Wennerström (2001) as "the variation of pitch, volume, and voice quality that a speaker makes for pragmatic, emotional, and stylistic reasons and to meet the requirements of genre" (2001: 60).

Considering prosody, in practice, most linguistic analysis in the last fifty years been conducted within the context of intonation research. The study of linguistic prosody has during this time gradually shifted its orientation from the analysis of intonation as a phonetic/phonological system via the analysis of intonation as spoken text to the analysis of intonation in its conversational function. These developments in intonation research may be represented in the following schema as successive, but partially overlapping, phases:

INTONATION IN/AS SYSTEM	>	INTONATON IN/AS TEXT	>	INTONATION IN/AS CONVERSATION
unit structuring focus on substance propositional meaning (e.g. Crystal 1969)		unit sequencing focus on discourse textual meaning (e.g. Brazil 1975)		unit turns focus on interlocutor interpersonal meaning (e.g. Szczepek Reed 2006)

The earlier work on intonation (e.g. Crystal 1969) as INTONATION IN SYSTEM strove to extend the phonetic details of 'linguistically structured prosody' beyond pitch and stress and it at the same time developed a refined conception of intonational unit patterning as tone type, nucleus and tone-unit (e.g. via the systems of tone, tonicity and tonality of Halliday (1967)); the predominant (but not sole) intonational meaning focussed on was the propositional (Halliday's 'ideational'). In the subsequent phase of INTONATION IN TEXT (e.g. Brazil 1975, 1977) attention turned to how structural choices of tone, 'key' and 'termination' in successive tone units shape the continuity and cohesion of spoken discourse, hence highlighting the textual meaning of intonation. In the more recent phase of INTONATION IN CONVERSATION (e.g. Szczepek Reed 2006; *cf.* also Couper-Kuhlen/Selting 1996), studies have investigated the way in which the intonational choices of interlocutors shape the flow of oral exchange, for instance by signalling turn-takes, where the meaning intonation carries is interactional-interpersonal in nature. However, at the same it will be noted that even in this 'interpersonal' function, intonation structure is *not* seen as systematically expressing affective or social meanings as such.

Returning again to paralanguage, its linguistic study over this equivalent time has been conspicuously meagre. However, and perhaps ironically, it is with the upsurge of *written*, but 'speech-like' (?) casual 'conversation' via the new social media that questions as to the interpersonal and social significance of 'paralinguistic' (and 'prosodic') features in such communication have begun to emerge.

3 PROSODIC AND PARALINGUISTIC FEATURES IN WRITING?

3.1 Read-aloud Prosody

The connection between prosody and paralanguage and written language has been explored in the pre-social media age as a rendering of the one in the mode of the other; specifically via the analysis of read-aloud prosody and written paralanguage. Chafe

(1988), for example, is convinced of the 'covert prosody' of written language which "is apparent to a reflective writer or reader" and via which writers and readers "experience auditory imagery of specific intonations, accents, pauses, rhythms, and voice qualities, even though the writing itself may show these features poorly if at all" (1988: 397). "The principal device for making prosody at least partially overt" (1988: 397) is punctuation; with full stops, question marks, exclamation marks, commas, colons, semi-colons, dashes and brackets having the potential of marking (certain) intonation unit boundaries in written language read aloud as well as signalling rhythmic pauses. However, in reality punctuation functions primarily in the service of grammatical structure by marking syntactic unit boundaries of different dimensions. To establish how punctuation marks correlate with intonation unit boundaries and with the pitch patterns of falling and rising, Chafe analyses the reading aloud of various texts (advertisement, newspaper, academic text and three literary passages) by younger (20 year old) and older (64 year old) informants, in which it is shown that while intonation unit boundaries in general coincided with the punctuation marks, certain intonation unit boundaries were not signalled by punctuation, and that the majority of the punctuation marks (i.e. '.', ',', ';', ':' and '?') coincide with a falling pitch except commas, most of which coincided with a 'nonfalling' pitch (1988: 408–409).

As interesting as this research might be, it may be pointed out that the written passages are read in a particular style as 'spoken prose' (Abercrombie 1956), i.e. as written language vocalised in a particular style of delivery (with conventional tempo, pausing, pitch range and volume as well as pitch patterns and segment articulation), and remembering too perhaps that the standard orthography of a written text is not a transcription of speech. In other words, in investigating the position of prosody with regard to written language, the vocal essence of the former in the spoken mode of language must be *explicitly* related (e.g. transformed or converted) into a graphic essence in the written mode of language for comparisons and correlations to be made. Of course the meanings or functions expressed by prosody in language may be compared from speech to writing and the extent to which its meaning is constrained and determined by the affordances of the spoken mode in which it is embedded is a question still to be addressed.

3.2 Written Paralangage: Its Representation in Literary Prose

Examining the relationship between the written language and paralanguage, Brown (1977) proceeds in an opposite direction by investigating how paralinguistic features are 'directly' represented in writing. Defining the paralinguistic features of speech as "those which contribute to the expression of attitude by the speaker. They are phonetic features of speech which do not form an intrinsic part of the phonological contrasts which make up the verbal message" (1977: 2), but noting the variety of interpretations as to which specifically vocal features they are, Brown proceeds to establish her own list for English Language Teaching purposes. They exclude any specifically intonation and rhythm features and comprise: 'pitch range,' 'placing in voice range,' 'tempo,' loudness,' 'voice setting,' 'articulatory setting,' 'articulatory precision,' 'lip setting,' 'direction of pitch,' 'timing' and 'pause.' It will be apparent that this framework includes

both the 'prosodic' and 'voice quality' features of other models. Further, each feature manifests 'unmarked' and 'marked' values: e.g. 'pitch span' can be 'unmarked,' 'extended' or 'restricted' and 'voice setting' can be 'unmarked,' 'breathy' or 'creaky.'

By way of operationalising the features for teaching purposes, Brown then illustrates the attitudinal and emotional effect carried by them by presenting how these features probably underlie the formulatıon of reporting clauses (of direct speech) in literary sources. Thus, for example, while the reporting verbs *replied*, *answered* and *said* reflect unmarked values of all features, the inclusion of the adjectives *depressed* and *miserable* and the adverb *sadly* in reporting clauses could reflect 'restricted pitch span,' 'lowered placing in voice range' and 'slow tempo,' but at the same time unmarked values of the remaining features (1977: 149). The assumption here of course is of a direct link between the written mode and the spoken mode of language, in that the former can be said to represent the latter transmodally from vocal substance to graphic substance – indirectly in the present case via lexical *description* (as opposed to more directly in the form of *transcription*). While the postulation of this connection must, strictly speaking, be explictly argued for (see above and further discussion below), this didactically motivated operationalisation of paralinguistic features is nonetheless unique.

4 'PROSODY' AND 'PARALANGUAGE' IN THE NEW SOCIAL MEDIA

4.1 The Linguistics of Speech and Writing

It has been commented in the Introduction above that since the 'new' digital media are now employed on a large scale for interpersonal communication, with the conveying of social and affective meanings predominant, it would not be surprising if the language used in such interchanges reflected in a graphic modality the ways in which these meanings are expressed in a comparable vocal one by means of prosody and paralanguage. The fact that one type of such written discourse is actually referred to as *chat* belies an orientation in genre classification to 'original' oral models, and it is in digitally mediated social writing that linguistic style has become overtly reflective of 'equivalent' speech. However, as indicated already in the previous discussion above, this relation of comparability between speech and writing, vocality and graphicality and therefore 'spoken' and 'written' prosodic and paralinguistic features must be explicitly analysed and not simply assumed to be given, for an understanding of the forms and functions of 'equivalent' linguistic expression within the affordances of the respective modality. Drawing selectively on data from two relevant corpora for representative illustration – the CorTxt text messaging corpus of Tagg (2012) and the HERMES microposts corpus presented by Zappavigna (2012) – these issues will be pursued in detail in the following.

The observation that linguistics at least since Saussure has focussed its analysis on spoken as opposed to written language is a truism. This 'phonocentrism' (Deumert 2014), where the spoken language has also been 'the object of the sociolinguistic gaze' (Lillis 2013), has in recent years been increasingly exposed by the challenges for analysis raised by digital writing. In particular, analysis not only of the styles of language use now associated with the new media, but also of the digital medium itself and its

graphic modality has become an urgent requirement for progress in linguistic understanding. Analysis of both structural and semiotic (semantic and pragmatic) properties and typicalities of CMC leads inevitably to reflection on the affordances and constraints for expression the medium creates and hence also to a greater understanding of how 'typed' digital screen writing departs *linguistically* from 'typed' print on paper writing.

In an overview of how theorising writing has developed over time, Lillis (2013: 150–161) traces how the 'key academic frames' with their associated fields of activity have emerged successively. The specifications of certain of them may be represented thus (*cf.* Lillis 2014: 160–161; Table 7.1, here in abridged and adapted form):

FRAME	poetic-aesthetic	>	transactional-rationalist …	>	social semiotic	>	socio-discursive
FIELDS	literary studies		linguistics		semiotics		applied linguistics
					linguistics		sociolinguistics
					multimodality		critical discourse

Here it will be apparent that linguistics has 're-invented' itself from its original 'transactional-rationalist' approach to writing to a more recent social semiotic frame of research and as sociolinguistics to a socio-discursive approach. Indeed the linguistic analysis of socially oriented digital writing needs to be conducted within appropriate semiotic and discursive frames of reference (not just the 'transactional-rationalist') to fully elucidate the contextual significance of such texts and practices.

4.2 'Prosody' and 'Paralanguage': Formal Properties in Speech and Writing

As to the nature of prosody and paralanguage and their relation to digitally mediatised social discourse, a reconsideration of their 'original' formal and functional properties in speech is necessary. Concerning formal essence, it may be deduced from the discussion in 2 above of Crystal's parametric framework for his paralinguistic features of 'voice qualifiers' and 'voice qualifications' (1969: 132–135) that in physical terms also prosodic (and segmental!) vocal effects are brought about by variation along the *same* phonatory and articulatory parameters of the vocal apparatus. They are in full (1969: 135):

> air pressure – oral aspiration – nasal friction – pulsation type – pulsation speed – phase with syllable – vocal cord amplitude – vocal cord vibration – volume of supraglottals – tension of supraglottals – extent of horizontal glottal movement – ingressive airflow*

With the exception of 'ingressive airflow' (marked '*'), these parameters can be seen to vocally define for instance prosodic – and segmental – realisation in Standard British English pronunciation; e.g. prosodically as the phonetic systems of pitch (height-direction (range-span)), volume and duration (and thereby phonological

intonation and stress) – and segmentally as the phonetic systems of voicing, length, nasality and aspiration. The particular values of the combination of parameters in association with particular co-occurring lexis determine their interpretation as locally 'prosodic' or 'paralinguistic.'

Reflecting now on the mechanisms of (digital) writing production and their propensity for realising prosody-equivalent and paralanguage-equivalent forms, there are typographic limitations to the typical keyboard with its letter and numeral characters, punctuation marks, mathematical '+', '–', '=' and '%', '&', '@' and a limited number of currency signs. While the letter 'alphabet' might be seen as 'equivalent' to the segment system of speech, following Chafe (1988) the punctuation marks '.', ',', '!', '?', ':', and ';' might be seen to be 'equivalent' to the intonation system of pitch direction (tone) and unit termination (tonality). By extension, the punctuation marks '( )', '[ ]', '{ }', and also '" "' could be said to equate contextually to onset and termination of intonation unit (tonality), respectively. However note that these 'equivalences' are with elements and features of a *phonological* status in speech. Indeed the typographic limitations of a keyboard as alphabet permit the conventional orthographic realisation of the particular language in type/print much as the segment inventory of the language would constitute the basis for phonological realisation in speech. Of course the forms of the letters themselves on the keyboard follow particular script conventions of alphabetic writing, e.g. Roman, Cyrillic, Greek, etc. Punctuation marks signal linear divisions in the (typo-)graphic display on screen or page according to grammatical criteria, marking phrase, clause and sentence boundaries variously, sentence type (declarative/interrogative/imperative) and direct 'speech' (?) mode boundaries.

It will be apparent from these reflections that the formal essence of written language typography cannot in any direct way be compared to the formal essence of spoken language prosody and paralanguage. In any case the nature of the written mode compels a representation of language in space, while the spoken mode is produced as vocal events in time. While typographic writing selects pre-formed characters from a keyboard layout to produce lexical units according to the orthographic conventions of the language *sequentially*, the prosodic and paralinguistic features of speech are formed via physical configurations of the vocal tract producing vocal effects which co-realise the phonetic essence of lexical units *simultaneously*.

4.3 Representing 'Prosody' and 'Paralanguage' in Digital Writing: The Re-semioticisation of Punctuation and Orthography

Any attempt to represent (*not* reproduce!) the linguistic effects of prosody and paralanguage in 'typed conversation' must *re-interpret* the semiotics of the keyboard characters and signs. In other words, it is obviously the *functions* of prosodic and paralinguistic features that are re-created not the *forms* in any way, and these functions are realised as value-added affective and social meaning of the lexical substance produced. Hence one such a typical 're-semioticisation' of the keyboard symbols takes the form of re-indexing indexical punctuation marks, e.g. by which the semiotics of '!' shifts from its grammatical function as boundary marker of exclamatory-declarative sentences to a

general marker of emotional intensity, or iconicising ';', which changes from punctuation index of grammatical break to icon meaning something like humorous scepticism. Other familiar examples of punctuation marks re-semioticised are:

'?' as indexical marker of curiosity, doubt, etc.
':' as iconic eyes
')' as iconic mouth, upturned as in smiling
'(' as iconic mouth, downturned as in grimacing

These punctuation marks and others and also letter characters combine together to form lexis-like pictograms known as 'emoticons' which express general attitudes and emotions such as in the following (taken from the CorTxt corpus):

i. ':)' happiness as in "5.36 Glad it went well :)" and
ii. ':-' happiness as in "5.39 …hope you got train ok :-)"
(Tagg 2012: 119)
iii. ':(' sadness as in "5.37 ...sorry I didn't make it over to you :(" and
iv. ':-(' sadness as in "5.45 Apparently there's a huge queue :-("
(Tagg 2012: 120)

Numerous other examples and combinations could be given from the 190,000 word CorTxt corpus (Tagg 2012) and the 7 million tweet HERMES corpus (Zappavigna 2012), where the whole system of emoticons and their composition is presented in considerable detail (2012: 73–76). The exact formulation of the attitudes they express can be refined per context, e.g. as 'regret' in iii. above and 'frustration' in iv. It will be noticed that the emoticons are realised after the verbal structure, in principle qualifying the whole utterance they follow. These punctuation-derived emoticons are now being increasingly substituted by easily accessible non-keyboard 'smileys' (where, e.g., ':-(' becomes ☹) as well as whole sets of emojis and other pictographic images, etc.

Another re-semioticisatıon of keyboard symbols takes the form character repetition indicating intensification of emotion or attitude as in the examples from the HERMES corpus:

v. 'iiiiiiii' as in " # nowplaying We gotta liiiiiiiive like we're dying"
(Zappavigna 2012: 57)

or punctuation mark repetition:

vi '!!!' as in "User oh My. God. You are the most awesome person ever :D THANK YOU !!!
(Zappavigna 2012: 68)

This last example also shows the use of 'caps lock' as an intensification of the emotion expressed by the lexis as well as the emoticon ':D', a re-semioticised punctuation mark plus upper case letter signalling joy, plus re-semioticised full stops in "oh My. God." standing for radical pause in the discourse.

In prosodic terms the repetition of letter characters would seem to correspond to the duration feature and the capitalisation to the feature loudness. As 'prosody-like' they are linked to lexical units directly. However, these are nonetheless indexical and not iconic graphic symbols and therefore symbolically remote from prosody, while noting the shared prosodic-graphic operationalisation of this intensification as greater length by prolonging and greater intensity by magnifying.

A link to paralanguage would seem to be given with the emoticons above, which serve the expression of affective (attitudinal and emotional) meaning directly via iconic face-like symbols separate from the lexical structure and thereby presumably qualifying longer stretches of utterance. They have nonetheless quasi-lexical character themselves as logograms (punctuation based) and pictograms (smileys). The affective meanings depicted would in speech most likely be expressed via the 'voice qualifications' of paralanguage combined with actual facial expression. However, it must be remembered that the emoticons and emojis are *typographic-pictographic* not paralinguistic symbols: the character repetitions and capitalisations are *orthographic-logographic* not prosodic symbols. The means of their semiotic signalling as 'reinforcing the signal,' and their linguistic co-occurrence are at a certain level of abstraction *reminiscent of* prosodic and paralinguistic features.

Many other examples could be given of the logograms and respellings of the social media and their analysis (*cf.* Deumert 2014: 122–145; Tagg 2012; and Zappavigna 2012 for extensive treatment), but perhaps at this point the socio-discursive essence of social media interchange could be addressed by establishing why the analogy of prosodic and paralinguistic communication has been considered to be so illuminating.

4.4 The Expression of Affective Meaning

As already indicated, communication via the digital media serves the cultivation of interpersonal contact in a medium conducive to informative-commentative collaboration, to a 'mediated phatic sociability' (Miller 2008), and to the construction of an 'ambient affiliaton' (Zappavigna 2012) and within such an ambience the expression of affective meaning is greatly furthered. At the same time social identities are being created and performed via the linguistic choices being made (Tagg 2012: 169–190) and an informal style of verbal-visual interlocution maintained. The written/typed mode of its realisation itself allows a degree of reflexivity on the part of the interlocutors (e.g. the affordance of 'deliberate' language use). These factors collude to encourage texters to express affective stance and evaluation with regard to their subject matter relatively freely. In terms of appraisal theory (Martin/White 2005) they employ 'upscaled graduation, tending to intensify interpersonal systems as a way of increasing solidarity through emphasizing both positive and negative appraisal as shared experience' (Zappavigna 2012: 67). While in this theory both the present 'more prosodic' capitalisations and character repetitions and the 'more paralinguistic' smileys, emoticons and emojis predominantly signal the 'affect' meaning feature, but by extension also the 'judgement' and 'appreciation' features of the 'attitude' system (*cf.* Zappavigna 2012: 53ff.), the former are message-oriented and vocally-linked in substance and the latter

interlocutor-oriented and gesturally-linked in substance. In summary, Tagg characterises the mindset of the texter succinctly thus:

> the main concern is not to 'sound speechlike' but to fulfil interpersonal purposes to express an evaluative stance, to heighten intimacy, to signal informality. The norms that are typically associated with spoken language can be seen as resources that texters draw on in creating an impression and intimacy. Thus, if you like, they are performing a speech-like informality, just as they perform being brief and non-standard.
> (Tagg 2012: 183)

5 CONCLUSION

The 'prosodic' and 'paralinguistic' continue to pervade the literature on blogging and texting as points of reference, as the following quotes demonstrate: Zappavigna states that "Interpersonal meaning is difficult to study because it is prosodic in nature" (2012: 10) and that "emoticons manifest prosodically" (2012: 73); 'paralinguistic restitution' is used by Tagg (2012: 48) to refer to the character repetitions and capitalisation discussed above; Tagg further posits that "the lack of paralinguistic cues" encourages texters to use emoticons (2012: 122) and that performing identity online means "reduced access to paralinguistic features" (2012: 176); and finally, and tellingly, Zappavigna concludes that language used in the social media "is deployed in a modality whose interpersonal meanings that might otherwise be expressed paralinguistically must be expressed with other means" (2012: 195, fn. 7).

These statements confirm the persistence of the general notion that the prosodic and paralinguistic somehow underlie social media communication as constituting the 'original' (more adequate?) verbal means of expressing the interpersonal semiotics that the latter strives (imperfectly?) to convey. However, it has been shown that texters and bloggers do not *perform* prosodic and paralinguistic features as such, but rather, in Tagg's terms, a 'speech-like' discourse, one which with its graphic modality creates its own conventions of verbal expression that are selectively reminiscent, formally, of a written *transcription* of prosodic and paralinguistic effects and, functionally, of the affective meanings that the latter can convey.

In current reality, with the 'keyboards' of mobile texting devices no longer containing punctuation marks or any characters other than those required for spelling and with the online availability of ever increasing numbers of emoticons and emojis, the graphic means of producing so-called 'prosodic-like' and 'paralinguistic-like' meanings in social media discourse has in fact never been greater.

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Abstract

PROSODY AND PARALANGUAGE IN SPEECH AND THE SOCIAL MEDIA: THE VOCAL AND GRAPHIC REALISATION OF AFFECTIVE MEANING

The study of prosody and paralanguage is in the first place concerned – unsurprisingly – with the phonetic and linguistic effects of non-segmental *vocal* variation expressed as values of the feature systems of pitch, volume and duration, but also of rhythm and tempo and further of voice qualities, etc. However, in more recent times the emergence of digitally mediated written communication (in the 'new' social media) has led attention to the role of prosody and paralanguage in defining the characteristic informal interpersonal style of this new 'typed conversation.' The present article reviews the formal and functional essence of prosody and paralanguage and, drawing on data from recent corpora of text messaging and microblogging, analyses the extents to which prosodic and paralinguistic features may be reflected in such discourse, in particular the ways in which affective meaning is expressed in the *graphic* modality of this medium.

Keywords: paralanguage, prosody, speech, writing, social media

Povzetek

PROZODIJA IN PARAJEZIK V GOVORU IN DRUŽBENIH OMREŽJIH: GLASOVNA IN GRAFIČNA URESNIČITEV AFEKTIVNEGA POMENA

Raziskave prozodije in parajezika se ukvarjajo predvsem s fonetičnimi in jezikovnimi učinki nesegmentnih glasovnih sprememb, ki se odražajo v glasovni višini, glasnosti in trajanju, kakor tudi v ritmu, tempu in glasovnih značilnostih. V zadnjem času pa je pojav digitalno posredovanega pisnega sporazumevanja (»novi« družbeni mediji) usmerilo pozornost na vlogo prozodije in parajezika pri določanju značilnega neformalnega medosebnega sloga te nove oblike »tipkane konverzacije«. Članek ocenjuje formalno in funkcijsko bistvo prozodije in parajezika. Na osnovi analize podatkov iz novejših korpusov kratkih besedilnih sporočil in mikroblogov ugotavljamo, v kolikšni meri se prozodične in parajezikovne lastnosti lahko odražajo v takšnih besedilih. Še posebej nas zanimajo načini, s katerimi se afektivni pomen izraža v grafični podobi tega medija.

Ključne besede: parajezik, prozodija, govor, pisanje, družbeni mediji

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PROSODY AND ABSOLUTE VS. RELATIVE USES OF ENGLISH AND SLOVENE ADJECTIVES

1 INTRODUCTION

The paper takes inspiration from Rastislav Šuštaršič's work on the contrastive analysis of English and Slovenian (Šuštaršič/Kocijančič-Pokorn 1998; Kocijančič-Pokorn/Šuštaršič 1999, 2001), and especially from his investigation into the differences and similarities between the two languages in terms of stress and accent (drawing primarily from his doctoral research as presented in Šuštaršič 1993, 1994, 1995). The concept of absolutely and relatively used adjectival structures in English and Slovene, presented in Section 2 and developed in Kavalir (2014), is investigated through the lens of prosody in the following sections, which focus on adjectival structures in the base (positive) degree, and the comparative and superlative degrees, respectively.

2 ABSOLUTELY AND RELATIVELY USED ADJECTIVAL STRUCTURES

The concept of absolutely and relatively used adjectival structures in English and Slovene brings together previously disparate ideas about the comparison and intensification of adjectives, proposing two parallel systems within the framework of Systemic Functional Linguistics (Kavalir 2014).

In both languages, adjectives (and adjectival structures) can be used in all three degrees, base (positive), comparative, and superlative, with reference to two different standards, internal and external. The subsystem of standard has at its core the question whether the meaning of the adjective depends crucially on the nominal referent (or some other external circumstance), yielding what is termed the relative use of adjectives, or whether the meaning of the adjective is contained within the adjectival structure, i.e. whether the adjective is used absolutely. The two options are a matter of use and not an inherent feature of adjectives, although some adjectives will be predominantly used with one standard rather than the other. For reasons which are beyond the scope of the present paper, the systems can be shown to pertain to the interpersonal metafunction in the Hallidayan theory of language.

Table 1 shows examples of all possible combinations for both English and Slovene.[1] Semantically, the most important difference between relative (external standard) and absolute (internal standard) uses is the fact that relative uses do not entail the positive: when

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1 Due to important distinctions in the strategies employed by the two languages, the examples of comparative and superlative degrees with an internal standard represent uses typical of each language rather than direct counterparts of each other.

we say that she chose a nicer ring than he originally suggested, this does not entail that the ring was actually nice. Such an implicature can be struck down explicitly, e.g. *She chose a nicer ring than he originally suggested, although it was still pretty darn ugly*.[2]

Table 1: Adjectives in English and Slovene, according to degree and standard (Kavalir 2014)

	Base degree	**Comparative degree**	**Superlative degree**
External standard	ENG: Mary has a big dog. SLO: Marija ima velikega psa.	ENG: She chose a nicer/more extravagant ring than he originally suggested. SLO: Izbrala je lepši/bolj ekstravaganten prstan, kot ga je predlagal on.	ENG: Luxembourg is the richest/most advanced EU country. SLO: Luksemburg je najbogatejša/najbolj napredna država EU.
Internal standard	ENG: His grandfather is a kind man. SLO: Njen stari oče je prijazen človek.	ENG: All better hotels offer self-service. He explained some of his more radical ideas about the afterlife. SLO: Vsi boljši hoteli nudijo samopostrežne obroke. Njegove ideje o posmrtnem življenju so bolj temačne.	ENG: Alan bought her the cutest little bouquet. Alan bought her a/the most wonderful little bouquet. SLO: To bom storila z največjim veseljem. Kupila je obleko iz najbolj finega žameta.

In the case of absolute uses, entailment is present in all three degrees. In the comparative degree, the positive is present but modulated, yielding the meaning 'quite *x*,' and the superlative has an elative meaning 'very *x*'. The shading in Table 1 also suggests that, although both uses are present in both languages, absolute comparatives are more productive in Slovene and absolute superlatives are considerably more productive in English.[3]

2 Implication can be strengthened or entailment added using various lexicogrammatical means, such as premodification by *even/še* (e.g. *Catherine, made less thin by candlelight, had put on a blue dress which made her look even younger than her age*; *Na sliki imaš še lepšo frizuro kot v resnici*), comparative reduplication (e.g. *Things got better and better between them as weeks passed*), or using the non-neutral member of the antonymic adjectival pair specific to a dimension or noun related to so-called inherentness (e.g. *Peter is the shorter of the two* (neutral for size: *tall*); *The red towel is a little bit wetter than the blue one* (neutral for dryness: *dry*); *cf.* Cruse 1991: 214–222; Frazier/Clifton/Stolterfoht 2008).

3 Unfortunately, this research question does not lend itself well to corpus investigations, but Kavalir (2014) investigates it qualitatively and shows that, for instance, absolute comparatives in Slovene are so productive that they exhibit a specialization whereby synthetic comparison pairs up with positive evaluation, and analytic comparison with negative evaluation; no such significant tendencies have been observed in English.

What is also obvious from Table 1 is that both kinds of comparison, synthetic (with *-er* and *–est* in English, and *-ši* and *naj-* + *-ši* in Slovene) as well as analytic (with *more* and *most* in English, and *bolj* and *najbolj* in Slovene), are possible with both absolute and relative uses. Kavalir (2014) has shown, however, that there is a link between these systems, and that corpus investigations (focusing on the construction "*X* couldn't be more *Y*/*Y*-er," for instance) prove that absolute uses feature analytic patterns significantly more frequently compared to their distribution in general. While this is an important morphosyntactic reflex of the semantic difference between absolute and relative uses, this paper shows how this grammatical phenomenon interacts with prosody.

3 THE PROSODY OF ADJECTIVAL STRUCTURES IN THE BASE DEGREE

In the base degree (usually called the positive, but the term is avoided here to ensure clarity), there is only one form, so even if it can be shown that absolute and relative uses have an effect on the type of comparison in the comparative and superlative degrees, this does not in any way prove that the distinction is justified in the base degree as well. Halliday's take (1998/1985: xx) on Occam's razor is very much applicable here:

> [A]ll the categories employed must be 'there' in the grammar of the language. They are not set up simply to label differences in meaning. In other words, we do not argue: 'these two sets of examples differ in meaning; therefore they must be systematically distinct in the grammar'. They may be; but if there is no lexicogrammatical reflex of the distinction, they are not.

Syntactically, there appears to be some link to the position of the adjective. Let us consider English first. When an adjective is used predicatively, the fact that it is more distant from the referent noun can promote an absolute interpretation, and the proximity of the referent noun in attributive use increases the likelihood of a relative (scalar) interpretation. If the sentences *He's a clever dog, isn't he?* and *I never realized our dog was so clever!* are compared, attributive use of the adjective *clever* means it is more likely to be interpreted relatively as 'intelligent compared to other dogs,' while predicative use makes us think the dog is 'absolutely smart'.[4] This is by no means universally true, and sentences like *It's a big universe* and *That puppy is still very small* are good examples of combinations attributive + absolute and predicative + relative.

It is prosody, therefore, that provides the strongest evidence that a grammatical distinction between absolute and relative uses in the base degree is indeed justified. As mentioned before, both kinds of uses combine with both adjectival positions, attributive and predicative, but what changes the situation is if the adjective becomes the focus of the intonation unit: putting tonic stress on the adjective and prolonging the vowel restricts the interpretation to an absolute one, e.g. *There was a* BIG *cat*. While the context of interaction may prioritize other factors and yield other options in terms of neutral

4 Possibly 'so smart he can be compared to a human,' as the internal standard often seems to be anthropocentric.

and marked tonicity (*cf.* Halliday 1967, 2005), what is at the core of the argument here is that it is indeed possible for prosody to do away with the inherent structural ambiguity present in such constructions.

The use of the above-mentioned prosodic cues is crucial especially when the more likely interpretation would be a relative one, with adjectives of size, which tend to be scalar and describe a nominal referent with reference to other members of the same category, e.g. *There was a big* CAT. *It was* BIG. It is worth noting that saying the same of a grain or a flea would only be acceptable in two cases: (i) if the grain/flea really is big in terms of internal standard, i.e. from the point of view of humans; or (ii) if the speaker suggests this as a hyperbole – in this case the addressee knows (i) is impossible and infers that the referent was extremely big compared to other members of the same group. What is important, though, is that in the later case the process is not straightforward going from 'for grains/fleas, this is a large one; actually, for grains/fleas, this is a very large one,' but passes through a stage where the addressee recognizes that the speaker is relating the size of the grain/flea to human standards and expressing an exaggeration.

This mechanism can be related to Cruse's (1991: 217) account of "prosodic gradation" in "implicit superlatives", i.e. adjectives which do not exhibit the category of comparison: "[A]lthough [implicit superlatives] cannot be lexically or morphologically graded, they can be prosodically graded, that is to say by means of stress and intonation […] Thus, the 'hugeness' of something can be indicated by the pitch range of the falling tone on *huge* in *It's hùge!*"

These patterns show that the matter of absolute vs. relative uses of adjectives in the base degree goes beyond semantics. The same prosodic tools do not work with merely semantic phenomena, and placing the focus of intonation on an ambiguous lexeme with several possible meanings cannot elucidate the intended interpretation, so that emphasizing *It was a* CRANE cannot make it clear whether the crane mentioned was a bird or a machine.

Finally, it is an interesting question why, in examples like the ones above, a focus on the adjective should yield the absolute interpretation rather than a relative one. While this is hardly an empirical issue, it can be hypothesized that placing the focus on the adjective automatically relegates the noun to less prominence in the prosodic hierarchy. Brazil (1997/1985: 18) states that "[t]he allocation of prominence to a word can be shown to be consistently the result of a speaker-decision over and above that which resulted in the choice of the particular lexical item. It is, therefore, independently meaningful." When intonation cues suggest the nominal referent is less important, it is not difficult to imagine that the interpretation will obviate it as well.

There is nothing in these suggestions that would tie them to a particular language, and indeed it turns out that Slovene adjectival structures in the base degree function in exactly the same way as in English. The two languages are therefore a very good match in this area, with both absolute and relative uses possible (*cf.* Table 1), and with the possibility of using prosody to bring absolute interpretations to the foreground (e.g. *Imela je* VELIKEGA *psa* with the same characteristics as *She had a* BIG *dog*).

4 THE PROSODY OF COMPARATIVE AND SUPERLATIVE ADJECTIVAL STRUCTURES

When it comes to comparative and superlative adjectival structures, synthetic comparison by means of comparative inflections *-er* and *-est* as well as *-ši* and *naj-* + *-ši* does not allow for any choice when it comes to word stress, which must obligatorily fall on the lexical morpheme. Mondorf (2003) claims that the cause-consequence relationship here might be reversed, arguing that when the word that follows begins with an initial stressed syllable, preference is normally given to synthetic comparison as opposed to analytic comparison, with the affixes *-er* and *-est* used to establish a 'buffer' between the stresses, e.g. *a fresher salad* vs. *a more fresh salad*. Hilpert's (2008) quantitative analysis of suggested factors on the choice of comparison in the British National Corpus (using only adjectives that are attested with both kinds of comparison) did not show this circumstance to have a significant impact on the type of comparison.

The situation is very different when it comes to adjectival structures exhibiting analytic comparison. Many authors (e.g. Biber et al. 2000: 522) suggest the choice of analytic rather than synthetic comparison in English can be conditioned by the desire to stress the comparison for emphatic reasons. Making the words *more* or *most* prominent (i.e. accented) thus does away with structural ambiguity and singles out the relative interpretation as the only one applicable, or in Curme's (1931: 504) words, speakers "stress the *more* or *most* when we desire to emphasize the idea of degree: 'She is indeed béautiful, but her sister is still móre beautiful.'" The same reasoning is again valid in the case of Slovene: *Tina je* BOLJ *inteligentna od sestre*.

There is, however, an important difference between the two languages in how the extent to which *more* (*bolj*) and *most* (*najbolj*) are stressed in connected speech affects the interpretation. In general, the literature reports similar findings for degrees of stress in both languages. Šuštaršič (1993: 118*ff*; 1995: 159*ff*) adapts Varga's (1975; also related to Kingdon 1966/1958: 8; O'Connor/Arnold 1973; Wells 2007/2006: 228–229) system of four degrees of stress, and finds that it described both English and Slovene well. The four categories he distinguishes are:

1. Syllables with primary stress – syllables with primary stress are the only ones that can be dynamically accented.
2. Syllables with secondary stress – the vowel in such a syllable is a strong, loud and long one compared to unstressed syllables, but when following the primary stress, the syllable does not have tonic prominence.
3. Syllables with tertiary stress – the vowel in such a syllable is a strong one, somewhat louder and longer compared to unstressed syllables, but the syllable does not have tonic prominence even in a position before the primary stress.
4. Unstressed syllables – pronounced with minimal volume; in English, they mostly contain vowels of centralized and reduced quality.

The difference in unstressed syllables is discussed as follows in Collins, Šuštaršič and Komar (2014: 100–101):[5]

> It has been claimed that English, as well as some other European languages, are stress-timed. This means that sentence stresses seem to occur at roughly regular intervals in connected speech. To achieve this stress-timed rhythm, unstressed syllables are shorter, while their 'full' vowels are usually replaced by /ə/, /ɪ/ or /ʊ/. Since the occurrence of stressed syllables remains regular, i.e. at more or less equal intervals, the reduced unstressed syllables can be squeezed in between the stressed ones.
>
> *They BOUGHT a CAR.*
> *They BOUGHT a NEW CAR.*
> *They've just BOUGHT the FASTest SPORTS car.*
> *They've just BOUGHT the very FASTest and MOST expensive SPORTS car.*
>
> Other languages, including Slovene, are considered to be syllable-timed. In these languages the length of stressed and unstressed syllables remains roughly the same (i.e. unstressed syllables are not noticeably reduced) and the vowel quality of unstressed syllables is maintained.

While stress is of course not a discrete variable and "innumerable gradations of stress" (Kingdon 1966/1958: 8) could be distinguished if desirable,[6] Šuštaršič's account is detailed enough to point out a number of differences in the degree of stress for various constructions in English and Slovene. Although not discussed at length in his work, the general conclusion that can be drawn (*cf.* Cruttenden 1997: 17–18, 44; Komar 2008: 19, 113–114; Ladefoged 2001: 91–93) is that many elements that are unstressed in English tend to receive some degree of stress in Slovene. Some of Šuštaršič's examples comprise, for instance, demonstratives (e.g. *these people* vs. *ti ljudje* with tertiary stress on *these* and secondary stress on *ti*), greetings (e.g. *good morning*, with no stress on *good*, vs. *dobro jutro*, where *dobro* can receive anything between secondary and no stress), and some constructions where the English version allows unstressed syllables but the Slovene does not (e.g. titles – *Mr Smith* vs. *gospod Smith*; pronouns preceding emphatic reflexives – *I myself* vs. *jaz sam*).[7]

5 This of course has important implications for Slovene-produced English, where connected speech phenomena such as loss of stress and vowel reduction are missing. The same tendencies have been noticed in L2 English speakers coming from several different languages (although Sönning (2014) surprisingly reports no significant differences in terms of vowel reduction in German L2 speakers of English) but they cannot be generalized to all Slavic languages as Russian, for instance, has been shown to produce exactly the opposite transfer effects with speakers lacking secondary stress and over-reducing unstressed vowels in English (Banzina/Dilley/Hewitt 2016).

6 *Cf.* Brazil (1997/1985: 18) for a critique suggesting only primary and secondary stress are useful in the identification of "meaningful contrasts."

7 What Šuštaršič (1993, 1995) himself notes in his experimental work is that realizations may vary across different speakers of the same language, and as one of the reviewers suggests, *good* in *good morning* may actually be both stressed and accented.

On a side note, a tendency that, according to Šuštaršič (1993: 142; 1994: 34; 1995: 174), causes many differences between the two languages in the realisation of intonation is the fact that in English the last lexical item in the intonation unit will usually be the focus, whereas Slovene will often have the focus prior to the last lexical item. As it happens, synthetic comparatives are a typical example of this and Šuštaršič (1993: 127; 1995: 165) points out in particular that in cases like *I still think his car is better than* MINE vs. *Še vedno mislim, da je njegov avto* BOLJŠI *od mojega* it is often more appropriate in Slovene to place the primary stress on the adjective – so it could well be that in Slovene intonation patterns contribute to the link between relative uses and synthetic comparison.

What can be observed is that in both English and Slovene the independent morphemes *more*, *most*, and *bolj* (absolute superlatives are so rare in Slovene that it is difficult to produce judgements for *najbolj*) will generally be unstressed and often reduced in absolute uses (for Slovene already noted in Toporišič 2004/2000: 327; *cf.* Tomšič 1956/1957: 123). Some examples from the spoken part of the BNC corpus and GOS, the corpus of spoken Slovene, testify to this:

I've TAKen one of the more OBvious ones
the more ausTERE TYPES
of the more proGREssive ones
bl slaBU JE za JEST
k ponaVAD je v BISTvu bl brezPLAČno ne
TU je bl težKU no

The crucial distinction is, however, that in Slovene the difference between the more or less stressed relative *bolj* and the unstressed absolute *bolj* is very salient, so that loss of stress guides the addressee to favour an absolute interpretation. It is important to point out, of course, that prosody is a matter of spoken language and the context of interaction will include many additional factors that may prevail over this lexicogrammatical consideration.

In English, on the other hand, it is quite common for the relatively used *more* and *most* to be unstressed as well (e.g. Lecumberri/Maidment 2000: 83, 90, 95), which means that the difference in prosodic prominence does not have the same power of differentiating meanings as in Slovene. Following the spirit of Brazil's (1997/1985) work on the role of speaker-decision and meaningful contrasts expressed through prosody, it could be said that the contrast presented by the Slovene speaker not allocating prominence to the comparative adjective is in some ways more meaningful than the one presented by the English speaker.

It would go beyond the scope of this paper to attempt a diachronic investigation into the development of absolute and relative adjectival uses and their prosodic patterns, but the synchronic characteristics of these constructions suggest the current state of affairs might be related to the process of subjectivisation/subjectification in language, which would postulate the evolution of absolute uses from relative ones. In this respect it may

be of interest that early literature on the development of intensification (e.g. Stoffel 1901 in Traugott 2006: 335 for adjective-intensifying adverbs) already mentions some typical, and not unfamiliar, prosodic traits of such semantic change, for instance when it comes to modalised subjective uses and a reduction of stress.

5 CONCLUSION

The paper builds on Rastislav Šuštaršič's seminal work on the contrastive analysis of English and Slovene, especially in the field of their prosodic patterns, and applies it to the notion of absolute and relative uses of adjectival structures. It turns out that, in the base degree, intonation works in the same way in both languages and can perform the function of disambiguating between the two sets of interpretations. In the comparative and superlative degrees, however, the well-established difference in the intonation patterns of stress-timed English, which often resorts to stress reduction in connected speech, and syllable-timed Slovene, where word stress is rarely completely lost, results in important distinctions in how intonation interacts with absolute and relative uses. These findings, however, are only preliminary and clearly show a need for further research in this area, presumably involving experimental work and specially designed comparable spoken corpora.

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Abstract

PROSODY AND ABSOLUTE VS. RELATIVE USES OF ENGLISH AND SLOVENE ADJECTIVES

The paper explores the role prosody plays in distinguishing two types of uses of adjectival structures in English and Slovene. In both languages, adjectival structures can be used with an internal standard, yielding an absolute interpretation, or with an external standard (typically comparing the nominal referent to other members of the same category), giving rise to a relative interpretation. It is shown that, in the base degree, a focus on the adjective provides disambiguation by making it clear that the construction is an instance of absolute use. In the comparative and superlative degrees, however, structural differences in the intonation patterns of the two languages come into play in the case of analytic comparison, so that in Slovene reduction in stress signifies absolute use, but in English relatively used comparatives and superlatives can be unstressed as well.

Keywords: adjectives, English, intonation, prosody, Slovene

Povzetek

PROZODIJA TER ABSOLUTNA IN RELATIVNA RABA PRIDEVNIKOV V ANGLEŠČINI IN SLOVENŠČINI

V prispevku analiziramo vlogo, ki jo prozodija igra pri razlikovanju med dvema tipoma pridevniških rab v angleščini in slovenščini. V obeh jezikih lahko pridevniške zgradbe uporabljamo z notranjim standardom, kjer se razvije absolutna interpretacija, ali z zunanjim standardom (tu gre tipično za primerjavo samostalniškega referenta z drugimi primerki iste kategorije), kjer pa pride do relativne interpretacije. Članek pokaže, da pri osnovni stopnji poudarek na pridevniku omeji interpretacijo, tako da je takšna zgradba lahko samo primer absolutne rabe. V primerniških in presežniških zgradbah pa se po drugi strani strukturne razlike med intonacijskimi vzorci obeh jezikov pokažejo za pomembne v primeru opisnega stopnjevanja, saj v slovenščini nenaglašenost kaže na absolutno rabo, medtem ko so lahko v angleščini nenaglašeni tudi relativno rabljeni primerniki in presežniki.

Ključne besede: pridevniki, angleščina, intonacija, prozodija, slovenščina

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THE RELATIONSHIP BETWEEN THE PERCEPTION AND PRODUCTION OF FOUR GENERAL BRITISH VOWELS BY SLOVENE UNIVERSITY STUDENTS OF ENGLISH

1 INTRODUCTION

1.1 Perception and Production of Vowels

Successful acquisition of foreign sounds depends on several factors, among which the pivotal ones are the correct perception and production of the sounds. The ability to discriminate between L1 and L2 sounds is hindered by the phonemic and phonetic system of L1, since the judgements on similarity or difference between two phonemes are made against the background knowledge and phonemic awareness of the mother tongue.

It has been frequently suggested that there is a strong correlation between L2 perception and production of phonemes. Flege (1995) and Escudero (2000) both believe that the majority of production errors are based on a false perception of L2 phonemes. Regarding the development of new phonemic categories by L2 speakers, Flege (1995) and Best (1995) claim that foreign learners can create new L2 phonemes only by relying on some phonemic category of their L1. More recent studies by Baker and Trofimovich (2006) and Bion et al. (2006), which have looked into the relationship between the perception and production of L2 vowels, claim that there is a positive correlation between vowel perception and vowel production. Furthermore, they tentatively suggest that vowel perception might precede vowel production.

1.2 Orthographic Input and Production of Sounds

There has been very little research in second language acquisition on the influence of L1 orthography on the perception and production of L2 phonemes. Bassetti (2008) argues that orthographic input of L1 interacts with L2 acoustic input, leading to non-native pronunciations which cannot be attributed to the influence of L1 phonological and phonetic system. The influence of L1 orthographic input can have positive as well as negative effects on L2 pronunciation. The positive influence of L2 orthography on L2 pronunciation lies in the visual representation (i.e. by means of letters) of a phonemic contrast,[1] whereas the negative influences of L2 orthography are manifold (e.g.

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1 Studies by Brown (1998) and Eckman (2004) have shown that Japanese learners of English can learn to distinguish between the phonemes /l/ and /r/ if they know how a word is spelt; if it is spelt with the letter <r> they will pronounce it as /r/, if the word contains the letter /l/, they will pronounce it as /l/.

additions and omissions of phonemes, phoneme substitutions and equations of L1 and L2 phonemes). The influence of L2 orthography on L2 pronunciation is present also when L2 learners are speaking freely.

The orthographic input seems to affect the correlation between perception and production as well. Research has shown that learners' mental representations of L2 phonemes created under the influence of orthographic input may affect their perception in such a way that they hear non-existing phonemes or phonetic features (see Matthews/ Brown 2004).

We can sum up that the mental representations of L2 phonemes created on the basis of orthography are so strongly imprinted in the brain that they affect the production and perception also in the absence of the orthographic input.

1.3 Orthographic Input, Phonemic Transcription and Production of Sounds

Phonemic transcription can be regarded as an important medium between a written text and its spoken manifestation. The International Phonetic Alphabet, which is used for the transcription of sounds, consists of symbols and diacritical signs with a number of symbols resembling letters. A quick look at different dictionaries of the English language shows that not all of them opted for the International Phonetic Alphabet. In fact, a large number of American dictionaries developed their own system for the transcription of English sounds which uses letters. As pointed out by Šuštaršič (2005: 94), this choice, although governed by the familiarity of letters, turned out to be confusing and not very user-friendly.

In agreement with the discussion above (see 1.2), we believe that speakers whose L1 exhibits a close grapheme-phoneme correspondence (e.g. Slovene) may benefit from phonemic transcription when they are learning foreign languages whose grapheme-phoneme correspondence is more opaque (e.g. English). Phonemic transcription, however, may also reflect many pronunciation errors which are the result of the orthographic input. Nonetheless, we believe that one of the most important roles of phonemic transcription is its ability to develop L2 phonetic awareness in L1 learners.

The importance and positive influence of phonemic transcription on the foreign learners' pronunciation has been researched and documented by, among others, Wells (1996), Šuštaršič (2005) and Lintunen (2005). The third of these studies has investigated the effect of phonemic transcription on L2 pronunciation in learners whose L1 exhibits a close phoneme-grapheme correspondence (Finnish) and found that the phonemic transcription generally has a positive effect on the pronunciation of a foreign language with an opaque phoneme-grapheme correspondence. The correlation between the phonemic transcription and the pronunciation of consonants was stronger than that between the phonemic transcription and vowels.

1.4 GB Vowel System vs. Slovene Vowel System

Studies in contrastive English-Slovene analysis of the vocalic system have shown that the two languages differ not only in the number of vocalic phonemes but also in their

quality and quantity (see Šuštaršič/Komar/Petek 1995; Šuštaršič 2003, 2005; Stopar 2015). Stopar (2015: 87) presents the comparison between Slovene and GB monophthongs as shown in Figure 1.

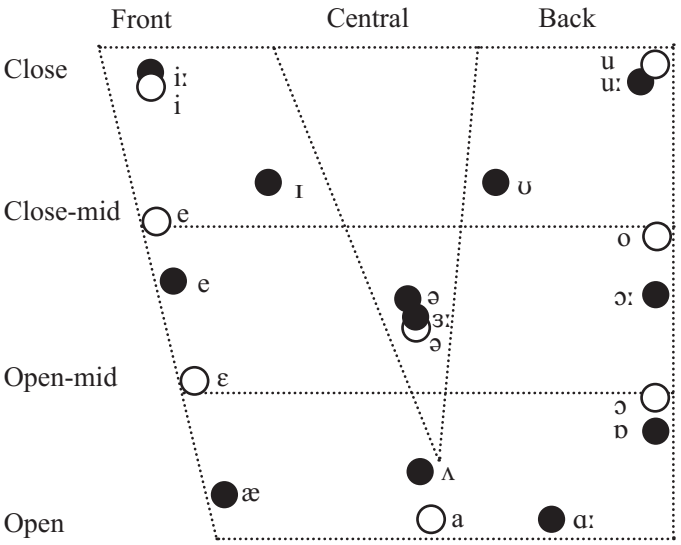

Figure 1: Vowel chart with Slovene (white dots) and GB (black dots) monophthongs

Several studies (Šuštaršič 2005; Stopar 2015) in contrastive analysis of Slovene and General British vowel systems have shown that the most difficult GB vowel contrast for Slovene speakers of English to master is the contrast between the front close-mid to open-mid /e/ – or DRESS vowel – and the front just above open /æ/ – or TRAP vowel – (transcribed in Cruttenden (2014) as /a/).[2] The contrast is even more challenging since there is a similar vowel contrast in standard Slovene between /e/ (front close-mid) and /ɛ/ (front open-mid). The most common mistake that Slovene speakers make is to neutralize the GB vowel contrast and pronounce both vowels as the Slovene /ɛ/. Šuštaršič (2005: 84) observes that this failure to distinguish between the two GB vowels is also present in the phonemic transcription exercises. The study by Stopar (2015: 89) shows that the perception of /e/ and /æ/ is least successful, and that the two vowels are most frequently heard as interchangeable.

2 THE STUDY

The present study investigates the influence of orthography and phonemic transcription on the production of the GB vowels /e/, /æ/, /ʌ/, and /ɜ:/. Its purpose is also to examine the correlation between the perception and the production of these four GB vowels. In this respect, the study is closely connected to the study by Stopar (2015) in terms of the choice of experiment material and the results.

2 DRESS, TRAP, STRUT and NURSE are four of 27 keywords introduced by Wells (1982) to represent a large number of words with the same vowel.

2.1 Research Questions

The purpose of the study was to answer the following research questions:

RQ1: Does spelling by analogy guarantee correct pronunciation of the vowels in question?

RQ2: Does the training of phonemic transcription have a positive influence on the production of the four GB vowels /e/, /æ/, /ʌ/, and /ɜ:/?

RQ3: Does the production of the four vowels in question mirror their perception?

2.2 Method and Participants

The study consisted of two production tests. In the first test, which took place at the beginning of the course in English phonetics and phonology (October 2016), the participants were given a list of 24 orthographically transcribed English real and nonsense words. They were required to read and record them. They were also informed that some of the words were nonsense words, and that they should try and read them by analogy with the spelling. The second test took place at the end of the course (January 2017) – the course consisted of 30 hours of lectures and 30 hours of practical classes during which the students were trained in perception and production of General British phonemes, as well as in phonemic and phonetic transcription.[3] The participants were given the same 24 real and nonsense words, but this time only phonemically transcribed.

The words used in the test, contained the four vowels in question. Each vowel was represented by six words. The DRESS -vowel words were <gret> /gret/, <streb> /streb/, <tech> /tek/, <med> /med/, <bent> /bent/, and <fled> /fled/. The TRAP-vowel words were represented by <dap> /dæp/, <map> /mæp/, <lag> /læg/, <kaln> /kæln/, <badge> /bædʒ/, and <shazz> /ʃæz/. The STRUT-vowel words were <cut> /kʌt/, <numb> /nʌm/, <fung> /fʌŋ/, <love> /lʌv/, <come> /kʌm/, and <crup> /krʌp/. The NURSE-vowel words were represented by <plurp> /plɜ:p/, <turg> /tɜ:g/, <work> /wɜ:k/, <lurk> /lɜ:k/, <bird> /bɜ:d/, and <heard> /hɜ:d/. The words were mixed and occurred in the following order: /dæp/, /kʌt/, /plɜ:p/, /gret/, /mæp/, /nʌm/, /tɜ:g/, /streb/, /læg/, /fʌŋ/, /wɜ:k/, /lʌv/, /kæln/, /tek/, /med/, /lɜ:k/, /bɜ:d/, /kʌm/, /bædʒ/, /bent/, /ʃæz/, /fled/, /krʌp/, and /hɜ:d/.

For the evaluation of results, the auditory method was used. The evaluator had vast and long experience in teaching British English phonetics and phonology to Slovene speakers of English.

All the participants in the study were first-year BA students of English at the Faculty of Arts, University of Ljubljana. In the first test 60 students took part, whereas in the second test only 40 students participated. Participation in the study was on a voluntary basis.

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3 The practical teaching of English pronunciation to Slovene students of English consists of several strategies which include (i) different ear-training exercises whose purpose is to improve the learners' perception of GB phonemes, (ii) phonemic (and to some extent also phonetic) transcription of written texts, (iii) reading phonemically transcribed texts, and (iv) reading regular texts. All these strategies are supported by the theory of GB phonology and phonetics.

3 RESULTS

3.1 Reading from Orthography

The average performance of the participants in the production of the four vowels in question when "reading from orthography" was at 74%. Table 1 shows that the GB vowel /e/ was not problematic and was pronounced correctly by all participants. The weakest performance was, as expected, of the GB vowel /æ/, immediately followed by the GB vowel /ɜ:/, and the GB vowel /ʌ/.

Table 1: Production of /e/, /æ/, /ʌ/, and /ɜ:/ in reading from orthography by Slovene students of English (N=60)

GB Vowel	Correct (%)	Substitutes (%)
/e/	100.0	0
/æ/	49.0	/e/ (35.9) /ɑ:/ (15.1)
/ʌ/	79.3	/ə/ (20.7)
/ɜ:/	67.8	/ər/ (32.2)
Mean	**74.0**	

The analysis of the substitutes showed that the most common substitute for the GB vowel /æ/ was the front close-mid to open-mid GB vowel /e/ (35.9%), whereas a small percentage (15.1%) read the model words with the back open long GB vowel /ɑ:/. This means that more than one third of all participants did not distinguish between the DRESS and the TRAP vowels.

Mispronunciations of the STRUT vowel as /ə/ were also relatively frequent (20.7%). The pronunciation of the NURSE vowel as /ər/ (32.2%) was considered wrong, since the model pronunciation for our students of English is the General British English where the post-alveolar approximant /r/ is pronounced only in pre-vocalic positions.

3.2 Reading from Phonemic Transcription

The average performance of the participants in the reading from phonemic transcription test was 85%, which was 11% better than in the reading from orthography test. Table 2 shows that the GB vowel /e/ was correctly pronounced by all participants. The pronunciation of the GB vowel /ɜ:/ improved in the sense that only 0.8% of participants still pronounced it as /ər/, while the majority managed to pronounce the vowel without the post-alveolar approximant /r/. The pronunciation of the GB vowel /æ/ also improved by 10.1% compared to the reading from orthography test, whereas the pronunciation of the GB vowel /ʌ/ remained nearly the same.

Table 2: Production of /e/, /æ/, /ʌ/, and /ɜ:/ in reading from phonemic transcription by Slovene students of English (N=40)

GB Vowel	Correct (%)	Substitutes (%)
/e/	100.0	0
/æ/	59.1	/e/ (35.8) /ɑ:/ (5.1)
/ʌ/	81.7	/ə/ (18.3)
/ɜ:/	99.2	/ər/ (0.8)
Mean	**85.0**	

The analysis of the most frequent substitutes showed that the most common substitute for the GB vowel /æ/ remained the close-mid to open-mid GB vowel /e/ (35.8%). Only a small number of participants (5.1%) pronounced it as the back open long GB vowel /ɑ:/. The number of participants who pronounced /æ/ as /e/ decreased (13.3%) compared to the number of participants in the reading from orthography test (24.3%).

3.3 Reading Nonsense Words

Table 3 shows the performance of the participants in reading nonsense words from orthography, as well as from phonemic transcription. The average performance of the participants in reading nonsense words from orthography was, as expected, lower (namely, by 3.1%) compared to the performance in the reading from phonemic transcription test.

In both tests the participants were most successful in pronouncing the DRESS vowel. Nearly equally successful was the pronunciation of the NURSE vowel – where there was a small exception in the reading from orthography test where 2.5% of the participants pronounced the post-vocalic approximant /r/. The pronunciation of the STRUT vowel was successfully achieved in both tests (over 80%), with the short central mid-close to mid-open vowel /ə/ as the only substitute. As expected, the least successful pronunciation results were achieved with the TRAP vowel. There was a small increase in the pronunciation of the vowel in the reading from transcription test (6.6%). This vowel also had two common substitutes – /e/ and /ɑ:/ – thus indicating a similar trend as with the pronunciation of real words.

Table 3: Production of /e/, /æ/, /ʌ/, and /ɜ:/ in Reading Nonsense Words from Orthography and from Phonemic Transcription

GB Vowel	Correct orthography (%)	Substitutes (%)	Correct transcription (%)	Substitutes (%)
/e/	100.0	0	100.0	0
/æ/	36.7	/e/ (34.3) /ɑ:/ (29.0)	43.3	/e/ (40.0) /ɑ:/ (16.7)
/ʌ/	81.5	/ə/ (18.5)	85.0	/ə/ (15.0)
/ɜ:/	97.5	/ər/ (2.5)	100.0	0
Mean	**78.9**		**82.0**	

4 DISCUSSION

The results indicate that spelling by analogy does not guarantee correct pronunciation of all the vowels in question (RQ1). Least problematic is the vowel /e/ when spelt with the letter <e>, whereas the most frequent spelling of the vowel /æ/ by means of <a> does not trigger the right pronunciation.[4] The prevailing substitute is /e/. The substitute /ɑ:/ is particularly frequent in nonsense words (29%), which can be attributed either to the influence of the spelling (letter <a>) or to the tendency to maintain the TRAP/PALM opposition in General British pronunciation.

The results confirm that there is a positive influence of systematic training in phonemic transcription on the production of the four vowels in question by Slovene students of English (RQ2). This fact is particularly noticeable in the case of the NURSE vowel, where the regular mispronunciation of /ɜ:/ in reading from orthography includes the post-vocalic approximant /r/. This error disappears when students read the NURSE vowel words from phonemic transcription. A positive influence of phonemic transcription on the production of the TRAP vowel words can also be observed, but to a much smaller degree. Although the most frequent substitutes for /æ/ remain /e/ and /ɑ:/, a small increase in the number of mispronunciations of /æ/ as /e/ can be observed in the reading from transcription test.

The average result for the successful production of the GB vowels /e/, /æ/, /ʌ/, and /ɜ:/ in reading from orthography test is at 74% and is comparable to the average result for the successful perception of the same vowels in the study by Stopar (2015) where the average was at 71.1%. More important for establishing the degree of overlap between perception and production (RQ3) are the correct results of individual vowels and their most frequent substitutes. Our results confirm that the TRAP vowel is the most difficult vowel for Slovene students to perceive, and even more difficult to produce. In the study by Stopar, 61% of the participants perceived the vowel correctly. In our study the percentage of correct pronunciation of the vowel is noticeably lower (49%). In both studies the most frequent substitute is the GB vowel /e/ – with a frequency of 20.8% in the study by Stopar, and 35.9% in our study.

As far as the other three GB vowels are concerned, the results between the successful perception and production do not show a parallel trend. According to Stopar (2015: 90) the second most difficult GB vowel to perceive is /ʌ/, followed by /e/, and /ɜ:/. Our results suggest that the second most difficult vowel to produce is /ɜ:/ if the target pronunciation is General British, followed by /ʌ/, whereas the pronunciation of /e/ is least problematic.

Comparing the two studies with regard to the vowel substitutes that the participants perceived and produced, we can find little overlap. If the participants misperceived the GB vowel /ʌ/ as /æ/ (17.8%), they most frequently mispronounced it as /ə/ (20.7%). While the Stopar study showed /æ/ to be the most frequent misperception of /e/, the participants in our study had no problems pronouncing the vowel correctly (100%).

4 Students are explicitly told that the vowel /æ/ is in 99% of its occurrences spelt with the letter <a> (see Cruttenden 2014:119).

With regard to the production of nonsense words, our results do not suggest that they were any more challenging than real words – the average facility values were 78.9% for nonsense words in reading from orthography, 82.0% for nonsense words in reading from phonemic transcription, 76.7% for real words in reading from orthography, and 84.8% for real words in reading from phonemic transcription. This is different from the perception study by Stopar (2015: 89) in which the perception of nonsense words appeared to be particularly challenging and much worse compared to real words. This means that in the perception tests of real words the participants try to decode the words by means of recalling the mental representations which, as stated above (see 1.2), were arrived at on the basis of orthography, whereas in the perception tests of nonsense words, the participants have to rely on perception only.

5 CONCLUSION

The paper presents the influence of orthography and phonemic transcription on the production of the four GB vowels /e/, /æ/, /ʌ/, and /ɜ:/. In line with the study by Šuštaršič (2005), our results suggest that the orthography has a misleading influence on the pronunciation, particularly in the case of the GB vowel /ɜ:/, where the students tend to pronounce the vowel followed by the post-vocalic approximant /r/. The orthography (the letter <a>) does not provide a positive influence on the pronunciation of the GB vowel /æ/ which is most frequently mispronounced as /e/. There is, on the other hand, a positive correlation between the phonemic transcription and correct pronunciation of the GB vowels /e/, /ɜ:/ and /ʌ/. In spite of an increase in correct pronunciation of the GB vowel /æ/, this vowel remains most problematic for the Slovene students of English. The comparison of the perception and the pronunciation results does not suggest that the correct perception is a guarantee for the correct production of L2 sounds.

The results of the study could be useful for improving techniques for teaching pronunciation. In addition to the identification of foreign GB vowels without reliance on orthography, the reverse exercises could prove beneficial. Similarly, the use of nonsense words for the training of perception, as well as for developing the awareness of the spelling, may prove a useful and entertaining exercise.

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Abstract

THE RELATIONSHIP BETWEEN THE PERCEPTION AND PRODUCTION OF FOUR GENERAL BRITISH VOWELS BY SLOVENE UNIVERSITY STUDENTS OF ENGLISH

This paper presents a study of the influence of orthography and phonemic transcription on the pronunciation of the four GB vowels /e/, /æ/, /ʌ/, and /ɜ:/ by Slovene university students of English. The paper also examines the relation between the perception and production of the four vowels in question by comparing the perception results of the same vowels from a previous study and the production results of this study. The results indicate a positive influence of phonemic transcription on the production of the examined vowels, whereas the influence of orthography on the pronunciation is confusing and leads to pronunciation errors. The results also confirm the findings of the perception study that the most difficult vowel contrast to maintain is between /e/ and /æ/. Interestingly, the perceived vocalic substitutes do not match the pronunciation substitutes for these two vowels. While the pronunciation of /e/ is excellent, its perception is still confused with /æ/.

Keywords: phonemic transcription, GB vowels, perception of vowels, production of vowels, orthography

Povzetek

ODNOS MED PERCEPCIJO IN PRODUKCIJO ŠTIRIH SAMOGLASNIKOV STANDARDNE BRITANSKE IZGOVARJAVE PRI SLOVENSKIH UNIVERZITETNIH ŠTUDENTIH ANGLEŠČINE

V članku obravnavamo vpliv pisave in fonemske transkripcije na izgovarjavo štirih samoglasnikov standardne britanske angleščine /e/, /æ/, /ʌ/, in /ɜ:/ pri slovenskih univerzitetnih študentih angleščine. Poleg tega tudi ugotavljamo odnos med percepcijo in produkcijo teh štirih samoglasnikov, tako da primerjamo rezultate predhodne študije percepcije teh samoglasnikov z našo študijo njihove produkcije. Rezultati kažejo pozitiven vpliv fonemske transkripcije na produkcijo preučevanih samoglasnikov, medtem ko je vpliv pisave na izgovarjavo zavajajoč in vodi do napak v izgovarjavi. Rezultati tudi potrjujejo ugotovitve študije percepcije, da je najbolj težavno prepoznavanje samoglasnikov /e/ in /æ/. Zanimivo pa je, da se pri tem samoglasniškem paru napačno zaznani samoglasniki ne ujemajo z napačno izgovorjenimi samoglasniki. Medtem ko je izgovarjava samoglasnika /e/ odlična, pa pri njegovi percepciji še vedno prihaja do zamenjave s samoglasnikom /æ/.

Ključne besede: fonemska transkripcija, standardni britanski samoglasniki, percepcija samoglasnikov, produkcija samoglasnikov, pisava

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« VOUS AVEZ UN PETIT ACCENT »: ENSEIGNEMENT DE LA PRONONCIATION AUX APPRENANTS SLOVÈNES DE FRANÇAIS LANGUE ÉTRANGÈRE

1 INTRODUCTION

Avec l'approche communicative et depuis la parution du Cadre européen commun de référence pour les langues (dans la suite : CECRL) en 2001, ce qui est valorisé dans l'enseignement/apprentissage des langues étrangères, c'est surtout le contenu ; la composante linguistique – la prononciation y compris – est souvent reléguée au deuxième plan. Or, tout dépend des objectifs d'apprentissage ; si pour un touriste il suffit de se faire comprendre, en est-il de même pour un public spécialisé qui va utiliser la langue dans des buts professionnels ?

Dans le domaine de la prononciation en langue étrangère, comme le souligne Tagliante (2006 : 121), « les apprenants ne sont pas sur un plan d'égalité. Ils ressentent cela comme une grande injustice, mais en réalité, ce n'est pas très important : à condition d'être parfaitement compréhensible, un accent étranger peut avoir beaucoup de charme ». « Vous avez un petit accent, » ou « Vous n'avez presque pas d'accent, » sont deux phrases qui font sourire – parfois amèrement – les étrangers venant en France. Il nous est arrivé à tous de les entendre et l'effet de ces remarques est souvent négatif ; en les entendant, le locuteur étranger se sent exposé ou même en position d'infériorité. Parfois un accent étranger peut aussi, comme le montre Telep dans son article (2016), stigmatiser le locuteur. Selon Wachs (2011 : 184), la perception et le jugement d'un accent étranger est un phénomène culturel.

C'est peut-être justement dans le domaine de la prononciation que les différences entre les apprenants se font le plus ressentir. Lauret (2011 : 31) dit que l'entraînement phonétique « met en jeu des capacités très personnelles : facilité à prendre la parole, conscience de soi, contrôle de son image, capacité d'imitation, capacités d'écoute (oreille musicale), ouverture à la différence, plaisir du jeu, en particulier vocal, perméabilité de l'ego. » Vitez (2012 : 144) souligne aussi l'importance de la langue maternelle : le procédé de la reconnaissance et de l'acquisition des sons d'une langue étrangère dépend des compétences du locuteur d'une langue et de son oreille musicale, mais aussi de sa compétence linguistique en langue maternelle.

Dans l'entraînement phonétique, l'enseignant d'une langue étrangère joue un role primordial. Il doit corriger – ce qui n'est pas en soi une tâche facile – mais sert aussi de modèle. Selon Lauret (2011 : 31), les enseignants qui ont une parfaite maîtrise de

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la prononciation (est-ce possible ?) « seront plus enclins à travailler la phonétique en classe que les enseignants ne se sentant pas aussi à l'aise dans leur prononciation que dans leur grammaire. » Il est, bien sûr, aussi (ou surtout) important, de savoir comment ces enseignants sont formés et comment eux-mêmes traitent la prononciation en classe.

L'objectif de cet article est de passer en revue les concepts concernant l'enseignement de la prononciation en classe de FLE ainsi que quelques recherches qui pourraient se montrer utiles pour le contexte slovène. Dans la dernière partie, nous proposons l'analyse des contenus phonétiques de certains manuels généralistes, utilisés en Slovénie. Nous partons de l'hypothèse que les contenus proposés ne vont pas toujours suffire pour remédier aux difficultés de prononciation des locuteurs slovènes.

2 LA « PHONÉTIQUE » DANS LA LITTÉRATURE DIDACTIQUE

La phonétique est, en classe de langue, d'habitude considérée comme une des composantes "linguistiques" de la production orale. Avec l'approche communicative et le CECRL, elle apparaît moins souvent dans les grilles d'évaluation de la compétence linguistique, ce qui montre qu'elle n'est pas toujours considérée comme une partie importante de l'enseignement. Guimbretière (2000 : 154) constate : « Jusqu'à présent, qui disait phonétique sous-entendait oral mais qui disait oral n'entendait pas nécessairement phonétique. » Elle ajoute dans le même article (p. 155) : « La phonétique est l'ossature de la communication mais en constitue également le fondement. »

Dans la littérature « didactique » à disposition des formateurs et des enseignants du FLE, il est possible de constater des différences dans l'approche ; certains auteurs se concentrent uniquement sur le communicationnel et parmi les objectifs ne mentionnent pas la prononciation. Dans le chapitre *Le développement de l'aptitude d'expression orale*, Shiels (1996 : 146–147) parle longuement de la tolérance et de la correction des erreurs mais ne mentionne pas explicitement les erreurs de prononciation. Courtillon (2003 : 49) propose une grille que l'on pourrait utiliser « si l'on veut mettre en avant l'excellence linguistique », donc, une évaluation focalisée plutôt sur la forme qui se décompose en trois parties : aspects linguistiques (phonétique, lexique, grammaire), aspects pragmatiques (fluidité, registres, enchaînements) et aspects expressifs (intonation, figure de style, gestuelle). Nous pouvons constater que les éléments de la compétence phonologique apparaissent dans les trois groupes de critères. Dans leur ouvrage Manuel de formation pratique pour le professeur de FLE, plus récent, Bertocchini et Constanzo (2008 : 101–115) élaborent une partie consacrée à la production orale mais ne mentionnent pas la prononciation. Tagliante pourtant, dans ses deux ouvrages (2005 et 2006), accorde beaucoup plus d'importance à la correction phonétique. Dans *La classe de langue* (2006 : 122–126), elle propose des exercices de discrimination auditive pour faire le diagnostic concernant les points problématiques et propose des pistes pour le traitement d'une mauvaise prononciation des consonnes et des voyelles (pour relacher et tendre une consonne ou une voyelle, pour obtenir un contexte grave ou aigu, pour fermer, tendre ou ouvrir une voyelle). Elle s'inspire de la méthodologie verbo-tonale et ajoute qu'"il serait vivement souhaitable que l'enseignant qui n'a pas eu de formation initiale à la correction phonétique puisse observer

un collègue qui pratique la méthodologie verbo-tonale." Dans *L'évaluation et le Cadre européen commun* (2005), elle propose des fiches pédagogiques pour la discrimination de certains phonèmes français : entre [y] et [u], entre [b] et [v], [ɑ̃] et [ɛ̃], [z] et [s], [ø] et [e] et [õ], [ɑ̃].

Finalement, Cuq et Gruca (2002 : 175) constatent que « les tendances actuelles pour la correction phonétique relèvent, comme pour les autres domaines, de l'éclectisme et le matériel pédagogique croise les points forts des divers courants qui ont marqué les différents dispositifs méthodologiques. Dans tous les cas, la phonétique ne constitue plus un moment de la classe ; elle est intégrée à chaque phase et est contextualisée. »

3 QUEL FRANÇAIS ENSEIGNE-T-ON EN CLASSE ?

Pour revenir à notre titre, quel est l'accent français que l'on vise en classe de FLE, qu'est-ce que la norme en classe de langue ? Detey et Racine (2012) citent Lyche qui affirme qu'il n'existe pas un français mais des français, chaque système possédant sa propre dynamique. Ils ajoutent que « les réponses aux questions « Quel français – natif – enseigner ? » et « Quel français – non natif – accepter ? » semblent aujourd'hui davantage plurielles qu'elles ne l'étaient auparavant ». Ils citent aussi Borrell et Billières (1989) qui ont passé en revue différentes méthodes de FLE et ont catégorisé les contenus, selon l'accent utilisé, en trois catégories– le « français parisien cultivé », le « français standard » et le « français standardisé », notions peut-être dépassées aujourd'hui, même si ce genre de catégorie rassure les enseignants qui sont, comme le constate Weber (2010 : 171), « imprégnés de l'effet normatif du langage (on ne va tout de même pas enseigner un mauvais français ?) », tout en plaidant pour l'élargissement de la vision normative: « L'élargissement de la normativité discursive en didactique du français langue étrangère nous semble donc indispensable. Notre proposition est de tendre vers une plus grande proximité réflexive entre *fonctionnement du langage* et de la *langue*, entre *grammaticalité de l'oral* et *grammaticalité de l'écrit,* entre *prononciation fantasmée* et *parole sociale* » (ibid.: 176). Selon elle, « il ne peut y avoir qu'une norme mais des normes qui sont à voir en tant que processus » (ibid.: 177).

Le CECRL reste assez vague sur ce sujet puisqu'il propose une (seule) grille pour la description et l'évaluation de la compétence phonologique en langue étrangère (2001 : 92) :

C2	Comme C1
C1	Peut varier l'intonation et placer l'accent phrastique correctement afin d'exprimer de fines nuances de sens.
B2	A acquis une prononciation et une intonation claires et naturelles.
B1	La prononciation est clairement intelligible même si un accent étranger est quelquefois perceptible et si des erreurs de prononciation proviennent occasionnellement.
A2	La prononciation est en général suffisamment claire pour être comprise malgré un net accent étranger mais l'interlocuteur devra parfois faire répéter.

A1	La prononciation d'un répertoire très limité d'expressions et de mots mémorisés est compréhensible avec quelque effort pour un locuteur natif habitué aux locuteurs du groupe linguistique de l'apprenant/utilisateur.

Les descriptions de la compétence sont assez générales et l'accent est mis sur le sens. Les auteurs mettent pourtant en garde et avertissent :

> De nombreux phonèmes sont transférables sans problème de L1 en L2. Dans d'autres cas, il se peut que les allophones en question soient différents de façon notable. D'autres phonèmes de L2 peuvent ne pas exister en L1. S'ils ne sont pas acquis ou appris, cela entraînera un déficit d'information et des malentendus peuvent surgir. Quels sont les risques de fréquence de ces malentendus et leur gravité ? Quelle priorité doit-on leur donner ? Ici, la question de l'âge ou de la période d'apprentissage pendant laquelle il est préférable d'apprendre ces différences se complique du fait que la fossilisation des erreurs est très importante au niveau phonétique. Rendre conscient des erreurs phonétiques et désapprendre des comportements devenus automatiques peut être beaucoup plus coûteux (en temps et en efforts) lorsque l'apprenant s'est approprié une forme approximative par rapport à la norme que cela l'aurait été au début de l'apprentissage, notamment précoce. (CECRL 2001 : 104–105)

4 LES DIFFICULTÉS DES APPRENANTS SLAVES DE FRANÇAIS LANGUE ÉTRANGÈRE

Il n'y a, à notre connaissance, pas de recherches faites sur les problèmes phonétiques des locuteurs slovènes apprenant le français comme langue étrangère. Nous pouvons cependant citer deux recherches, faites sur des publics parlant une langue slave : la recherche de Desnica Žerjavić (2006), menée sur un public croate et la recherche de Kamber et Skupien-Dekens (2010), menée, entre autres, sur un public russophone.

La recherche de Desnica Žerjavić a été faite sur 16 locuteurs[1], divisés en quatre groupes : deux groupes d'enseignants de français à la faculté (groupes 1 et 2), un groupe d'étudiants de troisième année de la même faculté (groupe 3) et un groupe, constitué de Croates vivant à l'étranger (sans formation linguistique) (groupe 4) (Desnica Žerjavić 2006 : 96). Les erreurs les plus persistantes sont les suivantes :

1 Concernant les recherches dans le domaine de la phonétique et de la phonologie en langue étrangère, Detey et al. (2010 : 1289) citent Gut (2009) qui résume les limitations des études en 6 points : 1) limitation des aspects étudiés, focus sur une ou deux structures seulement, 2) peu d'études sur les interrelations entre les différentes structures du système, 3) peu d'études sur l'impact des facteurs non linguistiques, 4) faible nombre de sujets participants, 5) focus sur la parole de laboratoire, 6) focus sur l'anglais L2. Petit nombre de sujets participants est aussi le point faible des deux études citées dans l'article.

	% du groupe 1	Nº d'erreurs par groupe			
voyelles		1.	2.	3.	4.
œ̃	8,33	6	7	43	53
õ	3,17	8	16	30	49
ɑ̃	1,78	6	7	171	227
ɛ	0,88	7	8	70	62
ɔ	0,83	3	6	17	32
y	0,41	1	5	95	137
i	0,17	1	3	49	90
consonnes					
-D	4,17	3	1	6	6
semi-voyelle ɥ	3,57	3	7	24	55
-Z	1,19	1	17	43	60
semi-voyelle w	1,19	1	1	8	28
-T	0,64	1	-	9	15
semi-voyelle j	0,55	1	-	11	25

(Desnica Žerjavić 2006 : 113–114)

Nous pouvons constater que les erreurs où il y a le plus de différences entre le public linguistiquement formé (enseignants et étudiants en langue) et le public de non linguistes concernent la prononciation des voyelles [ɑ̃] et [y]. La différence est moins visible ailleurs. Desnica Žerjavić ajoute que parmi 3221 erreurs détectées, seulement 179 (5,56 %) sont distinctives et pourraient donc induire une différence de sens.

La deuxième étude est faite par Kamber et Skupien-Dekens (2010) et porte plus sur la remédiation que sur le diagnostic. Les chercheurs ont travaillé pendant deux semestres avec 50 étudiants de nationalités différentes – dont 7 russes – auxquels ils ont proposé des « parcours fléchés de phonétique », exercices ciblés pour améliorer la prononciation. Le parcours fléché pour les russophones, basé sur le diagnostic fait au préalable, comportait les sons suivants : y/u, e/ɛ, e/ə, e/ɛ/ə, ə caduc, ɔ/œ, ø/œ, o/ɔ, ɑ̃/ɔ̃/ɛ̃, j/w/ɥ, R en finale, R intervocalique, consonne + R, s/z. Les résultats du groupe des russophones sont surprenants ; tandis que les autres groupes progressent de façon relativement linéaire (sauf les Espagnols qui font plus de fautes dans le test 2 que dans le test 1 mais le nombre de fautes diminue nettement dans le test final), les étudiants russophones « sont les seuls à augmenter globalement leur nombre de fautes au cours de leur année d'exercice de la phonétique du français » (Kamber/ Skupien-Dekens 2010).

Les deux études se focalisent sur un nombre considérable de sons ; la recherche de Desnica Žerjavić porte sur la reconnaissance des sons, tandis que Kamber et Skupien-Dekens travaillent plutôt sur la discrimination des paires de sons. Les

recherches ne sont pas vraiment comparables ; dans la première, il s'agit d'un diagnostic (qu'on pourrait utiliser pour proposer des pistes d'amélioration) tandis que dans la deuxième il s'agit d'un suivi de progression, fait avec des exercices élaborés sur la base d'un diagnostic. Le point faible des deux études est le nombre réduit de participants.

Pour le contexte slovène, les seules données à notre disposition sont celles de Stare (2010) qui a réalisé, pour son mémoire de maîtrise, une enquête parmi 32 enseignants slovènes de français. Une des questions posées portait sur l'évaluation des difficultés des élèves slovènes concernant la prononciation en français. Les points critiques, soulevés par les enseignants, sont les suivants (dans l'ordre décroissant): prononciation des voyelles nasales [ɔ̃] / [ɑ̃] / [ɛ̃], distinction entre [y] et [u], distinction entre [ø] et [œ], liaison, intonation et rythme, prononciation de [ɥ], prononciation de [R], distinction entre [e] et [ɛ], prononciation de [ʒ] final.

Nous pouvons constater que dans les trois recherches, menées sur des publics slaves, certaines catégories se recoupent, surtout la prononciation des nasales, la distinction entre [y] et [u], la distinction entre [ø] et [œ], la distinction entre [e] et [ɛ], la prononciation de [R]. L'erreur qui n'apparaît que dans l'enquête menée auprès des enseignants slovènes est la prononciation de [ʒ] final que les locuteurs slovènes ont souvent tendance à prononcer comme [ʃ].

Notre expérience enseignante et les observations dans les collèges et lycées slovènes confirment plus ou moins les observations des enseignants de l'enquête mentionnée ci-dessus. Les erreurs les plus persistantes dans le contexte slovène sont probablement la prononciation de [y] et [u] (le [y] étant souvent prononcé à l'anglaise [ju]), la prononciation des nasales (surtout la discrimination entre [ɑ̃]/[ɛ̃]), la prononciation de [ø] et de [œ] (trop peu labialisés) et, parmi les consonnes, le [ʒ] final. La prononciation de [R] pose moins de problèmes ainsi que d'ailleurs la discrimination entre [e] et [ɛ], mentionnée dans l'enquête, la mauvaise prononciation dans ce cas est peut-être influencée par les dialectes slovènes. Tout reste, bien sûr, au niveau subjectif d'observation et devrait être confirmé par des recherches ciblées.

5 LES CONTENUS PHONÉTIQUES DANS LES MANUELS DE FLE

Nous avons choisi d'analyser 6 manuels plus récents, deux par tranche d'âge des destinataires : enfants, adolescents et grands adolescents/adultes. Nous allons essayer d'évaluer les contenus proposés et voir s'ils correspondent aux besoins des apprenants slovènes.

Les manuels analysés sont *Zig zag* (paru en 2010, destiné aux enfants à partir de 7 ans), *Tip top* (2010, pour les enfants de 9 à 11 ans), *Adosphère* (2011, pour les adolescents), *Décibel* (2015, pour les adolescents), *Version originale* (2009, pour les grands adolescents/adultes) et *Saison* (2014, pour les grands adolescents/adultes). Trois des manuels sont publiés chez Didier et un respectivement chez Hachette, CLE International et Difusión/Maison des langues.

Les contenus « phonétiques » trouvés dans les manuels sont les suivants :

Zig zag (2010)	-identifier une structure rythmique -frapper le rythme dans les mains	identifier [a]	identifier [o]	identifier [ɔ̃]	identifier [ɑ̃]	discriminer [y] [u]			
Tip top (2010)	intonation(1) [y] [u]	liaisons	[e] [ə] élision	[ɔ̃] [ɑ̃]	intonation(2) consonnes finales	[ʃ] [ʒ] syllabes			
Adosphère (2011)	-consonnes muettes en fin de verbe -liaisons avec les articles indéfinis -liaisons sujet-verbe	-liaison avec les articles -question intonative	discrimination féminin/masculin des adjectifs [ɔ̃]	identifier [ɑ̃]	[y] [u]	[ɑ̃] [œ̃]	[ɛ] [œ]	[v] [b]	[s] [z]
Décibel (2015)	-le rythme de la phrase -sensibilisation aux intonations interrogative et exclamative	[ɔ̃] je dis, je lis: ai [ɛ]	[y] [ʁ] je dis, je lis: ou [u] e muet	[ʒ] [ɑ̃] je dis, je lis: au, eau [o]	[ø] [z] s final la liaison	[v] [œ] je dis, je lis: oi [wa]	[ɛ̃] [ʃ] je dis, je lis: in, ein, ain, aim [ɛ̃]		
Version originale (2009)	-alphabet phonétique -prononciation de quelques voyelles	opposition masculin/féminin des adjectifs	intonation [ə] [e]	prononciation des verbes à une base au présent	[ə]	féminin des adjectifs de couleur	voyelles nasales	liaisons	
Saison (2014)	-alphabet syllabation et accentuation -groupes rythmiques et accentuation	-consonnes finales muettes -e muet -un/une	le/les liaisons au pluriel	[y] [eu] [e] enchaînement consonantique	[o] [ɔ̃] enchaînement vocalique	intonation interrogative [a] [ɑ̃]	[i] [y] [s] [z]	[y] [u] [r] [l]	e muet [ɛ] [ɛ̃]

La partie, destinée à la prononciation, est intitulée « Phonétique » dans tous les manuels, sauf dans *Décibel* où elle porte le titre « Sons et graphies ».

Les différences sont plus visibles dans les approches choisies et les contenus proposés :

- dans *Zig zag*, les auteures se concentrent surtout sur l'identification des sons (parmi ces sons, il y a aussi les nasales [ɔ̃] et [ɑ̃]). Dans la dernière unité, le thème proposé est la discrimination entre [y] et [u]. L'accent est aussi mis sur la structure rythmique du français (dans la première unité, les enfants frappent le rythme de leurs mains) ;
- dans Ti*p top*, l'auteure accorde beaucoup d'importance à l'intonation (le thème apparaît dans 2 unités), à la discrimination [y]/[u], [e]/[ə], aux nasales [ɔ̃] [ɑ̃] et aux consonnes [ʃ] [ʒ]. Ce qui nous paraît intéressant, c'est la mention de l'élision ; un thème qui selon notre recherche (2016) pose beaucoup de problèmes aux collégiens slovènes ;
- les auteures d'*Adosphère* travaillent beaucoup sur la relation graphie/phonie, surtout dans les premières unités (p. ex.: consonnes muettes à la fin des verbes). Elles proposent aussi des exercices pour l'identification et la prononciation des voyelles nasales (c'est parmi les manuels étudiés le seul manuel où apparaît encore la voyelle [œ̃] et non pas [ɛ̃]). Dans les deux dernières unités, les thèmes proposés portent sur la discrimination des [v]/[b] et [s]/[z], des sons plus problématiques pour les hispanophones ;
- dans *Décibel*, nous pouvons constater un penchant assez marqué pour les thèmes portant sur l'opposition graphie/phonie ; les auteures proposent, à partir de la 2e unité, la rubrique « je dis, je lis » où elles présentent les différentes graphies possibles pour les sons [ɛ], [u], [o], [wa] et [ɛ̃]. Elles proposent aussi de travailler sur le rythme et l'intonation (interrogative et exclamative), sur les trois nasales (séparément), [y], [ø], [œ] et les consonnes [ʒ], [ʃ] et [ʀ] ;
- dans *Version originale*, nous pouvons observer une approche assez éclectique, plutôt grammaticalisée (p. ex. prononciation des verbes à une base au présent, féminin des adjectifs de couleur). Le manuel contient relativement peu d'exercices consacrés à la prononciation ;
- parmi les manuels analysés, *Saison* est celui où le plus de place est accordée à la phonétique ; une des auteures s'est spécialement consacrée à cette partie. Parmi les thèmes proposés, nous pouvons aussi trouver la syllabation, l'accentuation, l'intonation, un travail sur les groupes rythmiques, sur les liaisons et l'enchaînement vocalique et consonantique. Les sons sont travaillés par opposition : [y]/[eu]/[e], [o]/[ɔ̃], [a]/[ɑ̃], [i]/[y], [s]/[z], [y]/[u], [r]/[l], [ɛ]/[ɛ̃]. C'est aussi le seul manuel qui contienne un Précis phonétique.

Nous pouvons constater que, dans la plupart des manuels, la phonétique occupe une place à part, mais que le nombre d'exercices proposés n'est probablement pas suffisant. Il s'agit de manuels généralistes, couvrant les problématiques des locuteurs de langues différentes. On pourrait être d'accord avec Lauret (2011: 31) qui dit que « l'enseignant ne peut attendre de maîtrise de la prononciation que s'il met en place

un réel entraînement phonétique. Les quelques exercices, proposés souvent à la fin des unités des manuels généralistes, ne suffisent pas. »

Lauret (ibid.: 33) attire l'attention sur le fait que « l'écrit orthographique en français nuit considérablement à la performance en prononciation ; il semble toujours préférable de commencer par entendre et répéter, avant d'être exposé au code orthographique (les correspondances graphie-phonie étant d'une grande complexité en français) ». La question qui se pose à ce sujet est la suivante : comment le faire en utilisant les manuels comme ceux que nous avons analysés ? Selon Detey et Racine (2012), les manuels imposent souvent leur norme comme modèle à suivre.

Les exercices proposés pour un entraînement phonétique dans les manuels analysés ne vont sûrement pas suffire et certains ne seront pas pertinents pour le public slovène. Les enseignants devront donc les compléter par des exercices plus ciblés qu'ils trouveront dans des manuels spécialisés. L'idéal serait de « travailler sur l'individu, sur ses propres difficultés, en un mot de faire un travail à la fois plus précis, plus ciblé et sans nul doute alors plus efficace ». (Guimbretière 2000 :160).

Une autre possibilité, plus utile et plus pertinente car plus focalisée sur la communication, est l'utilisation renforcée des documents authentiques. Detey (2010 : 162) se demande : « La présentation de documents authentiques, qui sert d'ancrage aux approches actuelles de l'enseignement du FLE ne requiert-elle pas que l'on fasse écouter les voix réelles de la francophonie aux apprenants sans toutefois – et j'insiste là-dessus – leur demander de les imiter ? » Weber (2010 : 181) conclut : « Enfin, accorder une plus grande place à l'oralité avec des arrêts pédagogiques sur la base de séquences de films, ou d'extraits où est materialisée la parole est aussi un support à la compréhension, source intéressante d'observation ou d'analyse comme représentation la plus authentique possible de l'échange. » Detey (2010 : 162) propose l'utilisation des corpus oraux, par exemple le PFC[2], qui, selon lui, « pourraient offrir aux apprenants un input phonétique dont les caractéristiques pourraient assurer un apprentissage phonologique plus résistant à la variation d'une part et à l'influence des représentations orthographiques d'autre part, sous réserve, naturellement, d'être employé de manière adéquate. » L'utilisation de documents authentiques rendrait l'enseignement aussi plus motivant pour les élèves.

6 CONCLUSION

Durant les dernières décennies, l'enseignement des langues a beaucoup changé, surtout grâce au développement technique et à tous les supports que nous avons à notre portée. Pourtant, l'enseignement de la phonétique n'a pas beaucoup évolué, comme le constate Wachs (2011 : 195) : « il semble pourtant que ni l'approche communicative, ni les progrès en informatique n'aient changé le statut de l'enseignement de la prononciation : il reste le parent pauvre de la didactique des langues. »

La question principale reste, à notre avis, comment faire croître l'intérêt pour améliorer sa prononciation et surtout comment responsabiliser l'apprenant et lui faire comprendre que passer le message n'est souvent pas suffisant ; il faut aussi que ce message

2 Le projet PFC (Phonologie du Français Contemporain) : http://projet-pfc.net/

soit (plus ou moins) correct et bien prononcé. Nous sommes convaincus que, dans le contexte slovène, il faudrait plus insister sur une bonne prononciation, puisque le système de la langue maternelle n'induit pas de blocages significatifs.

Parmi les pistes possibles, Wachs (2011 : 193–195) propose de s'inspirer des approches pédagogiques « originales », comme le silent way ou la suggéstopédie, faire engager le corps et la voix (utiliser par exemple les techniques vocales théâtrales) ou travailler avec la chanson. Selon elle, la chanson est moins une approche qu'un support qui a de nombreux avantages. Nous ne pouvons qu'être d'accord avec cette recommandation car, ayant beaucoup utilisé la chanson dans les classes, nous avons constaté que c'est un bon moyen de reconnaissance et de mémorisation des sons et du rythme ainsi qu'un excellent moyen de motivation.

Lauret (2011 : 32) propose, entre autres, d'initier/entretenir la motivation, le plaisir de la prononciation, définir et faire comprendre les objectifs phonétiques, susciter les questions, informer, organiser le travail phonétique et responsabiliser l'apprenant[3]. Travailler sur la perception en même temps que sur la production, en utilisant des documents authentiques, serait tout aussi recommandable.

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3 Pour l'exemple de responsabilisation de l'apprenant, voir Degardin (2014).

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Résumé

« VOUS AVEZ UN PETIT ACCENT »: ENSEIGNEMENT DE LA PRONONCIATION AUX APPRENANTS SLOVÈNES DE FRANÇAIS LANGUE ÉTRANGÈRE

Dans le présent article, l'auteure se propose de passer en revue les concepts concernant l'enseignement de la prononciation en classe de Français langue étrangère ainsi que quelques recherches – faites sur des publics slaves – qui pourraient se montrer utiles pour le contexte slovène. Dans la dernière partie, elle analyse les contenus phonétiques de six manuels généralistes, utilisés en Slovénie : deux pour enfants, deux pour adolescents et deux pour grands adolescents/adultes. Elle part de l'hypothèse que les contenus proposés ne suffisent pas toujours pour remédier aux difficultés de prononciation des locuteurs slovènes, hypothèse qui est finalement confirmée. Elle conclut en donnant quelques pistes pour un enseignement plus authentique.

Mots-clés : la prononciation, la classe de FLE, les manuels de FLE, public slovène

Abstract

"YOU HAVE A BIT OF AN ACCENT" – TEACHING PRONUNCIATION TO SLOVENIAN LEARNERS OF FRENCH AS A FOREIGN LANGUAGE

The objective of the article is to explain some of the concepts used in teaching pronunciation in French classes, French being a foreign language. Some studies are presented which could be potentially important for the Slovenian context since they have been carried out with speakers of Slavic languages. The paper also focuses on the analysis of chapters in textbooks that deal with phonetics. Six textbooks are analysed: two for children, two for adolescents, and two for adult students. The hypothesis under consideration is that the contents do not always prove to be appropriate for the elimination of mistakes made by Slovenian speakers of French, which is proved to be correct. Finally, some suggestions for more effective teaching of pronunciation are made.

Keywords: pronunciation, French classes, textbooks of French as a foreign language, Slovenian speakers of French

Povzetek

»IMATE MALO NAGLASA« – KAKO SE FRANCOSKA IZGOVARJAVA POUČUJE V SLOVENSKEM KONTEKSTU?

V članku avtorica najprej razjasni nekaj konceptov s področja poučevanja izgovarjave pri pouku francoščine kot tujega jezika. Nadaljuje s predstavitvijo določenih raziskav, narejenih z govorci slovanskih jezikov, ki bi lahko bile pomembne

za slovenski kontekst. V zadnjem delu članka se posveti analizi tistih vsebin v učbenikih, ki se nanašajo na fonetiko. Analizira šest splošnih učbenikov, po dva za otroke, adolescente in odrasle. Izhaja iz hipoteze, da vsebine niso vedno ustrezne za odpravljanje napak, ki jih imajo pri izgovarjavi slovenski govorci francoščine, kar se izkaže kot resnično. V zaključku predlaga nekaj rešitev za bolj osmišljeno poučevanje izgovarjave.

Ključne besede: izgovarjava, pouk francoščine, učbeniki francoščine kot tujega jezika, slovenski govorci francoščine

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ALGUNOS ASPECTOS FONÉTICO-FONOLÓGICOS DEL ESPAÑOL DE COLOMBIA

1 INTRODUCCIÓN

El objetivo del presente artículo es presentar algunos de los aspectos fonético-fonológicos característicos del español de Colombia tomando como base los estudios de Flórez (1963), Montes Giraldo (1982a, 1982b, 1985a, 1985b, 1996), Calderón Rivera (Montes Giraldo/Rivera 1991), Patiño Roselli (1983, 2004) entre otros, así como la división dialéctica de Montes Giraldo en dos grandes dialectos, llamados superdialectos, el costeño y el central andino. La primera parte sitúa el español de Colombia dentro del marco más amplio llamado español de América, destacando algunos hechos históricos referentes al estudio del español en Colombia. La segunda parte se centra en la presentación de algunos fenómenos fonético-fonológicos en Colombia compartidos o no con el resto de América. Se presta especial atención a la presencia o ausencia de la aspiración de la *s* implosiva y a la pérdida de la *d* intervocálica, a la ampliación del yeísmo en la zona bogotana y la consiguiente pérdida gradual de la distinción entre la lateral alveolar sonora y la fricativa palatal sonora, lo que nos hace pensar en una posible dilución progresiva de la frontera entre los dos dialectos debido, probablemete, a factores tanto lingüísticos como sociales (cambios en el plano socio-económico, fenómenos migratorios, mayor frecuencia de contactos entre los hablantes de diferentes regiones, etc). También se analizan algunos rasgos fonéticos del palenquero como elemento importante de la variedad lingüística colombiana. A fin de corroborar esos hechos se procede, a continuación, a un breve análisis de textos orales de hablantes colombianos procedentes de tres regiones diferentes: los departamentos de Antioquia (y su capital Medellín), Tolima y Casanare.

2 OBSERVACIONES GENERALES

Suele llamarse español de Colombia a las modalidades del español de ese país. Desde una perspectiva más amplia es una de las modalidades del español de América, denominación que en el pasado suscitó discusiones sobre la unificación y reunificación cultural e idiomática de los países hispánicos. Hoy día no se plantean dudas sobre la existencia de una lengua única con multitud de variantes. Con palabras de Manuel Alvar (1996: 4): «[…] no hay un español de España frente a otro de América, sino que cada uno de esos dominios está vinculado a motivos geográficos, sí, pero también sociales o históricos […]». La unidad de la lengua está asegurada opina Humberto López Morales (1996: 19):

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> Ello no significa, sin embargo, que estemos ante una lengua homogénea. Hay fenómenos lingüísticos de variado tipo que distinguen unos dialectos de otros. Si el español es un gran complejo dialectal, una enorme parte de él se encuentra en suelo americano, que alberga, aproximadamente, al noventa por ciento de todos los hispanohablantes del mundo.

Hispanoamérica es un mosaico dialectal en el que las zonas dialectales quedan por deslindar (López Morales 1996: 20) a pesar de numerosos intentos realizados a partir de finales del siglo XIX[1]. Sin embargo, las investigaciones fonéticas y fonológicas que han avanzado los últimos decenios –entre otras destacan las investigaciones de Montes Giraldo– permiten dividir, *grosso modo*, el continente en dos zonas: la marcada por el debilitamiento del consonantismo final, especialmente -s, -n, -r, y el fortalecimiento del vocalismo (el Caribe, amplias zonas de México y América Central, las costas de casi toda América del Sur) (López Morales 1996: 24) y la que no presenta debilitamiento consonántico. La tradicional división dialectal en tierras bajas y tierras altas[2] parece coincidir con esta repartición aunque quedan muchos fenómenos por explicar[3].

3 EL ESPAÑOL DE COLOMBIA

El español de Colombia es una variedad de la lengua española compuesta por un conjunto de hablas regionales con rasgos específicos de pronunciación, entonación y vocabulario, principalmente, que permiten su clara diferenciación frente a otras modalidades nacionales.

3.1 División dialectal

Rufino José Cuervo (1844–1911), filólogo colombiano, fue uno de los primeros en estudiar el español de América como variedad de la lengua. Guitarte consideraba a Cuervo fundador del español de América como disciplina propia en la filología romance (en Aleza Izquierdo/Enguita Utrilla 2002: 40) que, sin embrago, en aquel entonces, se inclinaba por la posibilidad de fragmentación del español en lenguas separadas.

El filólogo y dialectólogo colombiano Montes Giraldo[4] propuso la división del diasistema del español general en dos variedades o superdialectos, el continental interior A y el costero insular B «sobre la base de una norma principal, el tratamiento de la -s implosiva o posvocálica a la que se agregan otras normas como la neutralización de -r, -l, la -n velar final, etc.» (Montes 1996: 135). Admite, sin embargo, que «tal vez

1 Véase Quesada Pacheco, Miguel Ángel (2014) para más datos sobre las diferentes divisones dialectales de Hispanoamérica.

2 En 1920 Max Leopold Wagner propuso una división entre las tierras altas o interiores y las tierras bajas o costeras. En 1962, Ramón Menéndez Pidal desarrolló con mayor detenimiento la teoría expuesta por Wagner con respecto a esta oposición (en Quesada Pacheco 2014: 292). Véase también Fontanella de Weinberg (1992), López Morales (1998) y Sánchez Méndez (2003), entre otros.

3 Véase también Aleza Izquierdo y Enguita Utrilla (2002: 28–36) y Montes Giraldo (1982a: 123–124).

4 José Joaquín Montes Giraldo (1926–2014), experto en dialectología hispanoamericana, uno de los redactores y editores del Atlas lingüístico y etnográfico de Colombia, obra cumbre de la dialectología hispánica.

fuera más conforme establecer una diferenciación geográfica, colocando a un lado la mitad septentrional de la Península y las tierras altas de América, y, por otro lado, la mitad meridional de la Península, Canarias y las tierras bajas del continente americano» (*ibídem*). A base de esta bipartición dialectal del español distingue dos grandes superdialectos en Colombia: el costeño y el central andino, divididos a su vez en dialectos.

La norma básica que caracteriza al superdialecto costeño (el costeño caribe y el costeño pacífico) es la aspiración o pérdida de la -s, además de otras normas, como el mantenimiento del carácter sordo de la s intervocálica, neutralización de la -r y -s implosivas, la -n final articulada como velar, el yeísmo, etc.

> El fenómeno básico que se toma en consideración para la división mencionada es el de la suerte de la -s (implosiva o posvocálica), que se pronuncia como aspiración (-h) o se reduce a cero en la superzona 'meridional' y que ocasiona una serie de alteraciones en los sistemas fonológico y morfológico, como el ensordecimiento de b, g (que pueden llegar a [ɸ] o [x]: lah ɸáka, raxúŋo) o el reordenamiento de los esquemas de plural (lo(h) papá = los papás, etc.). Pero al lado de este fenómeno caracteriza también ampliamente a esta superzona la neutralización de /r/ y /l/ en posición implosiva, o su reducción a cero fonético en final de palabra (forma, argo, calne, vielne, vendaba, canta, vení, etc., etc.) y la pronunciación como velar (-ŋ) de la –n final de palabra. Menos diferenciador, por presentarse también en zonas que no ofrecen los rasgos anteriores, es la frecuencia del mantenimiento de la antigua h: mojo, bijao, jarían, jozar, jico, etc. (Montes Giraldo 1982b: 30–31).

El dialecto costeño caribe abarca toda la costa atlántica (sus respectivos departamentos) más los departamentos de Cesar, Norte de Santander y parte de los Llanos Orientales. El rasgo que lo distingue del costeño pacífico (que comprende los departamentos de la costa del Pacífico) es un rasgo morfosintáctico, el tuteo como trato de confianza que se usa en el costeño caribe, a diferencia del voseo que predomina en el costeño pacífico (Montes 1996: 136–138).

El superdialecto central andino (el andino occidental y el andino oriental) se caracteriza por la conservación de la -s implosiva como sibilante, la identidad fonológica de -r y -l, etc. El dialecto andino occidental (Antioquia, excepto su parte septentrional, Caldas, Quindío, Risaralda y partes de Tolima y Valle del Cauca) se caracteriza por el yeísmo, mientras que el andino oriental (departamentos de Nariño, Cauca –menos la zona costera–, Huila, parte de Tolima, Cundinamarca, Boyacá, Santander y parte de Norte de Santander) mantiene la oposición /ʎ/: /ʝ/. (Montes 1996: 140). Además de los dos superdialectos existen zonas interdialectales, como los llanos Orientales, en las que se van mezclando los fenómenos de los dos superdialectos, sobre todo en las zonas limítrofes.

3.2 Fenómenos consonánticos

3.2.1 El seseo

El seseo es general para todas las modalidades americanas y, por tanto, también colombianas. Es un fenómeno de desfonologización con la pérdida de la oposición de dos

fonemas fricativos sordos, el alveolar /s/ y el interdental /θ/. En gran parte de Colombia prevalece la realización predorsal aunque se registra también la apicoalveolar en tierras altas del interior de Colombia (Aleza Izquierdo/Enguita Utrilla 2002: 68), en Antioquia, por ejemplo, es una apicoalveolar cóncava (NGLEFF 2011: 191). En algunas zonas del centro noroeste de Colombia puede aparecer hasta una variante de la apicoalveolar cóncava que sería una apicoalveolar redondeada según se cita en la NGLEFF (2011: 192). En algunas hablas del español de América aparecen realizaciones sonoras de /s/ en forma de [z] no solo en posición implosiva de la s ante consonante sonora (NGLEFF 2011: 192).

3.2.2 Procesos de variación de la /s/

El debilitamiento de la /s/ en coda silábica es uno de los fenómenos más destacados en los procesos del español tanto en España como en Hispanoamérica y depende de varios factores relativos a la posición final de la /s/. Los resultados del debilitamiento pueden ser la asimilación, la aspiración y la elisión y frecuentemente influyen sobre la duración de la vocal precedente (NGLEFF 2011: 197, 199). En Colombia se registran diferentes realizaciones fonéticas de /s/. En los dos dialectos costeños de Colombia, el caribe y el pacífico, conviven la aspiración (con los fenómenos concomitantes de asimilación) y la pérdida de la -s en posición de coda silábica, o posición implosiva. El superdialecto costeño presenta diferentes alófonos debilitados de la sibilante implosiva (aspiración o pérdida): [ˊejo̯oh], ellos; [ˊmiɦmo], mismo; [ˊse̯i̯ ˊpeso], seis pesos. Aparece también un ensordecimiento de las consonantes sonoras: [lahˊɸaca], las vacas o una asimilación como [ˊokko], osco, [ˊwikki], whisky[5].

En el superdialecto central andino, tanto occidental como oriental, normalmente se mantiene la -s implosiva y se articula como sibilante tensa. Sin embargo, Montes Giraldo señala que en materiales de habla semiespontánea recogidos en Bogotá en 1992 se manifiesta una sorprendente frecuencia de aspiración de /s/ tanto implosiva como también intervocálica [nehe˝sita], *necesita*, [nohˊotɾos] o [noˊhotɾoh] *nosotros* (Montes 1996: 138). Según la NGLEFF (2011: 203) en las hablas centrales andinas en Colombia la -s llega a elidirse [noˊotɾos] *nosotros.*

3.2.3 El yeísmo

El yeísmo es un fenómeno ampliamente difundido por todo el mundo hispanohablante, consiste en la fusión de dos fonemas, el líquido lateral palatal /ʎ/ y el fricativo palatal sonoro /ʝ/ a favor de este último y la consecuente pérdida de la distinción fonológica entre /ʎ/ y /ʝ/. «Se generan así dos subsistemas de consonantes sonantes laterales, el sistema distinguidor de /ʎ/ y /ʝ/, que comprende los segmentos /l/ y /ʎ/, y el subsistema yeísta, con una única sonante lateral, el segmento /l/» (NGLEFF 2011: 194). Gran parte de Colombia posee el subsistema yeísta (todo el superdialecto costeño es yeísta) y, en general, el resultado es la fricativa palatal sonora [ʝ], pero en algunas zonas (p.ej. la costa del Pacífico de Colombia) se realiza como africada [dʒ] (Aleza Izquierdo/Enguita Utrilla 2002: 74) o inclusive como fricativa prepalatal [ʒ] en el sur de Antioquia y en

5 Los ejemplos son de NGLEFF 2011: 201 y de Montes (1996: 136)

el centro del norte de Santander. La articulación más general es la de palatal fricativa sonora: *calle* [ˊkaʝe], *hoyo* [ˊoʝo]. En algunos casos se realiza como cero fonético *gallina* [gaˊina] (Montes 1996:137). Hay casos de realizaciones aproximantes o elisiones en la costa atlántica como [anʲaˊeɾ], anteayer (NGLEFF 2011: 224).

En Colombia el dialecto andino occidental conoce el yeísmo, mientras que en el andino oriental se mantiene la oposición /ʎ/ y /ʝ/ excepto Bogotá donde, según las investigaciones de Montes Giraldo (1985b: 122–125), esta oposición se va perdiendo[6]. Se conserva, no obstante, «a lo largo de la cordillera Oriental, desde Nariño en los límites con el Ecuador hasta la frontera con Venezuela» (Montes 1996: 140)[7].

3.2.4 Las /b/ /d/ /g/ intervocálicas

En general es frecuente el debilitamiento de las consonantes /b/ /d/ /g/ intervocálicas que normalmente se realizan como variantes fricativas. En el costeño caribe como también en algunas zonas del dialecto andino se registra el debilitamiento y la pérdida de las oclusivas intervocálicas. Sin embargo, aparece también la situación contraria, es decir, la conservación de las sonoras intervocálicas en el habla de las tierras altas del interior de Colombia y la región amazónica (Aleza Izquierdo/Enguita Utrilla 2002: 77). Montes (1996: 138) menciona que en el costeño pacífico la -r ocupa el lugar de la -d probablemente por influencia de las lenguas africanas: *maruro* por maduro, *moro* por modo etc. El debilitamiento o desaparición de la -d- intervocálica es general en el dialecto costeño y en partes del andino.

3.2.5 Mantenimiento y neutralización de las líquidas

La posición silábica favorece un proceso de debilitamiento con diferentes manifestaciones fonéticas de la lateral alveolar /l/. El resultado puede ser el rotacismo, cambio de modo de articulación que consiste en la transformación de [l] en [ɾ] en la coda silábica como [ˊaɾɣo] por *algo* que se registra en la costa y en el norte de Colombia o inicios silábicos complejos como [ˊfraʊ̯ta] por *flauta* en Bogotá (NGLEFF 2011: 229). Las consonantes róticas pueden experimentar un cambio de su articulación que conduce a la lateralización, es decir, [ɾ] > [l] que aparece esporádicamente en las zonas costeras: [ˊkalne] *carne*, [ˊpʲelna] *pierna* (NGLEFF 2011: 257). Este fenómeno de lateralización está estigmatizado en casi todas las zonas. Montes Giraldo (1985b: 25) señala el fenómeno opuesto [l] > [ɾ] en el español hablado en Manizales como una disimilación (p. ej. *karkular* por calcular). En las regiones costeras colombianas se produce también el fenómeno de geminación de la consonante siguiente *Cat-tagena* para Cartagena (Aleza Izquierdo/Enguita Utrilla 2002: 82).

3.2.6 La consonante fricativa velar sorda

El fonema fricativo linguovelar sordo /x/ tiene dos alófonos principales en español: uno linguovelar sordo [x] «presente en el español de España (dialectos del Norte peninsular) y en varias regiones de Hispanoamérica» y otro aspirado [h], «faríngeo o laríngeo, muy

6 Véase también Orduz Navarrete (2013).

7 Véase también Salcedo Salinas (2005) y Donadío Copello y Salcedo Salinas (2005), entre otros.

extendido en zonas andaluzas, canarias e hispanoamericanas» (Vaquero de Ramírez 1996: 43). Montes Giraldo y Calderón Rivera realizaron un estudio acústico sobre la articulación colombiana de la fricativa linguovelar sorda /x/ y llegaron a la conclusión de que la colombiana no difiere de la peninsular en la articulación sino en el grado de intensidad, en la abertura y la sonorización.

> No creemos apresurarnos al aseverar que una de las tipificaciones que diferencian marcadamente /x/ española de /x/ hispanoamericana radica en el mayor grado de intensidad de la primera frente a la nuestra, débil la colombiana, acentuadamente fuerte la ibérica, y no su punto de articulación que a veces es el mismo o con muy leves diferencias fonoarticulatorias. (Montes Giraldo/Calderón Rivera 1991: 422)

También se presentan elisiones en posición inicial como [la´ẹnte], *la gente*, en algunas zonas (Vaquero de Ramírez 1996: 44–45).

3.2.7 La consonante labiodental fricativa sorda

La realización bilabial [ɸ] del fonema labiodental fricativo sordo /f/ es frecuente en los estilos de habla relajada y es muy difundido por Colombia. En las hablas cuidadas de Bogotá y sus alrededores es más frecuente la realización labiodental [f]. Según la NGLE FF (2011: 187) [f] y [ɸ] pueden alternar en un mismo lugar y están parcialmente relacionadas al registro del habla. El fenómeno de posteriorización desemboca en una aspiración o una velarización de la f- en el habla de hablantes poco escolarizados: [´hu̯erte], *fuerte*; [ha´mosa], *famosa* (ibídem 189).

3.2.8 Las consonantes nasales

Las consonantes nasales en posición de coda silábica sufren procesos de debilitamiento, como la velarización de la nasal alveolar implosiva al final de sílaba o palabra que se ha registrado en las costas y la región amazónica de Colombia, es decir, en el superdialecto costeño p. ej. [´beŋ] *ven,* [´teŋ], *ten*, [´diseŋ], *dicen*. En el Valle y en el Cauca (zonas pertenecientes al superdialecto central andino) aparece una bilabial en posición final de palabra: [popa´ɟam] *Popayán*, [´pam] *pan* (Patiño Rosselli 2004: 5).

3.3 Fenómenos vocálicos

El español de Colombia mantiene el sistema fonológico de cinco vocales /a/, /e/, /i/, /o/, /u/. Las vocales se clasifican por el grado de abertura, o sea, el modo de articulación, y el lugar de articulación. Las vocales son fonéticamente *normales* (Vaquero de Ramírez 1996: 11), es decir, las posteriores o velares /u, o/ son siempre labializadas, mientras que la central /a/ y las anteriores o palatales /e, i/ son deslabializadas. La realización de /e/ y /o/ tiende a ser abierta especialmente en sílaba acentuada y libre en la zona costeña, sobre todo, la vocal media palatal /e/ > [ɛ] p. ej. *se* [sɛ]. El debilitamiento de la -s implosiva o su elisión tienen como consecuencia la abertura de la vocal precedente [mu´xeɾɛ] *mujeres* (NGLEFF 2011: 96).

Las vocales colombianas son fonológicamente orales, la nasalización no tiene valor fonológico. Sin embargo, en algunos casos, en el español de Colombia (costa caribeña, por ejemplo) como en otras zonas hispanoamericanas, aparece el fenómeno de nasalización cuando se elide la consonante nasal implosiva en final de palabra, p. ej. [ˊentɾã] *entran*; [taˊpõ], *tapón* (NGLEFF 2011: 103). En este caso la nasalización obtendría valor fonológico. Por otra parte, Yolanda Rodríguez Cadena (2008: 139) ha comprobado el fenómeno de nasalización de fonemas vocálicos en codas con final nasal en español (*ratón* [raˊtõ]) en contacto con el ticuna, lengua de una comunidad indígena en la región de la Amazonía Meridonal, en la zona en la que convergen el Perú, Colombia y Brasil. También registra la nasalización de las vocales en contacto con consonante nasal y casos de propagación de la nasalidad [buenõ aũ nõ lõ entĩendo], bueno, aún no lo entiendo (ibídem p.152) en español en contacto con el damana en la sierra Nevada de Santa Marta.

Los estudiosos del español de Colombia destacan una tendencia general a la diptongación de los hiatos, como por ejemplo [ˊtjatro] *teatro*, [ˊtwaja] *toalla*.

3.4 El palenquero

En Colombia existen dos comunidades de hablantes que utilizan criollos: el palenquero, lengua criolla de base española hablada en el Palenque de San Basilio cerca de Cartagena de Indias, y el bendé o criollo sanandresano de base inglesa hablado en las islas de San Andrés y Providencia. En el palenquero, el vocalismo no tiene rasgos que se desconozcan en español. Al igual que en otras zonas colombianas e hispánicas se observa, según Patiño Rosselli (1983: 90–92), la tendencia de la vocal /o/ a cerrarse en [u]: *kunosé* (conocer), *kume* (comer), *mau* (mano), *bunitu* (bonito). Asimismo la /e/ tiende a cerrarse en /i/: *kaí* (caer), *sigí* (seguir), *bitilo* (vestido). La mayoría de los fenómenos consonánticos son también compartidos por la variedad costeña del español (Montes 1996: 147), como la geminación [ˊakko] *arco*; el paso de -dr- a -gr- [ˊkwagro] *cuadro*; el paso de r a l [kolaˊso] *corazón,* [ˊtiela] *tierra*; la aspiración o pérdida de -s implosiva [dehˊpwɛ] *después.* El rasgo fonético desconocido por el español es la prenasalización, al que se le asigna origen africano (*nda*, dar; *ngande* grande).

3.5 Análisis de textos narrados

Este apartado presenta algunos resultados de los análisis realizados de tres textos orales de hablantes colombianos procedentes de los departamentos de Antioquia[8] (de su capital Medellín), Tolima[9] y Casanare[10].

8 El departamento de Antioquia se encuentra en el noroeste de Colombia.

9 El departamento de Tolima está en el centro-occidente del país. Su territorio se inscribe en la región andina colombiana y la cuenca del río Magdalena.

10 El departamento de Casanare se extiende en el piedemonte oriental de la Cordillera Oriental de los Andes colombianos. Pertenece a la región de los Llanos Orientales.

En las grabaciones analizadas de PRESEEA[11], en el relato del informante de Medellín, capital del departamento de Antioquia, destaca muy especialmente el debilitamiento de la consonante oclusiva linguodental sonora /d/ que en la mayoría de los casos se pierde en posición intervocálica o final: ganao (ganado), luchao (luchado), pelao (pelado), empapao (empapado), descartao (descartado), too (todo), puee (puede), facilida (facilidad). En algunos casos menos frecuentes el debilitamiento se realiza con una fricativización de la oclusiva /d/: [meðeˊʤin] o [meðeˊ͡jin] para la capital Medellín. El yeísmo es constante con una tendencia a pronunciar la africada [ʤ] en lugar de la palatal [͡j], como p.ej. [ˊʤamen], llamen; [ˊoʤa], olla; [reˊpoʤo], repollo etc. Aparece la elisión de la oclusiva linguovelar sorda en posición implosiva: [espeˊtakular] por espectacular; y a veces la aspiración de la fricativa labiodental sorda en posición inicial y delante de diptongo en palabras como afuera, fuera. Esta zona (Antioquia) pertenece, según Montes Giraldo (1996: 140–141), al dialecto andino occidental (paisa o antioqueño) del superdialecto central andino.

El departamento de Tolima, de donde era la informante, una damnificada de Armero[12] que relata la tragedia sufrida por la ciudad y sus gentes cuando erupcionó el volcán Nevado de Ruiz, está a caballo entre los dos dialectos, el andino oriental y el andino occidental. También en este relato aparece el yeísmo con una producción africada o fricativa palatal: [aʤuˊðo], ayudó; [ʤoˊßia], llovía; [aˊʤi] allí, [ˊeʤos] ellos, [caˊ͡jo] cayó, [cabeˊ͡jeɾa] cabellera. Se siente la presencia de nasalizaciones como [deˊxãßan], dejaban; [imãxiˊnaR], imaginar; y aspiraciones como [ˊmihmo], mismo; [noˊhotɾos], nosotros; [ˊbamoh], vamos.

Según Montes (1996: 140) los Llanos Orientales tienen carácter interdialectal. La zona extrema (las localidades Orocué, Arauca, Trinidad) es claramente costeña. Los rasgos costeños se diluyen a medida que se avanza hacia el occidente. Con el análisis de la narrativa oral presentada por un hablante natural del municipio de Trinidad en el departamento de Casanare[13], de la zona de los Llanos Orientales de Colombia, se muestra algunos elementos fónicos típicos de esta zona dialectal. El relato analizado se refiere a una bola de fuego que el informante vio en uno de sus viajes y que considera como un alma en pena[14]. En el relato está presente el yeísmo. La /s/ se manifiesta como fricativa sorda apicoalveolar en posiciones inicial [sen̪ˊtjẽn̪de] se entiende, intermedia [aˊsi] así y final [ˊlus] luz. En la mayoría de los casos, sin embargo, la -s en posición implosiva se aspira o desaparece: [dehˊpwɛ] después, [ma] más, [soˊesɛ], soeces, [ẽn̪ˊtõnhɛ],

11 (MEDE_H11_001 PRESEEA (2014–): *Corpus del Proyecto para el estudio sociolingüístico del español de España y de América*. Alcalá de Henares: Universidad de Alcalá. [http://preseea.linguas.net]. Consultado: 1/5/2016.

12 Grabación de la señora Odilio Olarte Molina, damnificada de Armero, realizada después de la tragedia de Armero por los investigadores del Seminario Andrés Bello, Instituto Caro y Cuervo, Bogotá, Colombia para el análisis lingüístico y literario, 1986.

13 Casanare es uno de los más extensos departamentos de la República de Colombia. Mide 44.490 km^2 pero es escasamante poblado (según el censo de 2005 tiene 295.353 habitantes). Se encuentra en la región de los Llanos Orientales Colombianos, en el oriente de Colombia.

14 Para más detalles sobre el informante y el relato véase Markič (2008).

entonces. Destaca también la fuerte fricativización de la /d/ en posición intervocálica que a menudo desaparece: [ɟoˊixe] yo dije; [ˊbolaeˊɸweɣo] bola de fuego; [ˊtoa] toda. Como rasgo del dialecto de esta región destaca también la nasalización, posiblemente debido a un relajamiento articulatorio general. En el relato hay inflexión de la [-e-] en [-i-], como en [se miˊiβa], y casos de asimilaciones al sonido posterior [iˊtorja] historia; [t͡ʃípjaɳdo] chispiando; [ˊmima] misma. La realización bilabial [ɸ] del fonema labiodental fricativo sordo /f/ es frecuente en este texto oral: [ˊbolaeˊɸweɣo] bola de fuego; [seaɸirˊmo] se afirmó; [seˊɸwe], se fue.

4 CONCLUSIÓN

«El gigantesco mosaico dialectal que es el mal llamado español de América», en palabras de Juan M. Lope Blanch (en Aleza Izquierdo/Enguita Utrilla 2002: 16), es un sintagma que se suele emplear para el conjunto de las hablas hispanoamericanas, de las variedades diatópicas, diastráticas y diafásicas que «son instrumento de comunicación al otro lado del Atlántico, con peculiaridades que pocas veces poseen validez general en todas ellas, aunque contrastan con las realizaciones de España, sobre todo con las del norte y del centro peninsulares» (ibídem). El español de Colombia se ubica dentro de este mosaico lingüístico y es, a su vez, otro mosaico. Montes Giraldo (1996), siguiendo la línea de Menéndez Pidal, defiende una bipartición dialectal del español válida para el español en general y, dentro de este marco, también para Colombia. El breve análisis fonético de los textos narrados por hablantes provenientes de tres diferentes regiones pertenecientes a variantes dialectales de los dos mencionados superdialectos colombianos parece corroborar las investigaciones realizadas en este campo destacando, sin embargo, algunos fenómenos "mixtos" que nos llevan a concluir que los límites entre dialectos no son, ni pueden ser, concluyentes sino que las variantes se expanden y se influyen mutuamente. Por otro lado, este breve estudio ha intentado demostrar la gran variedad del español en territorio colombiano en el nivel fónico, abrazando solamente algunos fenómenos fonético-fonológicos dejando de lado otros, como p. ej. los fenómenos prosódicos (acentuales, rítmicos y entonativos) de las variedades del español colombiano, que son tema para otro estudio, o las influencias de las lenguas autóctonas sobre el español de Colombia aun poco analizadas pero cuyo estudio está ampliándose considerablemente[15].

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15 Para este tema véase Palacios (2008); Pachón, Correa y Benavides (1997) y otros.

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Abstract

PHONETIC AND PHONOLOGICAL ASPECTS OF COLOMBIAN SPANISH

Colombia is, after Mexico, the second country with the largest number of Spanish speakers in the Hispanic world. More than 90% of their 48 million inhabitants are native speakers of Spanish. Colombian Spanish is a grouping of the varieties of Spanish spoken in this country with specific pronunciation, intonation and, especially, vocabulary. The article deals with some relevant phonetic and phonological aspects of Colombian Spanish, some of them shared with other Hispano-American regions, for instance the *seseo* (/θ/ merges with /s/), and other phenomena present in two Colombian superdialects as defined by Montes Giraldo (the presence or absence of implosive -s or the loss of intervocalic -d-). The article also deals with the extension of *yeísmo,* a merger of /ʎ/ into /ʝ/, in the area of Bogotá and with some phonetic phenomena of the creole language *palenquero*. The analysis is based on examples from spoken Colombian Spanish corpus PRESEEA and other sources.

Key words: Colombian Spanish, Phonetics, *seseo, yeísmo*, dialects

Povzetek
NEKATERE FONETIČNO FONOLOŠKE ZNAČILNOSTI
KOLUMBIJSKE ŠPANŠČINE

Kolumbija je za Mehiko druga država z največ špansko govorečih, saj je španščina materni jezik za veliko večino njenih več kot 48 milijonov prebivalcev. Kolumbijska španščina je inačica španščine, ki jo tvorijo vrsta regionalnih govorov z določenimi značilnostmi pri izgovarjavi, intonaciji in še posebej besedju. Namen pričujočega prispevka je predstavitev pomembnejših glasoslovnih značilnosti kolumbijske španščine, ki si jih deli z ostalo špansko govorečo Ameriko (npr. *seseo*), kot tudi nekaterih značilnih pojavov dveh glavnih kolumbijskih dialektov (npr. aspiracija -s na koncu zloga ali besede, izguba -d- v položaju med samoglasnikoma). Članek opozarja tudi na širitev tako imenovanega *yeísma* na področju Bogote in posledično postopno stapljanje /ʎ/ v /ʝ/. Prav tako so analizirane nekatere fonetične značilnosti kreolskega jezika *palenquera*. Analiza sloni na virih ustne kolumbijske španščine, kot je korpus PRESEEA.

Ključne besede: kolumbijska španščina, fonetika*, seseo, yeísmo*, dialekti

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ADAPTING THE FREIBURG MONOSYLLABIC WORD TEST FOR SLOVENIAN

1 INTRODUCTION

Speech audiometry is one of the standard methods used to diagnose the type of hearing loss and to assess the communication function of the patient by determining the level of the patient's ability to understand and repeat words presented to him or her in a hearing test. For this purpose, the Slovenian adaptation of the German tests developed by Hahlbrock (1953, 1960) – the Freiburg Monosyllabic Word Test and the Freiburg Number Test – are used in Slovenia (adapted in 1968 by Pompe). These tests employ the use of phonetically balanced lists of existent monosyllabic words with the aim of determining the percentage of correctly repeated words at different sound intensity levels.

In this study we focus on the Freiburg Monosyllabic Word Test for Slovenian, which has been criticized by patients in personal communication during and after testing, as well in the literature for the unequal difficulty and frequency of the words, with many of extremely rare or even obsolete items (Podlesek et al. 2007; Podlesek et al. 2008).[1] As part of the patient's communication function is retrieving the meaning of individual words by guessing, the frequency of use of an individual word is crucial. The less frequent and consequently less familiar words (e.g. *dac*, *golč*, *irh*, *lat*, *raš*, *sak*) do not contribute to a reliable testing result, as they cannot be guessed to the same extent as more familiar words (e.g. *bor*, *klop*, *pas*, *sin*). We therefore propose that the test be adapted by identifying and removing less familiar words from the list and supplementing them with phonetically similar words so as to preserve the phonetic balance of the list.

The paper is organized as follows. In Section 2 we provide a general description of the Freiburg test. In Section 3 we proceed to identify less familiar words in the Freiburg

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1 In Podlesek et al. (2007) the authors criticize the Freiburg test from 1968 on the same grounds as in this paper, but with a different purpose. The authors eliminate a list of less familiar words, keeping only 135 items, and develop a different method of testing (the so-called staircase method), which, however, did not succeed in everyday clinical use due to a difficulty in comparing its results to those of the Freiburg test and the data from the relevant literature.

test, while in Section 4 we describe the procedure of replacing the less familiar words with more familiar ones that we extract from various Slovenian corpora, the result being a new version of the Freiburg test. Section 5 discusses some remaining issues and Section 6 concludes the paper.

2 FREIBURG MONOSYLLABIC WORD TEST FOR SLOVENIAN

2.1 Speech Audiometry

Classic pure-tone audiometry assesses only basic deficits in auditory function. The audiometric curve determines the detected threshold levels (in dB) for selected frequencies. To evaluate the clinical impact of hearing loss, disorders affecting auditory pathways after the cochlea, and especially the rehabilitation of severe hearing loss and deafness with cochlear implants, it is necessary to use various other audiometric tests, such as sound localization, auditory discrimination, auditory pattern processing and speech audiometry. Speech audiometry assesses the understanding of words presented at a specified loudness in different conditions (Musiek et al. 2011).

A speech recognition test consists of the patient's listening and repeating words, with the clinician marking a tally of right and wrong responses. The percentage of test words correctly repeated by the patient is referred to as the speech recognition score (also the word recognition score or speech discrimination score). The percentage of the correctly repeated words depends on more than just the patient's speech recognition ability; it also depends on the patient's familiarity with the words and on the intensity at which the words are presented. The graph of performance – intensity function shows how the patient's speech recognition performance depends on the intensity of the test materials (Gelfand 2009).[2] Different diseases of the middle, inner ear and central auditory pathways result in different speech recognition scores and different performance – intensity curves, despite having similar pure tone audiometry curves (van Dijk et al. 2000). The speech recognition score is essential in evaluating and comparing the rehabilitation effects achieved with the use of classical hearing aids or cochlear implants (De Riuter 2015).

In the Department of Otorhinolaryngology, University Medical Centre Ljubljana, speech is normally assessed with the Slovenian adaptation of the German tests developed in Hahlbrock (1953, 1960), and the Freiburg Number Test. The Slovenian adaptations of these were developed in Pompe (1968). After the patient is fitted with a hearing aid, a 20% improvement of the speech recognition score represents a significant therapeutic effect. However, if the score of a patient fitted with a standard hearing aid is lower than 50% of the highest possible score, then this approach is not a satisfactory rehabilitation method, and a cochlear implant should be considered. Moreover, a constantly improving score following the rehabilitation of a cochlear implant user is proof of a well-selected speech rehabilitation method and the effective work of the related language specialists.

2 There exists speech audiometry in which sentences (rather than words) are used, but the correct repetition is in such tests much more influenced by other factors than in speech audiometry with monosyllabic words. Consequently, the results among the tested groups are not comparable.

2.2 Freiburg Monosyllabic Word Test

In this paper we focus on the Slovenian adaptation of the Freiburg Monosyllabic Word Test (henceforth Freiburg Test-SLO-1968). This consists of 281 monosyllabic nouns in the nominative singular form (nine of them repeated). In the test, a patient listens to phonetically balanced columns of 28–29 monosyllabic Slovenian words in a quiet environment, with the stimulus intensity level increased in each consecutive column. A speech audiogram with the percentage of correctly repeated words at each level serves as the basis for estimating the patient's communication function.

The Freiburg Test-SLO-1968 is phonetically balanced in the sense that the columns consisting of 28 or 29 words contain equal numbers of different letters (with rare exceptions), as can be seen in Table 1. For example, in each column there are nine occurrences of the letter "a," seven of the letter "o," four of the letter "g" and so on.[3]

Table 1: Letter frequency in the Freiburg Test-SLO-1968 in test columns 1 through 10.

	a	**b**	**c**	**č**	**d**	**e**	**f**	**g**	**h**	**i**	**j**	**k**	**l**	**m**	**n**	**o**	**p**	**r**	**s**	**š**	**t**	**u**	**v**	**z**	**ž**
1	9	2	2	3	5	4	1	4	3	5	1	4	5	3	4	7	6	10	8	1	8	2	4	1	1
2	9	2	1	3	5	4	0	4	3	4	1	4	5	3	4	7	5	10	9	1	8	2	4	1	1
3	9	2	1	3	5	4	0	4	3	4	1	4	6	3	4	7	5	10	9	1	8	2	3	1	1
4	9	2	1	3	6	5	0	4	3	4	1	4	5	3	4	7	6	11	9	1	7	2	4	1	1
5	9	2	1	3	5	4	1	4	3	4	1	4	5	3	4	7	4	10	9	1	8	2	4	1	1
6	9	2	1	3	5	4	0	4	3	4	1	4	6	3	4	7	5	10	9	1	8	2	3	1	1
7	9	2	1	3	5	5	1	4	3	4	1	4	6	3	4	7	5	10	10	1	9	2	3	1	1
8	9	3	1	3	5	4	0	4	3	4	1	4	6	3	4	7	4	11	9	1	8	2	3	1	1
9	9	2	1	3	5	4	0	4	3	4	1	4	4	3	4	7	5	10	9	1	8	2	5	1	1
10	9	2	1	3	6	5	0	4	3	4	1	4	4	3	5	7	5	11	9	1	8	2	5	1	1

The comparison of the occurrence of individual letters in the test to the occurrence of individual letters in the Slovenian language, as established in Jakopin (1999), reveals that the distribution of letters broadly reflects that in the actual language (Table 2). For example, the letter "f," which is rarely found in the language, appears in only three columns, while "m" and "t" appear in all of them, as their frequency of occurrence is much higher. Moreover, the letter "a" occurs nine times in each column, which is consistent with it being one of the most frequently occurring letters in the language. However, some discrepancies can be observed, as for example, the letter "j" occurs almost five times less often in the test than in the language, while the letter "f" occurs three times more often in the test (despite it being present in only three columns).

3 In this paper we establish phonetic balance by referring to the letters in writing and not the actual sounds. See 5.1 for a discussion on the sound-letter relation.

Table 2: Letter frequencies in Slovenian literature (Jakopin 1999), in the Freiburg-SLO-1968, and the ratio between the two.

letter	Jakopin 1999 [%]	Freiburg-SLO-1968 [%]	ratio
a	10.5	8.9	0.85
b	1.9	2.1	1.07
c	0.7	1.1	1.64
č	1.5	3.0	2.00
d	3.4	5.1	1.51
e	10.7	4.2	0.40
f	0.1	0.3	2.69
g	1.6	3.9	2.40
h	1.1	3.0	2.81
i	9.0	4.0	0.45
j	4.7	1.0	0.21
k	3.7	3.9	1.07
l	5.3	5.1	0.97
m	3.3	3.0	0.90
n	6.3	4.0	0.64
o	9.1	6.9	0.76
p	3.4	4.9	1.46
r	5.0	10.1	2.03
s	5.1	8.9	1.76
š	1.0	1.0	0.99
t	4.3	7.9	1.82
u	1.9	2.0	1.05
v	3.8	3.7	1.00
z	2.1	1.0	0.47
ž	0.7	1.0	1.52

3 IDENTIFYING LESS FAMILIAR WORDS IN THE FREIBURG TEST

The first step in our project is to identify and eliminate the less familiar words that appear in the Freiburg Test-SLO-1968. As there is no existing data based on the patient judgements of the words' frequencies, we refer to Podlesek et al. (2007), the corpus of written Slovenian Gigafida, and the corpus of spoken Slovenian GOS.

3.1 Podlesek et al. (2007)

Podlesek et al. (2007) gathered data on the frequency of the Freiburg test words in everyday spoken language, as judged by the native speakers of Slovenian. The frequency was assessed by a sample of 141 students who were given written lists of the Freiburg test words and asked to assess the frequency of occurrence of each in their everyday lives (i.e. how often they hear it on TV, radio, or use it in spoken language) by using

a 5-point Likert scale (0 – never, 5 – very often). The information gathered is one of our criteria in providing a list of less familiar words. For a word to be considered less familiar, we set the threshold at the average score 1 or less (on a scale from 1 to 5) in the Podlesek et al. (2007) survey of native speakers. There are 65 such words, listed in (1).

(1) *ar*, *ceh*, *cep*, *cis*, *čad*, *črm*, *dac*, *dis*, *dož*, *drač*, *dreg*, *dvir*, *gat*, *gnjat*, *golč*, *golk*, *golt*, *gož*, *grod*, *groh*, *hrst*, *il*, *irh*, *jad*, *jam*, *karp*, *krc*, *krm*, *krn*, *lat*, *loč*, *lug*, *mig*, *mik*, *nrav*, *or*, *pah*, *pard*, *plač*, *polk*, *ral*, *raš*, *rig*, *ril*, *rovt*, *sak*, *sekt*, *ser*, *sip*, *skrak*, *sna*, *sned*, *snet*, *soj*, *speh*, *spuh*, *stog*, *stud*, *svest*, *sviž*, *šeh*, *tvar*, *urh*, *vat*, *žad*

A vast majority of the words in (1) are completely unknown to contemporary native speakers of Slovenian, many of them being archaic terms relating to agricultural practices, animals and plants.

3.2 Reference Corpora

Several reference corpora for the Slovenian language are freely accessible at the internet portal of the project "Communication in Slovene" (http://eng.slovenscina.eu/korpusi). A natural choice for determining the frequency of spoken words would be the corpus of spoken Slovenian GOS (for details on the corpus see Zemljarič Miklavčič et al. 2009; Verdonik et al. 2013). The corpus contains transcripts of approximately 120 hours of speech found in various situations: radio and TV shows, school lessons and lectures, private conversations between friends or within the family, work meetings, consultations, conversations in buying and selling situations. All speech is transcribed in two versions – with pronunciation-based spelling and with standardized spelling. The corpus contains around one million words. However, the drawback of the corpus is that it is still relatively small and many of the words that we would expect in a corpus of Slovenian are not found there, or have a very low number of hits (*ceh* "guild"– 0, *noj* "ostrich"– 0, *volk* "wolf"- 4).

A much larger corpus than GOS is Gigafida (an upgrade of Fidaplus), which contains about 1.2 billion words (see Erjavec and Logar Berginc (2012), Logar Berginc and Krek (2012) and Logar Berginc et al. (2012) for more information on this corpus). The corpus has been automatically lemmatized and includes morphosyntactic descriptions (part-of-speech, gender, case, number). The option "advanced search" enables the user to determine the part-of-speech of the word (noun, verb, adjective) as well as choose whether to search only for a particular form or for all forms of a word. This search engine is to some extent successful in eliminating the erroneous hits when the part-of-speech is specified. For example, when searching for the word *teč* "run-supine", where the option noun is chosen, the search gives no hits, which is expected, as *teč* is a verb. Yet, with *smuč* – in an advanced search specified for noun – the hits are all the noun, verb and adjective occurrences, as the search engine provides hits with the meaning "pike perch" (nouns) as well as those with the meaning "ski" (verbs and adjectives, e.g. *smuč. skoki* "ski jumps"). Even narrowing down the search to only the form *smuč* does not help – we still get the adjectival hits related to the meaning "ski". This is probably due to the incorrect connection between the lemma *smuč* "pike

perch", present in the *Slovar slovenskega knjižnega jezika* (*Dictionary of Standard Slovenian*, hereafter *SSKJ*), and all the forms *smuč* – the ones relating to the meaning "pike perch" and those relating to the meaning "ski" (since the two are homonymous).

Reference corpora should thus be used with caution when establishing the frequency of individual words. Regardless of which corpus is used, special attention should be paid to the content of the results. There are numerous cases where an unlimited search in a corpus provides a very high number of hits for a certain word, but it then turns out that the vast majority of these are not for the word checked, but for some other, more familiar word that is homonymous with the word in question.

3.3 Final List of the Less Familiar Words in the Freiburg Test-SLO-1968

We now return to establishing the final list of the words to be eliminated from the Freiburg Test-SLO-1968, combining the results in Podlesek et al. (2007) and data from corpora available to us. First, there are some additional words that need to be considered for elimination from the Freiburg Test-SLO-1968, despite the fact that their frequency was not judged as below 1 in Podlesek et al.'s (2007) native speakers' test:

(2) *dna*, *hot*, *lišp*, *smuč*, *teč*

Let us begin with the words *hot* and *smuč*, which score 1.06 and 1.07, respectively, in the test for native speakers. According to *SSKJ*, the two words have the meanings *hot "*an interjection for a horse" and *smuč "*pike perch", which are words that are rarely used by speakers in their everyday lives. Both words were also erroneously recognized as frequent in the corpora, as a careful examination revealed that all or a great number of their hits are not for the actual dictionary meanings of the two words, but rather refer to the borrowed combination *hot dog* (for *hot*) and to the adjective *smučarski*, abbreviated as *smuč* "ski" (as described in the previous section)[4].

A different problem occurs with the words *dna* and *teč*, which score 1.06 and 1.13, respectively. One of these is not a nominative singular noun, as is true of other nouns in the Freiburg Test-SLO-1968 (*dna*), while the other is not a noun at all (*teč*).[5] An examination of the hits in the corpora reveals that the ones for *dna* are actually the plural nominative or accusative forms of the word *dno* "bottom" or the acronym DNA, and the hits for *teč* are the supine forms of the verb *teči* "to run". Finally, we decide to replace the word *lišp,* as it is marked archaic in *SSKJ* as well as in *Slovenski pravopis* (*Slovenian Orthography 2001*).

As to the list in (1), we decide to keep the eight words in (3) in the test, basing our decision on our native speakers' intuition as well as the frequency of these words in the Gigafida corpus, where we consider only genuine hits.[6]

4 The word *hot* has no hits in GOS, while *smuč* has 30 hits, but none for its original meaning.

5 In GOS the two have 1 and 0 hits. They are not found in the forms *dna* and *teč* in SSKJ. The reason why the two words appear in the test at all is thus unclear.

6 We employ various strategies to ensure that the hits are indeed the words we are searching for and not homonymous words with different meaning. For some words, we use an advanced search,

(3) *ar*, *ceh*, *gnjat*, *gož*, *polk*, *soj*, *urh*, *vat*

Table 3: Corpus data for *ar*, *ceh*, *gnjat*, *gož*, *polk*, *soj*, *urh*, and *vat*

	Gigafida (accessed April 4, 2016)
ar "are"	1494 (for *arov*)
gnjat "ham"	965
gož "grass snake"	347
polk "regiment"	3711
urh "toad"	101
vat "watt"	2229
ceh "guild"	3648
soj "shine"	6274

The final list of 62 words that we decide to remove from the Freiburg test list is shown below:

(4) *cep*, *cis*, *čad*, *črm*, *dac*, *dis*, *dna*, *dož*, *drač*, *dreg*, *dvir*, *gat*, *golč*, *golk*, *golt*, *grod*, *groh*, *hot*, *hrst*, *il*, *irh*, *jad*, *jam*, *karp*, *krc*, *krm*, *krn*, *lat*, *lišp*, *loč*, *lug*, *mig*, *mik*, *nrav*, *or*, *pah*, *pard*, *plač*, *ral*, *raš*, *rig*, *ril*, *rovt*, *sak*, *sekt*, *ser*, *sip*, *skrak*, *smuč*, *sna*, *sned*, *snet*, *speh*, *spuh*, *stog*, *stud*, *svest*, *sviž*, *šeh*, *teč*, *tvar*, *žad*

4 CONSTRUCTING THE FREIBURG TEST-SLO-2016

The next step is supplementing the words in (4) with more familiar words so as to preserve the letter frequencies in each column of the original test (Table 1). We begin by building the database of possible replacements (Section 4.1) and proceed to finding the optimal ones (Section 4.2).

4.1 Constructing the Database of Possible Replacement Words

To construct the database of possible replacements for the words in (4) we again refer to the corpora. For this purpose, we use the GOS and ccGigafida corpora, as they have XML sources available. The ccGigafida is ten times smaller than its base corpus Gigafida, and was made by random paragraph selection. The full Gigafida is unfortunately not available with its source, and ccGigafida is currently one of the largest freely available corpora of Slovenian (cc stands for the Creative Commons-Attribution-NonCommercial license).

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where we specify the gender, thus eliminating the homonymous results (e.g. *polk* "regiment-masculine" is homonymous with *polk* "polka dance-feminine/plural/genitive"). For others, where this approach does not work, we search for a particular form of the word. For example, with the word *ar* "are" we search for *arov* "are-plural/genitive", as *ar* "are-singular/nominative" mostly gives completely unrelated hits (acronyms, *ara* "downpayment", etc.).

The database of monosyllabic singular nouns from GOS and ccGigafida was constructed by first extracting the lemmas of all nouns (by searching for the lemmas with the XML msd tag "S*", where * represents any number of any characters). We then extract all nouns with one vowel and all those that contain the sonorant *r*, but no vowel (as in these the schwa appears in pronunciation, but not in writing, e.g. *vrt* "garden"). The processing of the words in corpora was performed using Mathematica software (Wolfram Research), which has numerous built-in word-analysis tools. ccGigafida gives 21,942 hits and GOS 1,190. We then set the limit as to the number of hits for a word to be kept in the database; for the nouns from ccGigafida we set the limit at 200 hits, while we keep all the nouns from GOS, as this is a relatively small, but representative corpus of spoken language. We use both corpora because not all the words present in GOS have more than 200 hits in ccGigafida (e.g. *jež* "hedgehog" has eight hits in GOS and 187 in ccGigafida). This leaves us with 1,771 nouns from both corpora.

We then need to eliminate unsuitable words from this list. First, we exclude all the words that are acronyms or non-Slovenian words (*mr*, *oš*, *fahr*, *boys*, etc.). We then pass the words through another filter, as we need to eliminate colloquial or slang words (*šiht*, *starš*, *ksiht*, *kšeft*, *baš*, *dec*, etc.), the remaining English words (*show*, *what*, *fan*, *bird*, *pub*, etc.), acronyms (*dag*, *kfor*, *kud*, *pef*, *sos*, etc.), pronouns (*jaz*), proper names (*Ptuj*, *Cre*s, *Krim*, *Jan*, etc.), words potentially uncomfortable for the speaker to say (*seks*), vulgar words (*rit*, *fuk*, *drek*, etc.) and the words that have one vowel, but are in fact bisyllabic (*črka*, *brlog*, *črnec*, *prvak*, etc.). When this is completed, the remaining words have to be checked against the list in the Freiburg Test-SLO-1968, as we have to make sure not to use words already present in the test as replacements. The final list contains 348 monosyllabic nouns that are suitable as replacements.

4.2 Finding Optimal Replacements

The goal was to replace the less familiar words in each column of the Freiburg Test-SLO-1968 (4) with words from the list of suitable replacements that was derived from the corpora, while preserving the letter frequencies in each column. We rely on computational algorithms to find the combinations of words that satisfy the letter frequency criterion. This is a computationally demanding task, since for large word sets it is impossible to search through all possible combinations of words and test them for the desired criterion (for example, the number of all possible combinations of 10 words from a set of 348 words is on the order of 10^{20}). We therefore employ a version of a recursive back-tracking algorithm (Knuth 2016), where the paths that cannot lead to a solution are discarded from the search tree (e.g. if one is looking for two words with a total of five letters, there is no need to search through combinations of words with a larger number of letters).

To further speed up the computation, the words were first vectorized in a 25-dimensional space of letters according to their letter count, and the task was then solved in Matlab, which is optimized for efficient vector computation. As an illustration: if the alphabet contained only three letters, the unit vectors would be "a"= (1,0,0), "b"=(0,1,0), and "c"=(0,0,1), and the word "aaac" would, for example, correspond to a vector (3,0,1).

By using the optimized algorithm, we were able to find many combinations of the replacement words that exactly matched the letter count criterion for all columns except for column 5. For this column, where only two words had to be replaced (*ril* and *šeh*), the most suitable match differed by three letters.[7] Finally, the list of words that we propose for the Freiburg Test-SLO-2016 (shown in Table 4) was manually selected from the results returned by the algorithm.

Table 4: The proposed Freiburg Test-SLO-2016. The words that replaced less familiar words from the original test are marked with *. All the columns, except for column 5, exactly match the letter frequencies of the corresponding columns from the Freiburg Test-SLO-1968, while column 5 differs by three letters ("m," "v", "v").

1	2	3	4	5	6	7	8	9	10
lak	čir	jež	lan	bon	noj	tat	car	gož	niz
mah	paž	gad	kip	seč	sin	čer	rob	cev	del
vir	grm	piš	set	kad	mah	mož	kih	mir	laž
dlan	sla	beg	brc	srh	gon	ceh	sneg	voh	prag
prod	vid	svat	past	moč	dar	soj	vrat	trst	snov
tast	dom	park	zvon	dir	grah	film	žolč	disk	gumb
kljun	štor	molk	breg	cvet	most	kost	plen	vamp	tisk
sok	pest	stolp	dolg	bron	brat	svet	grom	trup	šport
grušč	noht	tun	smeh	gams	dvom	vrač	strah	vdih	vat
stvar	bran	hrast	trušč	vrag	plašč	strop	pad	zglob	blesk
lift	stran	stric	sad	pisk	kup	dan	zvrst	lord	strok
stih	log	post	vrisk	smrad	drozg	zdrob	blišč	pust	stan
gost	ključ	grič	slast	kal	strel	kramp	test	noč	dren
bog	vzrok	klop	punč	gnjat	glad	glas	vran	gnoj	urh
polh	rast	sod	vlak	tresk	vest	brst	drob	prah	dvor
bas	hrib	last	rep	vzor	slak	trg	mast	mag	kap
trn	svak	čoln	čast	slap	hči	nos	polk	krt	vrč
som	med	drn	nart	polž	polt	uk	nart	peč	os
zid	dvig	zob	maj	vrt	prst	svet	ud	bor	*ptič
reč	tank	dih	srd	list	čar	*sklad	*jed	sad	*cent
ep	pas	vas	pih	drog	ton	*čin	*kri	*član	*shod
*cmok	les	meh	vod	fant	ris	*dol	*laks	*rast	*čaj
*ranč	srp	ar	tla	čut	led	*ring	*las	*dres	*spis
*prt	*čas	*črv	rep	duh	bar	*dah	*hrt	*takt	*gram
*grad	*gol	*rang	*krom	pot	up	*greh	*čip	*sen	*rov
*dež	*hec	*dur	*hod	as	*cvek	*par	*gos	*sir	*gred
*prav	*top	*smer	*rog	*lev	*stik	*šal	*sum	*šal	*hlad
*vic	*trud	*tlak	*rod	*miš	*srž	*plus	*god	*kvas	*tram
*pes			*žig	*vrh		*tip			

7 There was one replacement differing only by two letters, *pirh* "Easter egg" and *fleš* "flash." We decide against this option, as it contains the letter "f," which occurs in the Freiburg Test-SLO-1968 three times more often than in the language, and adding another example with this letter would further increase its frequency of occurrence.

5 SOME REMAINING ISSUES

5.1 Phonetic Balance

In this paper we follow Pompe and establish phonetic balance by referring to the letters in writing and not the actual sounds pronounced in the words. The phonetic balance achieved in this way is an approximation of the phonetic balance that takes into account the actual pronunciation. To explain this we need to refer to the notion of phoneme and allophone, and their relation to the letters in the alphabet. A phoneme is standardly defined as the smallest sound unit that can be segmented from the acoustic flow of speech and which functions as a semantically distinctive unit: if a sound unit is replaced by another sound unit in a word and the two words have a different meaning, we define the two sound units as phonemes, e.g. in the English pair pet – bet, /p/ and /b/ are phonemes. Phonemes are abstract units, each phoneme representing a class of phonetically similar sound variants, the allophones, which are in a complementary distribution, depending on the phonological environment they appear in. For example, in English, the phoneme /p/ has an aspirated variant [p^h] at the beginning of the syllable (as in *pet*), but a non-aspirated variant [p] elsewhere (e.g. *loop*).

The writing systems that use letters can be organized in different ways – some of them tend to use a letter to denote a phoneme, others are closer to using a letter for an allophone. In Slovenian, the tendency is for one letter to represent one phoneme. For example, the letter "n" stands for the phoneme /n/, which has three allophones: [ŋ] when followed by a velar consonant as in *Anglija* "England;"; [n^j] (for some speakers) when followed by [j#] or [jC] as in *konj* "horse," *konjski* "horse-adj" and [n] elsewhere, e.g. *nos* "nose". However, there is no one-to-one correspondence among phonemes and letters, as there are more phonemes than letters (29 versus 25). In fact, there are many cases in which a single letter stands for two or more phonemes, e.g. the letter "e" can denote [e] in *led* "ice", [ɛ] in *žep* "pocket" or [ə] in *pes* "dog". Finally, for some phonemes, no letter is used: in many words that contain the consonant [r] and the vowel [ə], the vowel is pronounced, but not expressed in writing: *vrt* "garden," *smrt* "death," etc.

Referring to letters instead of phonemes or allophones is thus an approximation on two levels. First, the letter-phoneme correspondence is not always one-to-one, and second, even if it were, the phonemes themselves can refer to different sounds in pronunciation, i.e. their allophones (see /n/ above). Referring to the allophones in the phonetic balance calculation would require a much more thorough linguistic analysis. It would, for example also require considering all the phonological rules that take place in Slovenian, such as the final devoicing of voiced obstruents (the word *bog* "god" is pronounced the same way as *bok* "hip"), the changes that occur at word boundaries, and the like. Moreover, the search engines of the corpora are organized according to written and not spoken language, with the exception of GOS, which is too small to be the only representative corpus of the language (see also Section 3.2). As corpora such as ccGigafida are crucial for establishing the word frequencies and building the database of words that we need for adapting the Freiburg test, we use the letters as approximations of the actual sounds, bearing in mind the limitations that come with this.

Another issue relating to phonetic balance that remains a challenge in our future research is balancing the occurrence of individual letters in the test with the occurrence of individual letters in the Slovenian language. We mentioned in Section 2 that the distribution of letters in the Freiburg Test-SLO-1968 only broadly reflects the distribution in the actual language (with the latter established in Jakopin (1999)). The same is true for the Freiburg Test-SLO-2016, as the new test has been designed in such a way that it preserves the phonetic balance of the older version. A more exact balance still remains to be achieved.

5.2 Syllable Structure

The Freiburg Test-SLO-1968 and the Freiburg Test-SLO-2016 are balanced with respect to the number of letters in individual columns consisting of 28 or 29 words. A possible balance to consider in future work is that with respect to the types of syllables that appear in the language, some of which are exemplified in (5) with the related notation shown in (6).

(5) *um* "mind" → Vs
gol "goal" → oVs
ples "dance" → osVo
ring "ring" → sVso
sklad "fund" → oosVo

(6) Notation
V for vowel; spelled a, e, i, o, u
s for sonorant consonant; spelled m, n, v, j, l, r
o for obstruent consonant spelled p, t, b, d, k, g, h, f, c, č, dž, s, š, z, ž

The analysis of syllable structure in the test columns shows that 36 different syllable combinations are used in the test. Given the fact that one column consists of 28 or 29 monosyllabic nouns, not all combinations can be present in each individual column. The balance in terms of syllable structure appears a complex issue, and we thus leave it for future research.

6 CONCLUSION

In this paper we adapted the 1968 version of the Freiburg Monosyllabic Word Test for Slovenian by identifying and removing less familiar words from the list, supplementing them with phonetically similar words so as to preserve the phonetic balance of the list. The result is a new test, the Freiburg Test-SLO-2016, as well as a new database of monosyllabic nouns that are commonly used by native speakers of Slovenian. The new Freiburg test presents a great improvement in speech audiometry clinical practice in Slovenia, while the related database can be used for constructing new tests for diagnosing hearing loss in the future. The new test with its clinical implementation will provide a tool for better assessment of the patient's rehabilitation with different hearing

aids. It will enable clinicians to select good candidates for cochlear implantation, and to distinguish different pathologies in central auditory pathways.

The adaptation crucially required the use of Slovenian corpora, the written corpus Gigafida and the spoken corpus GOS. These were of great help when determining the frequency of the words that appear in the test and in the extraction of new nouns needed as replacements, though we did encounter some problems with lemmatization and morphosyntactic tagging. In this light, we strongly encourage further funding and research of advanced algorithms of Slovenian corpora (e.g. accurate automatic lemmatization), as such work would greatly advance the application of the corpora in studies of the Slovenian language, resulting, among other things, in improved clinical practice with hearing impaired patients.

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Abstract

ADAPTING THE FREIBURG MONOSYLLABIC WORD TEST FOR SLOVENIAN

Speech audiometry is one of the standard methods used to diagnose the type of hearing loss and to assess the communication function of the patient by determining the level of the patient's ability to understand and repeat words presented to him or her in a

hearing test. For this purpose, the Slovenian adaptation of the German tests developed by Hahlbrock (1953, 1960) – the Freiburg Monosyllabic Word Test and the Freiburg Number Test – are used in Slovenia (adapted in 1968 by Pompe). In this paper we focus on the Freiburg Monosyllabic Word Test for Slovenian, which has been criticized by patients as well as in the literature for the unequal difficulty and frequency of the words, with many of these being extremely rare or even obsolete. Since part of the patient's communication function is retrieving the meaning of individual words by guessing, the less frequent and consequently less familiar words do not contribute to reliable testing results. We therefore adapt the test by identifying and removing such words and supplement them with phonetically similar words to preserve the phonetic balance of the list. The words used for replacement are extracted from the written corpus of Slovenian Gigafida and the spoken corpus of Slovenian GOS, while the optimal combinations of words are established by using computational algorithms.

Keywords: speech audiometry, Freiburg Word Test, test adaptation, corpora

Povzetek

PRIREDBA FREIBURŠKEGA ENOZLOŽNEGA BESEDNEGA PREIZKUSA ZA SLOVENŠČINO

Govorna avdiometrija je eden od standardnih diagnostičnih pripomočkov pri ugotavljanju različnih tipov slušnega primanjkljaja ter pri preverjanju sporazumevalne funkcije pri pacientu, kjer s pomočjo testov slušne zaznave preverjamo, kakšna je pacientova zmožnost razumeti in ponoviti besede iz testa. V Sloveniji je v rabi Freiburški govorni preizkus (enozložni besedni in številčni preizkus), ki ga je razvil Hahlbrock (Hahlbrock 1953, 1960), za slovenske govorce pa leta 1968 priredil Pompe. V članku se osredotočimo na enozložni besedni preizkus, za katerega je bilo ugotovljeno veliko pomanjkljivosti predvsem z vidika pogostosti besed, saj test vsebuje kar precejšnje število izjemno redkih ali celo zastarelih besed. Ker je del sporazumevalne funkcije pri govorcu tudi zmožnost ugibanja slišane besede, je pri velikem številu govorcu neznanih besed pod vprašajem veljavnost izmerjenega rezultata, saj neznane besede govorec težje ugane. Test prenovimo tako, da najprej identificiramo manj pogoste in zastarele besede ter jih zamenjamo s fonetično podobnimi besedami, da obdržimo fonetično uravnoteženost testa. Nadomestne besede poiščemo z uporabo pisnega korpusa slovenščine Gigafida ter korpusa govorjene slovenščine GOS. Najbolj ustrezno kombinacijo nadomestnih besed, ki ohranja fonetično uravnoteženost testa, določimo z uporabo računskih algoritmov.

Ključne besede: govorna avdiometrija, freiburški govorni preizkus, priredba preizkusa, korpusi

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THE COMPLEXITY OF THE BATH WORDS IN CARDIFF ENGLISH

1 INTRODUCTION

This paper discusses a small-scale longitudinal empirical study of the choice of vowel phoneme in the BATH words in Cardiff English. Below we explore the role played by vowel quality, vowel duration and lexical incidence for the choice of TRAP or PALM in this set of lexical items. Two sociolinguistic variables are examined: social class and age/time differentiation. Since Cardiff English exhibits a complex pattern of usage for the BATH set which differs from that of RP and most other varieties of English (section 1.2), it is useful to employ Wells's (1982) standard lexical sets to describe the variation (section 1.1). Recordings were made of 11 speakers (five middle class, six working class) who read a word list and a one-page text (see section 2 for a brief outline of the selection of the informants and the measures used to determine their social class status). Sociolinguistic studies have shown that the use of standard or prestige forms increases in post-adolescence as this is the stage in life when the pressure to conform to the speech norms of the wider society is greatest; notably in their middle years people are likely to use fewer vernacular forms (Holmes 2013: 178–179). Since our recordings represented childhood, early adulthood and middle age, we were able to examine if any potential changes were indeed in the direction of the standard. Section 3 describes the methodology employed to analyse the speech tokens (a combination of instrumental techniques and auditory impressionistic judgment). In section 4 the results are presented and discussed, followed by our conclusions in section 5.

1.1 Standard Lexical Sets

In order to be able to compare the pronunciation of vowels across different varieties of English, Wells (1982) proposed the concept of 'standard lexical sets', which he defined as 'a set of keywords, each of which […] stands for a large number of words which behave in the same way in respect of the incidence of vowels in different accents' (Wells 1982: 119–120). He termed them 'standard' lexical sets because they were based on the two reference accents RP and General American (GA). One keyword was chosen to represent all the words belonging to a particular set. For instance, the lexical set KIT refers to the pronunciation of the sound which a particular variety employs for those

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words which have strong /ɪ/ in the two standard accents RP and GA. For our study, the following lexical sets are of importance:

- TRAP comprises those words whose citation form in RP and GA has /æ/; it is nearly always spelt <a>, e.g. *trap, back*.
- START comprises those words whose citation form contains /ɑː/ in RP and the sequence /ɑr/ in GA. It is typically spelt <ar>, e.g. *far, start*, but words containing <ear>, <er>, and <aar> also occur, e.g. *heart, sergeant, bazaar*.
- PALM comprises those words whose citation form in RP is /ɑː/ and /ɑ/ in GA, excluding those words where <a> is followed by /r/ in GA (i.e. the START set). This set contains only a handful of common words, usually spelt with <a>, e.g. *palm, calm, father*.
- BATH comprises those words whose citation form contains the vowel /æ/ in GA, but /ɑː/ in RP. Words in this set are spelt <a> and occasionally <au>, e.g. *dance, bath, laugh*. Cardiff English favours /æ/ in some of these words and /ɑː/ in others; see section 1.2 below.

The quality of the PALM/START vowel is a strong marker of social status in Cardiff, a long front vowel being used by working-class (WC) speakers while the more standard-influenced central to back vowel is found in the middle class (MC) (Mees 1977: 15, 36–39, Mees 1983: 72; Coupland 1988: 26–27; Wells 1982: 381). When asked about the Cardiff accent, almost all the informants – both WC and MC – mentioned the 'hard /a/s', as in *Cardiff Arms Park* (the national rugby stadium), which they pronounced with a very front (and sometimes raised) PALM vowel ['kaːdɪf aːmz 'paːk]. One of the ten-year-old informants reported: 'If I say ['kæːdɪf], my Mummy 'its me. She says I've got to say ['kɑːdɪf] and talk properly' (Collins/Mees 1990: 96). Interestingly, the quality of the TRAP vowel (more open than in RP and sometimes retracted) does not seem to be subject to the same negative attitudes and is rarely commented on.

Unlike GA, both RP and Cardiff English are non-rhotic accents (Wells 1982: 75–76), and therefore PALM and START are identical. For convenience, we shall in the remainder of this paper use PALM as a cover term for both lexical sets.

1.2 The BATH Set

The BATH set constitutes an example of what Wells (1982: 78–79) terms 'lexical-incidental' or 'lexical-distributional variation', i.e. differences in the incidence of phonemes in a specific set of words. Most accents have a TRAP–PALM contrast, and this also holds true for both RP and Cardiff English, e.g. *hat – heart*, /hæt – hɑːt/. (The actual realisation of the vowels may be different; for instance, TRAP is typically more open and retracted in Cardiff, [hat], than in RP, and PALM has a much more fronted (and sometimes raised) articulation, [haːt].) However, in the lexical set BATH, some varieties of English use TRAP while others favour PALM. In RP, the items belonging to this set have the PALM vowel (see below). By contrast, in many other British regional accents, as well as in other English-speaking varieties such as General American, some or all of the BATH words are pronounced with the TRAP vowel /æ/ (Wells 1982: 133–135). In Cardiff, the situation is complicated for

three reasons. Firstly, the similar qualities of the PALM and TRAP vowels (both being front open) make it difficult to determine which of the two is selected, at least in the working class (WC). In the middle class (MC), the realisation of PALM is usually similar to RP, [ɑː]. Secondly, the duration of the TRAP vowel is often variable, adding another difficulty in discriminating the two vowels. Hughes, Trudgill and Watt (2012: 62) observe that south-western accented speakers in Britain normally use TRAP in many of these words, 'often pronounced with a half-long /aˑ/'; this is also the case in Cardiff English, which has a lot in common with these varieties (Collins/Mees 1990: 87–88, 96). In his study of Cardiff English, Coupland (1988) also draws attention to the 'generally quite long phonetic realizations of even the so-called "short" vowels, which means that the /a/ – /aː/ contrast is not a clear one for some speakers' (Coupland 1988: 28). A further complication is constituted by the 'extremely strong stigmatization of [æ]-type realizations, particularly when lengthened, [which] leads Cardiff speakers to vary both the quality and length of this cluster of sounds when they style-shift' (Coupland 1988: 28–29). Thirdly, contrary to accents like General American, where *all* the BATH words take TRAP, in Cardiff the individual words making up the set vary (Mees 1983: 75–78; Coupland 1988: 28; Wells 1982: 387). For instance, an item like *chance* is more likely to take TRAP whereas *class* favours PALM, but there appears to be no consistent pattern (Wells 1982: 387; Mees 1983: 76; Collins/Mees 1990: 96). To sum up, in Cardiff, three dimensions are involved in the BATH words: vowel quality, vowel length and lexical distribution, resulting in various pronunciations, from long to short, and back to front (Wells 1982: 387; Penhallurick 2007: 156). See Figure 1.

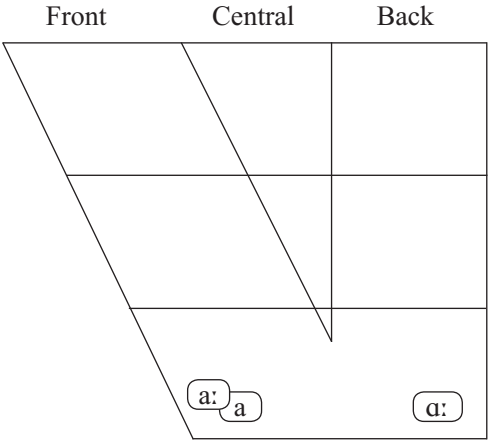

Figure 1: The realisations of the vowels in the BATH words in Cardiff English

The BATH set includes chiefly words where <a> occurs before consonant clusters containing an initial nasal /n/ or /m/ or before the voiceless fricatives /f, θ, s/, e.g. *chance, laugh, bath, class,* and *fast* (Collins/Mees 2013: 105; Hughes/Trudgill/Watt 2012: 61). However, as Wells (1982) observes, 'sound changes do not always apply to all lexical items which apparently meet their structural description', because 'the lexical diffusion was arrested before all the relevant items had undergone the change'

(Wells 1982: 100–101). For instance, while RP *plant* takes PALM, *pant* is said with TRAP: RP /plɑːnt – pænt/; similarly, *grass* is pronounced with PALM while *gas* is said with TRAP: RP /grɑːs – gæs/. In the north of England items belonging to BATH generally select the vowel in TRAP (Wells 1982: 353) though a small subset of words, including the high-frequency items *half, can't, rather*, *banana,* take PALM (Wells 1982: 135; Hughes/Trudgill/Watt 2012: 61). As stated above, the situation in Cardiff appears to be much more variable, and we therefore decided to subdivide the BATH words into three phonological contexts to see if this would enable us to detect a more regular pattern. The following contexts were considered:

1. preceding a nasal followed by a consonant, e.g. *chance, answer,* and *demand.*
2. preceding a fricative followed by a consonant, e.g. *fast, after,* and *mask.*
3. preceding a fricative, e.g. *staff, pass,* and *path.*

In this exploratory study we examine the vowel chosen in these three phonological contexts in the speech of a small number of female informants who were recorded at three points in time (see sections 2.1 and 2.2). Because of the difficulties involved in determining whether TRAP or PALM was selected (section 1.2), it was decided to analyse the vowels using a combination of acoustic measurement and auditory impressionistic judgment.

2 THE SAMPLE

2.1 Selecting the Speakers

Our study is based on a small number of speakers recorded in Cardiff, the capital of Wales, at three points in time over a period of 34 years (1977, 1990, 2011). The original 1977 corpus consisted of 80 informants, 56 of whom were re-recorded in 1990. We selected 11 of the female speakers (five MC and six WC) who participated in both 1977 and 1990. We were able to trace five of these in 2011 (two MC and three WC); hence the 2011 results are clearly less reliable, but it is nevertheless hoped that some initial indications can be discovered. At the time of the first recordings the informants were ten years old. In 1990 they were young adults (aged 23) and in 2011 they had reached mid adulthood (aged 44). The 80 speakers in the original sample were selected from 15 different primary schools in the city of Cardiff. The schools, found with the help of an inspector of the Education Authority and a professor at the Department of Sociology, were located in eight administrative areas which differed with respect to social and economic characteristics.

2.2 Determining Social Class Status

A binary social class classification was adopted based on a weighted index of occupation, education and residential area (see Mees/Osorno 2015: 59–61). Father's occupation was used in the 1977 sample but was replaced in 1990 and 2011 by the informants' own occupations. The occupations of the fathers in the 1977 MC group were: economics lecturer, assistant county treasurer, stock control manager, press officer, sales representative. The families lived in typically middle-class districts (e.g. Llanishen, Whitchurch,

Roath). The fathers' occupations in the WC group were: butcher, lorry driver, car mechanic, coach driver, packer. All the families in this group lived in WC districts such as Splott and Ely. With respect to education, all 1977 MC informants acquired A levels and most proceeded to take a university or teacher training college degree. All ended up in higher-status, white-collar occupations, e.g. accountant, court clerk, and teacher. None of the WC informants gained A levels, though the only girl who obtained O levels in this group went on to take a law degree and worked as an HR and training officer in the hotel industry, and would therefore in 2011 be classified as middle class. The remaining WC speakers worked as waitresses, factory packers, and carers in nursing homes. All continued to live in the districts they were brought up in. This was also to an extent the case for the MC group although there was more geographical mobility in this group since some of the speakers moved to areas outside Cardiff (Aberystwyth, Oxfordshire). For details, see Mees (1983) and Mees/Osorno (2015).

2.3 The Texts

In addition to the free speech style obtained in interviews with the authors (IMM in 1977 and 1990, CHO in 2011), recordings were also made of a reading passage and a word list (the last-mentioned only in 1990 and 2011). The reading passage contained seven instances of BATH words while the word list comprised 34 BATH items. For this particular study, the written texts were chosen rather than the free speech excerpts to facilitate the process of data analysis and to ensure a greater degree of comparability of the data. As the 1977 sample did not contain a word list, we used the reading passage to compare the pronunciations of the BATH words at the three points in time; in addition, this passage was employed for the normalisation procedure of the acoustic data (section 3.1.2). The word lists served mainly to illustrate the lexical distribution but were also compared across time (1990 and 2011).

3 ANALYSES OF THE DATA

As Labov, Ash and Boberg (2006: 37) observe, '[n]o means of instrumental analysis can be considered reliable without some degree of auditory confirmation.' The acoustic measurements obtained in the present study were therefore supplemented with auditory impressionistic analyses carried out by two trained phoneticians. The two methods are discussed below.

3.1 Acoustic Analyses

In general, only a small number of tokens are required in acoustic analyses as compared with auditory analyses. Deterding (1997: 49), who studied 11 monophthongs for 10 speakers, measured approximately 10 occurrences of each of the vowels for each speaker. Fridland (1999) coded fewer than 10 tokens per vowel to represent the mean in her study of the southern shift in Memphis, Tennessee. In his study of the Philadelphia vowel system, Labov analysed between 10 and 20 tokens of a given variable per speaker, though for some of the less frequent vowels, he used down to a single instance per vowel (Labov

2001: 133). Such a small number of tokens has been accepted in instrumental analyses as these are generally perceived as being more objective than analysis by auditory judgment, which requires a larger number of tokens to reduce misrepresentation due to subjectivity as far as possible (Milroy/Gordon 2003: 151). However, since our corpus contained only a small number of speakers and tokens (seven in the reading passage and 34 in the word list), all vowels were analysed both acoustically and auditorily.

3.1.1 Vowel Formants

The acoustic analysis was carried out using the free software program Praat (http://praat.en.softonic.com/). The frequencies of F_1 and F_2 for each vowel were measured at the vowel's steady state, as close to the middle of the vowel as possible, at a point estimated to be the least affected by consonantal interference, as recommended by Harrington, Palethorpe and Watson (2000: 67). This procedure was assisted by Praat's inbuilt formant tracker. However, this function is not always exact. Particularly when measuring back vowels, the two first formant tracks may be in close proximity, in some cases so much so that the central peaks of F_1 and F_2 may be very difficult to distinguish from one another. This was for instance the case for many of the words pronounced by Angie, whose PALM vowels were very back, approximating cardinal vowel 5. Hence, following Harrington, Palethorpe and Watson (2000: 67), formants sometimes had to be measured manually. The measurements were recorded in Excel spreadsheets, facilitating calculations. Tokens in which the vowel's formant tracks 1 and 2 were not clearly visible were discarded.

3.1.2 Normalisation Procedure

A problem when doing acoustic analyses is the difficulty in comparing the data of different speakers. No two vocal tracts are identical, and no two speakers have identical voice qualities, and as a result it may be very difficult to compare the sounds produced by different speakers, particularly when they are of different sexes or ages. In general, both female speakers and children tend to have higher frequencies than male speakers, as their vocal tracts are shorter, which means that their resonance frequencies are higher (Watt/Fabricius 2002: 161; Flynn 2011: 2). By using only female informants, this problem was significantly reduced in the present study. A good normalisation procedure 'eliminates only those differences that are due to physical differences among speakers, but not social differences' (Labov 2001: 159). We employed the modified version (Fabricius/Watt/Johnson 2009) of a relatively new method called the *S*-centroid Vowel Normalisation Procedure, also referred to as the *S*-procedure, which has been proposed by Watt and Fabricius (2002). When tested against other methods, it has shown itself to be one of the most effective methods in allowing comparisons of vowel systems from different speakers (Fabricius/Watt/Johnson 2009: 431; Flynn 2011: 16–17). An obvious advantage of using this procedure is that measurements of only two vowels (FLEECE and TRAP) are needed in addition to the ones that are actually analysed. This is a clear improvement on other vowel-extrinsic normalisation methods, i.e. methods which require employing a number of other vowels (Flynn 2011).

The vowels measured (FLEECE in addition to PALM and TRAP) were identified from the reading passage. Approximately 10 tokens were selected for each vowel. For an example of the calculation of *S* for one informant (Judy), see Osorno (2011: 49–50).

The vowel triangles of all 11 speakers in 1990 are shown in Figures 2 and 3, the first showing F_1 and F_2 in hertz and the second showing them relative to the *S*-centroid in *S*-units. The effectiveness of the normalisation procedure is demonstrated by the overlap of the individual triangles – the greater the overlap, the more successful the normalisation. All names have been changed for the sake of anonymity.

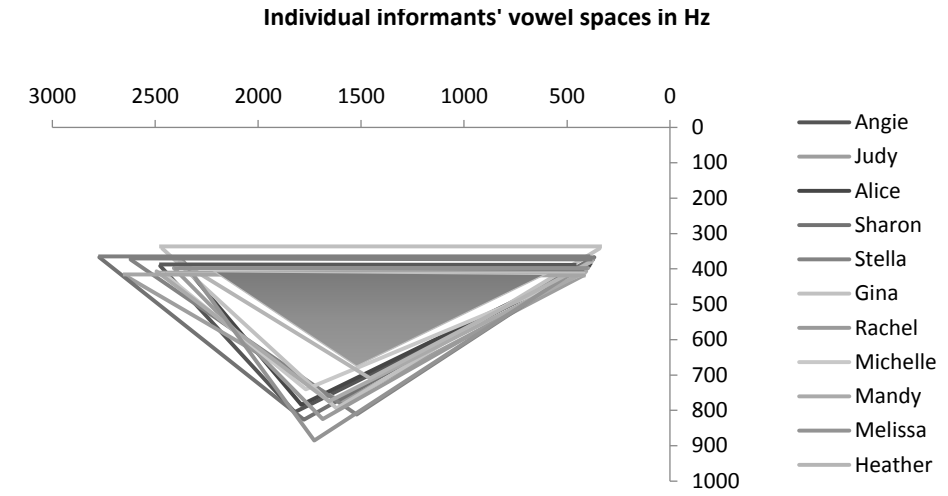

Figure 2: Individual informants' vowel spaces in hertz – prior to normalisation

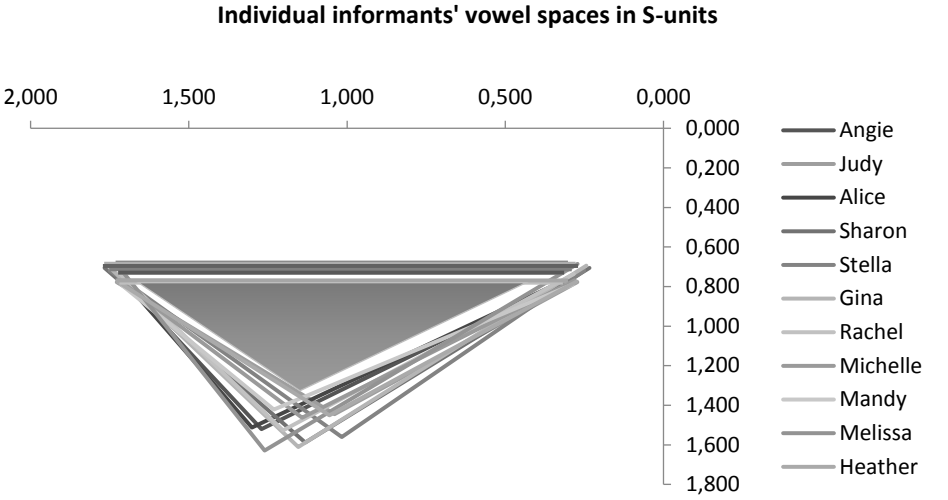

Figure 3: Individual informants' vowel spaces defined relative to the *S*-centroid

Looking at the informants' vowel spaces before and after normalisation, it can be observed that the procedure has greatly improved the overlap of the triangles, at least at the top. The lack of overlap at the bottom can be argued to be owing to the variability of the TRAP vowel in Cardiff English, some informants having a more front vowel quality than others.

3.1.3 Vowel Length

In Cardiff English, the quality of WC TRAP is often similar or identical to that of PALM. As a result, the choice of one or the other vowel in the BATH words can sometimes be recognised by means of length alone (though even this is not a foolproof method as the TRAP vowel is sometimes relatively long; see section 1.2). Therefore, in addition to measuring the formants, the duration of the PALM vowel was also measured. The mean length of the TRAP vowels was not calculated, as the length of this vowel tends to be highly variable (Cruttenden 2014: 98). For instance, unlike any of the other short vowels, when TRAP is followed by a voiced consonant, e.g. *bad*, it is nearly as long as any of the long vowels (Cruttenden 2014: 120).

The vowels in the PALM set were divided into four categories: word-final position (e.g. *far*), preceding a voiced (non-nasal) consonant (e.g. *hard*), preceding a nasal consonant (e.g. *farm*), preceding a voiceless consonant (e.g. *start*). It was necessary to take all these categories into consideration as vowel length varies greatly according to its phonological context. It has been found that vowels are fully long when they occur in word-final position or are followed by a voiced consonant, shortened when they occur before a nasal, and shortest before a voiceless consonant (Cruttenden 2014: 101). However, as the items were taken from a reading passage, the words were also affected by the reading rate of the informants, some words being pronounced faster than others regardless of their phonological context because of their position in the reading passage. To compensate for these effects, the different PALM vowels were added up and divided to arrive at an average length. The mean length was made as representative as possible by using words from the four different categories.

The mean length of the PALM vowel was then compared with the length of the vowel in each word from the BATH lexical set. If the vowel in the BATH set was shorter than the mean length of the vowels in the PALM set, it was categorised as a TRAP vowel, and conversely, if it was longer, it was categorised as a PALM vowel.

3.2 Auditory Impressionistic Analyses

A critique of instrumental techniques has been that although they can demonstrate fine-grained distinctions, they cannot show whether the many different variants can actually be perceived by listeners (Macaulay 2009: 25; Milroy/Gordon 2003: 150–151). To ensure that the different realisations of the Cardiff BATH words were actually audible to hearers, the acoustic technique was supplemented with an auditory analysis carried out by two trained phoneticians who listened to all the tokens. Since any discrepancy between the judgements of the two raters could in principle be attributed to their perceiving the items in terms of their own usage or their degree of familiarity

with the accents of the area, it was decided to use two phoneticians who differed in these two respects. Neither was a speaker of Cardiff English, one being one of the authors (IMM), the other a speaker of a different variety of South Wales English.[1] The first listener used PALM for all BATH words while the second employed TRAP in some of the words.

The two raters listened to 544 instances in the word list (34 items read by 11 informants in 1990 and five in 2011) and 184 in the reading passage. They were asked to state whether they heard the item as TRAP or PALM. In cases of doubt they were instructed to make a choice but to indicate in a separate column by means of a question mark that it had been difficult to determine which of the vowels was used. In the word list there was a lack of correspondence between the judgments in only 2.6% of the instances, and if the tokens with question marks are excluded, the disagreement was a mere 0.6%. In the reading passage, the discrepancy between the two raters was 1.6 % (1.1% if the occurrences with question marks are disregarded). Thus degree of familiarity with the accent and own usage did not appear to lead to different results among the raters. The disagreement between the auditory and the acoustic results also proved to be relatively small. Of the 527 instances in the word list (we left out the 17 tokens where the judgments of the raters were at variance) only 8.9% of the auditory results differed from the acoustic results, and of the 181 instances in the reading passage (here three tokens were omitted), only 6.1% differed.

4 RESULTS

As detailed in section 3 above, the vowels in the BATH words were analysed using a combination of auditory and acoustic techniques. The results of the two methods did not differ significantly. Nevertheless, in the few cases where there were discrepancies, the auditory results were given precedence over the acoustic results. Below, three dimensions are considered: (1) the quality of the vowels, i.e. their degree of backness, (2) their length (considered in combination with their degree of backness), and (3) their lexical incidence.

4.1 Vowel Quality

In terms of vowel quality, it is evident from the results that there is a marked distinction between the WC and the MC. While the MC informants differentiate clearly between the TRAP and PALM vowels, TRAP being front and PALM back, most of the WC informants appear to have a similar quality for both vowels. Figures 4 and 5 provide typical examples of the realisations of the TRAP and PALM vowels (in non-BATH words) for one MC and one WC informant. In addition, the realisation of the vowels selected in the BATH words is shown. The examples have been taken from the reading passage in the 1990 sample. The axes were reversed so as to represent a traditional vowel diagram, axis (y) on the right showing height, and axis (x) at the top indicating degree of backness.

1 Our sincere thanks to Paul Carley (University of Leicester) for his generous help.

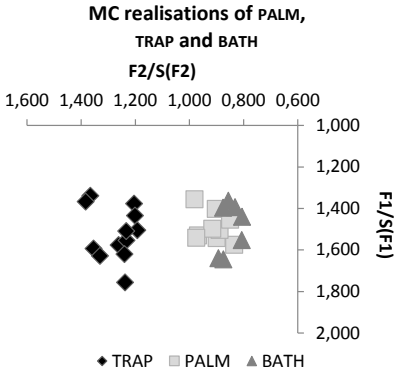

Figure 4: Realisations of PALM, TRAP and the vowels selected in the BATH words in the 1990 reading passage for one MC informant (Angie).

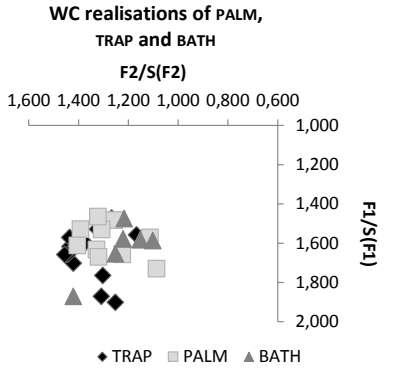

Figure 5: Realisations of PALM, TRAP and the vowels selected in the BATH words in the 1990 reading passage for one WC informant (Mandy).

For the MC informant, the two vowels are clearly separated, and it can be seen that the PALM vowel is selected for the BATH words. For the WC informant, on the other hand, the TRAP and PALM vowels overlap, showing a very similar (front) quality. As the realisations of TRAP and PALM are on the whole front, and the vowel in the BATH words is also front, it can be very difficult to determine which of the two vowels was selected for these words. Whatever the case may be, it is clear that the WC informant has a significantly more front pronunciation of the BATH words than the MC informant. Note that vowel height was not addressed in this study, as it did not appear to have any crucial social significance. To determine whether the informants chose TRAP or PALM for the BATH lexical set, it was therefore necessary to consider the length of the vowel.

4.2 Vowel Quality Combined with Length

In RP, PALM is long and TRAP (with some exceptions) is short. As we have seen, in Cardiff English, three representative vowels may be distinguished, namely TRAP, back PALM and front PALM. In Figures 6 and 7, the distribution of the three vowels for the seven BATH words in the reading passage and their development over time from 1977 to 1990 and 2011 is presented for the two social classes.

Figure 6 shows that the MC informants almost always select the back PALM vowel. Only in a few cases do they choose the TRAP vowel, and they never use front PALM. This pattern seems to be relatively stable across time. However, the pattern for the WC informants (Figure 7) is somewhat more varied. In 1977 they select the front PALM vowel in the majority of cases, and choose TRAP for the remaining occurrences. Back PALM is never selected. The distribution in 1990 is very similar to that of 1977 though it can be seen that a very small percentage of back PALM is introduced. Finally, in 2011, the use of the front PALM vowel has been significantly reduced while a

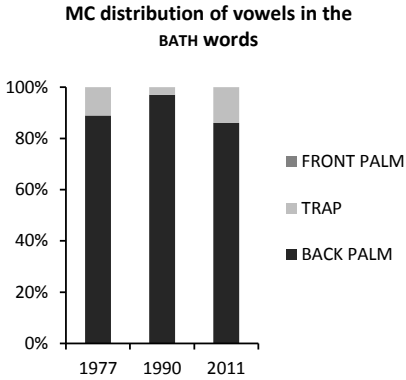

Figure 6: Distribution of the three vowels used for the BATH words in the MC across time. Reading passage.

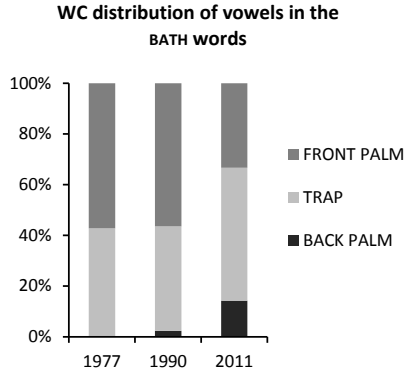

Figure 7: Distribution of the three vowels used for the BATH words in the WC across time. Reading passage.

retracted realisation of PALM has gained ground, as has the use of TRAP, which shows a marked increase and is now the variant selected most frequently. It is noteworthy that the 2011 occurrences of back PALM are found mainly in the speech of the upwardly socially mobile speaker (section 2.2).

The increased use of front PALM by the WC is likely to be the result of age-grading. This is a phenomenon in which speakers 'gradually alter their speech habits as they get older, and where this change is repeated in every generation' (Trudgill 2003: 6). As stated in the introduction, sociolinguistic studies have shown that speakers tend to modify their language in the direction of the prestige norm as they approach middle age as a response to the greater responsibilities at work and at home. Since the speakers use more standard forms in middle age than in childhood or early adulthood, our findings would appear to indicate that back PALM is indeed perceived as the prestige form while front PALM is stigmatised. It is more difficult to determine the status of TRAP. It is used more frequently by the WC than the MC, which would normally indicate it is less prestigious, but nevertheless it does not appear to have the negative social connotations associated with front PALM; it is rarely commented on by the speech community. Interestingly, however, the degree of acceptability of TRAP appears to depend on the lexical item. We shall examine this in section 4.3 below.

4.3 Lexical Variation

Figures 8–11 show the lexical distribution for the 34 items in the word list for the two social classes in 1990 and 2011. As stated earlier, the words have been divided into three categories: (1) pre-nasal plus consonant, (2) pre-fricative plus consonant, and (3) preceding a fricative alone. It should be borne in mind that the results from 2011 are based on only three WC and two MC informants. This obviously reduces the reliability of the data and makes it difficult to draw any general conclusions.

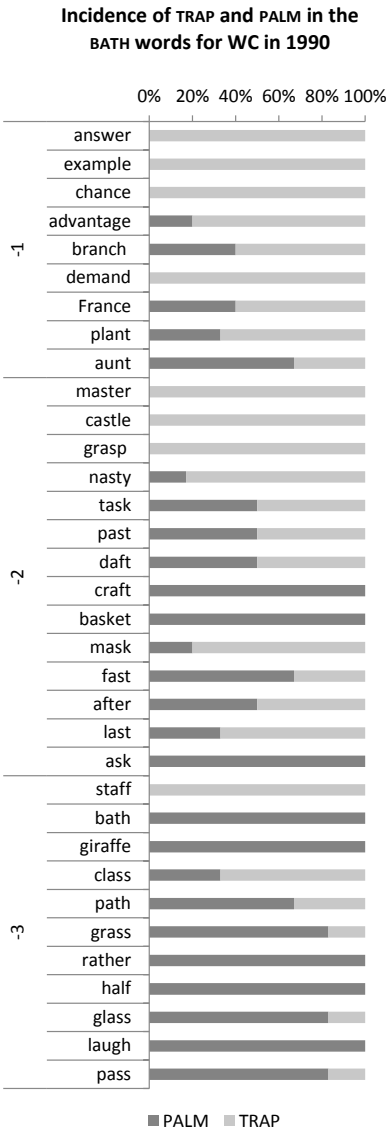

Figure 8: Incidence of TRAP and PALM for the BATH lexical set in the word list for WC in 1990. Three phonological contexts.

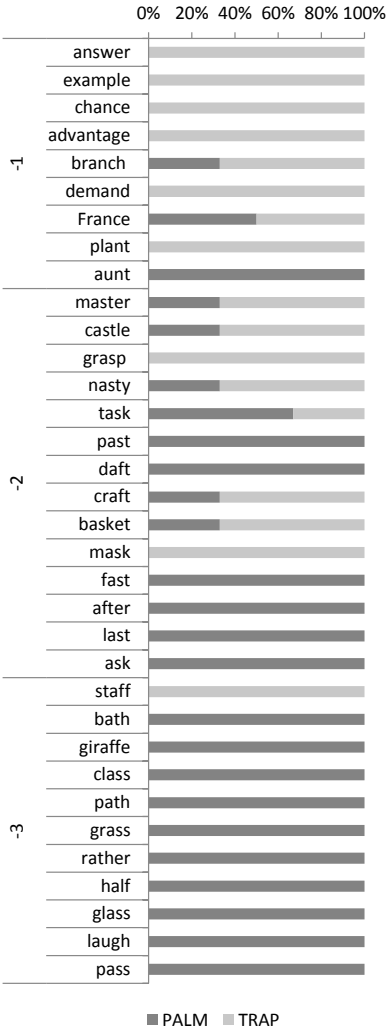

Figure 9: Incidence of TRAP and PALM for the BATH lexical set in the word list for WC in 2011. Three phonological contexts.

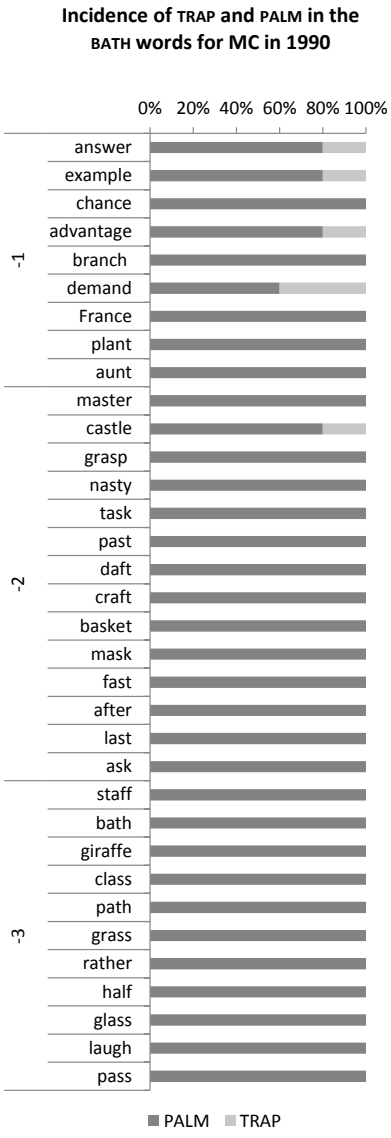

Figure 10: Incidence of TRAP and PALM for the BATH lexical set in the word list for MC in 1990. Three phonological contexts

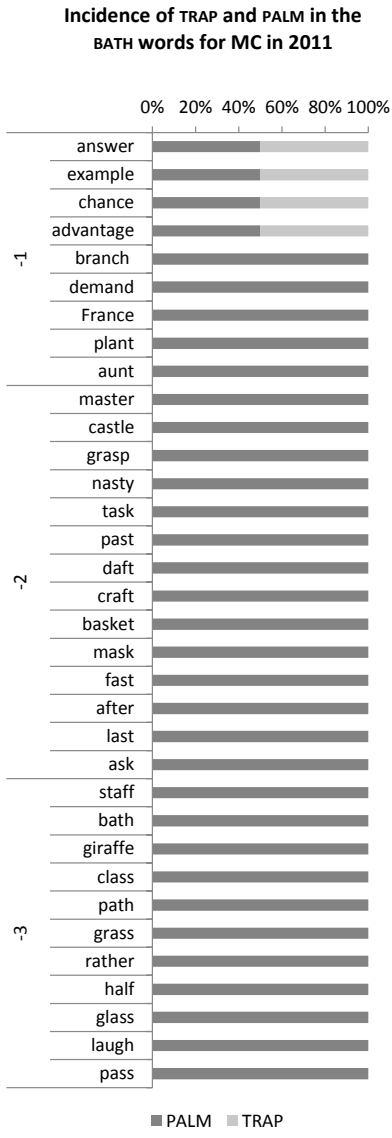

Figure 11: Incidence of TRAP and PALM for the BATH lexical set in the word list for MC in 2011. Three phonological contexts.

As can be seen from figures 10 and 11, TRAP was rarely used by the MC. When it was selected by this social class it appeared to be overwhelmingly for the words belonging to category 1. The MC informants never selected TRAP for words in category 3 (either in 1990 or 2011), and the same holds true for category 2, where only a single word (*castle*) occasionally favoured TRAP, and this only in 1990. By mid-adulthood all MC speakers had switched to PALM for all items in this category as well. The WC speakers also overwhelmingly selected PALM in category 3 (Figures 8 and 9). Although some of the words in this category exhibited a degree of TRAP in 1990, by 2011 all items except for *staff* had been replaced by PALM. Just as in the MC, speakers from the WC also typically selected the TRAP vowel for words in category 1; only *aunt* formed a clear exception. For words in category 2 the WC pattern is less clear. Although the informants seemed to favour the TRAP vowel for some of the words, e.g. *grasp*, for other words such as *ask* they were more likely to choose PALM. For two of the words, *craft* and *basket*, they even change from favouring PALM in 1990 to preferring TRAP in 2011.

In category 1, the overall tendency seems to be for both WC and MC speakers to increase their use of TRAP in mid adulthood although for the MC this holds true for only a selection of the words; in fact, five of the nine words in this category are 100% PALM in 2011. However, in the WC, most words have either majority TRAP or 100% TRAP when the speakers reach middle age.

On the basis of these results, it can be concluded that while the TRAP vowel is a possible choice for the informants for words in category 1, i.e. pre-nasal, it is only accepted for some words in category 2, e.g. *castle* (both WC and MC)*, master, grasp* and *nasty* (only WC), and it is accepted for almost no words in category 3, the exception being *staff* in the WC. This is different from the north of England, where the use of TRAP is much more widespread and would be used in most of the words included in the list.

5 CONCLUSION

The BATH words in Cardiff English are complex because of the many aspects which have to be taken into consideration, namely (1) lexical distribution, i.e. whether the PALM or TRAP vowel is selected in the lexical set constituting the BATH words; (2) in cases where the PALM vowel is chosen, whether it has a front or a back realisation, and (3) vowel length. From the results, it is evident that the back PALM vowel is the form favoured by the MC. Only in relatively few instances did the speakers belonging to this class use the TRAP vowel, and then only in some words – in virtually all cases words in which the vowel preceded a nasal plus another consonant. The WC, on the other hand, very rarely used the prestigious back PALM vowel. Instead they seemed to favour the more local forms, TRAP and front PALM. However, across time (notably in middle age), the use of front PALM decreased markedly while, conversely, the use of TRAP and back PALM increased. In this social class, TRAP was also found to occur most frequently in words containing a nasal plus another consonant though it was also selected for a number of the words in which the vowel preceded a fricative plus another consonant. Thus our study has shown that it is useful to undertake a further subdivision of the BATH words on the basis of phonological context.

Our findings suggest that two types of linguistic variable may be observed for the BATH words in Cardiff. Front PALM, decreasing over time for the WC and never appearing in the speech of the MC, has many similarities in common with the classic stereotype. The TRAP vowel, however, increasing rather than decreasing across time, does not appear to carry negative connotations, though it cannot entirely be regarded as a prestige form either, at least not in the MC, which continues to use relatively few TRAP vowels. In fact, when used in words in which the vowel precedes a fricative, it is clearly perceived as less socially acceptable.

In this exploratory study, we have found indications that the choice of vowel in the BATH words is determined by a combination of factors such as social class, age, lexical and phonological distribution. However, despite the emergence of these patterns, the situation remains somewhat confusing, with notably broad Cardiff speakers showing a variable pattern of alternation between PALM and TRAP. Coupland (1988: 28) observed in the 1980s that 'there is scope for more research into conditioned variation in [long/short] vowels in different lexical sets across different British communities', and even though this to an extent remains true today, we hope our findings have brought us one step closer to clarifying the distribution of this interesting set of lexical items in Cardiff English.

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Abstract

THE COMPLEXITY OF THE BATH WORDS IN CARDIFF ENGLISH

This article investigates how a small number of female speakers from Cardiff pronounce items belonging to the lexical set BATH. The data forms a subsample extracted from a longitudinal study on Cardiff English with recordings from 1977, 1990 and

2011. The BATH set comprises items (e.g. *chance*, *bath*) whose citation forms contain the TRAP vowel /æ/ in General American but the PALM vowel /ɑː/ in British RP. In other accents of English, including Cardiff English, the lexical distribution of the items is often less straightforward, with some items taking PALM while others take TRAP. The situation is particularly complex in Cardiff as the realisations of TRAP and PALM may sound very similar, both having a front vowel quality; furthermore, TRAP may be half-long. Consequently, it can be difficult to determine which of the vowels is selected. We analyse the vowels (both vowel quality and duration) of 11 (five in 2011) working and middle class informants who recorded a reading passage containing seven BATH words at all three points in time. In addition, we study a word list comprising 34 items read by the same speakers in 1990 and 2011. The vowels were subjected to both auditory impressionistic and acoustic analyses. We attempt to establish the social significance attached to the different pronunciations and also to discover if phonological context plays a role for the choice of vowel.

Keywords: BATH words, Cardiff English, vowel quality, vowel length, longitudinal study, acoustic analysis, auditory impressionistic analysis, lexical variation, real-time study

Povzetek

KOMPLEKSNOST BESED VZORCA »BATH« V CARDIFFSKI ANGLEŠČINI

Članek ugotavlja, kako nekaj ženskih govork iz Cardiffa izgovarja besede, ki pripadajo leksikalnemu naboru »BATH«. Podatki predstavljajo podvzorec posnetkov iz longitudinalne študije cardifske angleščine, ki so nastali v letih 1977, 1990 in 2011. Leksikalni nabor »BATH« vsebuje besede (npr. chance, bath), ki v standardni ameriški angleščini vsebujejo samoglasnik /æ/, v standardni britanski angleščini pa samoglasnik /ɑː/. V drugih angleških narečjih, vključno s cardifsko angleščino, je distribucija teh besed pogosto manj enoznačna; tako se nekatere besede izgovarjajo s samoglasnikom /ɑː/ druge pa s samoglasnikom /æ/. Situacija je še posebej kompleksna v Cardiffu, saj sta uresničitvi obeh samoglasnikov zelo podobni; oba sta sprednja samoglasnika. Poleg tega je samoglasnik /æ/ lahko podaljšan. Zato je težko določiti, kateri samoglasnik je izrečen. Analizirali smo kakovost in dolžino samoglasnikov pri enajstih govorkah (pet leta 2011) delavskega in srednjega razreda, ki so brale besedilo, v katerem je bilo sedem besed iz leksikalnega nabora »BATH«. Poleg tega smo preučili tudi seznam 34 besed, ki so jih prebrale iste govorke v letih 1990 in 2011. Samoglasnike smo analizirali s slušno in akustično metodo. Poskušali smo ugotoviti družbeni pomen različnih izgovarjav, kakor tudi vpliv fonološkega konteksta pri izboru določenega samoglasnika.

Ključne besede: besede iz leksikalnega nabora »BATH«, cardifska angleščina, kakovost samoglasnika, dolžina samoglasnika, akustična analiza, slušna analiza, leksikalna odstopanja, študija v realnem času

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APPROACHES TO THE SYLLABLE: AN ASSESSMENT

1 INTRODUCTION

Since the emergence of Prague School linguistics, the syllable has generally been recognized as a fundamental unit in phonological analysis among all the major schools of thought in the field. To Kohler's scepticism (1966) about the universality of the syllable in phonology, for instance, Fudge (1999: 370–371) responds: "I would like to state my firm belief that the syllable is a phonological universal." He also insists on the fact that the syllable must be defined in terms of its relationship to other linguistic constituents: "If we want to state syllable-structure, we must explicitly introduce the element 'syllable' into our linguistic description, and state its relation to other elements of the linguistic hierarchy; it is precisely this which Chomsky and Halle fail to do" (Fudge 1999: 378). For her part, Selkirk (1999: 328) insists that English provides particularly strong evidence of the view that "the syllable is a linguistically significant unit that must have its place in phonological theory." For her it is essentially "[…] a hierarchical unit, an internally structured tree […]." In support of this same stance, we find Durand (1990: 198–199) affirming that "The syllable needs to be recognized as a unit" and showing that the Polish stress rule, whereby word stress is assigned regularly to the penultimate syllable, can be formulated quite simply by accepting the syllable as a unit without any reference to syllabic composition.

More recently, Goldsmith (2011: 164) reminds us that "The syllable is one of the oldest constructs in the study of language, and most studies of phonology have found a place for the syllable within them." The philologists of the nineteenth century were fully aware of the fact that the outcome of the development of sounds is largely dependent on their phonetic contexts, which might mean their position in the syllable rather than their adjacency to other sounds in the speech chain. The pronunciation of many English words like *resist* /riˈzɪst/, *absolve* /əbˈzɒlv/ and *exert* /ɪgˈzɜːt/, for example, complies with Verner's Law, which, given certain circumstances, predicts voiced fricatives syllable-initially before a stressed vowel instead of unvoiced ones. Similarly, the Second Germanic or High German Consonant Shift, which probably took place cAD 500 and distinguishes High German from the Germanic languages of the Channel coasts and North Sea area, led to an allophonic split among the unvoiced plosives whose outcome depended on their position in the syllable. Thus the unvoiced alveolar plosive /t/ was affricated initially ([ts]), but became a fricative ([s]) in coda position, as can be seen by comparing German *zehn*, *aus* and *Wasser* with English *ten*, *out* and *water*.

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All this, however, is not to say that the concept of the syllable is indispensable in modern phonological theory. For example, Harris (1994: 45) in his description of the phonology of English argues that "[...] for our present purposes, we can manage quite happily without a syllable node." In fact, abstract theories, like government phonology, on the whole, seem to adopt a word-level only (van der Hulst/Ritter 1999: 42).

The aim of this paper is, firstly, to underline the shortcomings of some earlier, purely linear approaches to the syllable, which, view the unit, roughly speaking, either in terms of peaks of prominence derived from the relative sonority of sounds or from the point of view of permissible strings of phonological segments and, secondly, defend Wells syllabic analysis as laid out in the LPD and Wells (1990), while at the same time pointing out the unresolved issues of this approach regarding phonetic correlates of morpheme boundaries, over and against the more abstract, theoretical proposals.

But firstly, evidence for the existence of the syllable will be considered: namely, speaker intuition, on the one hand, and phonological processes that derive from the composition of the syllable, on the other.

2 EVIDENCE FOR THE EXISTENCE OF THE SYLLABLE

Speakers are aware of the existence of syllables and are able to count them, or at least count the number of peaks of prominence that are assumed to mark syllables. Ask any native or non-native English speaker how many syllables there are in the words *master*, *penetrate* and *sympathetic*, and the answer will be two, three and four, respectively.

Sometimes, however, there is uncertainty because of the tendency in English to compress unstressed syllables to make words fit as closely as possible the trochaic rhythmic pattern (stressed syllable + unstressed syllable). Thus, *med(i)cine*, *batt(e)ry*, *dec(o)rative*, *radio* ([i] > [j]), *influence* ([u] > [w]) may each be pronounced with one syllable less if compressed. Note also that even native speakers of English are often not aware that in words like *table* and *listen*, which contain an unstressed liquid or nasal, there are two syllables, and not just one.

A further problem in the identification of syllables is the precise location of the boundaries (see 3.1 below). How should the English words *master*, *rebels*, *pastry* and *extra* be divided? Is it *ma.ster*, *mas.ter* or *mast.er*; *re.bels* or *reb.els*; *pa.stry*, *pas.try* or *past.ry*; *ex.tra* or *ext.ra* (or should we split the <x> into [k] + [s]?)? Moreover, can morphological structure be overridden in syllabic division? Wells (see 3.2.1 [1] below), for one, would say no; thus for him the distribution of the vowels and consonants follows the pattern *lend.ing* and *writ.er*, not **len.ding* and **wri.ter*?

Language users are not accustomed to establishing syllable boundaries as they do not normally need to do so, at least as far as spoken language is concerned. If they do need to make a division in a long word in writing, then they will usually take into consideration morphemic structure (e.g. *friend+ship*, *deliver+ing*) or simply rely on works of reference to answer the problem for them. But syllable structure must be part of a speaker's phonological knowledge because a native speaker of English knows that certain clusters are not well-formed. For instance, there are no English

words that begin with [lt], though this cluster is possible when final (*fault*), a fact that is part of native speaker insight.[1]

A second argument that could be considered to testify to the existence of the syllable is the fact that it is the domain of many phonological processes. For example, in French *maman* [ma'mɑ̃] 'mum,' the final [n] nasalizes the preceding vowel, but the intervocalic [m] does not do the same as it is an onset consonant (*ma.man*), not a coda consonant. There are many processes that affect syllable edges: devoicing of final obstruents in some languages (see footnote 2); aspiration of initial voiceless stops in English; Homorganic Nasal Assimilation in syllable-final position in English (*bump*, *kind*, *sink*), but not necessarily across syllable boundaries (witness *moonbeam*, *gumdrop*, *gangbang* and *Sten gun*). Glottalling, tapping and rhotacization of English /t/ cannot occur initially, only finally, a weak position which allows suppression of supralaryngeal content and noise release.[2]

Note also how word play underlines the essential reality of the syllable for speakers: a *big pan* might be fumbled as *a pig ban*, thus producing a syllable-initial segment exchange, but is unlikely to be pronounced jocularly as a *nig bap*, with an exchange of consonants occupying different positions in the two syllables.

3 THEORIES OF THE SYLLABLE

In this section I shall refer to some traditional interpretations of the syllable that have proved to be inadequate in one way or another and then point out how Wells' proposal remedies some of these shortcomings. The first approach that I examine is one based on the somewhat elusive notion of sonority; the second is a putative universal principle which states that, where possible, consonants are preferably assigned to onsets rather than rhymes.

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1 There are analyses that would assign the final consonant of a word like *fault* and also that of a word ending in a single consonant, like *fall*, to the onset of a degenerate syllable, i. e., one without an audible nucleus. For a discussion of the advantages of this approach, see Harris (1994: 75). At the same time, note that the coda, while commonly occurring in government style onset-rhyme theories, is not, however, recognized as a constituent in government phonology (van der Hulst/ Ritter 1999: 24).

2 That the rhyme (or more precisely, the coda, if you accept its existence) is a "weak" or non-robust position is attested by many phenomena apart from those mentioned. For example, in many varieties of Spanish, /s/ is aspirated (or even lost) in this position. Moreover, there tend to be fewer final consonants than onset ones: Spanish has no final plosives. Some languages, like Russian, Polish, Slovene, German and Catalan, neutralize the voice opposition and allow only voiceless [–SON] consonants in this position. Goldsmith (2011: 190) literally refers to the coda as "a position of neutralization," and the onset-coda assymetry is further underlined by Silverman (212: 27–28), who states that neutralization "is almost exclusively found word-finally, and almost never word-initially." Restrictions on consonant types and combinations or on vowel nuclei + consonants are also found. For example, English /ŋ/ only occurs after short vowels; long vowels are followed by clusters only if they contain an alveolar segment (*joint*, *miles*, *seemed*, but not **claimp*, **boonk*).

3.1 The Sonority Theory

The Sonority Theory (ST) argues that syllables can be recognized by a peak of prominence flanked by troughs, the sonority of a sound being "its relative loudness compared to other sounds" (Giegerich 1992: 132); thus the sonority first rises, then a peak is reached, and, after that, it falls according to what Selkirk (1984: 116) called a Sonority Sequencing Generalization (SSG) (see also Hogg/McCully 1987: 34). On a seven point scale, the relative sonority values of the sounds of English would be as follows, the most open vowel, /ɑː/, having the greatest degree of sonority, and a plosive consonant the smallest degree of sonority:

Sonority Level	*Manner of Articulation*	*English Phonemes*
7	Vowel	iː, ɪ, e, æ, ɑː, ɒ, ɔː, ʊ, uː, ʌ, ɜː, ə
6	Glide	j, w
5	Liquid	l, r
4	Nasal	m, n, ŋ
3	Fricative	f, v, θ, ð, s, z, ʃ, ʒ, h
2	Affricate	ʧ, dʒ
1	Plosive	p, b, t, d, k, g

While this theory allows us to establish the number of syllables in a word by identifying the sonority peaks, it fails to determine the syllable boundaries. For example, it is clear that the word *terminate* has three syllables, as there are three peaks of prominence:

1 7 4 7 4 7 1
/ t ɜː m ɪ n eɪ t /

However, there is no indication as to which of the following representations reflects the true syllabification of the word:

/ tɜː.mɪ.neɪt / / tɜːm.ɪn.eɪt / / tɜːm.ɪ.neɪt / / tɜː.mɪn.eɪt /

Another problem with the Sonority Theory, at least as far as English is concerned, is the fact that English allows three-consonant initial clusters beginning with [s] and final consonant clusters ending in [s], as in the words *sticks* and *sprints* (but see footnote 3). However, [s] is more sonorous than the adjacent plosives, and therefore contravenes the Sonority Sequencing Generalization, which requires the outer segments of syllables to be less sonorous than the inner ones.

Finally, the Sonority Theory cannot inform us about syllable constituency in different languages, i.e. the rules of co-occurrence. For example, both [f] and [s] are voiceless fricatives and therefore have the same sonority value but, whereas initial [sn] is possible in English, [fn] is not; other languages may allow both. Again, the Sonority Theory fails to tell us that *[fljɔɪlnd] is not a legal syllable in English, in which all three-consonant initial clusters begin with [s] (*spread*, *street*, *scream*, etc.), so *[flj-] is ruled

out (*flew* is /flu:/, not */flju:/ in Present-day English). Likewise, the rhyme *[-ɔɪlnd] is illegal since three-consonant codas are supposed to be preceded by short vowels (*cf. fifths* [fɪfθs] with *five* [faɪv] or *fives* [faɪvz]).[3]

Another restriction that a language may impose concerns sonority distance. A language may specify the condition that adjacent segments must stand at a minimal sonority distance from each other (Goldsmith 2011: 177; Steriade 1982: 94). For example, the definition of an optimal syllable according to the SSG predicts that in a two-member onset, the first segment cannot be more sonorous than the second, as in *play* /pleɪ/, or *great* /greɪt/. However, [ml-] and [tl-] do not clash with the SSG and yet they are not possible onset sequences in English. These sequences appear to violate two different language-specific constraints of English. The sequence [ml-] violates a language-specific sonority constraint: within two-member onsets, there must be a minimum sonority distance of 2 points on the sonority scale, so that [fl-] and [gr-], for example, are acceptable. The sequences [tl-] or [fm-], to take another example, are not allowed because the two adjacent members of an onset cannot be homorganic, unless the first one is an [s], as in *stay*. Neither [tl] nor [fm] conform to this rule: in [tl-] both consonants are alveolar; in [fm-] both consonants are labial. The combinations [tr] and [dr] are admissible in English perhaps because [t] and [d] are alveolar, but [r] is postalveolar, and therefore not homorganic strictly speaking, and they are separated by at least two points on the sonority scale. On the other hand, these sequences tend to be treated monophonematically as affricates, anyway (see 3.2.1 [2]).

The sonority distance requirement for onsets does not seem to apply to codas. This is in accordance with the Dispersion Principle proposed by Clements (1990) and recited by Goldsmith (2011: 177) as: "all things being equal, a language will preferably maximize sonority difference in the onset, but minimize it in the coda."

One final setback to the Sonority Theory that I have only seen mentioned in McCully (2009: 83) is the fact that we also perceive syllable structure when syllables are whispered. To this it might be added that sounds are produced and perceived, in any case, not so much in terms of a sonority scale, but in groups or classes whose membership is defined by the acoustic properties held in common, whether these be related to manner or place of articulation (McCully 2009: 85).

Sonority has been considered in this section on the basis of traditional data, in which obstruents are placed at the bottom of the scale, being assumed to possess negligible sonority, a fact which excludes them from occupying the syllabic nucleus, but there are languages for which syllabic obstruents have been posited, among them the Salishan languages, in which you get long strings of obstruents (see Wells 2016: 109 and Durand 1990: 209). However, this raises basic questions about the nature of the syllable.

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3 "Superheavy" onsets and codas are not accepted in all theories. For example, regarding onsets, Harris (1994: 63) says "[…] it is now widely assumed that the imposition of a two-position limit on onsets is universal […]." Moreover, Harris (1994: 62–63) gives initial and final [s] special status and cites proposals regarding initial [s], not only in English, but also in other languages, like Spanish and Italian. Either the segment is adjoined to some higher node in phonological structure or it is a coda consonant preceded by an unrealized nucleus.

3.2 The Maximal Onset Principle

The Maximal Onset Principle (MOP), referred to by Kennedy (2017: 205) as the "onset preference," assigns as many consonants to the onset of a syllable as permitted by the phonological constraints of the language in question. Thus *England* must be syllabified as [ˈɪŋ.glənd], since Modern English disallows [ŋg] in syllable codas; similarly *actress* is syllabified as [ˈæk.trɪs] because English has no onsets beginning with [ktr]; [ˈækt.rɪs] is not possible either because [tr] is an affricate and, as such, cannot be split (see 3.1 above).

The main problem with MOP is that it sometimes leaves English short stressed vowels stranded in open syllables and thus requires recourse to an additional rule of ambisyllabicity. If the words *winner*, *honey* and *bother* cannot be divided as [ˈwɪ.nə], [ˈhʌ.ni] and [ˈbɒ.ðə] in accordance with MOP, then ambisyllabicity states that their intervocalic consonants must belong to both syllables. But this looks like a piece of phonological patchwork unless we admit the idea of adjacent syllables being seamless, since these consonantal segments are not articulated as geminates. This is the approach in Local (1990: 355), where ambisyllabicity is regarded as structure-sharing and an integral part of parsing well-formed syllables, rather than a resyllabifying process. This theory postulates ambisyllabicity not just with simplex coda + onset sequences but also in cases like *mister*, where the cluster [st] would be treated as ambisyllabic, as would the [d] of hardy [ˈhɑːdi] despite the preceding heavy syllable (1990: 362).

Further problems arise with the phonological form of certain words like *petrol*: [tr] is syllable-initial in English, but not syllable-final (though see Wells' division in 3.2.1 [2] below). Given these circumstances, if we apply ambisyllabicity, should the word be divided as *pet-trol*? Note also the anomalous cases in RP (SSB, GB) where an [r] has to be spread between two syllables in words like *severity* [sə.ˈver.rɪ.ti]. The problem here is that in the aforementioned variety [r] is not pronounced in coda position. Compare *vision* [ˈvɪʒ.ʒn], in which [ʒ] would be assigned to an uncustomary initial position as well as a coda.

Strong arguments in favour of ambisyllabicity were put forward by Kahn (1976), whose theory of the syllable is autosegmental, and Durand (1990: 217) admits that "There is [...] evidence that syllables should be allowed to overlap." However, Selkirk (1999: 343) rejects this theory for not allowing the syllable to be viewed as having an internal structure or be represented as part of a higher-order prosodic tree because autosegmental entities are not arranged in a hierarchy with respect to each other: "In an autosegmental analysis, it is impossible to view the syllable as a structural unit of a fully ramified prosodic structure." Selkirk (1999: 345) does, however, lend support to MOP: "In general, when a medial consonant or consonant cluster may be analyzed as either a coda or an onset according to BSC (= basic syllable composition), it is the onset analysis which prevails." In addition to this, Kennedy (2017: 210) makes the important observation that "[…] an internal CC sequence can only be assumed as tautosyllabic if the same sequence is observed word-initially."

Before we leave MOP, it must be remembered that many of the objections to it stem from analyses of English data, but many languages fit the theory perfectly. Languages

with a rigid CV structure, for example, present no problems of analysis. "MOP is applied through rule ordering: Coda Formation follows Onset Formation and applies only to unsyllabified consonants" (Hayes 2009: 254). Where none exist, there can be no problems of assignment.

3.2.1 Wells' (2008/1990) Proposal for Syllable Structure

Wells 2008/1990 includes a proposal for syllabicity which is expounded more fully in Wells 1990: 76–86. In summary, it puts forward the following essential points:

1) Syllable boundaries coincide with word and morpheme boundaries. Thus there is a difference between grey#tape and great#ape, and between *Tai.pei* (*T'ai.pei*) and *type#A*. Similarly, *kisses*, *lending* and *sunny* are syllabified as *kiss.es*, *lend.ing* and *sunn.y*, not **ki.sses*, **len.ding* and **su.nny*.
   For morphemes to be recognized as such, they have to be synchronically real to native speakers, although certain words act as if they were morphologically solid: *bedr.oom*, *teasp.oon*, *mi.stake*. In the case of the word *mistake*, the syllabification is *mi.stake* because native speakers no longer recognize the word as made up historically of the negative prefix *mis-* plus the verb *take* meaning 'consider.' Moreover, the alveolar plosive is unaspirated (see [i] below).
2) Affricates are not split: *catch.ing*, *Rog.er*, *petr.ol*, *detr.i.ment*, *paltr.y*, *caldr.on*. Thus the affricates of *catching* and *Roger*, [tʃ] and [dʒ], respectively, cannot be divided as *[t.ʃ] and [d.ʒ].
3) The core of Wells' theory is that, where the previous two conditions can apply without clashing with the phonological constraints of English (e.g. *e.nig.ma* cannot be **e.ni.gma* as [gm] is not a syllable-final cluster in English), the stress (whether primary or secondary) attracts as many consonants as possible: *plént.y*, *ùnd.er.stánd*, *vúlt.ure* /ˈvʌltʃ.ə/.
4) If a consonant is flanked by two unstressed syllables, it syllabifies to the left: *sán.it.y*, *stím.ul.us*.

The proposal in Wells is based on the behaviour of allophones at syllable boundaries. Thus, cases of aspiration, tapping, pre-fortis clipping, r-allophony, plosive epenthesis, t/d elision, and (de)voicing occur depending on whether the consonants involved are part of an onset or a coda.

The following examples illustrate each of the linguistic phenomena listed above:

i) Aspiration: that *mistake* is syllabified as *mi.stake*. is confirmed by the fact that the [t] is not aspirated and must therefore be preceded by [s] in the same syllable.
ii) Tapping: *debt.or*, *de.ter*. As the [t] of the first word can be tapped or glottalized, it must be in the coda of the first syllable; in the second word the aspiration of the [t] confirms its status as syllable-initial.
iii) Pre-fortis clipping: *leak.ing* v. *Lee#King*. If the vowel in the first syllable of *leaking* is relatively short as compared to that of the name *Lee King*, then it must be because of pre-fortis clipping, which proves that the [k] in *leaking* is in the first syllable.

iv) r-allophony: *your rise* v. *your eyes*. The initial [r] of *rise* is somewhat rounded in many speakers, whereas the linking [r] of *your eyes*, if pronounced, does not have this property and is therefore syllable-final.

v) Plosive epenthesis: *ten(t)s.ing* v. *ten sing*. Possible plosive epenthesis in *tensing* proves that the [n] + [s] must both be coda consonants. No such epenthesis is possible in *ten sing*, where the [n] and [s] are heterosyllabic.

vi) [t]/[d] elision: [t] and [d] can only be elided in a consonant cluster which is syllable-final. Thus the final [t] of *last* can be elided in *last wit*, but the initial [t] of the word *twit*, as in *crass twit*, cannot be omitted; likewise, the [d] of *old* is often elided, for example in the expression *old man*, but not the [d] in *coal dust*.

vii) Voicing can also supply some information on syllabification. For example, in *a.pply* the [l] is voiceless, so the preceding [p], which is voiceless, must be in the same syllable; on the other hand, the [l] in *app.li.cat.ion* is relatively voiced and cannot therefore have been influenced by the preceding [p]. This shows that the [p] must belong to the preceding syllable.

3.2.2 Notes and Comments on Wells' proposal

The argument that constituency within the syllable is based, at least in part, on distributional or phonotactic considerations is not entirely new (see Selkirk 1999: 329; Pike 1967: 386–387), but the detail provided by Wells (1990: 76–86) in his article on syllabification and allophony is unprecedented.

Regarding each of the four basic conditions for syllabification outlined in 3.2.1 (1–4), I would add the following notes and comments

1) *Syllable boundaries coincide with word and morpheme boundaries.*
Recognition of the coincidence of morphemes and syllables is, probably rightly, at variance with earlier, more simplistic theories of the syllable, like MOP or the contention expressed by Fudge (1999: 376) that "the /v/ of *drive* is syllable-final, whereas it is more natural to take the /v/ of *driving* as syllable-initial."

2) *Affricates are not split.*
This makes sense in view of the fact that [t͡ʃ] and [d͡ʒ] are generally treated as monophonematic, a fact that in metrical phonology can be represented by showing that two melodic units are linked to one skeletal position (Harris 1994: 40). But a problem arises with [tr] and [dr]: LPD divides *petrol* as /ˈpetr.əl/ since [tr] is a voiceless affricate and the stressed syllable requires a consonant after the short vowel. Since the affricate cannot be word-final, this calls for a distinction to be made between word internal positions and word edges, though perhaps this is not a bad thing, as these positions do often have different constituency. For example, Spanish has coda [b] internally in *submarino*, but [b] is rarely word-final (only in foreign words like *club*).

3) *Conditions 1 and 2 v. sequential constraints on sounds.*
This usually works, but note the problems with morpheme boundaries mentioned below.

It is interesting that, as English speakers pronounce the Spanish name *Pepe* /ˈpepe/ as /ˈpepi/ or /ˈpepeɪ/, and not */ˈpeɪpeɪ/ or */ˈpeɪpi/, they must therefore be treating the intervocalic [p] as a coda consonant required by the preceding short stressed vowel, rather than an initial one.

4) If a consonant is flanked by two unstressed syllables, it syllabifies to the left. This syllabic division would appear to be realistic in view of the fact that rhymes are left-headed (for detailed reasoning, see Harris 1994: 149).

Regarding the exemplification relating to allophonic distribution in syllables expounded in 3.2.1 (i–vii), I would add the following notes and comments:

i) Certain short vowels can occur finally in unstressed syllables, so the division of *mi.stake* shown by the LPD is legal, as would be that of *a.spire* and *a.skance*, which also contain unaspirated plosives. Both schwa and the KIT vowel, which we have in the first syllable of *mistake*, are very common in unstressed open syllables, but other vowels can appear too: Wells (1990: 83) quotes the case of *no.stalg.ic*, with the LOT vowel in the first syllable, saying that the [s] may be captured by the stressed syllable as there is no morpheme boundary after it.

(ii) Regarding tapping, note that it usually takes place before a weak vowel ([i], [u] and [ə], and sometimes [ɪ] and [ʊ]), so the [t] of *latex* and *Utah*, for example, which contain full vowels in the last syllable, is not tapped. However, there is no problem across word boundaries, even if the following vowel is strong, as in *put up*, *get up* and *quite obviously* (Wells 2014: 180).

An interesting case of possible [t]-glottalling can be found in the variable pronunciation of the surname or place name *Entwistle* (Wells 2014: 36). Those who glottalize the [t] are treating it as syllable-final; those who don't are treating it as syllable-initial. Thus the name is syllabified in different ways by different people: either as *Ent.wistle* or *En.twistle*.

Wells (1990: 81) observes that Americans may tap the [t] of *quality* but not that of *politics*. This he attributes to the fact that the final syllable of *quality* has a weak vowel (/ɪ/ or /iː/, according to him), while the vowel of *-ics* must count as a full vowel sufficient to outrank the preceding weak vowel and capture the [t]. Another way of looking at this would be to recognize *-ics* as a heavy syllable (and some phonologists would say it bears secondary stress because of this), although this argument will not work with the adjective *politic*, where the final syllable with only one consonant in the coda is not heavy, and yet this word behaves in the same way as *politics* as regards syllabification and absence of tapping.

(iii) This seems to provide adequate phonetic evidence to show that that the coda does exist in the face of proposals to the contrary (see footnotes 1 and 3).

Paragraphs iv–vii provide further evidence for the onset-coda dichotomy and underline further the importance of phonetic features in syllable constituency. So it

would appear that, on the whole, Wells has created a reliable way of assigning consonants to syllables. Nevertheless, it needs to be pointed out that the analysis is hampered slightly by the many cases where morpheme boundaries seem to be overridden. Pre-fortis clipping in a number of adjectives ending in *-ful*, like *awf.ul*, *caref.ul*, *tearf.ul* and *joyf.ul*, as opposed to others, like *law.ful*, *rue.ful*, *woe.ful* and *sorr.ow.ful* is a case in point. With reference to the former, Wells (1990: 81–82) says that we are not dealing with one of the "synchronic, psychologically real morphemes," and he contrasts *awful* 'terrible' with *awe-ful* 'full of awe,' which does not show pre-fortis clipping. It remains to be seen whether all the words with the suffix *-ful* that undergo pre-fortis clipping are more lexicalized, less transparent to native speakers, and less "psychologically real," to use Wells' terminology, than those that do not.

Even harder to explain than the previous cases are the ones like *plent.if.ul*, its synonym *bount.if.ul*, and *pow.erf.ul*, in which Wells' analysis overrides the morpheme boundary and applies the rule that assigns to the coda a consonant standing between two weak-vowelled syllables (3.2.1 [4]).

To take another example, Wells believes that *-ford*, unlike some other morphemes, like *-ton* and *-son*, does behave phonetically as a separate morpheme, as in *Cray.ford* /kreɪ.fəd/, but it must be remembered that short stressed vowels will require coda consonants, so *Staff.ord*, for example, will accordingly be divided as /stæf.əd/. As Wells (1990: 82) himself admits, "In general, this whole area of presence / absence of phonetic correlates of morpheme boundaries is still far from fully explored."

3 CONCLUSION

This assessment of various, sometimes competing, approaches to an analysis of the syllable has hopefully brought to light some of the strengths and weaknesses of each one, in particular as far as English is concerned. While exclusive recourse to the acoustic properties of this phonological unit fail to cast light on the identification of boundaries, the interpretations that do address this question, like the Maximal Onset Principle and John Wells' proposal, still run into many difficulties, not all of which have been resolved. As far as English is concerned, Wells' approach appears to be the most practical, as is attested by the observations he has made on the distribution of allophones in syllable onsets and codas. This view has the advantage of steering away from the less tangible, more abstract arguments adduced by government phonology, for example. Nevertheless, there is still more work to be done on the relationship between morphology and the division of words into syllables.

I note that in the LPD Wells analyses *discredit* as *dis.cred.it*. However, in the American recording of this word I hear no aspiration of the [k] or devoicing of the [r], which would assume the syllabic division to be *di.scred.it*. On the other hand, Wells gives discriminate as *di.scrim.i.nate*, but I believe that I personally devoice the [r], which would suggest that I assign the [s] to the coda of the first syllable. What are we to make of cases like these? I would go so far as to suggest that syllabic division in theory may clash with syllabic division in reality and maintain that, even though syllabification is predictable in most languages, there is a strong subjective,

idiosyncratic element in the morphology of some languages, like English, that has hitherto been underrated, especially by largely abstract notions of linguistic analysis that seek to establish hard-and-fast rules for language behaviour. Here the role played by etymology in determining syllabification for individual speakers cannot be ignored. The more transparent a form is to the speaker, the more likely it is that he or she will divide it according to its historical components. Thus I have no qualms about assigning the [s] of *dismember* to the first syllable, in view of the prior existence of the noun *member*, but *disparage* is less clear to me. Even though *dis-* in this word is historically a separate morpheme, I feel inclined to analyse it as *di.sparage*. I end with some words relevant to this situation from Zec (2007: 191): "Constraints that make reference to morphological constituencies may affect the place of syllable boundaries […], while constraints on phonological constituencies higher or lower than the syllable may affect syllable shapes or their weight properties […]. It is left for future research to establish the range of such interfaces."

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Abstract

APPROACHES TO THE SYLLABLE: AN ASSESSMENT

In this paper, which looks back at some of the principal ways of viewing the syllable that have been proposed and attempts to assess their relative validity, I firstly refer to evidence for the existence of the syllable and lend support to the argument that the syllable must be part of speakers’ phonological knowledge because, not only can they count syllables, but they also know what sound sequences are permissible in them in their native language. Moreover, in this same vein I also recall the fact that the syllable is the domain of many phonological processes (in English, note aspiration and the glottalling, tapping and rhotacization of [t], for example). Finally, I defend the analysis of English syllabification proposed by Wells in the *Longman Pronunciation Dictionary* over and against other traditional linear models and the more abstract non-linear models, while recognizing that Wells’ hypothesis still leaves unresolved some issues involving the presence/absence of phonetic correlates of morpheme boundaries.

Keywords: the syllable, linear and non-linear phonology, syllabification and allophony, J. C. Wells

Povzetek
ANALIZA PRISTOPOV K ZLOGU

Članek obravnava nekatera glavna stališča do strukture zloga in jim skuša določiti relativno veljavnost. Najprej se posvetimo obstoju zloga in podpremo trditev, da zlog mora biti del govorčevega fonološkega vedenja, ker le tako zna prešteti zloge in se tudi zaveda, kateri glasovi si lahko sledijo znotraj enega zloga v njegovem maternem jeziku. Spomnimo tudi, da se znotraj zloga dogodijo številni fonološki procesi (v angleščini so to na primer asimilacija, glotalizirani, vibrantni in rotični [t]). Na koncu potrdimo veljavnost Wellsove analize delitve na zloge v angleščini, kot je predstavljena v *Longman Pronunciation Dictionary*, ki je drugačna od tradicionalnih linearnih modelov in tudi bolj abstraktnih nelinearnih modelov. Pri tem ugotavljamo, da Wellsova hipoteza pušča nerešena nekatera vprašanja, kot sta na primer prisotnost oziroma odsotnost fonetičnih povezav z morfemskimi ločnicami.

Ključne besede: zlog, linearna in nelinearna fonologija, delitev na zloge in alofonija, J. C. Wells

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NASAL VOWELS AND DIPHTHONGS IN EUROPEAN PORTUGUESE: A PROBLEM FOR SLOVENE SPEAKERS

1 INTRODUCTION

This paper deals with a specific situation of Slovene students of Portuguese as a foreign language (L2). Such students need a relatively large amount of training to master the sounds that have no near equivalent in Slovene. They thus need much more practice than some other groups to master Portuguese pronunciation, and particularly that of European Portuguese, in order to reach an acceptable level. In trying to identify the problem areas of Portuguese pronunciation training, the teacher must examine the interaction between the mother tongue and foreign language in question. In this context, contrastive analysis can have an important role in students' awareness of their pronunciation errors and in improving their production of L2 sounds.

The first part of the paper describes, from a contrastive point of view, the main features of the sound systems of European Portuguese (L2) and Slovene (L1) – in particular with regard to place and manner of articulation – and focuses on the pronunciation of nasal vowels and diphthongs in European Portuguese as one of the difficulties that Slovene learners have to confront. Some common errors resulting from the systemic differences between Slovene and European Portuguese are also explained.

The second part of the paper presents a pilot study that focuses on the production of nasal vowels. The key aim of this study is to answer the decisive question as to whether the cause of the pronunciation problems that Slovene learners of European Portuguese have with these sounds is merely the absence of nasal vowels in the Slovene phonetic system, or if other factors are involved as well.

2 THE VOWEL SYSTEMS OF STANDARD SLOVENE AND EUROPEAN PORTUGUESE

2.1 Slovene

The Slovene vowel system consists of eight phonemes /i, e, ɛ, ə, a, o, ɔ, u /, as shown in the chart and examples below. All vowels occur in both stressed and unstressed positions, but /e/ and /o/ occur in unstressed positions in only a few grammatical words (Šuštaršič/ Komar/Petek 1999: 137; see also Toporišič 1984). The length is not considered a distinctive feature, as long vowels occur in stressed and short vowels in unstressed positions.

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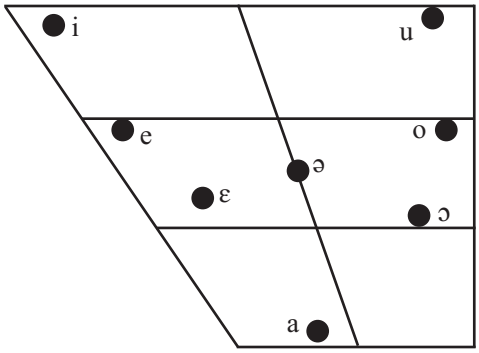

Figure 1: Slovene vowel system (Šuštaršič/Komar/Petek 1999: 137)

Table 1: Examples of the Slovene vowel system (Šuštaršič/Komar/Petek: 137):

Stressed				**Unstressed**			
i:	mi:t	*mit*	myth	i	ˊmi:ti	*miti*	myths
e:	me:t	*med*	honey	e	ʒeˊve:	*že ve*	already knows
ɛ:	ˊpɛ:ta	*peta*	heel	ɛ	ˊpɛ:tɛ	*pete*	heel (gen)
a:	ma:t	*mat*	checkmate	a	ˊma:ta	*mata*	checkmate (gen)
ɔ:	ˊpɔ:ten	*poten*	sweaty	ɔ	pɔˊte:m	*potem*	then
o:	po:t	*pot*	path	o	boˊʃlo	*bo šlo*	will go
u:	pu:st	*pust*	carnival	u	ˊpu:stu	*pustu*	carnival (dat)
ə:	pə:s	*pes*	dog	ə	ˊdo:bəɾ	*dober*	good

Phonetic diphthongs in Slovene occur when "the approximants /ʊ/ and /j / are preceded by a vowel and followed by a consonant or a word boundary. The labiodental /v/ in these positions becomes a rounded second element of a diphthong, i.e. [u], and /j/ becomes [i]" (Šuštaršič/Komar/Petek 1999: 137).

Table 2: The diphthongs in Slovene

ei	glei	*glej*	look (imp)
ai	dai	*daj*	give (imp)
oi	tʊoi	*tvoj*	your (masc sg)
ɔi	bɔi	*boj*	battle
ui	tui	*tuj*	foreign
iu	piu	*pil*	drank
eu	peu	*pel*	sang
ɛu	lɛu	*lev*	lion
au	pau	*pav*	peacock
ou	pou	*pol*	half
əu	ˊtɔ:pəu	*topel*	warm

(Šuštaršič/Komar/Petek 1999: 137)

2.2 Portuguese

Portuguese has one of the richest vowel phonologies of all Romance languages, having both oral and nasal vowels, diphthongs, and triphthongs. The analysis of Portuguese vowels is fundamentally related to the position of the accent: tonic, pretonic, postonic or final. Nasal vowels are presented in smaller numbers than the oral ones, and do not occur in postonic syllables, except in some diphthongs.[1]

2.2.1 Monophthongs

European Portuguese has fourteen monophthongs, nine oral and five nasal ones. Slovene speakers have no difficulties in distinguishing and pronouncing open and closed oral vowels, but they should pay attention to distinguishing /ɐ/ and /ɯ/, which occur in unstressed positions in Portuguese. In Slovene there is a similar sound /ə/, but it does not correspond exactly to any of these two European Portuguese sounds. The vowel /ɯ/ "occurs only in unstressed syllables and is often represented by /ə/ but does not correspond to the mid-central quality associated with schwa. It is a fronted and lowered high back unrounded vowel" (Cruz-Ferreira 1999: 127). Slovene students have to learn the pronunciation of nasal vowels, as there are no equivalents in Slovene and they tend to pronounce them as oral vowels.[2] In contrast, the diphthongs and hiatus vowels in Portuguese very rarely cause difficulties in the pronunciation of Slovene learners, as there are diphthongs in Slovene, as well as such combinations as *joj* and *jej*, similar to Portuguese triphtongs.

Azevedo (1981) considers three distributions of nasal vowels in Portuguese. The first is the nasalisation of elements adjacent to a nasal consonant of the next syllable. The author's opinion is that the degree of the nasalisation varies according to the speaker, but the tendency is to nasalize the accented syllable nucleus, as in *doma* [ˈdõmə] (Azevedo 1981: 23). The second type of nasalisation are vowels followed by nasal consonants in the final position of the syllable adjacent to non-nasal consonants in the next syllable. Orthographically these are represented as vowel + nasal consonant (e.g. *campo, canto;* [ˈkãmpu], [ˈkãntu]). The third case of nasalisation has to do with the nucleus of the nasalized syllable in the final position. It is interpreted as the second type mentioned above, i.e. as a sequence of a simple or compound nucleus followed by a nasal consonant (*mãe, mão, põe, fim, tem, som)* (Azevedo 1981: 26). It is noted that the obstruction of the final nasal consonant is present in all the cases even if the sound is a palatal one followed by a closed vowel /i/ or /u/ or a velar consonant preceded by an open or half open vowel (/a/, /e/, /o/).

The author (ibid.) considers the nucleus of a half open front vowel /e/ a factor causing difficulties in the pronunciation of nasals by foreigners. A sequence /en/ in the final position corresponds phonetically to [eỹ(ñ)] when it is in a stressed (e.g. *também*) or unstressed position (e.g. *sem abrigo*). The insertion of an [i] between e and the next

1 For more information on Portuguese phonology and grammar, see Cunha and Cintra (1984), Espada (2017), Mateus, Falé and Feitas (2005), and Mateus et al. (2006).

2 *Cf.* Markič (2008).

nasal sound creates a glide and emphasizes the nasalisation of the sequence of segments. For this reason, the comprehension and production of nasals by foreigners can be hampered.

Table 3: Examples of European Portuguese vowels (Cruz-Ferreira 1999: 127)[3]

Oral vowels				**Nasal vowels**[2]			
i	vi	*vi*	saw (1 sg)	ĩ	vĩm	*vim*	came (1 sg)
e	ve	*vê*	see (3 sg)	ẽ	ˊẽtɾu	*entro*	enter (1 sg)
ɛ	sɛ	*sé*	cathedral	ɐ̃	ˊɐ̃tɾu	*antro*	den
a	va	*vá*	go (3 sg)	õ	sõ	*som*	sound
ɔ	sɔ	*só*	alone	ũ	ˊmũdu	*mundo*	world
o	so	*sou*	I am				
u	ˊmudu	*mudo*	mute				
ɐ	pɐˊgaɾ	*pagar*	to pay				
ɯ	pɯˊgaɾ	*pegar*	to grip				

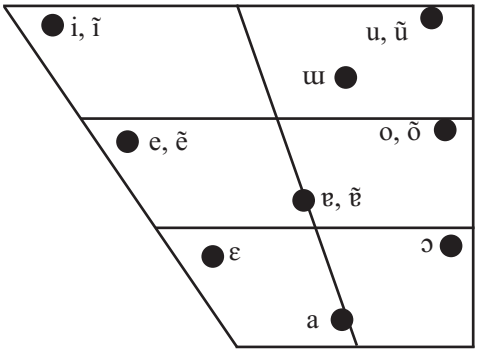

Figure 2: Portuguese vowel system (Cruz-Ferreira 1999: 127)

2.2.2 Diphthongs and Triphthongs

Portuguese is very rich in diphthongs, and in the European variety there are fourteen of these, ten oral and four nasal ones, as shown below.

Table 4: Portuguese diphthongs and triphthongs

ɛi	ɐˊnɛiʃ	*anéis*	rings
ai	sai	*sai*	go out (3 sg)
ɐi	sɐi	*sei*	know (1 sg)
ɔi	mɔi	*mói*	grind (3 sg)
oi	ˊmoitɐ	*moita*	thicket

3 The author uses the term nasalized vowels. See also Rothe-Neves (2012).

ui	ɐ′nuiʃ	*anuis*	agree (2 sg)
iu	viu	*viu*	saw (3 sg)
eu	meu	*meu*	mine
ɛu	vɛu	*véu*	veil
au	mau	*mau*	bad
ẽi	sẽi	*cem*	hundred
õi	ɐ′nõiʃ	*anões*	dwarves
ũi	′mũitɐ	*muita*	much, many
ẽu	mẽu	*mão*	hand

(Cruz-Ferreira 1999: 127–128)

Portuguese also has oral and nasal triphthongs, formed of three vocalic elements at the same syllable, such as uai (*Paraguai*), uei (*averiguei* – I verified), uou (*averiguou* – he verified), uão (*saguão* – hall), and uõe (*saguões* – halls).

3 EMPIRICAL STUDY

At the Faculty of Arts of the University of Ljubljana, the Portuguese language and culture are taught as an elective subject, as well as a course (*leitorado*) of Portuguese language. The didactic textbook used in the first level is *Português XXI*, released by the Portuguese publishing house Lidel – Edições Técnicas (Tavares 2013a, 2013b, 2013c, 2013d, 2014). The students who attend the elective subject Portuguese 1 should reach the basic level A1 after 30 hours of work, and should master the level A1 after 60 hours of learning. The teaching is based on the method in *Português XXI*, which also includes the audio material recorded on the CD, in addition to the textbook and workbook. Furthermore, every lesson has a few minutes of voice and visual contributions from the website of the Portuguese national television or radio broadcaster (https://www.rtp.pt/noticias/videos, https://www.rtp.pt/play/p2851/palavras-de-bolso).

The textbook or *Livro do aluno* of *Português XXI* dedicates considerable attention to Portuguese phonetics. The auditory-voice exercises provide a lot of phonetic exercises in order to help students master the acquisition of new sounds, consisting particularly of those that the Slovene speakers perceive as specific Portuguese sounds, and as the difficult parts of the Portuguese phonetic system.

As such, in the first unit there are already pronunciation exercises for the sounds ai–ei–oi–ui–au–ao–eu–iu–ou and [ɲ ʎ ʃ] (orthographical represented by –nh –lh –ch: *pinha* [′piɲɐ], pine cone; *pilha* [′pi ʎɐ]), battery; *chato* [′ʃatu], flat); in the second unit the pronunciation of b, v, f (*bato* [′batu], I strike; *vinha* [′viɲa], vine; *fato* [′fatu], costume); and in the third the phonetic realization of r in various positions in the word [ʁ ɾ] (*pira* [′piɾɐ], pyre; *rato* [′ʁatu], mouse). Some lessons focus on the realisations of s and z (*caço* [′kasu] – I hunt; *caso* [′kazu] I marry), others on g and k (*cacto* [′kaktu] – cactus; *gato* [′gatu], cat)[4]. Finally, the ninth unit is dedicated to nasal sounds in different environments – first

4 The exemples are from Cruz-Ferreira (1999: 126–127).

those followed by the bilabial nasal [m] and nasalised by it (e.g. *falam*), then those which act in the nasal diphthongs (e.g. *põe, põem, pão, cães, mãos, limões*).

3.1 Pilot Study

In recent years, since the Faculty of Arts of the University of Ljubljana implemented the courses of Portuguese (*leitorado*) as well as Portuguese in the context of elective subjects, namely Portuguese 1 and 2, the authors of this paper have noticed that the pronunciation of nasal vowels, in monophthongs and diphthongs, seems to cause problems to Slovene speakers who are learning this language.

With the pilot study described below we focus on the production (and not perception) of nasal vowels. We try to answer the question as to whether the cause of the pronunciation problems that Slovene learners of European Portuguese have with the nasals is merely the absence of nasal vowels in the Slovene phonetic system, or whether there are some other factors involved.

Therefore, in the pilot study we focus on the test carried out by the student participants of the *leitorado* of Portuguese language and the elective subject Portuguese Language 1 at the Faculty of Arts. The experiment was conducted at the end of the winter semester, so the students who attended the one-semester course Portuguese 1 (*leitorado*) had already received 60 hours of exercises, and those who were enrolled in Portuguese 1 as an elective subject, carried out throughout the whole academic year (two semesters), had received 30 hours of exercises.

The pilot study was carried out with the help of twenty students aged 20 to 23, who also study another Romance language, i.e. Spanish, Italian or French, in their basic academic program. Both groups – the group P30 (Portuguese 1, 30 hours) with ten students and the group P60 (Portuguese 1 - *leitorado*, 60 hours) with the same – were surveyed.

The participants were asked to pronounce two sets of written words. In the first set (A) there were three groups of words containing nasal diphthongs (1. [ɐ̃j], 2. [õj], 3. [ɐ̃w̃]):

A.

1. [ɐ̃j] – <ãe>, <ãi>,
   mãe (mother), cãibra (cramp), cem (hundred), sem (without), pães (loaves), cães (dogs), alemães (Germans);
2. [õj] – <õe>
   põe (he puts), corações (hearts), lições (lessons), cantões (cantons), canções (songs), botões (bottons), oscilações (oscillations), contrações (contractions), conjugações (conjugations), relações (relations), distinções (distinctions), visões (visions);
3. [ɐ̃w̃] <ão> (stressed), <am> (unstressed)
   pão (bread), irmãos (brothers), mulherão (big woman), Cazaquistão (Kazahstan, Kazakhstan), serão (they will be), andarão (they will go), estão (they are), são (they are), cantarão (they will sing), cantam (they sing), sintam (they shall feel), queriam (they have wanted, they wanted), amam (they love), amavam (they have loved, they loved), saibam (they shall know).

The second set (B) consisted of selected words which represent the minimal pairs and contain nasal vowels:

B.
1. lá [a] – lã [ɐ̃] / (there – wool)
2. mau [au] – mão [ɐ̃w̃] / (bad – hand)
3. vem [ɐ̃j̃] – vêm [ɐ̃j̃ɐ̃j̃] – veem [eɐ̃j̃] / (he comes – they come – they see)
4. tem [ɐ̃j̃] – têm [tɐ̃j̃ɐ̃j̃] / (he has – they have)

3.2 The Results

The results of the analysis of the recordings are as follows:

a. In the context of the set A1, in both groups of participants we noticed the correct nasal pronunciation of the nasals, particularly in the words *mãe* and *alemães*.
b. In the case of the words *cem* and *sem* from the set A1, we did not perceive the nasal pronunciation being produced by the vast majority of survey participants.
c. The set A2 presented problems with nasal pronunciation, especially in the case of longer and less frequent words that are still unknown to the students, e.g. *oscilações, contrações,* and *conjugações.*
d. In the set A3 we noticed a more correct, i.e. more nasal, pronunciation in the words with [ɐ̃w̃] <ão> in the stressed syllable: *pão, irmãos, mulherão, Cazaquistão, serão, andarão, estão, são,* and *cantarão*. Words like *cantam, sintam, queriam,* and so on, which are in particular verbal forms of the third person plural of different tenses in which the nasal vowel is unstressed, were pronounced by the survey participants as only slightly nasal or not at all, and stressed on the last syllable. The survey participants were wrong in putting the main stress on the last syllable. In the case of these verbal forms, the stress falls on the penultimate, and not on the last, nasal syllable.
e. The words in the sets B1 and B2 presented some problems of nasal pronunciation. In those cases where the nasal pronunciation was expected, we do not perceive it by the vast majority of survey participants.
f. Only rarely did the students pronounce the set of words in B3 (*vem – vêm – veem*) correctly. The pronunciation of *vem – vêm – veem* that was observed from almost all the survey participants was a non-nasal [em], and not the correct nasal *vem* [ɐ̃j̃] – *vêm* [ɐ̃j̃ɐ̃j̃] – *veem* [eɐ̃j̃].
g. The set of words in B4 *tem* [ɐ̃j̃] – *têm* [tɐ̃j̃ɐ̃j̃] caused pronunciation difficulties for the majority of participants from both groups, P30 and P60. These words were not pronounced with the open nasal vowel [ɐ̃j̃]. Most deviations from the correct pronunciation were detected in distinguishing the two nasals that stand together in the word *têm* [tɐ̃j̃ɐ̃j̃].

3.3 Discussion

The analysis of the pilot study offers some general observations. First, on the basis of the results that derive from the context of the set A1 in the pilot study, as described

above, it should be emphasized that if the survey participants knew the meaning of the word, like mãe (mother), the nasal pronunciation was easier and more accurate than if the words were unknown to them, like cãibra (cramp). Within the domain of lexical availability, and in line with our expectations, those words with a higher lexical availability were better pronounced by the participants than the other items. It is obvious, moreover, that if words have greater lexical availability then this is due to the earlier and more frequent occurrence of these in the students' textbook; in our case, in the elective course of Portuguese 1 and the course of the Portuguese language (*leitorado*). Furthermore, if the written word was shorter, like pão (bread), then a stricter nasal pronunciation was achieved than in the case of longer and less frequent words in the set A2, which were mostly still unknown to the participants, like oscilações, (oscillations). Nevertheless, in the case of the short words *cem* and *sem*, also in the set A1, we did not perceive the nasal pronunciation being produced by the vast majority of the participants.

Considering the issue of orthography as well as the results of the pilot study, the graphic accent in the nasal diphthong ão, as in pão (bread), seems decisive for achieving the nasal pronunciation in comparison with the terminal nasal ending -am, as in cantam (they sing). This was observed in the context of the set A3, where a more correct, i.e. more nasal pronunciation, was noticed in the words with [ɐ̃w̃] <ão> at the stressed syllable. However, and also in the set A3, words like *cantam, sintam, queriam,* etc., which are particular verbal forms of the third person plural of different tenses, and in which the nasal vowel is unstressed, were pronounced by the participants as only slightly or not at all nasal, and stressed, as was already noted above. The survey participants were thus not successful in identifying the main stress in the word. The stress, in the case of these verbal forms, falls on the penultimate, rather than the last, nasal syllable. These results lead to the conclusion that the graphic accent in the nasal diphthong ão helps the students to identify the nasal pronunciation, while the orthographic representation -am, although requesting the same pronunciation, leads the Slovene speaker to the wrong, non-nasal pronunciation.

Still, within the domain of orthography and with respect to the pronunciation of the words from the set B3, it could be claimed that the students, when pronouncing the selected words of B3, are misled by the orthographic representations of the words as *vem – vêm – veem*: the e notation discourages the Slovene learners from pronouncing [ɐ̃j̃].

The words from the sets B1 and B2 presented problems with regard to nasalisation, and those which should have nasal pronunciation were pronounced without it. Therefore, words like lá [a] – lã [ɐ̃] / (there – wool), and mau [au] – mão [ɐ̃w̃] / (bad – hand), lost a phonologically distinctive value, due to the non-nasal pronunciations of the participants. It thus seems that the graphic sign in both minimal pairs did not interfere with the participants' pronunciation in this study.

The set B3, as already mentioned above, was a problem for both groups, P30 and P60. In rare cases the students pronounced the words *vem – vêm – veem* (he comes – they come – they see) correctly. In line with these results, it could be concluded that the difficulty is two-fold: the openness of the vowels and the nasal pronunciation of the

nasal vowels. The pronunciation of *vem – vêm – veem*, which was observed with almost all participants, was with e and non-nasal [em], and not with the correct a and nasal *vem* [ɐ̃j̃] – *vêm* [ɐ̃j̃ɐ̃j̃] – *veem* [eɐ̃j̃]. Considering the fact that in the words from the set B3 *vem – vêm – veem* the orthographic representation is e and not a, we believe that this sign may cause the Slovene speakers at this level of learning Portuguese to avoid the nasal pronunciation [ɐ̃j̃].

The set of words B4 *tem* [ɐ̃j̃] – *têm* [tɐ̃j̃ɐ̃j̃] (he has – they have) caused pronunciation difficulties for the majority of participants from both P30 and P60, and these were not pronounced with an open nasal vowel. Most deviations from the correct pronunciation were detected in distinguishing the two nasals that stand together in the word *têm* [tɐ̃j̃ɐ̃j̃]. The same reason as that set out above also seems to be valid here: the orthographic representation of the words *tem* and *têm* probably caused the Slovene speakers to make the wrong pronunciation.

4 CONCLUSION

To the best of our knowledge, the present paper represents one of the few studies in the academic literature on Slovene (L1)/Portuguese (L2) pairs in the domains of phonetics and phonology.

The main purpose of this paper was to shed a new light on a specific situation of Slovene students of Portuguese as a foreign language (L2), considering the fact that there are some sounds in Portuguese that have no near equivalents in Slovene. In order to achieve this goal, we described the main features of the sound systems of European Portuguese (L2) and Slovene (L1), in particular from the points of view of place and manner of articulation, while also focusing on the pronunciation of nasal vowels and diphthongs in European Portuguese. Consequently, we tried to realize the key aim of this paper, which was to identify the pronunciation of nasal vowels and diphthongs in European Portuguese as a problem area of Portuguese pronunciation for native Slovene speakers. Furthermore, we carried out – with the help of student participants from the elective subject Portuguese 1 and the course of Portuguese Language 1 (*leitorado)* at the Faculty of Arts of the University of Ljubljana – a pilot study focused on the production of nasal vowels.

A number of interesting questions arose during the study described in the paper, and we have aimed to address them: e.g. we mentioned the fact that in teaching Portuguese more attention should be paid to the pronunciation of nasal sounds in words such as *tem – têm*, where orthographic presentation does not point to the nasal pronunciation (in this case [ɐ̃j̃] – [tɐ̃j̃ɐ̃j̃]), especially since the incorrect pronunciation causes the loss of a distinctive phonological value.

There are certain other issues that we would like to point out. It should be stressed that although we expected that the students who had taken more hours of Portuguese (the P60 group) would be more likely to pronounce the nasal sounds better, we did not observe better pronunciation in this group when we compared to that of the P30 group. It seems that the thirty additional study hours taken by the P60 group did not contribute significantly to a more accurate pronunciation of nasal sounds. We may

thus claim that more attention should be paid to Portuguese phonetics, as more time and much more practice is required in teaching/learning this language for native Slovene speakers.

Additionally, experience of teaching the elective subject Portuguese 1 and the practical course of Portuguese language 1 (*leitorado)* shows that when students repeat material that they listen to there are fewer problems in the pronunciation of the nasal vowels than when they are asked to read written material in Portuguese. Furthermore, as one of the general findings based on the results of the pilot study, it should be emphasized that the errors in the pronunciation of the nasal vowels are strongly associated with the lexical availability of the word(s), the level of acquired knowledge of Portuguese, and the interference of Portuguese orthography.

The results of this pilot study open up some avenues for further research. For example, future studies should analyse the differences in the acquisition of nasal vowels by Slovene students of different Romance languages, especially French, due to the use of nasal pronunciation in this language, in comparison with Italian or Spanish.

As an answer to the key question as to whether the cause of the problems in the pronunciation of nasal vowels and diphthongs in European Portuguese by Slovene learners is merely the absence of nasal vowels in the Slovene phonetic system, or whether there are other factors involved, the authors of this paper believe that the results of this study show that the problem with the pronunciation of Portuguese nasals is related to the absence of nasal vowels in the Slovene phonetic system, but is also connected with the fact that the Portuguese sound system requires more attention, time and work in the classroom, which all remain a challenge.

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Abstract

NASAL VOWELS AND DIPHTHONGS IN EUROPEAN PORTUGUESE: A PROBLEM FOR SLOVENE SPEAKERS

Portuguese, a Romance language, and Slovene, a Slavic language, are distant in the geographical, historical, cultural and linguistic senses. There are not many contrastive studies of these two languages, and even fewer in the phonetic-phonological field. The present work is limited to the study of standard European Portuguese (PE) and aims to address one of the major problems in teaching Portuguese phonetics to Slovene speakers: the correct production of Portuguese nasal vowels.

After a contrastive presentation of the vowel systems of both languages, the study is limited to Portuguese nasal vowels and diphthongs, which do not exist in Slovene. The analysis of Portuguese vowels is fundamentally related to the position of the accent: stressed vowels and pretonic, postonic or final vowels. The nasal vowels are presented in smaller numbers than the oral ones and do not occur in postonic syllables, except in some diphthongs. This work presents the analysis of a practical survey carried out in Portuguese classes for Slovene students of level A at the University of Ljubljana and is focused on the production of nasal vowels by Slovene speakers. The objective is to highlight the errors produced, to look for the causes in order to improve the teaching of this aspect of the phonetics and phonology of the European Portuguese.

Keywords: contrastive analysis, European Portuguese, Standard Slovene, nasal vowels, nasal diphthongs

Povzetek

NOSNI SAMOGLASNIKI IN DVOGLASNIKI V EVROPSKI PORTUGALŠČINI KOT PROBLEM ZA SLOVENSKE GOVORCE

Portugalščina, ki je romanski, in slovenščina, ki je slovanski jezik, sta precej oddaljena jezika, tako v geografskem, zgodovinskem in kulturnem smislu kot tudi jezikovno. Doslej na področju protistavnih študij teh dveh jezikov ni bilo opravljenih veliko raziskav, zlasti ne na področju fonetike in fonologije. Pričujoči prispevek se ukvarja s preučevanjem standardne evropske portugalščine (PE) in je namenjen osvetlitvi in iskanju rešitve za morda enega glavnih problemov pri poučevanju portugalske fonetike slovenskih govorcev, portugalskim nosnim samoglasnikom.

Po protistavni predstavitvi samoglasniških sistemov v obeh jezikih se prispevek osredotoča na portugalske nosne samoglasnike in dvoglasnike, ki v slovenskem jeziku ne obstajajo. Analiza portugalskih samoglasnikov je zlasti povezana s položajem naglasa (poudarjeni in nepoudarjeni samoglasniki v poziciji pred naglasom ali po njem, končni samoglasniki). Nosni samoglasniki so navzoči v manjšem številu kot nenosni in se ne pojavljajo v zlogih, ki se nahajajo za naglasom, razen v nekaterih dvoglasnikih. Pričujoči prispevek predstavlja analizo, ki izhaja iz praktičnega preizkusa, opravljenega s slovenskimi študenti izbirnega predmeta Portugalščina 1 na ravni A1 na Filozofski fakulteti Univerze v Ljubljani, in se osredotoča na produkcijo nosnih samoglasnikov s strani slovenskih govorcev. Namen te raziskave je opozoriti na napake, ki se pojavljajo pri izgovarjanju nosnih samoglasnikov, poiskati vzroke za napake in tako najti načine, ki bi omogočali boljše poučevanje tega vidika fonetike in fonologije evropske portugalščine.

Ključne besede: protistavna analiza, evropska portugalščina, knjižna slovenščina, nosni samoglasniki, nosni dvoglasniki

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EL PAPEL DE LA PROSODIA EN LA EXPRESIÓN DE LA IRONÍA EN ESPAÑOL

1 INTRODUCCIÓN

> «La estructura melódica de la frase es como el hilo donde se enhebran las palabras, haciendo de las perlas aisladas un collar.» Amado Alonso (1955: 76)

El contenido o el sentido comunicativo de cualquier enunciado depende de la combinación de los valores de todos los signos emitidos en una situación enunciativa. Una misma combinación sintáctica puede admitir e incitar varias interpretaciones, condicionadas tanto por movimientos corporales y gestos del hablante como por diferentes mecanismos prosódicos (el tono, la intensidad, el ritmo, la duración y las cualidades de la voz). Es más, la prosodia o, más concreto, la entonación, es el recurso más común y el más elemental del enunciado: puede haber enunciados sin forma gramatical, pero sin entonación, no (Quilis 1993: 426).

Según Couper-Kuhlen (2011: 491) la prosodia abarca «those auditory but non-segmental dimensions of speech which have a variable relation to the words used» así que no pocas veces es decisiva para la comprensión no solo de las oraciones enteras sino también para la interpretación de sus partes. Como el ejemplo más citado en castellano están los marcadores discursivos, cuya función principal es la de guiar las inferencias que se dan en la comunicación (Martín Zorraquino/Portolés 1999: 4057), ya que es justamente el contorno entonativo el que constituye el fenómeno suprasegmental más descrito en los estudios actuales sobre estos elementos (Pereira 2011: 86)[1]. En este trabajo nos interesa entonces cómo influyen los procesos entonativos en la correcta comprensión de la intención comunicativa del hablante, más concreto, de la intención irónica, y si son sistematizables siempre y cuando se utilizan intencionadamente. Para este objetivo se ha realizado un experimento en el que se ha analizado el reconocimiento de la intención irónica en diez enunciados, grabados especialmente para esta ocasión.

2 IRONÍA VERBAL

La investigación científica sobre la ironía acompaña a la filosofía desde sus orígenes y ha sido siempre muy heterogénea, de ella se ha ido ocupando todo un abanico de

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1 Un marcador tan frecuente como *bueno* puede expresar una amplia gama de matices, a saber, muy diferentes sentimientos (positivos o negativos), modalidad deóntica, puede ser regulador, puede servir para cerrar el discurso, pero puede ser también guía de la ironía dependiendo del contexto en que aparezca y de la entonación que se emplee.

disciplinas: antropología, filosofía, literatura, psicología, lingüística, pragmática, etc. El término proviene del griego *eironéia* y se define a menudo como 'burla fina y disimulada'[2] con lo cual no es de extrañar que la definición retórica tradicional la describa como «un tropo que consiste en decir lo contrario de lo que se quiere hacer entender al destinatario» (Charaudeau/Maingueneau 2005: 340). La ironía en el sentido más amplio abarca tanto la ironía situacional (que depende del contexto extralingüístico) como la ironía verbal que se infiere de las palabras pronunciadas en un determinado contexto (Haverkate 1985) y que es objeto de este estudio. Sin embargo, habrá que destacar ya de entrada que la ironía *verbal* en realidad no está *en* las palabras mismas sino que es un resultado del funcionamiento de varios factores y, asimismo, debe ser una «labor colaborativa» (Padilla García 2009: 7) entre el hablante y el oyente ya que no solo es suficiente la intención irónica del hablante sino también la capacidad del interlocutor para reconocerla y aceptarla, para completar así el proceso comunicativo.

La ironía verbal se ofrece en la mayoría de los enfoques «pre-pragmáticos» como una antífrasis que posibilita a los hablantes transmitir los significados implícitos que son intencionadamente contradictorios a las proposiciones contenidas en palabras. Por ejemplo, en una situación donde dos hablantes están sintiendo mucho calor debido a las altas temperaturas estivales, uno le dice irónicamente a otro: «uy, qué frío que hace hoy ¿verdad?»

Sin embargo, entender la ironía como decir algo contrario del sentido literal resulta problemático puesto que se puede aplicar solo a los declaraciones afirmativas, mientras que muchos enunciados irónicos pueden ser también interrogativos o expresivos, o pueden significar ofrecimientos (Haverkate 1985, Utsumi 2000). Observemos el siguiente ejemplo: María se ha preparado la tortilla, pero mientras está lavando los platos, su marido se la come entera. Cuando María se entera de ello, puede expresar la ironía de varias maneras que no simplemente expresan lo contrario del sentido literal, por ejemplo: ¿Quieres un trocito más?; ¿Has visto mi tortilla por aquí?; ¡Cuántas ganas tengo de comer ahora la tortilla!, etc. Parece obvio entonces, que la ironía no consiste en decir algo contrario sino en decir una cosa, con el propósito de dar a entender «otra distinta» (Padilla García 2009) o «muchas cosas a la vez» (Reyes 1990)[3].

En la segunda mitad del siglo XX aparecen así varias investigaciones que estudian la ironía primero desde la perspectiva de la filosofía del lenguaje (Grice 1975; Haverkate 1985, etc.) y después dentro del marco pragmático (Sperber/Wilson 1986[4]; Reyes 1984, 1990; Escandell Vidal 1999, etc.), centrándose sobre todo en la manera en que se transmiten, a través de ella, los significados implícitos cuando la contradicción no es tan evidente. La ironía es, según estos autores, un procedimiento del lenguaje propiamente pragmático

2 En *Diccionario de la Real Academia* en línea s/v 'ironía'.

3 Según Grice (1975), por otra parte, una enunciación irónica es posible porque se viola a propósito la máxima de calidad. El interlocutor reconoce la violación, lo que le lleva a inferir el significado contrario de lo dicho.

4 Sperber y Wilson (1978) consideran la ironía como mención, donde la ironía se entiende como una especie de cita por la cual el hablante mencionaría la verbalización de un personaje descalificado que dice algo «ostensiblemente fuera del lugar respecto del contexto» (Charaudeau/Maingueneau 2005: 340).

ya que «sólo se percibe en contexto, y depende de las intenciones del locutor y de las capacidades interpretativas del interlocutor» (Reyes 1984: 154). El objetivo central de este tipo de investigaciones es el lenguaje no literal, cuando hay que diferenciar entre el sentido de la oración y el sentido del hablante (Grice 1975; Sperber/Wilson 1986).

Ya se ha dicho que un enunciado es irónico cuando el hablante tiene esta intención y cuando el oyente lo reconoce y acepta como tal. Para que esto sea posible el oyente tiene que identificar una serie de indicadores y marcas que varían según la situación concreta. En general las marcas de la ironía se dividen en tres grandes grupos: las lingüísticas (uso de superlativos, unidades fraseológicas, etc.)[5], las kinésicas (gestos, risas, etc.), y las fónicas, como por ejemplo entonación, silabeo, pausas y otras (Padilla García 2015: 26), que son las que nos interesan en este estudio. Muecke (1978), uno de los primeros investigadores sobre los elementos indicadores de la ironía verbal, destaca tres factores que condicionan un enunciado irónico: emplear determinados recursos, disimular sentimientos y utilizar ciertas marcas llamadas *ironic markers* (1978: 365). Según él hay varias clases de marcas irónicas, entre ellas las lingüísticas que asimismo se dividen en las kinésicas, gráficas, fónicas, léxicas y discursivas.

Según el grupo GRIALE[6] hay que distinguir entre los conceptos de 'marca' e 'indicador' (Attardo 2001, Padilla García 2009 y otros) ya que tienen funciones distintas. Las primeras tienen un valor procedimental[7] y ayudan a identificar la ironía, mientras que los segundos producen o contienen la ironía en sí mismos ya que suministran ironía de una manera explícita. Los elementos acústicos, como también el tono irónico, pertenecen al primer grupo, es decir a las marcas ya que pueden guiar las inferencias hacia la ironía pero no son imprescindibles para su expresión.

En las últimas décadas los estudios de la ironía, como propone Becerra Valderrama (2011: 7) se han ampliado: se estudia cómo se adquiere la ironía y cuál es su función en la sociedad, y, sobre todo, si verdaderamente existe un tono de voz propiamente irónico que individualiza la ironía de otras figuras y, en el caso de que sí, cómo éste influye o condiciona la comprensión de los enunciados emitidos en un discurso oral.[8]

3 ENTONACIÓN EN ESPAÑOL: CONCEPTUALIZACIÓN

Cuando hablamos no solo articulamos sonidos y palabras una tras otra, sino también asignamos melodías a los enunciados para producir diferentes efectos semánticos. A veces la actitud del hablante «se deja implícita y hay que deducirla contando solo con

5 Se han estudiado también ciertas restricciones sintácticas, pero no hay muchas que valgan solo para los enunciados irónicos. De hecho, en español podemos mencionar la anteposición de algunos adjetivos (bonito, menudo, valiente,…) que en esta posición siempre indican una connotación expresiva, ironía, enfado o sarcasmo: ¡Bonita hora de llegar a casa! (véase Haverkate 1985: 349).

6 El grupo de investigación GRIALE (Grupo de investigación sobre ironía y humor en español) está formado por profesores de la Universidad de Alicante que se dedican desde el año 2002 al análisis pragmático de la ironía y el humor.

7 En el sentido de Sperber y Wilson (1994).

8 Sin embargo, solo el hecho de que la ironía existe también en los textos escritos demuestra que la prosodia no es *conditio sine que non* de la ironía (Reyes 1990 y otros).

el tono de voz, el contexto y otras pistas paralingüísticas.» (Sperber/Wilson 1994: 292). La prosodia como «música del habla» nos ayuda a usar las palabras y frases más allá de sus cualidades fonéticas y léxicas ya que transmite información de manera similar a los gestos o a los movimientos corporales que se usan en una conversación real (Couper-Kuhlen 2000). Toda esta información forma parte de lo que Poyatos llama esquema triple básico de la comunicación que consiste en lenguaje, paralenguaje y kinésica (Poyatos 1994). Lo básico de este esquema es la consideración de los tres componentes como inseparables, con lo cual forman un verdadero instrumento de la comunicación humana funcionalmente coherente y una estructuración óptima de signos percibidos sensorial e intelectualmente. Por otra parte habrá que destacar también su definición de paralenguaje como «cualidades no verbales y modificadores de la voz y sonidos y silencios independientes con que apoyamos o contradecimos las estructuras verbales y kinésicas simultáneas o alternantes» (Poyatos 1994: 137). Estas cualidades se agrupan en adelante en varias categorías entre las cuales son las cualidades primarias (que se refieren a los rasgos propios de cada persona como la voz, el timbre, la intensidad, el tono, el ritmo) las más interesantes para destacar en el estudio de la ironía ya que pueden mostrar un enunciado como irónico (Alvarado Ortega 2006: 5).

Cestero (2006: 59) advierte que, entre los cuatro sistemas de comunicación no verbal el sistema paralingüístico y el kinésico son básicos o primarios por su implicación directa en cualquier acto de comunicación humana, mientras que el proxémico y el cronémico son secundarios. Los elementos paralingüísticos consisten en, primero, las cualidades físicas del sonido y los modificadores fónicos o tipos de voz; segundo, algunas reacciones fisiológicas o emocionales; y tercero, los elementos cuasi-léxicos como vocalizaciones y consonantizaciones convencionales de escaso contenido léxico (Cestero 2006: 59). A nosotros nos interesa, entre otros factores, la capacidad de las cualidades físicas, es decir el tono, el timbre, la cantidad y la intensidad de matizar la información de un acto comunicativo.

El suprasegmento entonativo es uno de los componentes más complejos de la lengua y un campo de estudio en el que no faltan dificultades, por eso no es de extrañar que a lo largo del siglo XX se ha ido definiendo desde diferentes puntos de vista, según el centro de interés de cada investigador (Quilis 1993: 407). En el ámbito español actual se pueden divisar dos caminos respecto a la definición: desde una perspectiva más amplia (la entonación como la combinación de varios datos como la frecuencia, las pausas, el ritmo, la intensidad) y desde una perspectiva más estricta que se centra en las variaciones de F_0 que cumplen una función lingüística a lo largo de la emisión de la voz (p. ej. Padilla García 2009; Cantero 2002).

La descripción de la entonación española empieza en la primera mitad del siglo XX con Navarro Tomás (1944, 1957) cuyas definiciones siguen a la escuela británica del «intonational analysis». La entonación es, según este autor, «la línea de altura musical determinada por la serie de sonidos sucesivos que componen una palabra, una frase o un discurso» (Navarro Tomás 1957: 23), mientras que las cualidades físicas del sonido (traducidos los términos del inglés) son tono (ingl. *pitch*), timbre (ingl. *timbre*), cantidad (ingl. *duration*) e intensidad (ingl. *intensity*).

Para este estudio es relevante, primero, la definición de Quilis que ve la entonación como «la función lingüísticamente significativa, socialmente representativa e individualmente expresiva de la frecuencia fundamental en el nivel de la oración» (Quilis 1993: 410), es decir que aparte de las funciones lingüísticas de la entonación (integradora[9], distintiva, y la demarcativa) hay que tener en cuenta también las funciones del nivel sociolingüístico y las funciones del nivel expresivo de la entonación (Quilis 1993, de manera parecida Hidalgo Navarro 2006).

Además, como en este estudio nos interesa la entonación relacionada con un fenómeno fundamentalmente pragmático como es la ironía, es de especial importancia establecer una distinción entre los procesos entonativos lingüísticos[10] es decir convencionales y distintivos que tienen que ver con la entonación sistemática en el sentido de un comportamiento opositivo[11], y, por otra parte, la así llamada entonación expresiva (que tiene que ver con la fonoestilítica), es decir las inflexiones particulares que puede realizar un hablante en un contexto determinado señalando su actitud y provocando reacciones diferentes en el oyente (Escandell Vidal 1999: 3944).

Hidalgo Navarro distingue entre la *Función Modal Primaria*, aglutinadora de las funciones comunicativas básicas del contorno melódico, y la *Función Modal Secundaria*, asociada a la emotividad del hablante ya que la prosodia actúa como «vehículo de transmisión del contenido emotivo del habla» (2006: 28). En esta dirección estaban investigando ya Lieberman y Michaels (1962) cuando observaban la contribución de la F_0 y la amplitud en la transmisión del contenido emotivo y llegaron a diferentes conclusiones, p. ej., que la amplitud desempeña una parte importante en el reconocimiento de las emociones; que diferentes hablantes pueden aplicar parámetros acústicos distintos para transmitir un mismo contenido emotivo; que el grado de perturbación de la F_0 parece ser un correlato acústico fundamental de los valores emotivos, etc. (en Hidalgo Navarro 2006: 28).

Escandell Vidal (1999) aborda la entonación desde el punto de vista semántico-pragmático y la entiende como la interacción de las características prosódicas que utilizan los hablantes de una lengua con fines comunicativos que sirve «para orientar de manera decisiva la interpretación de los enunciados» (Escandell Vidal 1999: 3944). Desde esta perspectiva la función principal de la entonación es la «prelingüística» (se transforman unidades lingüísticas en unidades comunicativas), aparte de la función lingüística (para preguntar, afirmar,…) y la paralingüística, que sirve para transmitir las actitudes y estados de ánimo del hablante.

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9 La función integradora es aquella que posibilita la organización estructural de las secuencias y remite a la estructura informativa ya que las porciones de información lingüística aparecen a través de las unidades entonativas. La entonación así proporciona al hablante un recurso para hacerse entender por el oyente y, al mismo tiempo, permite al oyente reconocer los bloques de información de acuerdo con el propósito de su interlocutor (Hidalgo Navarro 2006: 19).

10 Según Navarro Tomás (1944) el uso lingüístico de la entonación significa «el movimiento espontáneo y emotivo de la voz, normalizado, sistematizado y puesto al servicio de la expresión voluntaria y consciente».

11 Por ejemplo una interrogación absoluta con un tonema final ascendente se opone en español a la aseveración completa neutra, que presenta un tonema final descendente (Hidalgo Navarro 2006).

Según Prieto, por otra parte, las variaciones melódicas en las lenguas entonativas, como son las lenguas romances, no se usan para distinguir palabras sino para «manifestar una serie de sentidos pragmáticos que afectan generalmente todo el enunciado» (Prieto 2003: 13). Es decir, mediante la entonación el hablante puede expresar su actitud subjetiva respecto del contenido de su mensaje: el *modus* (frente al *dictum* que es el sentido referencial). Es más: la entonación es un recurso modalizador por excelencia, que además de la mencionada función expresiva, tiene una función focalizadora en la lengua, con ayuda de la cual el hablante selecciona la información central, y la función demarcativa a través de la cual el hablante divide el discurso en unidades tonales para que el oyente pueda segmentarlo e interpretarlo con mayor facilidad (Prieto 2003: 14).

La entonación es entonces un efecto prosódico en el que colaboran diferentes elementos: tono (nivel tonal o altura musical de un sonido), tonema (inflexión melódica o dirección que sigue la curva entonativa a partir de la última sílaba tónica del grupo fónico[12]), acento oracional (un acento principal fonéticamente muy fuerte que determina el límite de una secuencia) y ritmo o *tempo* del habla, que es el rasgo de duración/cantidad a nivel discursivo (Hidalgo Navarro 2006: 16). La primera función expresiva de la entonación es, sin duda, indicar la actitud del hablante hacia lo que dice. El problema para reconocer la dicha actitud surge con la aparición de matices subjetivos y contextuales en el nivel de la función modal primaria que se vuelven más complejos en la perspectiva subjetiva.

3.1 Entonación como señal de la ironía

En este estudio nos interesa el papel de la entonación en la producción y el reconocimiento de los enunciados irónicos centrándonos en la pregunta de si verdaderamente existe un tono típicamente irónico, como afirman los retóricos y pragmatistas, que ayude al interlocutor a revelar las intenciones del hablante aún sin conocer el contexto situacional.

En los estudios sobre la ironía la entonación a menudo se menciona como «the most common index of ironical intent» (Attardo 2001: 119), aparte de otros medios fonológicos (alargamiento[13] de sílabas, pausa, risas), morfológicos (usos de las así llamadas expresiones citativas), tipográficos y kinésicos y marcas que dependen del cotexto o contexto.

¿Qué es entonces la entonación irónica? ¿Será posible determinar los patrones entonativos de la ironía que tengan un valor distintivo? ¿Existe un tono típicamente irónico? Hay varios estudios que se dedican en las últimas décadas a este tema en los cuales se

12 En español Quilis distingue entre el grupo fónico, que es «la porción de discurso comprendida entre dos pausas» y el grupo de entonación, que es «la porción de discurso entendida entre dos pausas, entre pausa e inflexión del fundamental, entre inflexión del fundamental y pausa, o entre dos inflexiones del fundamental, que configura una unidad sintáctica más o menos larga o compleja» (Quilis 1993: 419).

13 Cestero (2006: 60) afirma, por ejemplo, que un enunciado exclamativo como ¡Qué bonito jersey lleva! puede resultar irónico si lo producimos con control de labios redondeados o si elevamos el tono y alargamos ciertos sonidos de los términos ‘bonito’ y ‘jersey’.

pueden divisar dos tendencias principales, a saber, unos afirman que parece que no es posible aislar un tono típicamente irónico (también por el hecho de que los patrones melódicos dependen de los elementos diatópicos, diastráticos, diafásicos), mientras que otros defienden que sí es posible identificar ciertas características entonativas generales para los enunciados irónicos respecto a la intensidad, frecuencia, duración y la velocidad de emisión. En la mayoría de estos estudios la entonación irónica se describe como plana[14] (ni ascendente ni descendente), sin embargo, como advierte Attardo (2001), algunos autores destacan la entonación interrogativa (ascendente) también como marca irónica, Muecke (1978: 370) habla del uso de una «voz suavizada» (*softened voice*), mientras que otros presentan otros posibles indicadores de la ironía como bajar el tono de una sílaba normalmente acentuada, patrones intencionadamente exagerados (variaciones melódicas) o nasalización (en Attardo 2001: 119). Becerra Valderama, por otra parte, afirma que un enunciado irónico se caracteriza por una «frecuencia fundamental algo más alta en algunos casos, una duración mayor de los enunciados y una intensidad asimismo más alta» (Becerra Valderama 2011: 263).

Al carácter modal de la prosodia desde el estudio de algunos marcadores multimodales de la ironía en inglés se dedica Attardo (2000, 2001) y destaca como rasgos efectivos de la ironía el tono, como mecanismo de contraste, y la expresión de la cara. Según él, un enunciado irónico es, en principio, un «enunciado inapropiado» (*inappropiate utterance*) pero relevante dentro de una enunciación y un contexto determinados, siempre y cuando el interlocutor lo reconozca e interprete como tal. Este proceso es totalmente inferencial y depende solamente de la presunción de la relevancia óptima del enunciado en el sentido de Sperber y Wilson (1986).

Schoentjes (2001) opina que no es problemático reconocer una entonación irónica, pero distingue entre el tono irónico de un texto y la entonación irónica de la palabra, que según él no coinciden de forma total: «mientras que la entonación afecta con frecuencia a un segmento de discurso relativamente corto, el tono se extiende sobre una porción escrita mucho más larga» (2001: 138). Schoentjes destaca así la entonación irónica como el mayor indicador para el reconocimiento de la ironía en la conversación (íbid.).

Es de especial interés para este estudio el trabajo de Padilla García (2004, 2009, 2015) que intenta proporcionar datos e informaciones tanto fonéticas como pragmáticas sobre las marcas e indicadores de la ironía. Padilla García define el tono irónico como «una forma especial de emitir o pronunciar determinados enunciados, caracterizados, además, por otros elementos kinésicos y lingüísticos diferentes de los acústicos» (2009: 6) en cuya definición acústico-melódica habrá que tener en cuenta especialmente tres elementos acústicos: la frecuencia, la intensidad y el tiempo. Por otra parte, desde el punto de vista pragmático, el tono irónico «es una marca pragmática con valor procedimental» cuyas componentes (velocidad de emisión, F_0 y volumen de la voz) son «una serie de posibilidades acústicas que se manifiestan de manera gradual» (íbid.).

14 Padilla García (2009), por otra parte, considera el tono irónico como hiperónimo ya que, según la entonación depende de uno de los cuatro tipos de la enunciación irónica (como vamos a ver en el capítulo 4 de este trabajo).

Padilla García (2009, 2015) ha demostrado en su análisis del tono irónico que, en cuanto al español, la subida de los hercios de la F_0 en la inflexión final de la curva melódica del grupo fónico puede constituirse como parámetro útil en la valoración irónica de los enunciados. Por otra parte las marcas acústicas de la ironía son el cambio de la velocidad de emisión y, en menor medida, la elevación del volumen de voz. En la parte aplicativa de este estudio se comprueban algunas de estas marcas.

En este estudio seguimos a Padilla García (2009, 2015) en cuanto a la definición de las características principales del tono irónico en español. Sin embargo, coincidimos con Hidalgo Navarro (2014) cuando afirma que las marcas entonativas de ironía aparecen frecuentemente combinadas con otros indicadores fónicos y kinésicos (junto con los factores subjetivos, como carácter personal, estado de ánimo,…) que ayudan al oyente a interpretar correctamente el significado en un evento comunicativo.

4 ¡QUÉ OLOR A PAN TAN BUENO!

A lo largo de este estudio se ha destacado la naturaleza esencialmente pragmática de la ironía y con el experimento que describimos a continuación quisimos confirmarlo y, al mismo tiempo observar el papel que desempeña la prosodia en su expresión y reconocimiento. En dicho experimento nos propusimos analizar la contribución de la entonación a la comprensión de enunciados irónicos exclamativos tanto conociendo el contexto situacional como en el caso de enunciados aislados. El experimento se llevó a cabo con 30 estudiantes eslovenos de máster en hispánicas en la Universidad de Ljubljana, con el nivel de español entre B2 y C1. Se quería averiguar cómo se interpretaría una misma frase aislada, una vez emitida con la intención irónica y otra vez con una intención no irónica[15]. El grupo I conocía el contexto situacional, mientras que el grupo II no. A los estudiantes se les explicó que iban a escuchar, primero, un ejemplo no irónico del *Atlas Interactivo de la entonación del español* (AtInEnEs; Prieto/Roseano 2009–2013)[16] como enunciado de control y, después, 10 realizaciones del mismo enunciado, entre las cuales algunas habían sido emitidas con la intención irónica y otras no[17]. Los diez enunciados, que habían sido grabados especialmente para el experimento, habían sido emitidos por dos hablantes femeninos de la misma edad y conocidas por los estudiantes[18]: hablante G, hablante nativa de Madrid, y hablante B, hablante no nativa pero con el nivel del español C2. Además, creemos importante señalar que los diez enunciados, tanto los irónicos como los no irónicos, fueron grabados el mismo día, en

15 Queremos enfatizar una vez más que somos completamente conscientes de la importancia del contexto situacional y el contacto con el hablante para inferir y reconocer las intenciones comunicativas. Sin embargo con el experimento nos interesaba aislar lo más posible los elementos acústicos. De ahí que creáramos una situación comunicativa un tanto artificial.

16 En el Atlas se aplica el modelo AM y el sistema SP_ToBI, el mismo que en nuestro experimento.

17 No se les reveló el número exacto de los enunciados irónicos, que eran seis.

18 Como afirman varios autores (p. ej. Schoentjes 2001) es primordial conocer a nuestro oyente (y sus particularidades fónicas) para entender qué quiere decir, con lo cual nos pareció importante que las dos hablantes les fueran familiares a los oyentes puesto que no iban a tener el contacto directo con ellas (los estudiantes solo contaron con las grabaciones).

las mismas condiciones físicas (en un aula de la facultad) y con la misma tecnología (micrófono Logitech H390). Como archivos de audio en formato .wav se analizaron más tarde con el programa informático Praat, versión 6.0.19 (Boersma/Weenink 2016).

Por lo que respecta al protocolo del experimento, los estudiantes se dividieron en dos grupos: al grupo I se le presentaron dos contextos posibles, uno no irónico y otro irónico, que estaban proyectados en la pantalla durante todo el tiempo del experimento, mientras que al grupo II no se les dio ninguna información contextual, simplemente se le pidió que se centraran en los elementos fónicos y que decidieran si el enunciado era irónico o no. El único criterio que les servía fue centrarse en los elementos prosódicos, eso sí, habiendo conocido previamente lo que se suponen características básicas para una entonación irónica según Attardo (2001) y Padilla García (2009). Los enunciados se reprodujeron con un ordenador mediante altavoces, cada enunciado se escuchó tres veces.

4.1 Algunas características acústicas de los enunciados irónicos y no irónicos

La sintaxis de la oración ha sido igual en todas las diez realizaciones, solo en una realización apareció al final espontáneamente el adverbio ¿no? que en un principio queríamos eliminar, pero después decidimos dejar porque queríamos observar si iba a influir en el reconocimiento de la intención comunicativa. Se trataba de una oración exclamativa, *¡qué olor a pan tan bueno!*, introducida por el operador exclamativo *qué* seguido de un grupo nominal con el núcleo *olor*. Tomando en cuenta el contexto en que dicho enunciado se pronuncia irónicamente se trata aquí de una *enunciación irónica propiamente dicha* (Padilla García 2009: 149)[19] y de la así llamada *ironía focalizada*, puesto que aparece en un solo enunciado (Reus 2009: 297)[20].

El objetivo de la investigación fue observar, primero, si las distintas realizaciones de un mismo enunciado irónico pronunciadas por un mismo hablante comparten o no determinados elementos fónicos que revelen la intención irónica; segundo, si hay paralelismo entre los enunciados irónicos pronunciados por hablantes distintos; y, tercero, cómo influyen estos elementos en el reconocimiento de la intención comunicativa. Nos centramos en los elementos acústicos, sobre todo el tono y la entonación, como la frecuencia fundamental y ondulaciones de la curva entonativa (aunque se han observado también los elementos de la intensidad).

Como ya se ha explicado más arriba, primero se escuchó el enunciado tomado del AtInEnEs (figura 1): modalidad oracional declarativa, exclamativa, variante español peninsular, dialecto madrileño, con las siguientes características acústicas:

> El contorno entonativo formado por dos acentos prenucleares ascendentes, cuyo pico está alineado con la sílaba tónica (-lor, en el primer caso, pan, en el segundo),

19 Padilla García distingue entre cuatro tipos de enunciaciones irónicas: la enunciación sarcástica, enunciación falsa o exageradamente sincera, enunciación irónica propiamente dicha y enunciación irónica neutra o plana, que se diferencian según las marcas acústicas y la repercusión del uso de la ironía sobre el oyente (Padilla García 2009: 149).

20 Siempre según el grupo GRIALE, la ironía que se prolonga a través de varios enunciados es la *ironía continuada* (Reus 2009: 297).

precedidos por un tono bajo. En el segundo de los acentos prenucleares el tono alto presenta un escalonamiento descendente. El acento nuclear es ascendente precedido por un tono bajo, estando el pico alineado con la sílaba tónica bue-, y el tono alto presenta un escalonamiento ascendente. El contorno finaliza con un tono de frontera bajo. (AtlnEnEs, s.v. «Qué olor a pan tan bueno»)

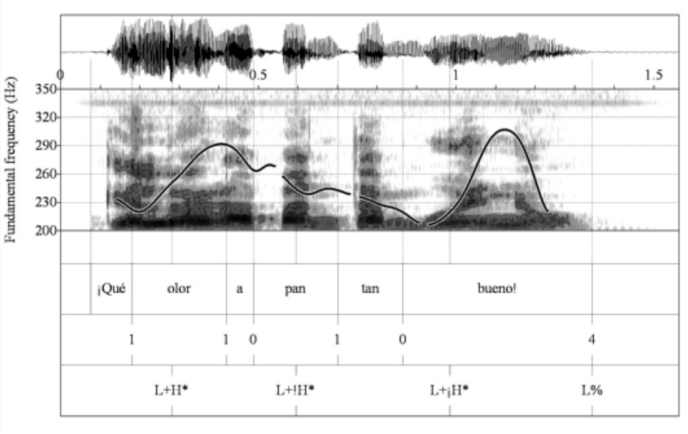

Figura 1: Enunciado no irónico del AtInEnEs

Después se pasó a escuchar los diez enunciados grabados especialmente para el experimento, primero los de la hablante nativa y después los de la hablante no nativa. La administración del experimento ha sido colectiva y se realizó en una sala con condiciones adecuadas de acústica.

4.1.1 La curva entonativa

En los gráficos obtenidos del análisis acústico que se añaden en el anexo 5[21] se puede observar una clara diferencia entre la variación tonal de los enunciados irónicos y no irónicos.

En los no irónicos la media de la curva entonativa es considerablemente mayor (siempre sobrepasa los 200 Hz, mientras que en los irónicos no llega a 200 Hz):

Figura 2: La media de la curva entonativa (*mean Pitch*) en los enunciados no irónicos

	Enunciado NoIr1	**Enunciado NoIr21**
Hablante G	231,0 Hz	247,4 Hz
Hablante B	223,5 Hz	262,1Hz

Figura 3: La media de la curva entonativa (*mean Pitch*) en los enunciados irónicos

	Enunciado Ir1	Enunciado Ir2	Enunciado Ir3
Hablante G	191,3 Hz	189,8 Hz	170,8 Hz
Hablante B	172,1 Hz	191,7 Hz	197,5Hz

21 Solo se reproducen los gráficos de curvas entonativas.

Si nos fijamos en los puntos de inflexión, es decir, en los puntos en los que se produce un cambio significativo de la curva melódica, podemos observar una notable heterogeneidad en los límites superior e inferior del rango tonal de los seis enunciados irónicos, también cuando son pronunciadas por un mismo hablante (la diferencia de 20 hercios en la media de la curva entonativa). En cuanto a la curva de entonación, Padilla García afirma que «la ironía más sutil, la más ambigua, se caracterizará por una enunciación plana o ligeramente marcada, y la ironía más evidente utilizará una enunciación sarcástica, exagerada» (2009: 156). En nuestros ejemplos analizados la enunciación irónica es plana o ligeramente marcada. Asimismo, en los enunciados irónicos se puede notar la bajada del tono de las sílabas normalmente acentuadas (como decía Haiman 1998), -lor en 'el olor' y bue- en 'bueno'. En algunos enunciados irónicos (por ejemplo BIr1, BIr3, GIr1, GIr3) se pueden observar las así llamadas pausas potenciales que dependen de la voluntad comunicativa del hablante y contribuyen con un valor significativo-expresivo. La consecuencia es también la mayor duración de los enunciados irónicos. La mayoría de dichos enunciados termina con un tonema descendente, uno termina con el ascendente, debido a que se añade el interrogativo ¿*no*?, mientras que dos terminan con el circunflejo ascendente/descendente. En cuanto a los no irónicos es interesante observar que todos se aproximan bastante al ejemplo del AtInEnEs y finalizan con un tono de frontera bajo, aunque dos con un tonema circunflejo.

Las oraciones que empiezan con una forma por sí misma exclamativa colocan de ordinario el tono principal sobre dicha palabra, haciendo descendiente el resto de la frase, como advierte Navarro Tomás (1957: 233). En los enunciados analizados este no parece ser el caso ya que el tono principal recae sobre 'bueno'. El mismo autor añade que cuando en una misma frase hay dos o más palabras que queremos poner de relieve, hacemos que cada una de ellas, dentro de la línea general de la entonación, ocupe una altura preeminente, resultando una ondulación muy marcada entre las sílabas fuertes de dichas palabras y las demás sílabas de la frase (íbid.). Sin embargo, recordemos que Quilis (1993: 453), en cuanto a las oraciones exclamativas, destaca un descenso muy acusado del fundamental desde la primera sílaba acentuada, o por un fundamental muy bajo y plano. Como ya se ha mencionado, en muchos estudios se destaca lo plano de la enunciación irónica y en parte lo confirma también este estudio.

Se pueden observar, además, diferencias en relación con las variaciones de frecuencia entre las dos hablantes, debido a las características personales y, asimismo, al hecho de que solo G sea una hablante nativa. Sin embargo, parece que estas diferencias en el tono no influyeron de manera decisiva en el reconocimiento de la intención irónica, como veremos a continuación.

4.1.2 La intensidad y la duración

Abelda Marco (2012) advierte que una conversación en situaciones normales suele registrar 60 dB. No obstante, en las grabaciones se capta y mide también el ruido ambiental, por eso los resultados pueden ascender. En una conversación coloquial se suele registrar una media de 77,5 dB de intensidad (Abelda Marco 2012) con lo cual

podemos observar que las máximas alcanzadas tanto en todos los enunciados irónicos de la hablante G como en los de la hablante B son bajas:

Figura 4: La media de intensidad (*mean-energy Intensity*) en los enunciados irónicos

	Enunciado Ir1	**Enunciado Ir2**	**Enunciado Ir3**
Hablante G	73,5 dB	70,5 dB	68,8 dB
Hablante B	62,3 dB	71,9 dB	73,7 dB

Figura 5: La media de intensidad (*mean-energy Intensity*) en los enunciados no irónicos

	Enunciado NoIr1	**Enunciado NoIr21**
Hablante G	76,0 dB	75,9 dB
Hablante B	69,7 dB	71,9 dB

El hecho de que la media de intensidad de los ejemplos analizados sea en general más baja en los enunciados irónicos[22] da a entender que la pronunciación irónica no es enfática, tampoco marcada, como lo es, por ejemplo, la pronunciación descortés (Abelda Marco, 2012: 526). Este hecho también concuerda con la descripción de Padilla García (2009) sobre el tono irónico en la enunciación irónica propiamente dicha, ya que según sus investigaciones ésta carece de aumento del volumen.

Se puede observar la mayor velocidad en los enunciados del hablante nativo, lo que era de esperar; asimismo se puede observar una cantidad mayor en los enunciados irónicos que en los no irónicos, lo que se debe a los alargamientos fonéticos y un tempo ralentizado:

Figura 6: Velocidad del habla en los enunciados irónicos en segundos

	Enunciado Ir1	**Enunciado Ir2**	**Enunciado Ir3**
Hablante G	1.18	1.20	1.50
Hablante B	1.50	1.23	1.66

Figura 7: Velocidad del habla en los enunciados no irónicos en segundos

	Enunciado NoIr1	**Enunciado NoIr21**
Hablante G	1.17	1.21
Hablante B	1.22	1.36

Se ha confirmado entonces que los enunciados irónicos se caracterizan por una curva entonativa más plana y por una intensidad baja, se ha confirmado la ralentización de la emisión[23] de una manera más evidente como si con ello el enunciado tuviera más

22 El enunciado no irónico IrG1 posee, además la intensidad más alta: 81,8 dB.

23 Por ejemplo el alargamiento de los sonidos en el adjetivo final *bueno* que es el lugar sobre el que recae el 'peso irónico'.

carga informativa (véase también Padilla 2009), pero no el aumento del volumen. También se ha confirmado en parte el aumento de la F_0 en la inflexión final de la curva, lo que es según Padilla García (2009), característico de los enunciados irónicos.

4.2 Reconocimiento de la intención irónica

Como ya se ha mencionado, a los oyentes se les dividió en dos grupos ya que nos interesaba conocer cuál será la diferencia entre los que sí conocían el contexto y los que no. El contexto no irónico (A) está sacado del AtInEnEs: entras en una panadería, notas un olor a pan muy bueno y se lo dices a la panadera. Por otro lado, el contexto irónico (B) es nuestro: llegas a casa con tu amiga, huele mal, tu pareja, que acaba de salir, ha quemado el pan y le dices a tu amiga: qué olor a pan tan bueno.

Abajo se recogen los datos sobre los aciertos en el grupo I:

Figura 8: porcentajes de acierto en el reconocimiento de los enunciados no irónicos con contexto situacional (grupo I)

		Porcentaje/número de aciertos (N=15)
hablante G	Enunciado NoIrG1	87% (13)
	Enunciado NoIrG2	93% (14)
hablante B	Enunciado NoIrB1	80% (12)
	Enunciado NoIrB2	93% (14)

Figura 9: porcentajes de acierto en el reconocimiento de los enunciados irónicos con contexto situacional (grupo I)

		Porcentaje/número de aciertos (N=15)
hablante G	Enunciado IrG1	73% (11)
	Enunciado IrG2	80% (12)
	Enunciado IrG3	60% (9)
hablante B	Enunciado IrB1	53% (8)
	Enunciado IrB2	66% (10)
	Enunciado IrB3	73% (11)

En cuanto a los enunciados no irónicos tal vez sorprende el hecho de que los enunciados no irónicos del hablante nativo G no hayan sido reconocidos por todos los oyentes, sobre todo porque antes se había escuchado un enunciado no irónico con la misma variante dialectal (madrileña) y en el anexo se pueden observar las semejanzas en cuanto al acento y la curva del fundamental. Pero cabe volver a decir que los oyentes no eran hablantes nativos de español, y es un hecho que, aparte de ciertas características de entonación comunes a los dos idiomas en cuestión (español y esloveno), existen también las circunstancias especiales (la amplitud y la extensión de los intervalos, la combinación de las inflexiones, las curvas melódicas particulares), características de cada lengua como también de cada individuo. Con lo cual en un futuro sería interesante, si

no necesario, repetir el mismo experimento con hablantes nativos de español.

En cuanto a los ejemplos irónicos el porcentaje de aciertos es más alto en el grupo I lo que era de esperar ya que disponían de los dos posibles contextos situacionales. Si observamos la curva melódica de los enunciados con menos acierto (Enunciado IrG3 donde un tercio de los hablantes no reconoció la entonación irónica y el Enunciado IrB1, donde casi la mitad no acertó) podríamos atribuirlo quizás al tono más grave y a que tenía menos aumentos y disminuciones de la frecuencia fundamental.

En el grupo que no disponía de contextos previos se nota un descenso en cuanto a los aciertos tanto de los enunciados irónicos como de los no irónicos. Los mismos enunciados reciben menos aciertos, lo que era de esperar:

Figura 10: porcentajes de acierto en el reconocimiento de los enunciados no irónicos sin contexto situacional (grupo II)

		Porcentaje/número de aciertos (N=15)
hablante G	Enunciado NoIr G 1	53% (8)
	Enunciado NoIr G 2	67% (10)
hablante B	Enunciado NoIrB1	60% (7)
	Enunciado NoIrB2	53% (8)

Figura 11: porcentajes de acierto en el reconocimiento de los enunciados irónicos sin contexto situacional (grupo II)

		Porcentaje/número de aciertos (N=15)
hablante G	Enunciado IrG1	40% (6)
	Enunciado IrG2	53% (8)
	Enunciado IrG3	33% (5)
hablante B	Enunciado IrB1	33% (5)
	Enunciado IrB2	47% (7)
	Enunciado IrB3	53% (8)

Lo que llama la atención en cuanto a los resultados del grupo II (pero también del grupo I) es el hecho de que hay un porcentaje considerablemente alto (casi 50%) de los que han encontrado la intención irónica en los enunciados que no han sido emitidos con esta intención. Este hecho los atribuimos a la ausencia del contexto previo. Es obvio que aquí la prosodia no parece resultar suficientemente informativa. Teniendo en cuenta que los oyentes siempre estamos buscando la relevancia óptima de cualquier enunciado que rija el menor esfuerzo posible, como ya nos demostraron Sperber y Wilson (1986), se puede entender que los que no disponían de información contextual, partían de sus propios contextos mentales.

Creemos importante señalar el hecho de que el enunciado con el porcentaje de aciertos más alto en los dos grupos (grupo I: 80%, grupo II: 53%) ha sido el enunciado IrG2, que termina con la juntura terminal ascendente, puesto que la hablante añade el adverbio ¿*no*?, que como «ironía cómplice» (Hidalgo Navarro 2014: 472) busca acuerdo

con el interlocutor. Obviamente este hecho ha servido como ayuda para reconocer más fácilmente la ironía.

Como los oyentes conocían a las hablantes era de esperar que iban a ser más fácilmente reconocibles las intenciones irónicas, puesto que estaban familiarizados con sus inflexiones particulares. Sin embargo, hemos visto que aún con el contexto previo el porcentaje de aciertos en ningún caso ha sido el 100%.

5 CONCLUSIÓN

«Irony markers cannot be defined as infallible pointers to irony» (Muecke 1978: 365)

Con la ironía el hablante expresa su actitud hacia lo dicho y hacia el interlocutor y para ello utiliza recursos variados, entre ellos también la entonación que es, como se ha demostrado también en el experimento, una guía estratégica importante dentro de la dinámica del sentido en un intercambio comunicativo.

Sin embargo, como se ha podido ver, es difícil reconocer la intención irónica de un enunciado sin previamente conocer un contexto situacional, con lo cual se puede concluir que solo las propiedades melódicas de un enunciado no aseguran el reconocimiento de las intenciones comunicativas por mucho que se esfuerce el hablante. Así se han confirmado en parte las conclusiones de otros estudios (Becerra Valderrama 2012, Bryant/Fox 2005) de que solo la prosodia no es suficiente para que los interlocutores reconozcan las intenciones irónicas pero que ésta sí tiene la función auxiliar ya que facilita una transmisión más eficaz de la intención comunicativa. Y no hay que olvidar que la ironía a menudo no se marca articulatoriamente ya que depende sobre todo de los conocimientos compartidos y del contexto. Al fin y al cabo, estamos de acuerdo con Poyatos (1994: 130), cuando afirma que los tres componentes del esquema comunicativo, lenguaje, paralenguaje y kinésica, son inseparables ya que forman un verdadero instrumento de la comunicación humana funcionalmente coherente, con lo cual la ausencia de la posibilidad de observar el tercero en nuestro experimento ha sido claramente significativo.

El experimento descrito, que sin duda necesitaría una repetición más sistematizada y elaborada, es solo una pequeña muestra en la que se han confirmado algunos patrones comunes de los que se habla en los estudios sobre las enunciaciones irónicas, mientras que para establecer las conclusiones definitivas habrá que analizar un corpus mucho más amplio.

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EL PAPEL DE LA PROSODIA EN LA EXPRESIÓN DE LA IRONÍA EN ESPAÑOL

Cuando la ironía verbal, fenómeno intrínsecamente polifónico, forma parte de un discurso oral, a menudo va acompañada de una entonación, de un tono y de un acento particulares (Ruiz Gurillo 2009, Becerra Valderrama 2011). Por lo tanto, la prosodia llega a formar parte significativa de la información paralingüística en una conversación real (Poyatos 1994, Couper-Kuhlen 2000), desempeñando no pocas veces el papel decisivo para el reconocimiento y la correcta interpretación de la ironía verbal por parte del interlocutor. En español hay pocos patrones sintácticos que posibiliten el enunciado irónico (p. ej. la anteposición del adjetivo según Haverkate 1985), de ahí que el papel de la entonación, posiblemente el fenómeno lingüístico más influyente en la comunicación oral, merezca más atención, aunque su estudio no se ha considerado siempre prioritario.

Este trabajo tiene como objetivo, primero, mostrar la relevancia pragmática de la prosodia en la producción de los enunciados irónicos y, segundo, observar los factores que determinan la entonación irónica en español, examinando su funcionamiento en ejemplos concretos del discurso oral. Para este objetivo se han comparado ejemplos de enunciados irónicos con no irónicos, especialmente grabados para esta ocasión y analizados con ayuda del programa informático Praat. La comparación, cuyo principal objetivo ha sido determinar el papel de la prosodia en el reconocimiento de la intención irónica sin o con el contexto situacional, se ha realizado a través de un experimento con treinta estudiantes de máster del departamento de lengua y literatura españolas de la Facultad de filosofía y letras de la Universidad de Ljubljana.

Palabras clave: entonación, prosodia, ironía, discurso oral

Summary
THE ROLE OF PROSODY IN THE EXPRESSION OF IRONY IN SPANISH

When verbal irony, an intrinsically polyphonic phenomenon, forms a part of oral discourse, it is often accompanied by a particular intonation, tone and accent (Ruiz Gurillo 2009; Becerra Valderrama 2011). Therefore, prosody becomes a significant part of the paralinguistic information in real conversation (Poyatos 1994; Couper-Kuhlen 2000), often playing the decisive role for the recognition and correct interpretation of verbal irony by the interlocutor. In Spanish there are few syntactic patterns that enable the ironic statement (e.g. the anteposition of adjectives according to Haverkate 1985). Hence, intonation, arguably the most influential linguistic phenomenon in oral communication, deserves more attention, although it has not always been considered a priority.

This article aims to, first, show the pragmatic relevance of prosody in the production of ironic statements and, second, observe the factors that determine the ironic intonation in Spanish, while examining its performance in specific examples of oral

discourse. For this purpose, examples of ironic statements have been compared with non-ironic statements and analyzed using Praat software. The comparison, whose main objective was to determine the role of prosody in the recognition of the ironic intent with or without the situational context, was carried out in an experiment with thirty students in the Master's Degree program in Spanish at the Faculty of Arts of the University of Ljubljana.

Keywords: intonation, prosody, irony, oral speech

Povzetek

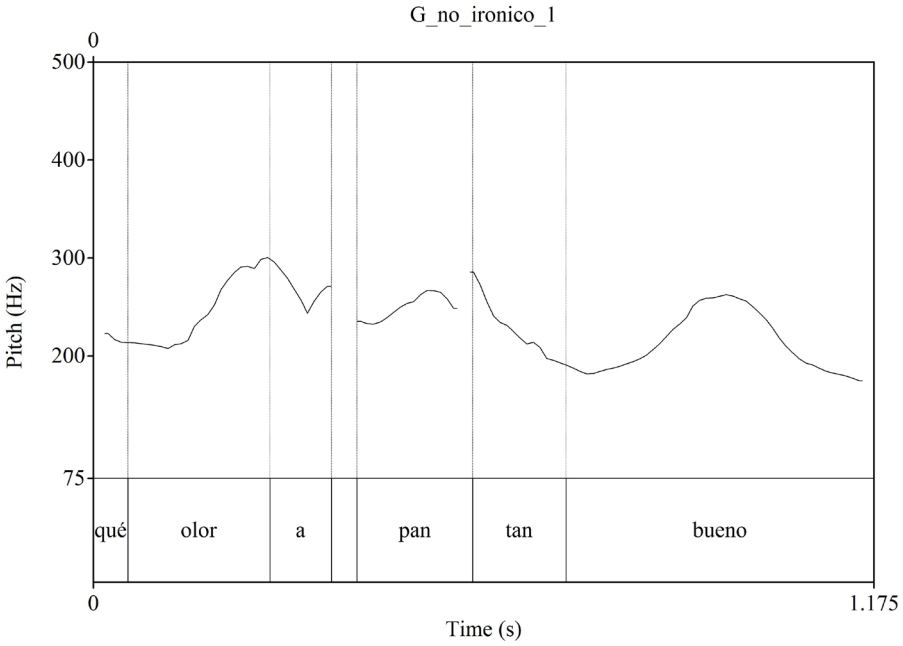
VLOGA PROZODIJE PRI IZRAŽANJU IRONIJE V ŠPANSKEM JEZIKU

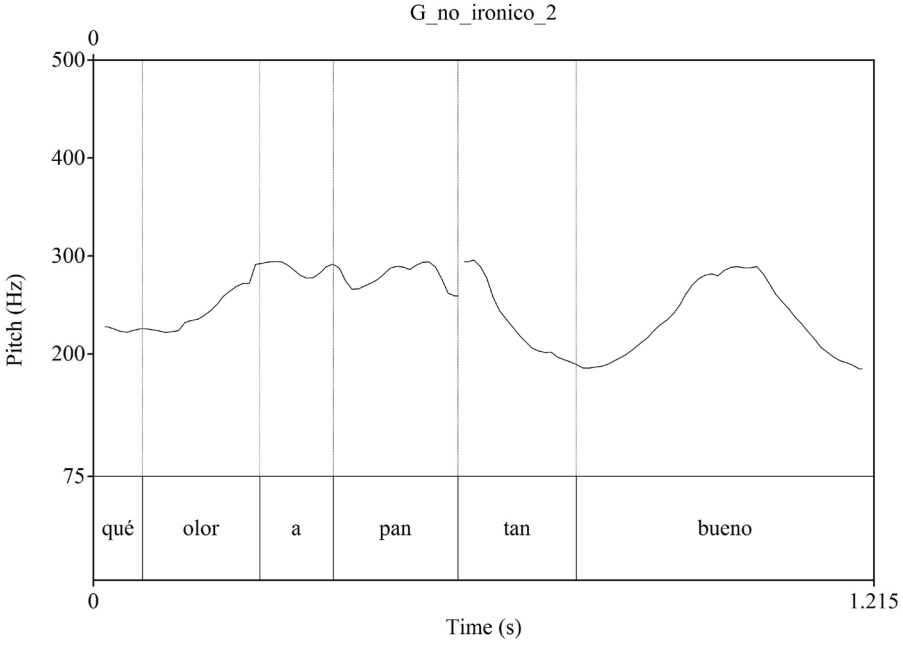
Ko se verbalna ironija, po svojem bistvu večglasje, pojavi v govorjenem sporazumevanju, jo pogosto spremljajo svojevrstna intonacija, tonski potek in vrsta naglasa (Ruiz Gurillo 2009; Becerra Valderrama 2011). Prozodija potemtakem igra pomembno vlogo znotraj parajezikovnega sklopa informacij v konkretni sporazumevalni situaciji (Poyatos 1994; Couper-Kuhlen 2000) in je pogosto celo odločilna pri poslušalčevem prepoznavanju in ustrezni interpretaciji ironično rabljenih besed. Španski jezik razpolaga z manj skladenjskimi vzorci, ki bi omogočali ironične pomene (npr. položaj pridevnika po Haverkateju 1985), iz česar sledi, da si raziskovanje intonacijske vloge, verjetno ključnega sredstva pri govorjenem sporazumevanju, v španskem prostoru zasluži več pozornosti, čeprav temu ni bilo vedno tako.

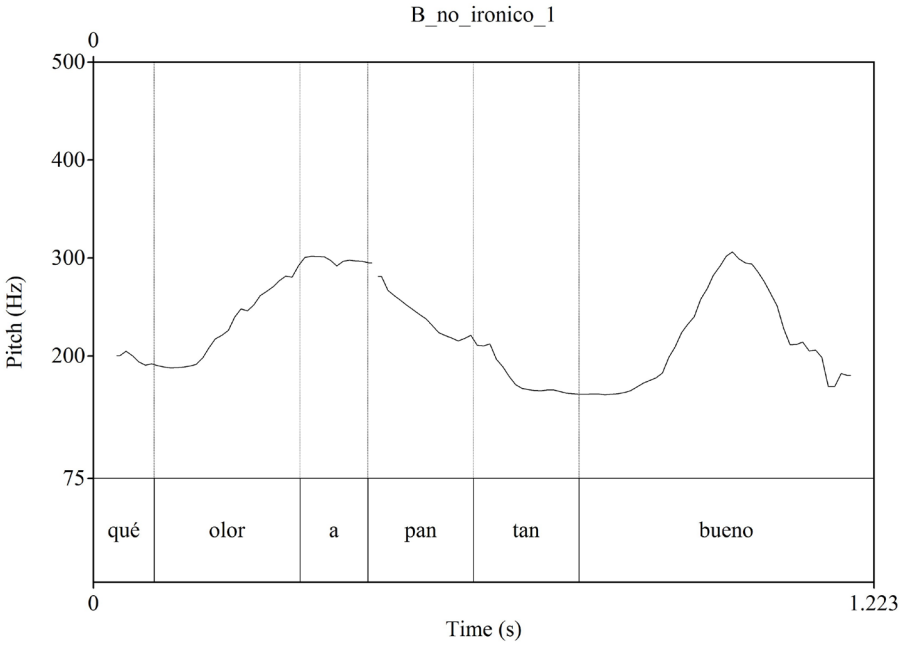
Cilja pričujoče študije sta dva: prvič, prikazati pragmatično relevantnost prozodije pri tvorjenju ironičnih izjav in drugič, na podlagi konkretnih primerov govorjene interakcije analizirati tiste prozodične dejavnike, ki opredeljujejo in zagotavljajo ironično intonacijo v španskem jeziku. V ta namen je bila s pomočjo računalniškega orodja Praat opravljena primerjalna akustična analiza ironičnih in ne-ironičnih izjav, posebej posnetih za potrebe te raziskave. V eksperimentu, pri katerem je sodelovalo trideset študentov španskega jezika in književnosti na Filozofski fakulteti Univerze v Ljubljani, se razišče tudi, v kolikšni meri prozodija pripomore k prepoznavanju ironičnega namena govorca, če poslušalci situacijskih okoliščin izjavljanja ne poznajo.

Ključne besede: intonacija, prozodija, ironija, govorjeni jezik

ANEXOS: GRÁFICOS DE LOS ENUNCIADOS ANALIZADOS



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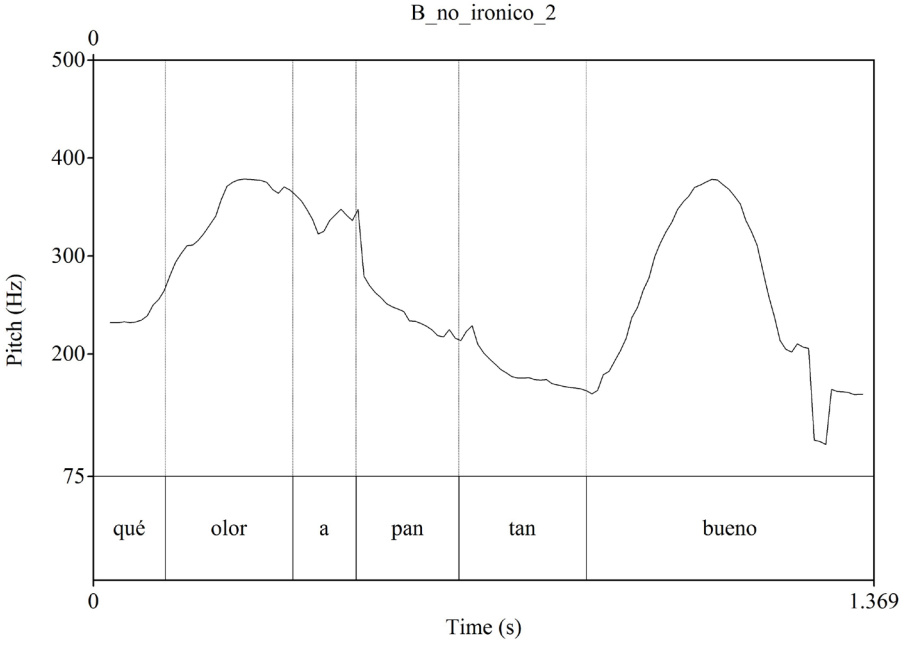
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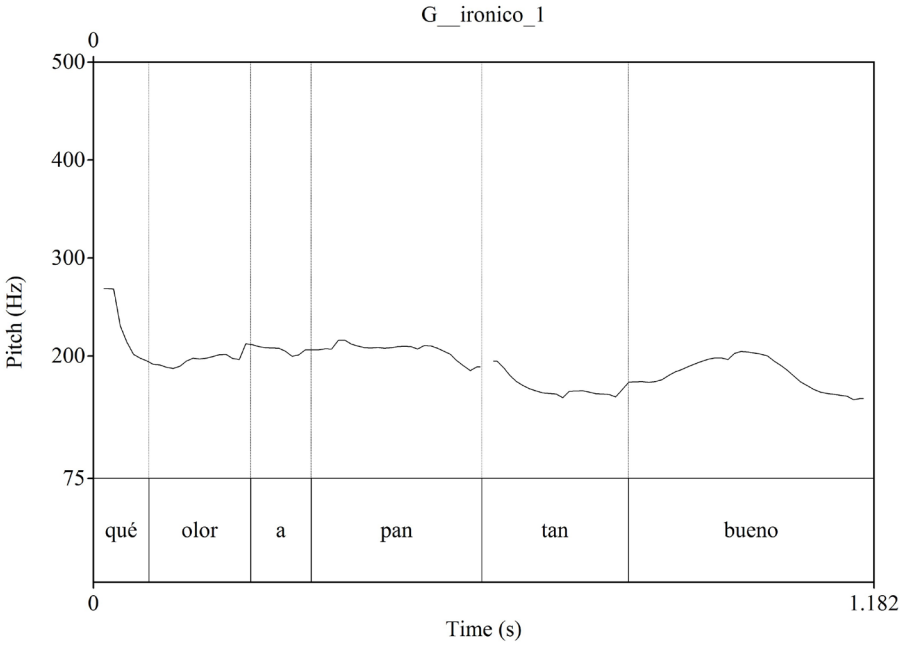
Time (s)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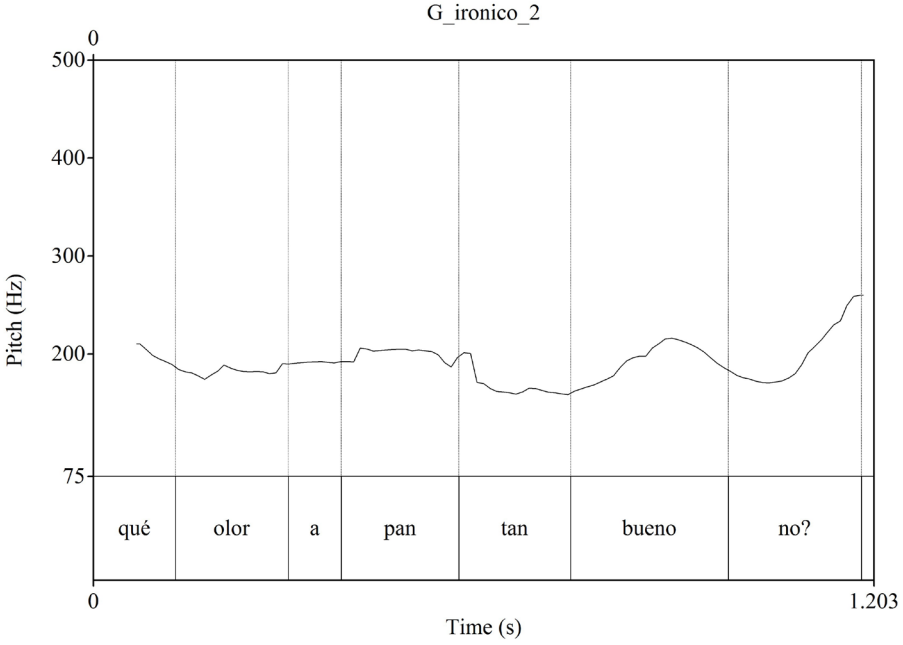
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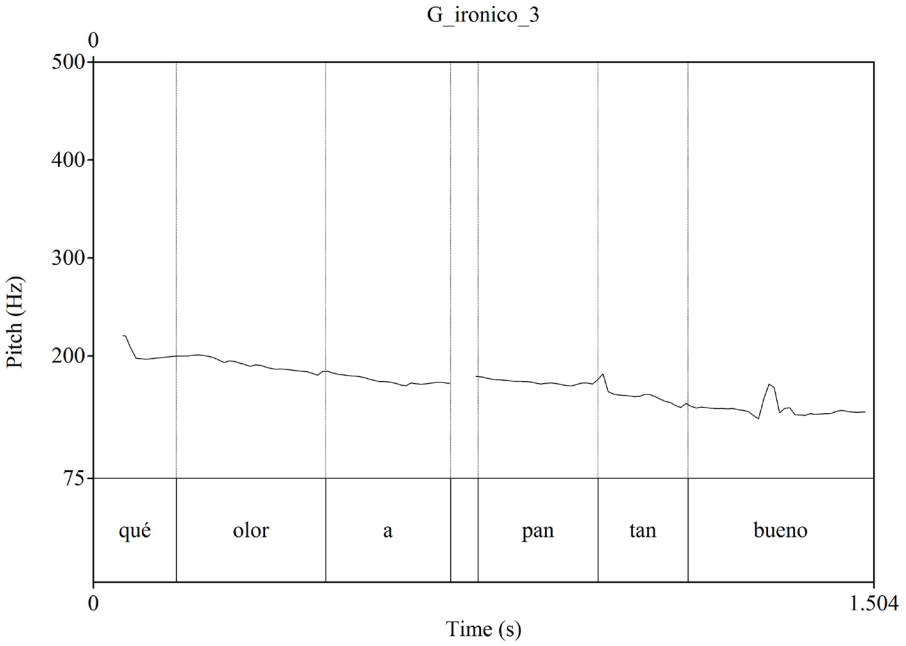
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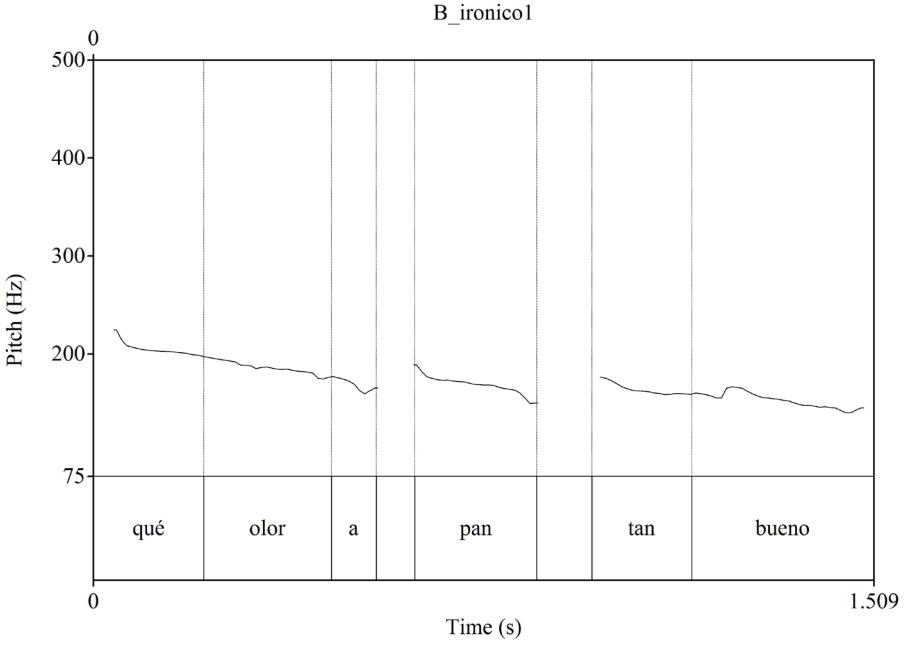
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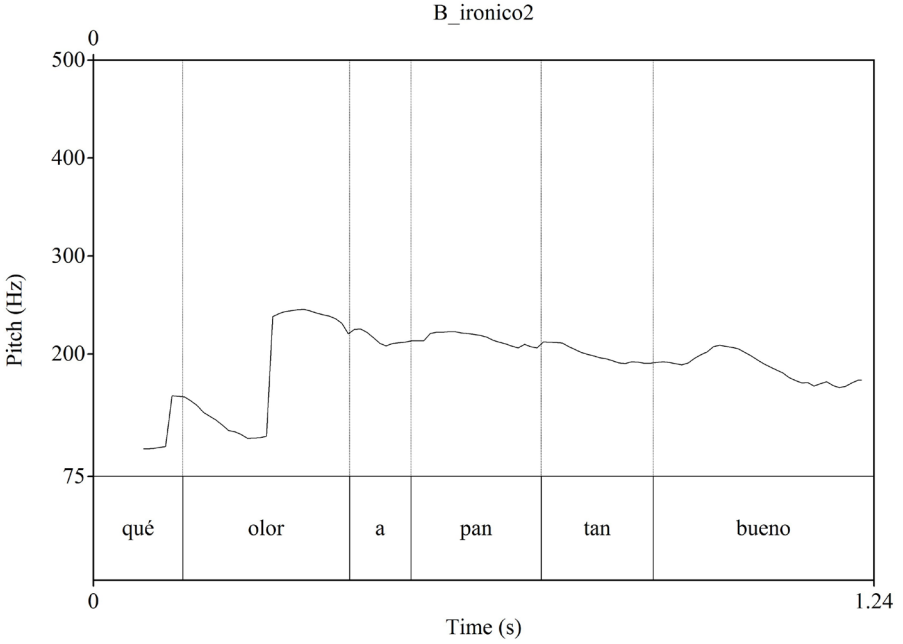
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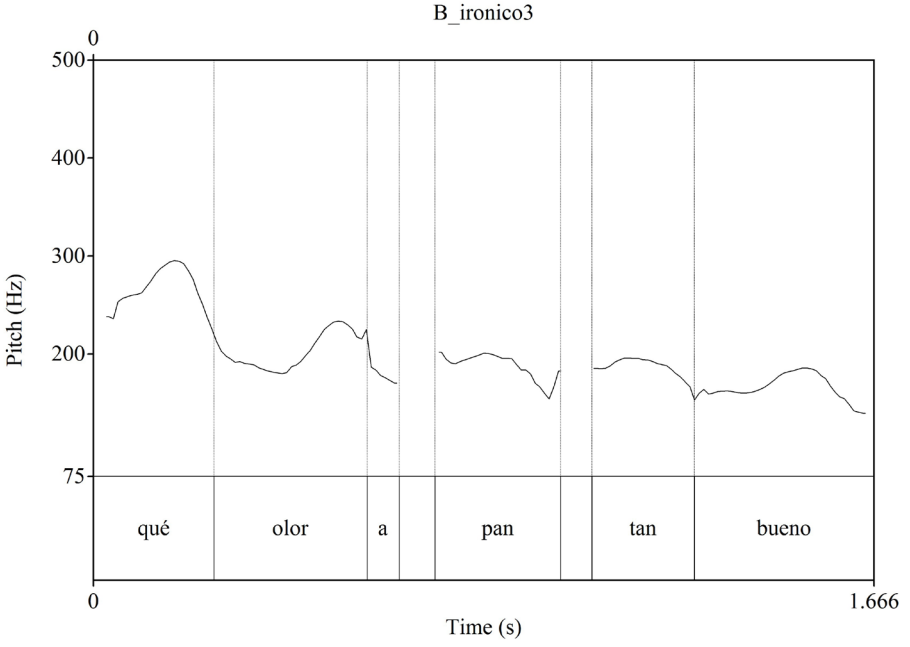
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Time (s)

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THE EXPRESSIVE POTENTIAL IN A DRAMATIC TEXT: BRECHT'S *A RESPECTABLE WEDDING*

1 INTRODUCTION

This article investigates how the linguistic shaping of a dramatic text influences its stage speech realisation. My initial assumption is that a dramatic text contains *matrices of expressive potential*[1] analogous to "matrices of performativity" (Ubersfeld 2002: 25). Just as a dramatic text "can be analysed by procedures that […] bring to light kernels of theatricality" (ibid.), it is also possible to identify the linguistic features that reveal its expressive potential. By analysing the Slovenian translation of Bertolt Brecht's one-act play *A Respectable Wedding*[2] and a part of its staging at the University of Ljubljana's Academy of Theatre, Radio, Film and Television (AGRFT),[3] I aim to show how the linguistic structure of the written text gives rise to an actor's speech interpretation.

A dramatic text belongs to both the literary and dramatic arts; therefore "alongside reading, it also makes possible or even demands staging" (Kralj 1998: 5). Its literary-theatrical nature is usually implied visually: it is graphically divided into the main (dialogic) text, spoken during the performance, and the side text (stage directions or "didascalia"), containing the author's instructions for its dramatization (location, time, etc.). The expressive potential can also be graphically evident: first and most obviously as the vertical succession of utterances of individual characters that form the dialogic structure (vertical axis); second and more subtly as the linguistic components of speech interwoven into the semantic and syntactic structure of individual lines[4] (horizontal axis).

In the dramatic theatre (theatre that has as its basis a dramatic text and considers speech "an important acting expression" (Humar et al. 2007: 54)), actors first convert the written language into speech during reading rehearsals, where, by using prosody in line with their understanding and experience of the content, they rely mostly on the written speech indications (punctuation, typesetting, stage directions). In the transfer

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1 I see *expressive potential* as a characteristic of the written text that uses linguistic features to indicate the speech realisation.

2 *Malomeščanska svatba* (henceforth *Svatba*), translation: Eduard Miler, Irena Novak Popov (Brecht 1993: 67–90). *A Respectable Wedding* (*The Wedding),* translation: Jean Benedetti (Brecht 1971: 258–282).

3 Performance of fourth-year students in the Old Power Station (2016). I was their "mentor" for speech.

4 An *utterance/line* is "a unit of dialogue spoken by one of the co-speakers before the next one begins to speak" (Humar et al. 2007: 164); cfr. also *turn* and *turn-taking* as used in conversation analysis (Verdonik 2007: 16).

from the literary to the theatrical medium, a larger/smaller deviation always occurs from the written language (omitting/adding/reorganising), which is dependent upon the directorial concept and the theatrical context (scenography, costumes, etc.) and also upon the expressive potential in the written text. Certain playwrights devote detailed attention to the potential enunciation of the lines, remaining aware that they describe that "which will later be spoken and staged" (Vitez 2012: 354). This is why they choose the type of linguistic features that will organise the speech also in terms of rhythm. If the text's expressive potential is weak, it is possible to strengthen it in the staging. The actors, often on their own, consciously or unconsciously, reshape the linguistic structure of their lines when speaking (they change the word order, omit/add a word, etc.; see Podbevšek 2008: 51–60). The process is often overseen by a language consultant who, in line with the directorial vision, orients the entire staging to a common speech denominator and in doing so respects the speech specificity of the individual actors (psychophysical characteristics), the interpretive image of the characters and the stage context. The synergy among the mentioned factors creates a stage (speech) unity and a unique stage speech aesthetic.

2 BRECHT AND *A RESPECTABLE WEDDING*

One of the most important German playwrights, Bertolt Brecht (1898–1956), was a poet, writer, actor, director, theorist and reformer of theatre. He wrote many socially engaged plays[5] with a clear critique of the capitalist system. Through his *epic theatre* he aimed to morally and socially educate the public with radically different performance strategies than bourgeois theatre. Using various features (cutting the action with songs, commentaries, projections), he broke the theatre illusion (through the so-called *alienation effect*) and forced the spectator into a critical experiencing of the stage action.

A Respectable Wedding belongs to Brecht's early works (1919).[6] In it he reveals and ridicules the perverse world of the bourgeoisie. Nine typified characters (The Bride's Father, The Groom's Mother, The Bride, The Groom, etc.) at a wedding banquet show their spiritual emptiness and complacency through their words and actions. The gradual demolition of the furniture, crafted by the Groom himself, intensifies the tragicomedy of the situation and symbolises the end of the illusion of happiness and the collapse of interpersonal relations. The play ends with the guests leaving, the Groom and the Bride commenting about the events of the feast, and then departing to the bedroom, where the bed also collapses.

Although "we miss the complexity, the dramatic perfection and the deeper social analysis of his later works" (Šlibar 1985/86: 74), Brecht's play is interesting from a theatre studies viewpoint because it announces "the theatre of the grotesque and the

5 *The Threepenny Opera* (1929), *Mr Puntila and his Man Matti* (1940), *Schweik in the Second World War* (1944), etc.

6 From 1919–1921 Brecht wrote several one-act plays, among them, *Die Kleinbürgerhochzeit*, originally titled *Die Hochzeit*, first staged in Frankfurt (1926). The young Brecht was influenced by the Bavarian actor Karl Valentin, who in his improvised performances comically showed the bourgeoisie in confrontation "with the insidious environment" (Šlibar 1985/86: 75).

absurd" (ibid.). We feel the exuberance of language typical of the absurdist drama (see 4.1), namely, in the semantic structure, where the puns create seemingly nonsensical connections with a comic effect. The manner of linguistic shaping is close to everyday speech communication. The expressive potential of the text is not only visible in the dialogue but also in the stage directions.

3 THE EXPRESSIVE POTENTIAL IN STAGE DIRECTIONS

Stage directions or "didascalia" are the playwright's instructions for the practical context in which the dialogue should be performed. They are intended for the reader to be able to follow "the inner relations and exchanges between individual speeches and other activities" (Inkret 1986: 93); they help to create the virtual space of the dialogue. Theatre makers respect them only partially, since the staging dictates its own speech context.

In *Svatba* there are 152 stage directions; they appear in different positions with different lengths and various functions. They indicate the performers' physical actions (*ga potolče po hrbtu / slapping him on the back, odmaši steklenico / opens bottle*), the direction of the speech (*prijatelju / to the friend, nevesti / to the bride*), the way the sound is rendered (*brutalno/brutally, grozeče/threatening*), the end of a dialogue (*tišina/silence*).

In length, the first note stands out (11 sentences); it precisely describes the spatial context of the conversation and provides important details for the proxemics,[7] since the speech "of a dramatic character […] is always a speech in a space" (Inkret 1986: 94). The first note also reveals that the play starts in medias res:

> Belo prepleskana soba z veliko pravokotno mizo v sredi. Nad njo rdeč lampijon. Devet preprostih, širokih lesenih stolov z nasloni za roke.[...] Večer je. Rdeči lampijon je prižgan. Za mizo sedijo svatje in jedo. (69) / A whitewashed room. with a large rectangular table in the middle. Above it a red Japanese lantern. Nine plain roomy armchairs. [...] It is evening. The Japanese lantern is lit. The wedding guests are seated around the table, eating. (259)

Stage directions appear within a dialogue before a line (a), between lines (b), after a line (c) and within a line (d):

(a)	MATI *prinaša na mizo* To je polenovka.	MOTHER *bringing in a platter* Here comes the codfish.
(b)	*Odobravajoče mrmranje.*	*Mutterings of approval*.
	OČE Tole me je spomnilo na neko zgodbo. (69)	FATHER That reminds me of a story. (259)
(c)	PRIJATELJ Potem pa lahko gremo! *Gre ven.* (86)	FRIEND Then I guess we might as well leave! *Goes out.* (278)
(d)	ŽENIN A tako. *Se smeje.* Zato tako pridno sediš na svojem mestu? (86)	GROOM Oh! *Laughs*. Is that why you've been standing around so quietly? (278)

7 *Proxemics* investigates how the size and shape of the space, the spatial relations between the actors, their position on the stage, movement, etc., influence the speech.

The expressive potential is shown by the instructions for the speaking of the lines (*navihano/mischievously, zahlipa/sobs*), for filling in the space between lines with unspoken sounds (*Odobravajoče mrmranje / Mutterings of approval, Smeh/Laughter*), for the absence of sound (*Tišina/Silence, Premor/Pause*). The number of 'sound' notes that suggest the choice of prosodic features is 58.

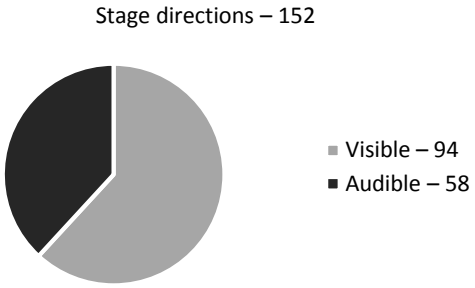

Figure 1: The relation between stage directions for audible and for visible action

For the rhythmic structuring of the dialogue in the vertical direction, the indications for the interruption of dialogue are especially visible. The so-called interturnus interruptions of speech (Katnić Bakaršić 2003: 177) are much more characteristic in the dense dialogue of a dramatic text than in everyday communication, and, likewise, their stage realisation is a strong theatrical mark. Brecht's text has 5 stage directions indicating silence, 6 indicating a pause.[8] A silence (also a pause)[9] concludes a speech event, delineating it from the next one and indicating the atmosphere between speeches: embarrassment, awe, tension, etc. In the written text the dialogic chain structures the conversation in the vertical direction, while onstage it structures an actor's speech time.

Silence indicates an embarrassing moment, e.g., after the Young Man's solemn speech to the young newly-weds when he attempts to get all the guests to sing: *Začne peti, ker mu nihče ne pritegne, kmalu sede. Tišina* (73) / *He starts singing, but stops short and sits down when no one joins him. Silence* (264).

The Father's long-winded story about Uncle August, who on his deathbed vulgarly refused to see a priest – *Rekel je: Poližite mi ..., no, saj veste kaj* (75) / *He said: Kiss my . . . well, you know what* (266) – is also followed by silence. The guests do not respond to the concealed vulgarism; they show their negative reaction towards Father's intrusive storytelling through silence or rather by abstaining from commenting. Silence lends the scene a grotesque note, since Father's stories speak about the everyday world in which they live, yet, they want him "in that sublime moment to give up, to forget it, to delude it" (Poniž 1985/86: 72).

8 I see silence as a longer, pause as a shorter absence of speech. In the German original *Stille* and *Pause* are used distinctively (Brecht 1967: 2720, 2739). See Poniž (2006: 27–44) and Katnić Bakaršić (2003: 175).

9 It is in realist literature that playwrights such as Chekhov, Ibsen and Strindberg begin to intentionally dedicate a role to silence. In the theatre of the absurd silence became a key part of the dramaturgy (Beckett, Ionesco, Pinter) and "a measure of dramatic rhythm" (Gantar 2006: 243).

Stage directions for pauses appear also after the mild conflict between the Friend and the Groom about whether the Friend is too tired after dancing. The Young Man interrupts the impasse with an unexpected question: *Ste tudi vi videli gledališko igro Baal?* (82) / *Did you see that play* Baal*?* (274).[10] Three lines of commentary about *Baal* follow, then silence, which stresses the negative opinion about the play (*silna svinjarija / unadulterated filth*). Father and the Friend each break the embarrassment with their own line about family life, but the conversation does not pick up; again there is a pause. The Groom tries to lighten the mood – *Tako. Poveselimo se malo! Saj se ne ženim vsak dan* (83) / *All right, let's have merriment! I don't get married everyday* (274) – but he is not successful; again a pause. Only the Friend's idea of playing cards returns the conversation to a regular rhythm.

Stage directions that describe the manner of speech are short, adverbial (e.g., *polglasno / in a half-whisper, navihano/mischievously*) and found 21 times. There are 26 notes for unspoken sound events, most of them short: *smeh/Laughter, vsi trkajo s kozarci / All clink glasses*; some are also longer: *V tem trenutku začnejo zvoniti cerkveni zvonovi* (73) / *At this moment church hells begin to ring* (264). Some are 'sounded-unsounded' notes, like the last – when the Groom drags the Bride off to bed: *Jo odvleče ven. Tema. Slišimo, kako se podira postelja* (90) / *Drags her out. Darkness. Sound of bed collapsing* (282).

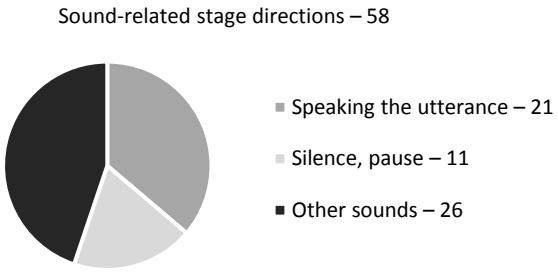

Figure 2: The relation between the notes for the speaking of lines, silence/pause and other sound events

4 THE EXPRESSIVE POTENTIAL IN THE DIALOGUE

4.1 Gossip as a Stylistic Procedure

The action in the one-act play is reminiscent of a coarse Chaplinesque farce or "the slapstick comedies of silent film" (Šlibar 1985/86: 75): breaking chairs and tables, the response of the wedding guests to vulgar jokes and sexual innuendos. The unrefined comedy of the external action is complemented by the dialogue's witty puns, self-referencing (the guests discuss Brecht's play *Baal*), unexpected turns (*Imate radi romantiko? – Ja. Zelo. Zlasti Heineja. Tako srčkan profil ima!(70) / Are you romantically inclined? – Oh, yes. I'm crazy about Heine. He has such an adorable profile!* (260)), vulgarisms (*žlampajo/eating hastily, pokavsal/banged*), absurdisms (*Ljubi gospod bog je nekoč hotel inkognito na sprehod. Ker pa si je pozabil privezati kravato, so ga*

10 *Baal* is another of play by Brecht.

prepoznali in ga odpeljali v norišnico (81) / One day the good Lord decided to go for a stroll incognito. But he forgot to put on a tie, so they recognized him and threw him in the loony bin (272)). Meaningless phrasemaking is shown in the Young Man's address to the young newly-weds, full of worn out, seemingly poetic phrases (*deviška nevesta, v viharjih življenja dozoreli ženin (73) / an innocent maiden, a man who has weathered life's stormy seas* (264)) taken from *Govori na svatbah / Speeches for Wedding Receptions*, which the Husband reveals rather tactlessly. The characters play out speech and behaviour patterns, they talk but have nothing to say, forced as they are to maintain the pointless conversation in order to preserve their bourgeois appearance and conceal their spiritual emptiness. The action intensifies grotesquely and the truth is finally bared in the closing dialogue: the Groom and the Bride – when left alone – "replay all that happened […] in words" (Poniž 1985/86: 73) and comment on their failure with *Saj je vseeno / It doesn't matter* and *Nič hudega* (90) / *Who cares* (282).

4.2 Interruptions

Interruptions are a prominent linguistic tactic. The exchange of lines takes three forms: the current speaker gives another person the chance to speak; the second speaker decides himself that he will speak; nobody decides to speak (omission of a line) – collectively creating an "interturnus break" (Katnić Bakaršić 2003: 55).

In *Svatba*, the second form of interruption is most frequent: different characters intentionally interrupt the Father's repetitive attempts to tell a story associated with the events at the wedding feast. When the Mother brings the codfish to the table, it reminds the Father of an uncle who choked on a fishbone. As everyone knows the Father's passion for storytelling, the Bride already interrupts him after his short announcement. But he persists. He starts to tell the story, then the Mother interrupts by telling her son to take the tail. But the Father is not thwarted and tells the story even more elaborately. The Mother interrupts the Father again by asking the guests how they like the food; he tries to fight for his speech space, but the Mother interrupts again. The action continues in this way until the Father nevertheless finishes telling his tale.

OČE Krili in postaja zmerom bolj modrikast, kot kakšen krap, pri tem prevrne vinski kozarec in nas neznansko prestraši, lopnemo ga po hrbtu, tolčemo, kamor prileti, in on, on ti bruhne čez celo mizo. Hrane se ni pritaknil nihče več – mi smo se pa zabavali, zunaj smo vse sami pojedli, navsezadnje sem bil jaz birmanec – torej, čez celo mizo, in ko smo ga srečno spet spravili k sebi, je rekel z globokim, zadovoljnim glasom, imel je krasen bas in je pel v zboru, tudi o tem vem imenitno zgodbo, torej, rekel je –	FATHER Flapping and turning as blue as a carp and knocks over a wineglass and scares everybody out of their wits. We thumped him on the back, gave him a good going over, and he, he threw up all over the table. We couldn't go on with our dinner – we were delighted, we ate it outside later on all by ourselves, after all it was my confirmation – anyhow, all over the table, and when we had him afloat again he said in his deep cheery voice – he had a fine bass and sang in the choral society, that's another great story, anyhow, he said –

MATI No, kako vam tekne riba? Zakaj nihče nič ne pripomni?	MOTHER Well, how's the fish? Why doesn't anybody say anything?
OČE Izvrstno! Torej, rekel je	FATHER Delicious! So he said –
MATI Ampak, saj še poskusil nisi!	MOTHER You haven't even tasted it!
OČE Ja, že jem, že jem. Torej, rekel je	FATHER All right, now I'm going to eat. So he said –
MATI Jakob, vzemi si še en kos!	MOTHER Have some more, Jacob!
ŽENIN Mama, oče vendar pripoveduje!	GROOM Mother, Father's telling a story!
OČE Hvala. Torej, polenovka, a ja, rekel je: otroci, zdajle se mi je pa skoraj zaletelo. Ampak hrana je bila neužitna. *Smeh.* (69)	FATHER Thank you. Anyway, the codfish, oh yes, he said: Children, I almost choked to death. The food was ruined. *Laughter.* (259–260)

Already in the first story, interrupting the Father becomes a visible linguistic and dramaturgical tactic that significantly contributes to the formation of his character and as a repetitive dialogic pattern gives the entire text a specific rhythm.

4.2.1 Song as Interruption

The insert "Balada o deviškosti v duru"[11] (sung by the Friend) represents a special type of interruption of the conversation.[12] The ballad consists of 5 rhyming 7-line stanzas. The penultimate stanza has 9 lines, 2 of which – in parentheses – vulgarly describe a hasty sex act, the brackets signalling the fleeting insignificance of the deed.

The poem tells the story of a groom who does not dare desecrate his bride's virginity before the wedding. He therefore finds other means of satisfying his craving. The Bride also finds herself a guy: *dedca in pol / No shy, shrinking violet, he*, who wastes no time in "doing" her: *se je z njo poravsal, / kar na štengah jo pokavsal! / Spread her on the stairs and banged her / Laughing at propriety.* Both are thus satisfied that their "chastity" has been preserved until the wedding. Laughter follows the song (*Žena se smeje / Wife giggles*), the Groom wants to move the conversation in a different direction as soon as possible, since the song hints at the question of the Bride's own chastity.

4.3 The Length of Utterances

The utterances in *Svatba* are mostly short (1 line, often partial) or medium (2 lines, usually partial), thus, long utterances (over 3 lines) are even more noticeable. Father's utterances are especially long; the longest is 21 lines (74/265), the Husband's affective description of life with his wife is 15 lines (86/277) and the Young Man's solemn speech is 12 lines (73/264). Long utterances express the desire to dominate, egocentrism or a speaker's individual style. The effects can be varied: "they can elicit boredom or unfriendliness," sometimes they can also be acceptable (Katnić Bakaršić 2003: 56).

11 "Ballad of Chastity in Major" (Brecht 1971: 270–271), Slovenian translation: Tone Pretnar (Brecht 1993: 79).

12 The inserted poem announces a staging strategy used in Brecht's later texts: breaking the stage action with a socially critical song.

In Brecht's play, the listeners generally respond to the Father's longer utterances by interrupting him or changing the topic or doing both. Short utterances prevail, which signals a faster conversational rhythm.

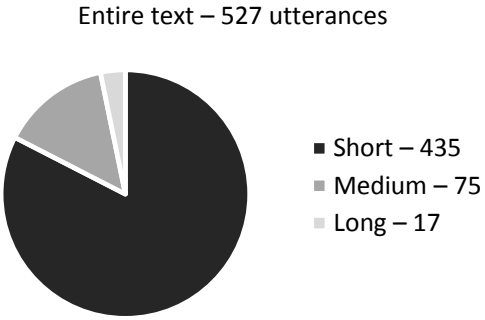

Figure 3: The relationship between utterances of different lengths

4.4 Graphic Marks for Speech Realisation

Punctuation is an important graphic mark for speech realisation. In *Svatba*, ellipses demonstrate the process of shaping a thought or withholding speech: *Oprostite, mislil sem ...* (72) / *I'm sorry, I thought ...* (263), *Bojim se, da stol ...* (81) / *I'm afraid that chair ...* (273). The underlined words in the Slovenian translation are surprising: *Jakob, vzemi še en kos* (69) / *Take that piece, Jacob* (262), *Zelo dobro* (70) / *That's a good one!* (260); in the original the same words appear with expanded spacing: *Jakob, nimm n o c h ein Stück, S e h r gut* (Brecht 1967: 2716). Both variations suggest emphasis. The noticeable number of exclamation marks shows the emotionality of the lines: *In moja sestra na hodniku! Za crknit! – In kako so zijali, ko se omara ni hotela odpreti!* (90) / *And my sister out in the hall! Enough to make you die laughing! – And the way they gaped when the cupboard door didn't open!* (282). Finally, dashes help shape the rhythm of longer statements (see 4.2).

4.5 Linguistic Elements of Spontaneous Speech

Brecht's linguistic shaping of the dialogues strives, both vertically and horizontally, to create a feeling of spontaneity. Spontaneous speech is a type of spoken language[13] actualised as "an acoustic interactive event, […] largely unprepared in advance, happening in real time and impossible to separate from the circumstances in which it takes place or arises" (Zemljarič Miklavčič 2008: 93).

The actor's speech is based on a written text and is not spontaneous; at least the actor speaks a text prepared in advance and responds to reactions of co-actors prepared in advance as well as to an external linguistic context prepared in advance. Because he is aware of the characteristics of spontaneous speech "he can also imitate all of its features in a [...] non-spontaneous text" (Verdonik 2007: 11).

13 Spoken language can also be realised as reading aloud or as a memorised text.

Creating a feeling of spoken spontaneity is an important characteristic of the contemporary stage speech aesthetic.[14] The written linguistic marks in the dramatic text help actors achieve spontaneity, especially with effective, text and stage appropriate prosody. Generally, as Verdonik observes (2007: 11), there are not many linguistic indicators for spontaneity in written texts, but because a dramatic text has inherent expressive potential, these kinds of marks are not so rare and do not go unobserved.

4.5.1 Deixis and Discourse Markers

In *Svatba*, the conversation is anchored in a situation that the speakers share (a wedding banquet); therefore frequent deictic terms create textual coherence through their reference to people, spaces, time and context. In texts we find "personal (I, you), temporal (now) and spatial (here)" deixis (Katnić Bakaršić 2003: 15). Deixis is connected to the dialogic nature of the drama and to its dominant time of the action, which is the present.[15] *Tole me je spomnilo na neko zgodbo* (69) / *That reminds me of a story* (259) – *tole/that* refers to the codfish that Mother has brought to the table. The involvement of the guests in the same situation and the rather common knowledge allows for relatively large deictic referencing: *Tale svetilka pravzaprav še ni dokončana (70) / I suppose that lamp never got finished?* (260), *Kako tukaj prijetno diši* (70) / *It smells so good here!* (261).

Discourse markers allow a larger expressive potential: *torej/so, anyway, no/well, seveda / of course*. These expressions show the speaker's attitude to the subject, to the co-speaker, his emotional engagement, "the connection of the discourse to the context" (Zemljarič Miklavčič 2008: 96). They often signal the beginning, the continuation or the end of an utterance; with them, a speaker can hold the listener's attention: *No, kako vam tekne riba? / Well, how's the fish?, Torej, polenovka, a ja, rekel je* (69) / *Anyway, the codfish, oh yes, he said* (260). In Father's story about the uncle who choked on a bone, *torej*[16] as a continuity marker is used seven times and it also has a rhythm-producing role.

4.5.2 Corrections, Repetitions, False Starts

Noticeable linguistic marks of spontaneity in Brecht's text include corrections[17] or rather 'errors' in the syntactic structure – incomplete thoughts, repeats, changes to syntax. By correcting, the speaker "reveals the processes that take place in the production of speech" (Verdonik 2007: 121) or "simultaneously, while speaking, plans how he will continue the statement" (ibid.: 123). An ellipsis often indicates the processing of a thought: *Jajca, hehehe, jajca, to je, hehehe, zelo dobro … jajca, to je izvrstno; sicer, hehehe, sicer ni nič, hehehe, to je izvrstno …, hehehe* (72) / *Eggs, hahaha, eggs,*

14 In the early 20th century, actors' speech moved away from spontaneity as a means of differentiation from everyday speech. Actors "by using facial expressions and gestures […] exaggeratedly exposed some prosodic features […] and with that gave speech an unnatural sound image" (Podbevšek 2010: 233).

15 The epic speaks "of events separated from *now* and *here*" (Katnić Bakaršić 2003: 17).

16 In English *anyway* is used twice, *anyhow* twice and *so* twice in this same speech.

17 *Dysfluencies* is also used, see Clark 2002.

that's hahaha, rich ... eggs are rich, marvelous; otherwise, hahaha, otherwise it's no good, hahaha, that's really marvel lous ... hahaha (262). Repetitions here are a sign of reticence – the character does not want to state his lewd thoughts; dysfluency offers an effective speech realisation. Repetitions, false starts, incorrect continuation are characteristic especially for the Father, who is fighting for his speech time (see 4.2.).

5 AN ACTOR'S SPEECH REALISATION

In their interpretation of their lines, the actor gives meaning to the written material mainly with the appropriate use of prosodic features (pauses, stress, tempo, etc.). Through these techniques he creates a feeling of speech spontaneity that can be intensified with the changing of lexis and syntax. I will cite a short section of Father's line.

Written text:

> OČE [...] in rekel nekaj, česar tukaj ne morem ponoviti. Bilo je nekaj grobega, takšnega, kakršen je stric pač bil. Res ne morem ..., ampak zaradi zgodbe ... Vseeno moram povedati, sicer ne bo razumljiva. Rekel je: Poližite mi ..., no, saj veste kaj. Ko je to izdavil, je, si lahko mislite, umrl. Postelja je ostala, spravil jo bom na podstrešje za vaju, kar pridita ponjo. (Pije). (75)

> FATHER […] and says something which I can't repeat here. It was a bit salty, but then Uncle was a saltyman. No, I really can't. But the story . . . I guess I'll have to say it or the story won't make sense. He said: Kiss my . . . well, you know what. After he said that, and as you can imagine it took quite an effort to say it, he died. We still have the bed up in the attic. Come to think of it, I'll get it ready for you. You can pick it up if you ever want it. (*Drinks*). (266)

Speech realisation (transcript from recording,[18] linguistic changes in **bold**):

> OČE [...] in rekel nekaj, **nekaj** grobega, **no**, nekaj, **nekaj neizrekljivega**, takšnega, kakršen je stric pač bil, **no**. **Ampak** ne morem ... zaradi zgodbe, **veš**, **zaradi zgodbe** moram **povedat**. Sicer **zgodba** ne bo razumljiva. **Torej – stric Avgust je rekel**: Poližite – mi **(*nekdo od svatov reče zelo potiho: ga*)** – **Ga. Poližite mi ga**. **In ko**, ko je to izdavil, je, si lahko mislite, **kar lepo crknil**. **Ampak, draga moja**, **postelja je ostala, spravil sem jo za vaju, kar pridita ponjo. Na zdravje.**

> FATHER […] and he said something **so** salty, **well**, something **so unspeakable**, but then that's just how Uncle was, **well**. **But**, I can't … because of the story, **you know**, **because of the story**, I guess I'll have **to say** it. Otherwise, **the story** just won't make sense. **So – Uncle August said**: Suck – my (***one of the guests says it very quietly: dick***) – **Richard**. **Suck my Richard. And then**, after he said that, he, can you imagine, **just up and croaked. But, my dear, we still have the bed, I saved it for you, just come and get it**. **Cheers.**[19]

18 Video library, AGRFT.

19 English rendering by the translator of this article.

In the spoken realisation the actor repeats, adds, omits, or exchanges words, changes formulations, and in doing so enhances speech spontaneity, which is also co-shaped by prosody, especially pauses with their production of rhythm. The speaker breaks the sentence *Poližite mi / Suck my ...* into two parts with a long pause, an even longer dramatic pause follows *mi/my*, in which the speaker's facial expression impels the wedding guests to complete the thought (*ga/dick*), then he himself says *ga/Richard* very loudly and says the entire sentence (*Poližite mi ga / Suck my Richard*), bringing the story to its speech-dramaturgical peak. The apparent linguistic redundancy – the meaning is conveyed by means of intensive prosody in combination with (numerous and long) pauses and, in some parts, loudness and tempo (agogics) – creates a feeling of a spontaneous speech event, blending in with the external action.

6 CONCLUSION

Using the example of Brecht's play the article has illustrated the presence of a *matrix of expressive potential* in a dramatic text, shown in the stage directions and the dialogues, which reveal elements of spontaneous speech (interruptions, deixis, etc.). Recognising signs of spoken discourse in a written text is imperative for its performer. In comparing the written text with the stage speech realisation we see that the text's expressive potential helps to stimulate the actor's creativity in adapting the prosodics and the lexical-syntactical structure to the stage context.

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Translated into English by Jana Renée Wilcoxen.

Abstract

THE EXPRESSIVE POTENTIAL IN THE LINGUISTIC STRUCTURE OF A DRAMATIC TEXT: BRECHT'S *A RESPECTABLE WEDDING*

The article discusses the linguistic shaping of a dramatic text and its influence on the text's stage speech realisation, using the Slovenian translation of Brecht's one-act play *A Respectable Wedding* as an example. A dramatic text typically has a specific – and also graphically visible – textual and linguistic structure that indicates its speech intention. A linguistic analysis of Brecht's text reveals a great expressive potential, both in the stage directions (especially the stage directions for pauses, silence, spoken realization) and in the dialogue (characteristic linguistic elements of spontaneous speech). A short comparison of the text with the stage speech performance shows that the actor used not only prosody (especially pauses) to semantically enrich and rhythmically organise the written language, but also linguistic interventions into the lexical and

syntactic structure (repetition, addition, omission, etc.). The great expressive potential of the text thus stimulated the actor's speech and interpretive creativity.

Keywords: actor's speech, dialogue, stage directions, elements of spontaneous speech, expressive potential of a dramatic text

Povzetek

GOVORNI POTENCIAL V DRAMSKEM BESEDILU: BRECHTOVA *MALOMEŠČANSKA SVATBA*

Članek obravnava vpliv jezikovne oblikovanosti dramskega teksta na njegovo odrskogovorno realizacijo, in sicer na primeru Brechtove enodejanke *Malomeščanska svatba*. Običajno ima dramsko besedilo specifično, tudi grafično razvidno, besedilnojezikovno strukturo, ki kaže govorno intenco. Jezikovna analiza Brechtovega teksta je razkrila velik govorni potencial, tako v didaskalijah (oznake za premore, tišino, govorno izvedbo) kot v dialogu (za spontani govor značilne jezikovne prvine). Kratka primerjava teksta in odrske govorne izvedbe je pokazala, da igralec pisnega jezika ni semantično obogatil in ritmično strukturiral le s prozodijo (zlasti s premori), pač pa tudi z jezikovnimi posegi v leksično-sintaktično strukturo (ponavljanje, dodajanje, izpuščanje itd.). Velik govorni potencial teksta je spodbudil igralčevo govornointerpretativno ustvarjalnost.

Ključne besede: dialog, didaskalije, govorni potencial dramskega besedila, igralski govor, prvine spontanega govora

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THE PROSODY OF FOCUS: NON-CONTRASTIVE, CONTRASTIVE AND VERUM FOCUS IN SLOVENIAN, ENGLISH AND RUSSIAN

1 INTRODUCTION AND LITERATURE OVERVIEW

Most syntax-oriented generative models claim that variation in word order can be accounted for by a set of rules that govern the movement of constituents in the syntactic structure. In such approaches (for instance, Chomsky 1995, *et subsq*), different types of movement occur that are triggered by the feature-checking requirements[1] (typically associated with morphosyntactic features) that result in different surface structures. However, since it has been established that word order can also be affected by pragmatic factors, i.e. by the way information is packaged in the sentence (see, for instance, Breul 2004), some authors suggest a separate set of features should be introduced to account for the effects of the so-called information structure (henceforth IS).

This paper follows such an approach, specifically the model developed by a number of Leipzig-based linguists (Junghanns 1997, 2002, 2003; Alter/Junghanns 2002; Junghanns/Zybatow 1997; Zybatow/Junghanns 1998; Zybatow/Mehlhorn 2000), who believe that IS depends on pragmatic elements and that it is realized at the level of the clause. Junghanns, for instance, defines IS as the pragmatically conditioned ordering of constituents based on their communicative value (2002: 10).

The IS-based model encompasses the discourse functions of focus and background, and topic and comment. Focus is related to the information perceived as important by the speaker, while background refers to less important information; topic is what the sentence is about, and comment represents the predication about the topic. Both the focus and topic are marked by features assigned to the relevant constituents in the clause (more in Junghanns 2002; Zybatow/Mehlhorn 2000: 416). According to Zybatow and Mehlhorn, the IS features are "freely assigned to the corresponding constituent in the syntactic tree" (2000: 415), which means that IS "is reflected in intonation and that focussing of syntactic constituents corresponds to a certain pitch contour" (2000: 432).[2]

This paper will examine the link between the assigned IS features and the prosodic characteristics of three types of focus: the non-contrastive focus, the contrastive focus and the verum focus.

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1 For instance, verb movement in wh-interrogatives can be triggered by a [+QUESTION] feature of root C that licenses the I-to-C raising in root interrogatives (Ilc/Milojević Sheppard 2002).

2 For an informative syntax-oriented critique of the approach, see Biskup (2011: 68–70).

1.1 Non-Contrastive Focus

The non-contrastive (or 'neutral') focus is realized at the right periphery,[3] and can be maximal (1a) intermediate (1b) or minimal (1c). Taking into account the pragmatic factors associated with IS, the examples below also include the context questions that illustrate the scope of focus. In all three cases the nucleus is located on the stressed syllable of the final lexical item (*cf.* Halliday 1967; Wells 2006).[4]

The Slovenian sentence in (1a) demonstrates the maximal non-contrastive focus; the whole sentence represents important information from the speaker's point of view. The feature [FOC] is assigned to the whole sentence.

(1a) *A: Kaj se dogaja? B: [$_{FOC}$[$_{TP}$[$_{TOP}$ Peter$_i$] [$_{VP}$ t_i potuje v London.]]]*
A: What is happening? B: Peter is travelling to London.

The Russian example in (1b) shows intermediate non-contrastive focus, where the focus feature is assigned to the VP.

(1b) *A: Čto s Miroslavoj? B: [$_{TOP}$ Miroslava$_i$] [$_{FOC}$ [$_{VP}$ t_i uexala v Jaltu.]]*
A: What is going on with Miroslava? B: Miroslava left for Jalta.
(Zybatow/Mehlhorn 2000: 417)

The English sentence in (1c) is an example of the minimal focus. The focus feature is on the DP 'books.'

(1c) *A: What does John read? [$_{TOP}$John$_i$] [$_{VP}$ t_i reads [$_{FOC}$[$_{DP}$books.]]]*

Zybatow and Mehlhorn (2000) observe that in Russian the focus exponent, i.e. the syllable carrying the main accent in the clause, is on the final lexical element, regardless of the scope of focus. They also note that the focus exponent is "pronounced with a greater lengthening than any other syllable in the sentence" (2000: 425). Similar conclusions have been made for English, for which it has also been claimed that the three types of non-contrastive focus presented above are ambiguous when taken out of context (Ladd 1996: 202; Wells 2006: 117).

The pitch on the non-contrastive focus exponent in Russian declarative sentences has been identified as falling (Zybatow/Mehlhorn 2000), while the pattern identified for English (Xu/Xu 2005: 170) shows a rise-fall on the focus exponent in the lower pitch range. In an early study of Slovenian phonetics and phonology, Bezlaj (1939: 97–98) describes the Slovenian sentence intonation as rising at the beginning and falling in the

3 With regard to the clausal structure, it is assumed throughout the paper that the clause consists of three layers of projection, headed by the so-called core functional categories (*cf.* Chomsky 1998: 15): the V(erbal) P(hrase), the T(ense) P(hrase), and the C(omplementizer) P(hrase). The first two are commonly referred to as the right periphery, and the third one as the left periphery (see Rizzi 1997 for details).

4 In the subsequent sections the term 'focus exponent' is used (in line with Zybatow/Mehlhorn 2000).

second half of the utterance. According to him, individual words have a melody of their own, but nevertheless remain within the constraints of sentence intonation. Since then, declarative sentences have been similarly described as having a falling or "cadent" pitch (Toporišič 2004: 547–552). Nevertheless, the falling tone on the focus exponent can be interrupted by a rise in the fundamental frequency (F_0) due to the "intonation of a word with the 'acute' in nuclear position, reflecting the realization of Slovene tonemicity" (Šuštaršič 2005: 52; also see Srebot Rejec 1997: 429–430; Šuštaršič 1995: 100–101; and Komar 2008: 65–66).

Utterances with the non-contrastive focus may also exhibit a rise in the F_0, signalling the presence of a topic (see 'John' in (1c) above). Zybatow and Mehlhorn (2000: 425) describe the Russian pitch on the topic as starting with a rise in the F_0, which is followed by a fall on the subsequent syllable. Previous studies on Slovenian place the main accent at the beginning of the utterance (Dobnikar 1996: n.p.; Vitez/Aubergé 1995: 2074), which, we believe, corresponds to the constituents that are assigned the [TOP] feature in the Leipzig-based IS model. Dobnikar (1996: n.p.) describes any such accent as a rise in F_0 "which differs more than 10% in Hz from its vicinity."

1.2 Contrastive Focus

Similar to the non-contrastive focus, the contrastive focus emphasizes important information in the sentence. However, contrasted elements also trigger alternative propositions (Rooth 1992, 1996).

(2a) $[\![$*Peter bere [$_{FOC}$knjigo]* $]\!]^f$
Peter is reading a book.
(2b) $[\![$ *[$_{FOC}$Peter] is reading a book.* $]\!]^f$

The examples in (2) illustrate the focus semantic value $[\![\alpha]\!]^f$ of the two sentences, which represents "a set of alternatives from which the ordinary semantic value is drawn" (Rooth 1992: 76). In the case of the Slovenian example in (2a), the contrastive focus on the accusative object 'knjigo' triggers the set of propositions of the type 'Peter is reading *y*', where *y* is every element that may contrast with the ordinary semantic value of 'book,' for instance, a magazine, a journal and similar. In parallel, the contrastively focused subject in the English example (2b) triggers the set of propositions of the type '*x* reads a book,' where *x* can stand for John, Mary, Tom and such like.

The contrastive focus does not have a fixed position in the structure: any constituent in a given string can be contrastively focused by means of a characteristic pitch accent. Zybatow and Mehlhorn (2000: 426–427) show that in Russian there is a "strong rise" on the focus exponent, especially when the focused element appears in sentence-initial and sentence-medial positions. Similarly, the study by Xu and Xu (2005) shows that in English the F_0 peak of a word is "consistently higher under a narrow focus than in the neutral-focus sentence" (2005: 167).[5] The pitch movement is then reversed in the

5 A characteristic example of a pitch contour with the contrastive focus in the sentence-final position can also be observed in Hedberg and Sosa (2008: 111).

same syllable. For Slovenian, Srebot Rejec (1997: 438–439) notices a wider range of F_0 frequencies on the sentence-initial contrastive focus exponent: the intonation contour of contrastive focus begins at a lower frequency and reaches a higher maximal than the contour of a non-contrastive constituent in the same position.

Moreover, according to Katz and Selkirk (2011: 806), contrastively focused elements may differ from the non-contrastively marked ones not only with respect to F_0 movement, but also with respect to the duration and relative intensity of the focus exponent.

1.3 Verum Focus

The verum focus shares two main characteristics with the contrastive focus: (i) it is not limited to a specific syntactic position (other than the positions typically occupied by the verb), and (ii) the relevant focused element (the finite verb) is prosodically marked.

The sentence in (3) is an example from a news report on a Slovenian TV channel.

(3) *Kratice krajevnih enot in občinski grbi [$_{FOC}$ostajajo] na novih registrskih tablicah …*
The abbreviations for place names and municipal coats of arms remain on the new licence plates…
(POP TV news report, February 10, 2005)

From a semantic perspective, the verum focus signals contrast between positive and negative meanings. The above example thus triggers a set of two alternatives: 'remain' and 'do not remain.'

The experimental study by Zybatow and Mehlhorn (2000: 428–429) illustrates that the verum focus exponent in Russian exhibits similar prosodic features as the contrastive focus. On the focus exponent, the F_0 strongly rises before it starts falling again.

2 THE STUDY

The experimental study presented herein measures the fundamental frequencies of Slovenian sentences with the non-contrastive, contrastive and verum focus. The results provide the means for a cross-linguistic comparison of prosodic features of English, Slovenian and Russian. Based on the syntactic/pragmatic model presented in the previous section, the results of the experiment are also used to explore the mapping between syntax and prosody: the findings will show the relevance of prosody for the reconstruction of IS. The experiment mainly builds on the work of Zybatow and Mehlhorn (2000), and is based on the following research question:

How is the assignment of IS features reflected in the prosody of the utterance?

More specifically, this study explores the prosodic differences between the different types of focus structures. Special attention is paid to the changes in pitch contours of the three types of focus, the tone in the syllables bearing the main accent, and the duration of these syllables. The collected data is compared to the findings of similar studies for other languages.

2.1 Methodology

The method used in the study was a controlled experiment. The participants in the experiment were asked to read pre-prepared dialogues that consisted of contextualized instances of the researched structures.

2.2 Material

The dialogues included three sentences with the non-contrastive focus (maximal [CP], intermediate [VP], and minimal [PP] scope); three sentences with the contrastive focus on the same constituent situated in various positions in the sentence (initial, medial, and final); and two sentences with the verum focus on the auxiliary verb. The sentences were in the form of dialogues consisting of the target utterance and two to five context sentences. The examples below (4–6) present three dialogues where Speaker A provides the context that elicits a response by Speaker B that contains the utterance with the non-contrastive focus (4a–c), contrastive focus (5) and verum focus (6).

(4a) *A: Slišim, da nisi mogel oddati diplomske naloge. Kaj se je zgodilo?*
I hear you couldn't hand in your diploma thesis. What happened?
B: [$_{FOC}$ Profesor je odšel na morje.]
The professor went to the seaside.
[maximal non-contrastive focus]

(4b) *A: Torej si počitnice preživel v knjižnici. Kaj pa tvoj profesor?*
So you spent your holidays in the library. What about your professor?
B: Profesor [$_{FOC}$ je odšel na morje.]
The professor went to the seaside.
[intermediate non-contrastive focus]

(4c) *A: Danes je predavanje zaradi izleta odpadlo. Morda veš, kam je odšel profesor?*
Today the lecture was cancelled because of the excursion. Do you perhaps know where your professor went?
B: Profesor je odšel [$_{FOC}$ na morje.]
The professor went to the seaside.
[minimal non-contrastive focus]

(5) *A: Je Mojca že odpotovala na seminar?*
Has Mojca left for the seminar yet?
B: [$_{FOC}$ Andreja] je odpotovala na seminar. Mojca ima preveč dela.
Andreja left for the seminar. Mojca is too busy.
[contrastive focus]

(6) *A: Jožica je tako trmasta. Spet noče popraviti članka.*
Jožica is so stubborn. Once again she refuses to revise the article.
B: Jožica [$_{FOC}$ bo] popravila članek. Na tem vztrajam! V nasprotnem primeru ne bom dovolil objave.
Jožica will revise the article. I insist on it. Otherwise I will not allow the publication.
[verum focus]

2.3 Participants

Eleven respondents participated in the experiment. All were female and native speakers of Slovenian, aged between 22 and 29 at the time of the experiment. The group was homogenous with regard to gender to compensate for the different pitch ranges in males and females. The participants were from different regions of Slovenia, but since the dialogues were written in standard Slovenian and the participants were asked to read them using this variety, the potential dialectal influences, aside from tonemicity effects, can be disregarded.

2.4 Procedure

The participants were instructed to familiarize themselves with the dialogues and imagine the situations suggested by the context. Then they were asked to read the dialogues. Their performance was recorded and they were allowed to re-read the text if they felt this was necessary. The process typically lasted between 20 and 30 minutes.

2.5 Equipment

The recording took place at various locations; however, special attention was paid to ensure acceptable background noise levels. A laptop computer equipped with an external microphone and the Praat software (Boersma 2001; Boersma/Weenink 2005) was used to record the participants. The dialogues were recorded at 48 kHz with a sample rate of 16 bits.

The analysis of the recordings was conducted using Praat. We extracted the sentences relevant for the analysis, plotted their oscillograms, identified the syllable boundaries, and measured the relevant F_0 values for each syllable. At least three measurements were taken for each syllable: the initial F_0 value, the maximal F_0 value, and the final F_0 value. For the syllables carrying the focus exponent of the non-contrastive, contrastive, or verum focus, two additional F_0 measurements were taken, located between the initial and maximal, and the maximal and final F_0 measurement points. For each point, the values for time (in seconds) and fundamental frequency (in Hz) were noted.

2.6 Statistical analysis

The collected data was analysed on two levels. Firstly, we measured the distance of the F_0 frequency vectors of individual participants from the average F_0. Secondly, we tested whether the F_0 frequency vectors of individual participants fall into the 90% confidence interval. Such an analysis was used to exclude any outliers, i.e. speakers whose intonation differed excessively from the average values. The data was also used to create statistically prototypical, interpolated F_0 contours of the analysed sentences. Finally, the average F_0 contours were used to compare different types of focus structures.

3 RESULTS

Each type of focus is represented in two ways: (i) by a Praat diagram of the speaker who was statistically closest to the average and (ii) by an Excel diagram that represents the average fundamental frequency curve which is based on the averages of the measured coordinates.

3.1 Non-Contrastive Focus

The results show the data for sentences with different scopes of non-contrastive focus: maximal, intermediate and minimal.

3.1.1 Maximal Non-Contrastive Focus

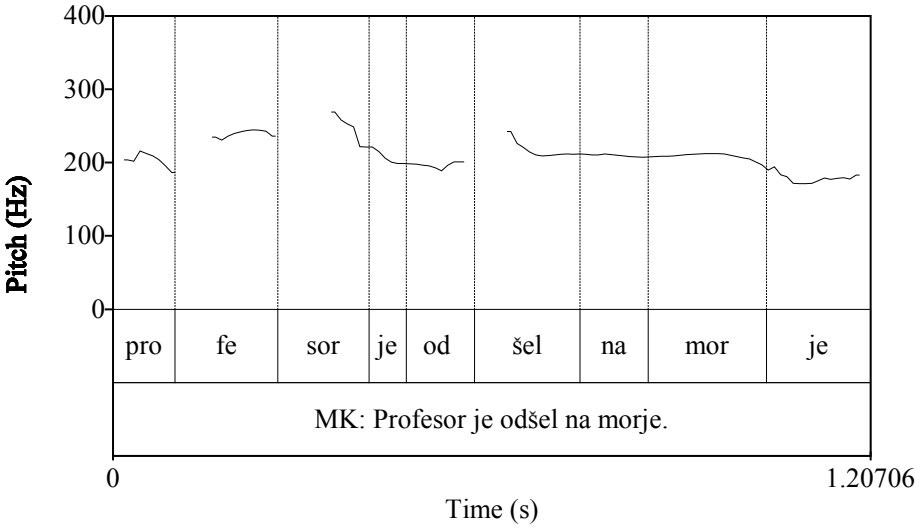

Figure 1: The utterance 'Profesor je odšel na morje' illustrating the maximal non-contrastive focus[6]

The pitch contour of the focus exponent (the syllable *mor–*) in a maximally focused sentence (Figure 1) starts with a slight rise, which is followed by a gradually descending curve. The fall is slight, but leading towards the lowest pitch in the intonation contour.

6 The initials included before the utterance in this and subsequent Praat figures indicate the individual speaker.

3.1.2 Intermediate Non-Contrastive Focus

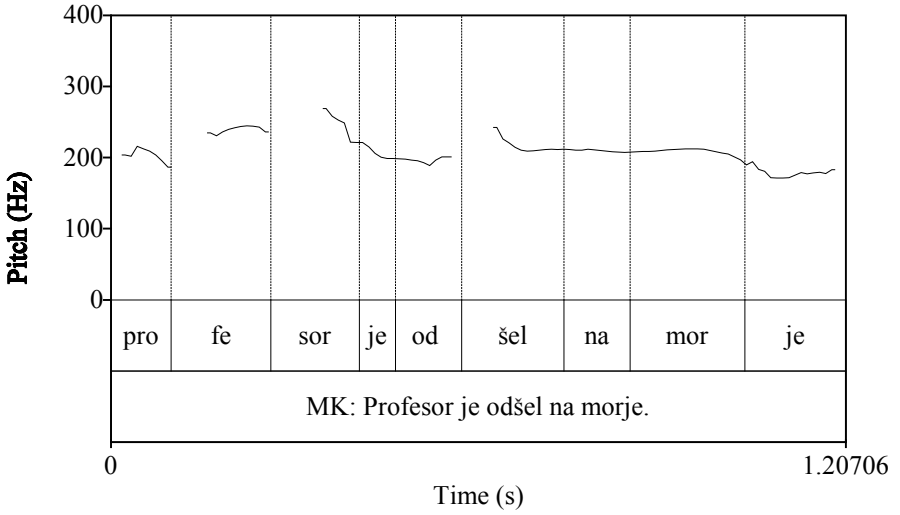

Figure 2: The utterance 'Profesor je odšel na morje' illustrating the intermediate non-contrastive focus

The shape of the intonation contour that was identified for the maximally focused sentence is repeated in Figure 2: after a rise-fall on the focus exponent, the pitch continues to fall towards one of the lowest pitch frequencies in the utterance.

3.1.3 Minimal Non-Contrastive Focus

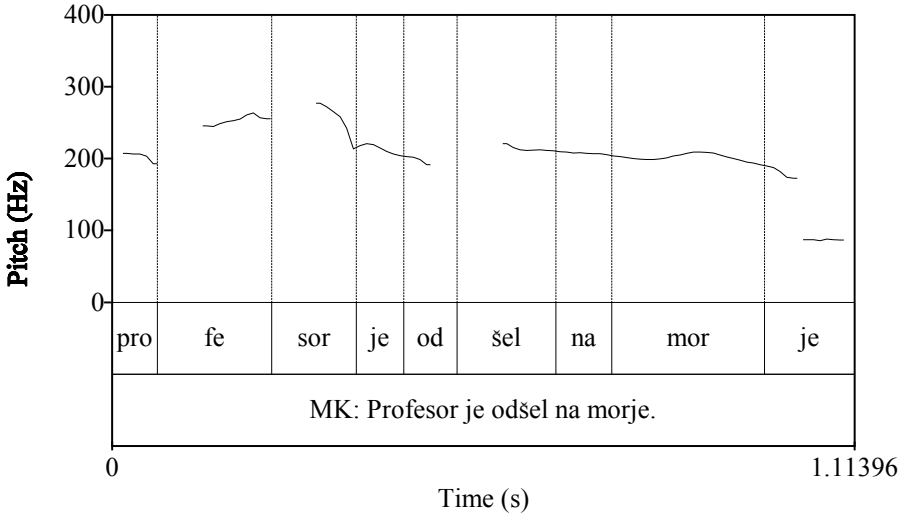

Figure 3: The utterance 'Profesor je odšel na morje' illustrating the minimal non-contrastive focus

The intonation contour of the minimally focused sentence (Figure 3) is similar to the previous examples of utterances with non-contrastive focus. The slight fall that starts on the syllable preceding the focus exponent becomes a rise on the syllable *mor–* before falling to a low-pitch position.

3.1.4 Non-Contrastive Focus Types Combined

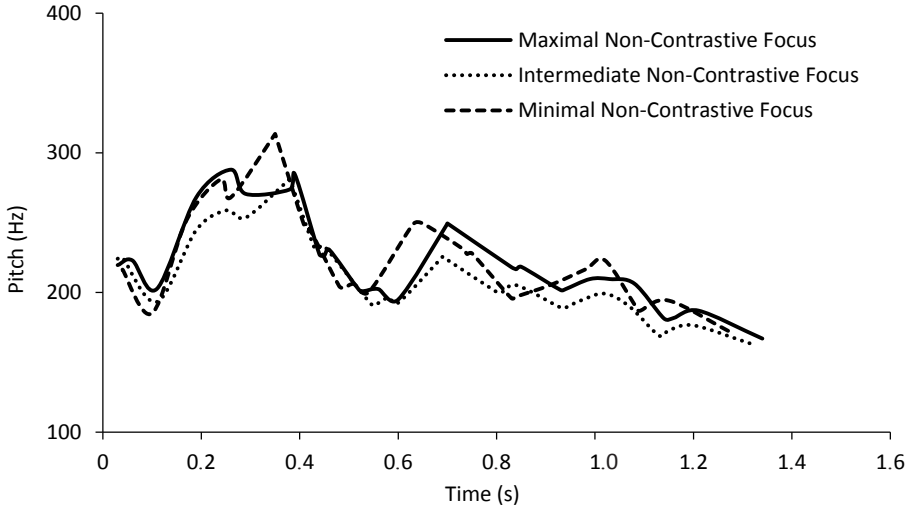

Figure 4: Interpolated intonation contours of the three non-contrastive focus types

Figure 4 presents the averages of nine speakers for maximally and minimally focused utterances, and the average of eight speakers for the utterance with the intermediate non-contrastive focus. The overlay shows that the three contours are difficult to distinguish from one another. The contours proceed in an overall down-trending pattern in the pitch range between 170 and 320 Hz. The potentially topicalized element at the beginning of the utterance ('profesor') shows the highest pitch values of around 300 Hz after a rise in F_0. The focus exponents, on the other hand, exhibit a rise-fall pattern above the 200-hertz range, regardless of the scope of focus.

3.1.5 Syllable Duration in Sentences with Non-Contrastive Focus

The syllable carrying the focus exponent in the sentences with the non-contrastive focus is also the longest syllable in the utterance. Figure 5 below shows the comparison between the duration of syllables in one of the utterances with the maximal non-contrastive focus; the focus exponent is marked in black (for the F_0 contour of the same speaker *cf.* Figure 1). Similar findings can be observed in sentences with the intermediate and minimal non-contrastive focus.

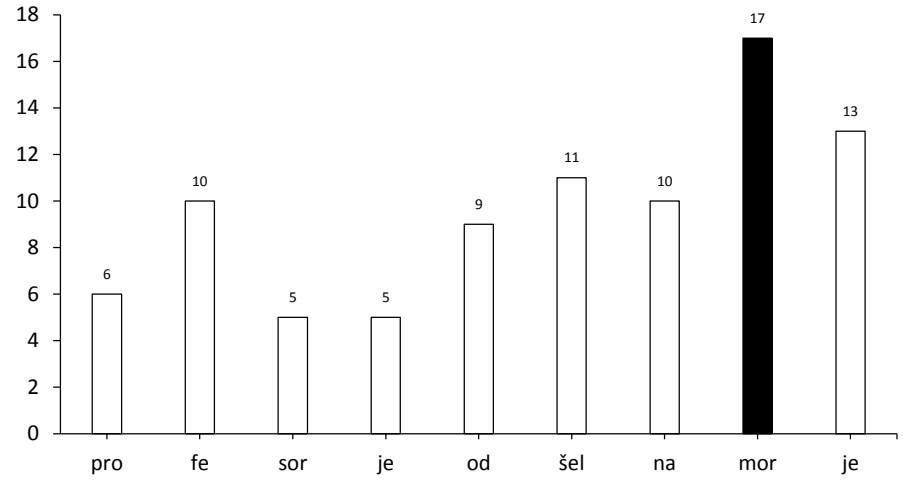

Figure 5: Syllable duration (in msec) in a maximally focused sentence

3.2 Contrastive Focus

3.2.1 Sentence-Initial Contrastive Focus

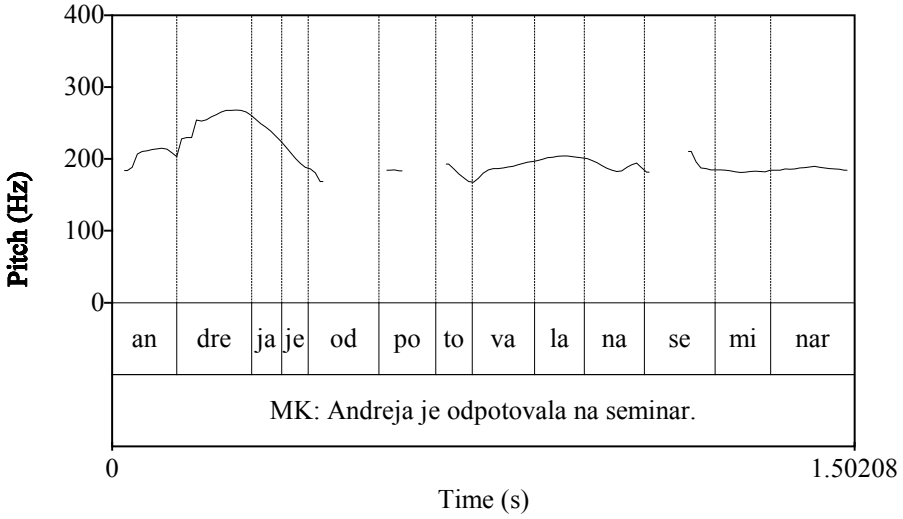

Figure 6: Sentence-initial contrastive focus in the utterance "Andreja je odpotovala na seminar."

Figure 6 shows a noticeable rise on the syllable bearing the contrastive focus accent (*–dre–*) situated at the beginning of the intonation contour. The pitch before the focus exponent syllable falls, then rises to reach the highest pitch in the utterance (close to

300 Hz) before it drops again. The fall continues over the next few syllables and stabilizes in the 200 Hz range until the end of the utterance.

3.2.2 Sentence-Medial Contrastive Focus

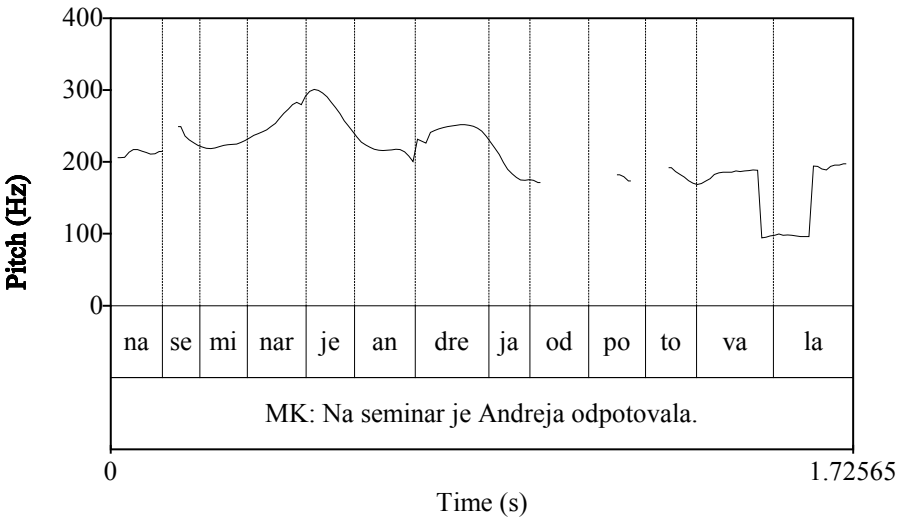

Figure 7: Sentence-medial contrastive focus in the utterance "Na seminar je Andreja odpotovala."

The intonation contour in the utterance with the sentence-medial contrastive focus (Figure 7) is characterised by two rise-falls on the first two constituents. The rise of the contour appears on the stressed syllable of the noun 'seminar,' which is expected since the noun represents the topic of the utterance. The syllable *–nar* is also the syllable with the highest pitch in the utterance. The second noticeable rise-fall is the one on the contrastive focus exponent, the syllable *–dre–* in 'Andreja.' The general trend of the contour after the maximal pitch on the topic 'seminar' is falling, with most of it levelling off in the 200 Hz range. Moreover, the rise-fall on the sentence-medial focus exponent is not as pronounced as the one on the sentence-initial one.

3.2.3 Sentence-Final Contrastive Focus

The intonation contour in the above sentence resembles the one in Figure 7. The sentence begins with a rise and a fall on the topicalized constituent, after which the contour levels off in the 200-hertz range. The characteristic rise-fall pattern of the focus exponent is still present on the syllable *–dre–* (it appears after a fall on the previous syllable); however, these pitch changes are not as pronounced as in the previous examples with the contrastive focus.

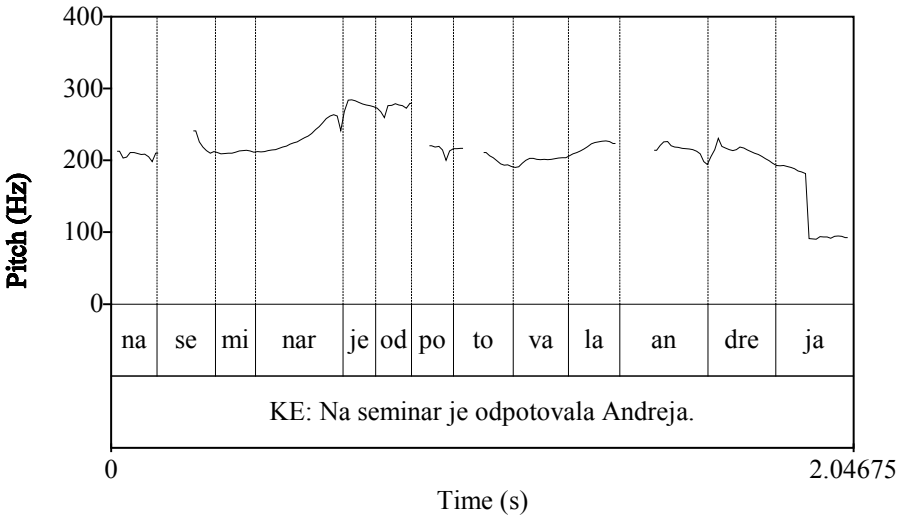

Figure 8: Sentence-final contrastive focus in the utterance "Na seminar je odpotovala Andreja."

3.2.4 Contrastive Focus Types Combined

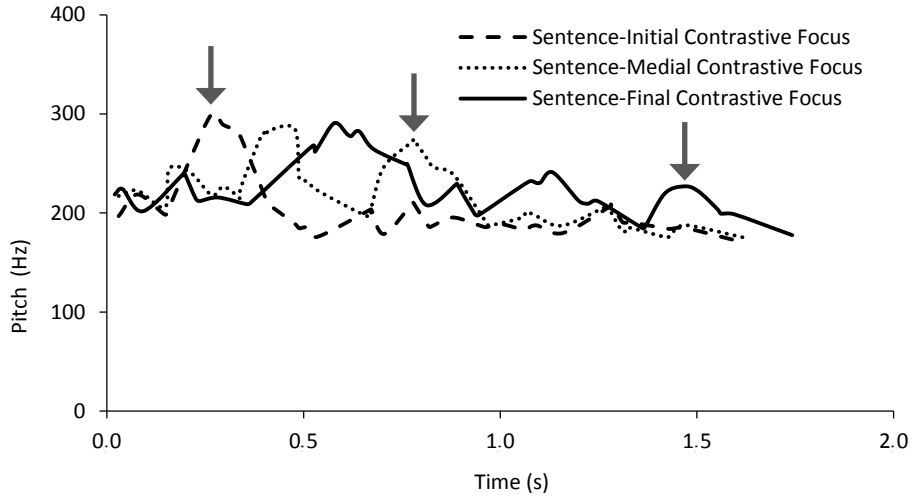

Figure 9: Interpolated contrastive focus contours: the sentence-initial, sentence-medial and sentence-final contrastive focus combined (the focus exponents are marked by arrows)

Figure 9 demonstrates the pitch movement in utterances with the contrastive focus. The average values for the three contours are based on the data for nine speakers for the sentence-initial contrastive focus contour, and eight speakers for the sentence-medial and sentence-final contrastive focus contours.

The stark differences between the three contours show the role of intonation in contrasting: the constituents carrying the contrastive focus are easily identifiable. The contours share the general pitch range (170–300 Hz), which is almost identical to the F_0 range in the sentences with non-contrastive focus. The contrastive focus exponents are all preceded by a sharp fall in the previous syllable, followed by an even sharper rise and an almost equally sharp fall in the syllable with the focus exponent. The overall downtrend of the pitch contour can still be observed in all three utterances.

The F_0 contours of the focus exponents in different sentential positions are similar, although they do not occur in the same pitch range. Figure 10 below illustrates the change in F_0 in relation to the position of the contrasted element.

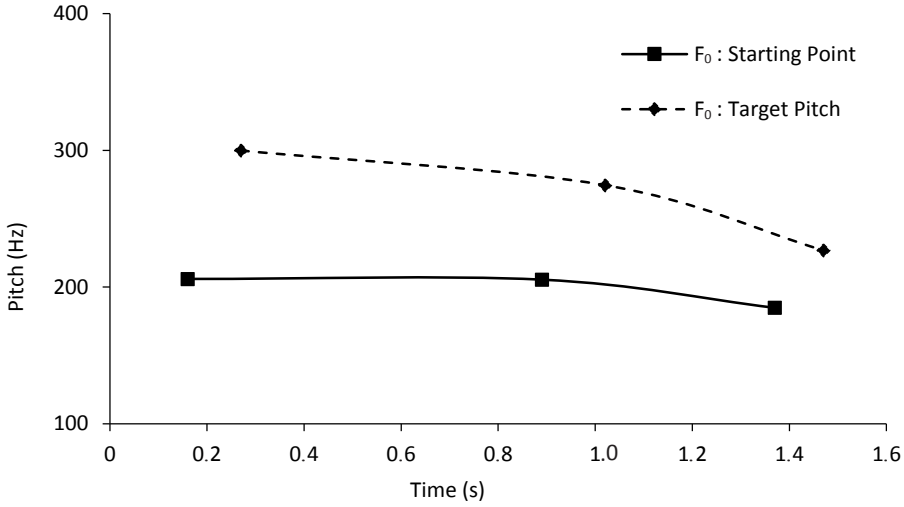

Figure 10: Pitch jumps on the contrastive focus exponents

In the utterances with sentence-initial contrastive focus, the difference in pitch at the beginning of the rise and at the highest point is almost 100 Hz. The distance between these two points diminishes when the focus exponent appears later in the sentence: in the sentence-medial position the jump amounts to about 70 Hz, while in the sentence-final position to around 45 Hz. The three observed pitch rises appear within ten milliseconds.

3.2.5 Syllable Duration in Sentences with Contrastive Focus

Figure 11 below compares the duration of syllables in one of the utterances with the contrastive focus in the sentence-initial position. The focus exponent is marked in black (for the F_0 contour of the same speaker, *cf.* Figure 6). Similar findings can be observed in sentences with the contrastive focus in sentence-medial and sentence-final positions.

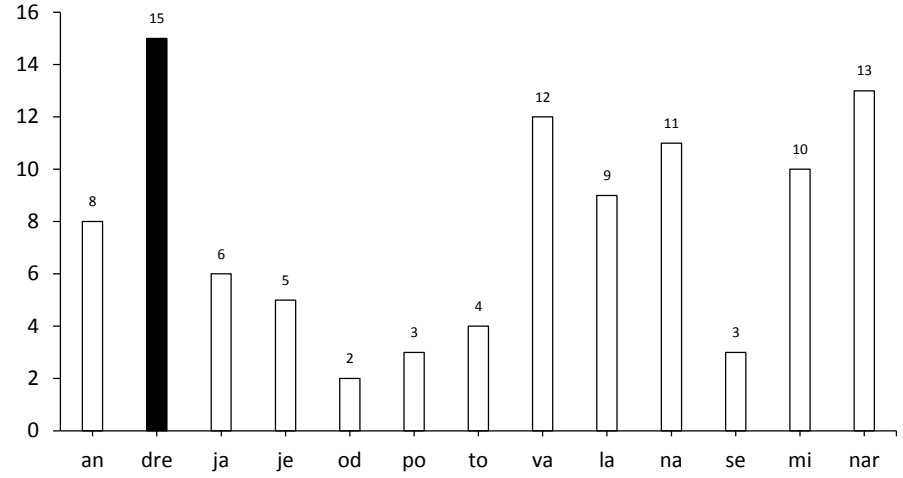

Figure 11: Syllable duration (in msec) in a contrastively focused sentence

3.3 Verum Focus

The intonation contour of sentences with the verum focus is similar to the contours for the contrastive focus (see 3.2).

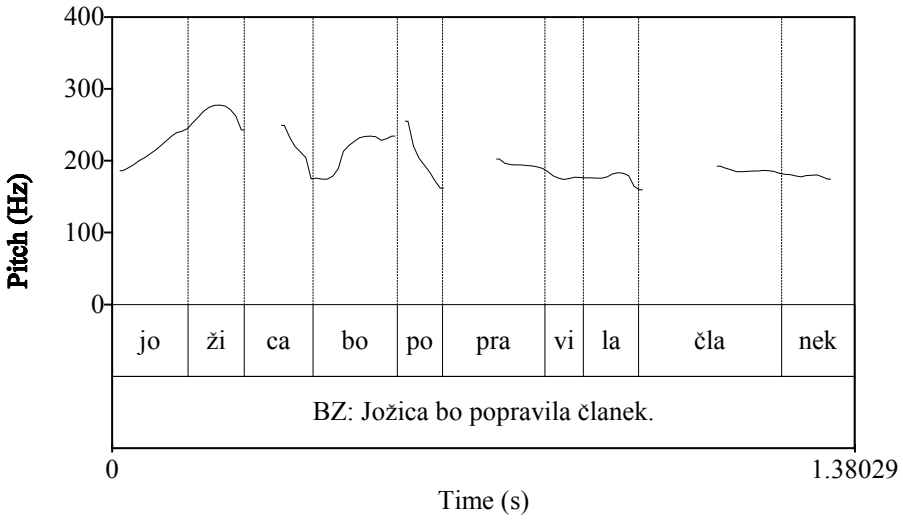

Figure 12: Verum focus in the utterance "Jožica bo popravila članek."

In the sentence in Figure 12, the focus is on the sentence-medial finite verbal form. Before the focus exponent, there is a sharp drop in pitch, which is followed by a similarly noticeable rise (the F_0 moves towards the 250 Hz mark) and a fall that continues

on the next syllable. The overall down-trend continues until the pitch contour levels off in the 200-hertz range.

The above finding is corroborated by the interpolated pitch contour in Figure 13, which is based on the utterances of seven speakers.

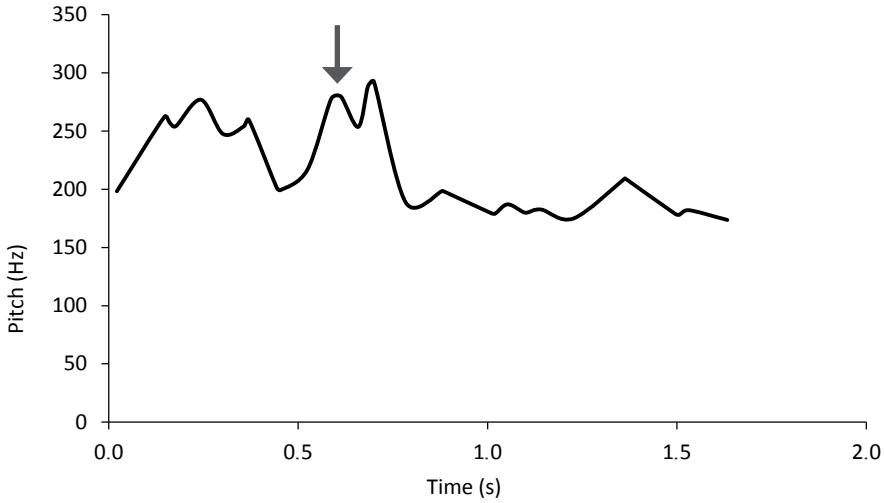

Figure 13: Interpolated verum focus contour[7]

With regard to duration, the sentences with verum focus do not differ from the previous focus types, see Figure 14.

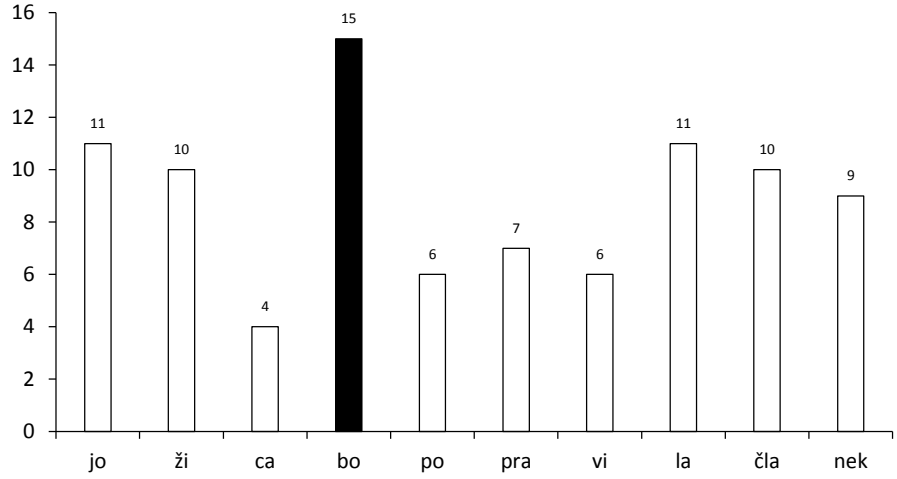

Figure 14: Syllable duration (in msec) in a sentence with verum focus

7 The second pitch jump (to the right of the one marked by an arrow) should be disregarded, as it due to segmental effects, i.e. it is caused by the voiceless consonant in the subsequent syllable.

As established for previous focus types, the syllable with the focus exponent in the sentences with the verum focus is the longest syllable in the utterance. Figure 14 illustrates the duration of syllables in the utterance with the maximal non-contrastive focus; the focus exponent is marked in black (for the F_0 contour of the same speaker *cf.* Figure 12).

4 DISCUSSION

The utterances included in the experiment were placed in pragmatic contexts that required the speakers to signal the IS by the appropriate placement and duration of sentence accents, and by the application of different pitch changes. The findings of the experiment support the approaches that observe a mapping between the syntactic and prosodic features of IS.

The pitch contours of utterances with non-contrastive focus exhibit an overall down-trending pattern. Regardless of the scope (maximal, intermediate or minimal), the syllable carrying the focus exponent falls on the final lexical item and is typically preceded by a falling pitch, which is then followed by a rise-fall of the F_0 on the focus exponent. Out of context, the Slovenian sentences with maximal, intermediate or minimal focus scope are ambiguous; this finding is in line with the claims about focus scope in English (Ladd 1996: 202; Wells 206: 117).

The slight rise-fall on the non-contrastive focus exponent can be interpreted as the result of Slovenian tonemicity, which is in line with the findings of Toporišič (2004: 547–552), Srebot Rejec (1997: 429–430) and Šuštaršič (2005: 52) for Slovenian declarative sentences. The rising/acute (phonemic) tone on the stressed vowel is typically produced by speakers of the Upper and Lower Carniolan dialects, as well as speakers from the Slovenian capital, which includes the participants who read for the present experiment. It can be assumed that a similar rise in tone will not be produced by non-tonemic speakers, resulting in an overall falling tone on the non-contrastive focus exponent, i.e. a tone similar to the one identified by Zybatow and Mehlhorn (2000: 425) for Russian sentences with this type of focus. We can conclude that the tonemic pitch of the focus exponent in Slovenian utterances with non-contrastive focus resembles the one presented for English by Xu and Xu (2005: 170), while the pitch on the focus exponent of non-tonemic Slovenian speakers is surmised to resemble the falling pitch associated with corresponding utterances in Russian (Zybatow/Mehlhorn 2000).

The experimental data for sentences with the non-contrastive focus also shows that the focus exponent represents only one of the noticeable pitch jumps in the observed utterances. Since it is linearly at the end of the down-trending curve, the rise of the F_0 occurs in the lower part of the speakers' pitch range. However, the highest pitch in such utterances (in the 300 Hz range) is on the stressed syllable of the sentence-initial constituent (*cf.* Dobnikar 1996: n.p.) which represents the topic of the sentence.

Additionally, the data on the syllable duration reveals that the non-contrastive focus exponent is also the syllable with the longest duration in the utterance, which corresponds to the data on Russian (*cf.* Zybatow/Mehlhorn 2000: 425).

The pitch contours of sentences with the contrastively focused constituents include a strong rise on the syllable bearing the focus accent. In the utterance with the

sentence-initial focused constituent, the pitch falls before the focus exponent, then rises to the highest position in the utterance (about 300 Hz), before it starts falling again. The same pattern (fall + rise-fall) can be identified in utterances with sentence-medial and sentence-final contrastive focus constituents, the difference being only in the extent of the detected pitch jumps: the closer the focus exponent is to the end of the (overall down-trending) utterance, the smaller the jump in the fundamental frequency.

The findings outlined above are mostly consistent with previous observations for Slovenian by Srebot Rejec (1997: 438–439). While the maximal pitch target of the contrastive focus exponent was measured as higher than the maximal pitches of non-contrasted elements, the beginning of the intonation contour on the sentence-initial contrastive focus exponent was not lower than that in the contour of a non-contrasted element. From a cross-linguistic perspective, the finding about the high pitch target is expected – similar claims have been made for English (Xu/Xu 2005: 167) and Russian (Zybatow/Mehlhorn 2000: 426–427).

Interestingly, the finding of the decreasing pitch ranges of focus exponents in different sentential positions also confirms the early observations of Bezlaj (1939) on the prosody of individual words observing the general constraints of sentence intonation.

An analysis of syllable duration revealed that the syllable bearing the contrastive focus exponent is also the longest syllable in the utterance, which also confirms the claims by Katz end Selkirik (2011: 794) presented in the introduction, and the findings of Zybatow and Mehlhorn (2000: 430) for Russian.

The intonation contours related to the verum focus are parallel to the contours of sentences with the contrastive focus. They undergo a pitch fall before the focus exponent, which is followed by a rise-fall on the accented syllable. Even though the verum focus exponent presented herein is sentence-medial, it reaches the high pitch range of the topicalized sentence-initial constituent.

The data on syllable duration also show the verum focus exponent as the longest syllable in the utterance.

5 CONCLUSION

The study explores the prosody of sentence constituents that bear IS features and measures their effect on the intonation contour of the utterance. The experimental part is centred on Slovenian, and the collected data is compared to that in studies on English and Russian.

The main conclusion is that prosody can be used to distinguish between various types of IS features, specifically the non-contrastive focus, contrastive focus, and verum focus. The three types of focus share an overall down-trending F_0, a fall of pitch before the focus exponent and a rise-fall on the focus exponent. The contours of non-contrastive focus exponents are gently sloping (associated with tonemicity), whereas the contours of contrastive focus exponents contain a sharp rise, followed by a similarly sharp fall. While the various scopes of non-contrastive focus give rise to ambiguity – i.e. they cannot be disambiguated without proper pragmatic context – the changes in the fundamental frequency can still be relied on to identify the various types

of focus exponents, especially the contrastive focus with its characteristic extended pitch range. Additionally, the focus exponents are identifiable with respect to their lengthened duration.

The study thus links the syntactic assignment of IS features to the prosodic characteristics of an utterance, and confirms the relevance of prosody for the reconstruction of the IS. Since the experiment was limited to declarative sentences and mostly centred on different types of focus, further research warrants a continued and more extensive scrutiny of IS effects, especially with regard to the [TOP] feature and other sentence types.

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Abstract

THE PROSODY OF FOCUS: NON-CONTRASTIVE, CONTRASTIVE AND VERUM FOCUS IN SLOVENIAN, ENGLISH AND RUSSIAN

The article presents an approach to information structure that marks focused or topicalized syntactic constituents with the features [FOC] and [TOP], and assumes that the assignment of these information structure features is reflected in prosody. The experimental study measures the fundamental frequency of various Slovenian sentences to identify the characteristic contours of the non-contrastive, contrastive, and verum focus. The findings are compared to those in studies on English and Russian. The results show that the most relevant prosodic characteristics of such structures are the pitch range, the pitch changes on the focus exponent, and the duration of the focus exponent.

Keywords: non-contrastive focus, contrastive focus, verum focus, information structure, information structure features, pitch contour, intonation

Povzetek

PROZODIJA FOKUSA: NEKONTRASTIVNI, KONTRASTIVNI IN GLAGOLSKI FOKUS V SLOVENŠČINI, ANGLEŠČINI IN RUŠČINI

Prispevek predstavi pristop k informacijski zgradbi, ki označi fokusirane ali topikalizirane skladenjske sestavnike z oznakama [FOC] in [TOP], in privzame, da se pripis teh informacijsko-zgradbenih oznak odraža v prozodiji. Eksperimentalna študija izmeri tonski potek različnih slovenskih stavkov, da bi določila značilne intonacijske krivulje nekontrastivnega, kontrastivnega in glagolskega fokusa. Ugotovitve primerja s tistimi iz študij o angleščini in ruščini. Rezultati pokažejo, da so bistvene prozodične značilnosti takšnih zgradb različni tonski razponi, spremembe tona na fokusnem eksponentu in trajanje fokusnega eksponenta.

Ključne besede: nekontrastivni fokus, kontrastivni fokus, glagolski fokus, informacijska zgradba, oznake informacijske zgradbe, krivulja osnovnega tona, intonacija

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LA ENSEÑANZA DE LA PRONUNCIACIÓN EN LOS MANUALES DE ELE DE A1–B2

1 INTRODUCCIÓN

El principal objetivo del aprendizaje de una lengua extranjera es alcanzar el éxito comunicativo. Dado que esto no es posible sin un dominio de la pronunciación[1], ya que la falta de este componente dará lugar a malentendidos en la comprensión e interpretación de los mensajes hablados, entendemos que es esencial enseñarla en todos los niveles del aprendizaje de la lengua extranjera.

La enseñanza de la pronunciación en general ha tenido una importancia desigual dentro de los métodos y enfoques de la enseñanza de lenguas extranjeras: desde el protagonismo que ocupó en el movimiento reformista hasta el papel secundario que ha tenido tras la introducción del enfoque comunicativo. Si comparamos la pronunciación con otros niveles lingüísticos, entenderemos por qué algunos autores la consideran la "Cenicienta" de la enseñanza de lenguas extranjeras (Kelly 1964: 60–87). El cambio de enfoque en la enseñanza de LE afectó considerablemente a la pronunciación, ya que se rechazaron las técnicas de los métodos estructurales pero no se propusieron otras, diseñadas desde el punto de vista comunicativo. El resultado de estas contradicciones es una presencia poco sistemática en la enseñanza del componente fonológico de los manuales. Por lo tanto, en la enseñanza actual de lenguas extranjeras es frecuente relegar la pronunciación, y sobre todo la prosodia, a un segundo plano debido a las razones siguientes (Cortés 2002a: 70):

1. Falta de conciencia de la importancia de la entonación por parte de los diseñadores de materiales y de los profesores.
2. Formación inadecuada del profesorado en el ámbito fónico y, sobre todo, en la didáctica de la pronunciación.
3. Escasa atención a los fenómenos suprasegmentales, al ser la tradición fonológica segmental, centrada sobre todo en los fonemas.
4. Creencia de que la entonación es un fenómeno complejo, difícil de describir, o incluso imposible de enseñar.
5. Creencia de que la adquisición de la entonación se aprende sencillamente a base de escuchar la LE en clase.

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1 En este artículo atenderemos al sentido más amplio de la pronunciación que, aparte de la articulación de los sonidos de una lengua, abarca también el componente prosódico: acentuación, ritmo y entonación.

En este trabajo se pretende analizar el lugar que ocupa la pronunciación en la enseñanza de ELE y en los manuales más recientes. El objetivo que se persigue es determinar si las dos dimensiones de este componente lingüístico (segmental y suprasegmental), tan distintivas e importantes, siguen ocupando un lugar secundario, es decir, si persiste el desequilibrio que venimos observando entre la enseñanza de la pronunciación y la de los otros aspectos lingüísticos. Trataremos de comprobar si la enseñanza de la pronunciación es sistemática, si se sigue una progresión que vaya de la percepción o sensibilización a la producción, en qué orden se enseñan y practican los sonidos, la acentuación y la entonación, qué tipología de ejercicios prevalece y el lugar que ocupa la (auto)evaluación de la competencia fonológica. Asimismo, este análisis se complementa con las características principales de la adquisición de la pronunciación y de la prosodia, y con las aportaciones del *Marco común europeo de referencia para las lenguas*, el *Plan curricular del Instituto Cervantes* y los descriptores de evaluación de pruebas orales en los exámenes DELE.

El *Diccionario de términos clave de ELE* (2008) contempla el término *pronunciación* en didáctica de las lenguas en dos sentidos: "en el más restringido se refiere a la vocalización o articulación de los sonidos de una lengua; en otro sentido más amplio abarca también el componente prosódico (acentuación, ritmo y entonación)". En este artículo atenderemos al sentido más amplio.

2 ADQUISICIÓN DE LA PRONUNCIACIÓN

La adquisición de la pronunciación de una lengua extranjera, que incluye la prosodia en su sentido amplio, es uno de los conocimientos lingüísticos que más se ve influido, por un lado, por los rasgos fonéticos y fonológicos de la lengua materna del hablante y, por otro, por las situaciones psicológicas, sociológicas y físicas en las que se encuentra el hablante, entre ellas, la edad. Existen muchas teorías que sostienen que la edad es el factor clave para poder llegar a tener "un acento" parecido al de un nativo. Scovel (1969), quien aboga por la hipótesis del período crítico, argumenta que un adulto no puede llegar a un acento nativo y llama a esta incapacidad "el fenómeno de Joseph Conrad"[2]. Apoya su teoría en el fenómeno de la lateralización de Lennenberg (1967), según el cual el cerebro se separa en dos hemisferios con funciones diferentes hasta la pubertad. Por lo tanto, el periodo anterior a la lateralización, llamado *período crítico*, representa biológicamente la etapa más propicia para la adquisición de LE por la plasticidad y capacidad para alcanzar el acento nativo. Sin embargo, esta teoría recibe muchas críticas, entre ellas también la de Neufeld (1987), quien defiende la fosilización fonológica en los adultos (que ya se han formado unos hábitos psicológicos) debido a que los profesores les exponen a situaciones de aprendizaje inadecuadas mediante las que se forman imágenes acústicas inexactas de la lengua extranjera. Mediante su experimento comprobó que los adultos expuestos a suficiente *input* de la lengua meta para formar imágenes acústicas correctas, sin tener la posibilidad de

2 Joseph Conrad, el famoso escritor polaco, escribió su obra en su segunda lengua, el inglés, que la dominó a la perfección por escrito pero la habló con un fuerte acento polaco, ininteligible para los ingleses.

destruirlas con las de su propia lengua, llegan a conseguir el acento nativo. De hecho, Neufeld (ibid.) ha comprobado que si el ritmo y la entonación es lo primero que se enseña a los adultos, podrán alcanzar una pronunciación muy parecida a la de un hablante nativo. Sin embargo cabe señalar que la competencia de un aprendiente o usuario de una LE nunca será igual a la del hablante nativo por el simple hecho de que aquel no lo es.

Parece que, por ser mucho más difíciles de describir y analizar, los rasgos suprasegmentales tienen menos importancia que los segmentales y que "la entonación, el acento o el tono, lo mismo que la cantidad, son fonemas que la moderna lingüística tiende a considerar como secundarios, en oposición a los fonemas primarios o segmentables" (Lorenzo 1980: 39) aunque "[…] se notan menos las faltas de la articulación de los sonidos teniendo una buena entonación; por el contrario, una mala entonación desvirtúa casi por completo la pronunciación" (Malmberg 1964: 35). Muchos lingüistas defienden la adquisición previa de los rasgos suprasegmentales que los segmentales, aunque, como veremos a continuación, los manuales de ELE normalmente escogen el orden contrario:

> Por ser la entonación […] uno de los primeros elementos del lenguaje que se aprenden, pertenece a un nivel de conocimiento más bajo que los rasgos fonéticos adquiridos más tarde y, por lo tanto, más difíciles de desterrar después de que el aprendiz de una lengua extranjera ya posee un buen nivel en la pronunciación de los segmentos. (Carcedo González 1998: 229)

Efectivamente, las características prosódicas son las que primero aprenden los niños en su lengua materna y las últimas en perderse al adquirir otra lengua, de modo que la entonación debería enseñarse igualmente desde los primeros días del nivel 0: una buena adquisición de la entonación y del ritmo desde un primer momento asegurará una mejor comprensión auditiva. (Hidalgo Navarro/Cabedo Nebot 2012: 31).

Además, Cortés (2002a: 69) sostiene que los hispanohablantes suelen ser más comprensivos con las faltas de pronunciación de los sonidos y de posición del acento pero intransigentes en el ámbito de la entonación, ya que este tipo de falta pueden interpretarla, en casos extremos, como una falta de educación.

Asimismo, Gospodarič (2004:194) comprueba con su investigación de percepción de los sonidos, de la acentuación y de la entonación en los hablantes eslovenos que "el mayor problema lo representa la identificación correcta de la entonación, seguida por la acentuación y los sonidos, cuya percepción correcta no parece ser difícil para los eslovenos" y concluye:

> Este hecho nos da una prueba muy importante para sostener la teoría de que no solo los sonidos, que han sido tradicionalmente el objetivo central de la enseñanza de la pronunciación, sino que también y, sobre todo, la prosodia desempeña un papel decisivo en la pronunciación correcta y legible y debe, sin lugar a dudas, ocupar la mayor parte del tiempo en la enseñanza de la pronunciación. (ibid.)

En resumen, la adquisición correcta de la prosodia exige un *input* suficiente desde el principio del aprendizaje de LE precediendo al aprendizaje del nivel segmental.

2.1 La pronunciación según los niveles de aprendizaje

El *MCER* (2002: 113–114) divide las competencias comunicativas de la lengua en competencias lingüísticas, sociolingüísticas y pragmáticas. Las lingüísticas hacen referencia a la habilidad del aprendiz para crear enunciados correctos. Entre las seis competencias, la fonológica supone el conocimiento y la destreza en la percepción y la producción de los sonidos, los rasgos fonéticos, la composición y la reducción fonética por una parte, y la fonética de las oraciones (prosodia) por otra, que consiste en el acento y el ritmo de las oraciones y la entonación. El documento ofrece en total 32 parrillas o escalas holísticas y analíticas de descriptores de niveles de lengua pero solo una de ellas cubre el dominio de la pronunciación.

Parece que los niveles establecidos por el *MCER* (2002) dan prioridad a la fluidez frente a la correcta o perfecta pronunciación. Se asume como normal que en los niveles iniciales (A1 y A2) y en el nivel B1 los hablantes tengan un "acento extranjero" que no pierden hasta el nivel B2, cuando "han adquirido una pronunciación y una entonación claras y naturales" (2002: 114). Solo a partir de este nivel se hace referencia a la entonación. Además, para el *MCER* el nivel C1 es el más alto que se puede alcanzar en la pronunciación, a diferencia de otros componentes de la lengua, en los que se puede llegar al C2. Esto supone que la pronunciación y la entonación no se evalúan igual que el resto de componentes de la lengua. Pareciera, por tanto, que para el *MCER* la pronunciación y la entonación perfectas son inalcanzables y/o innecesarias. Esta actitud toma en cuenta las recomendaciones del Consejo de Europa y la teoría de las multicompetencias (Cook 1992, 1999) que defiende la idea de que los usuarios de una segunda lengua o LE son personas diferentes del hablante nativo monolingüe y que el modelo predominante al hablar de competencias comunicativas no tiene que ser el hablante nativo sino un usuario de varias lenguas como hablante plurilingüe, quien con sus multicompetencias piensa de manera distinta a los hablantes monolingües, ya que la multicompetencia es un estado distinto de la mente (Cook 1992).

En el *Plan curricular del Instituto Cervantes* (2007), a diferencia de los demás inventarios que respetan los seis niveles establecidos por el *MCER*, el tratamiento de los aspectos fónicos se realiza agrupando los seis niveles en las tres etapas (A, B y C), argumentando que sería "técnicamente muy difícil establecer una gradación más pormenorizada" (2007: 44). En la introducción al tercer capítulo, "Pronunciación y prosodia", se explica que el principal objetivo en la fase A (A1 y A2) es reconocer los patrones fónicos del español y producir sus esquemas básicos, mientras que en la etapa B es necesario que el alumno vaya ajustando progresivamente su pronunciación a la del español y que consiga expresar con ella determinados estados de ánimo. En la fase de perfeccionamiento, la etapa C, la pronunciación del alumno debería asemejarse a un hablante nativo teniendo en cuenta la adecuación de la entonación a estados de ánimo, intenciones pragmáticas y saber modificar el tempo y la articulación conforme a la situación comunicativa (2007: 168). El inventario de "Pronunciación y prosodia" incluye

los siguientes elementos: 1) La base de articulación, 2) La entonación, 3) La sílaba y el acento, 4) El ritmo, las pausas y el tiempo (2007: 169–180).

Las escalas de calificación de las pruebas de expresión e interacción orales en los exámenes DELE (Instituto Cervantes, Guía del examen A1–C2, en línea) no hacen ninguna referencia a la pronunciación y prosodia en las escalas holísticas pero sí en las analíticas. Estas contienen en los niveles A1 y A2 el criterio de pronunciación aparte de coherencia, corrección y alcance, y en los niveles B1–C2 el criterio de la pronunciación se sustituye por la fluidez. Se hace referencia a la entonación dentro de la categoría de coherencia en los niveles C1 y C2.

Dado que las escalas fonológicas parecen escasas, a continuación proponemos unos descriptores que nos parecen más detallados. Se trata de los seis niveles elaborados por Horner (2014) que traducimos aquí del inglés al español:

Tabla 1. Escala fonológica holística según Horner (2014)

A1	Dominio suficiente de los sonidos para poder ser comprendido, pero no todo el tiempo y con cierta dificultad. Dominio suficiente de la acentuación de la palabra para poder ser comprendido, pero no todo el tiempo y con cierta dificultad. El hablante necesita repetición o aclaración.	Sufficient command of sounds to be understandable, but not all of the time and with some difficulty. Sufficient command of word stress to be understandable, but not all of the time and with some difficulty. The interlocutor will need to ask for repetition or clarification.
A2	Dominio suficiente de los sonidos para poder ser comprendido, pero con cierta dificultad. Dominio suficiente de la acentuación de la palabra para poder ser comprendido, pero con cierta dificultad. El hablante puede necesitar una repetición o aclaración.	Sufficient command of sounds to be understandable, but with some difficulty. Sufficient command of word stress to be understandable, but with some difficulty. The interlocutor may need to ask for repetition or clarification.
B1	Control suficiente de los sonidos para poder ser comprendido. Control suficiente de la acentuación de la palabra para poder ser comprendido. Se producen errores de pronunciación, pero solo de vez en cuando interfieren en la comprensión.	Sufficient control of sounds to be understandable. Sufficient control of word stress to be understandable. Mispronunciations occur, but only occasionally interfere with understanding.
B2	Se entiende al hablante. Hay errores de pronunciación, pero no interfieren en la comprensión. Se acentúa la frase, pero no siempre con éxito. Se utilizan patrones de entonación básicos, pero no siempre con éxito.	Speaker is understood. Mispronunciations occur but do not interfere with understanding. Sentence stress is used but not always successfully. Basic intonation patterns are used, but not successfully all the time.

C1	Se entiende al hablante fácilmente. Los errores de pronunciación son escasos. La acentuación de la frase se hace con éxito en la mayoría de los casos. La entonación se utiliza, pero no siempre con éxito.	Speaker is easily understood. Mispronunciations are rare. Sentence stress is used successfully most of the time. Intonation is used but not always effectively.
C2	Se entiende al hablante fácilmente. Los errores de pronunciación son escasos. La frase se acentúa con éxito en la mayoría de los casos. La entonación se hace con éxito en la mayoría de los casos.	Speaker is easily understood. Mispronunciations are rare. Sentence stress is used successfully most of the time. Intonation is used successfully most of the time.

En el caso de los aprendientes eslovenos, las escalas se pueden complementar con la propuesta de una secuenciación para la enseñanza de la pronunciación española a hablantes eslovenos de Gospodarič (2003: 127–128; 2004: 196). Su propuesta contiene una secuenciación para los seis niveles de A1 a C2 indicando los contenidos concretos dentro de los tres elementos: los sonidos, la acentuación y la entonación. A diferencia de las otras escalas presentadas anteriormente, esta incluye la enseñanza de la entonación en todos los niveles, ya a partir del nivel A1. Se precisa qué sonidos, patrones entonativos, acentuación de las sílabas y ritmos enseñar a cierto nivel. No obstante, la autora destaca que "los contenidos elegidos deben ser modificados conforme a las necesidades de los alumnos y otras circunstancias que acompañan un curso particular" (2004: 195).

3 LA PRONUNCIACIÓN EN LOS MANUALES DE ELE

Según diversos autores (Casany/Landa 2010; Cortés Moreno 2002a; 2002b; Hidalgo Navarro 2015; Otero Doval 2013) la presencia del componente fonológico en los manuales es escasa y, en la mayoría de los casos, lo abordan de manera general sin tratar de manera sistemática los elementos suprasegmentales:

> En los manuales de ELE solo hay, comúnmente, un único tema dedicado a la pronunciación, que suele centrarse en las consonantes, las vocales y las combinaciones de ambas, dejando de lado temas tan importantes como la acentuación y la prosodia, imprescindibles para la correcta pronunciación del español. (Casany/Landa 2010)

Asimismo, Cortés Moreno (2002a: 69) confirma este puesto marginal en los manuales de ELE de la enseñanza de la pronunciación, y de la entonación en particular, tras una revisión de manuales de enseñanza de lenguas extranjeras en la que constata que "en una proporción considerable de las obras consultadas la entonación o bien no se menciona o bien ocupa un puesto secundario".

Gospodarič (2003), en su análisis de 17 manuales de ELE de niveles variados publicados entre 1990 y 2002, que representan el enfoque comunicativo ecléctico, señala que "la pronunciación vuelve a considerarse importante y encuentra su espacio en los

manuales, que ofrecen al alumno una práctica más significativa y contextualizada" (2003: 63) pero con el objetivo principal de conseguir una pronunciación inteligible como parte esencial de la competencia comunicativa. De los 17 manuales analizados, solo siete de ellos contienen actividades para la práctica de la pronunciación tanto de los elementos segmentales como suprasegmentales, mientras que los otros se limitan solo a algunos elementos básicos en los niveles iniciales y no incluyen la enseñanza de la entonación. La autora destaca el manual *Sueña*, "que desarrolla la corrección fónica a través de todos los niveles siguiendo los parámetros de dificultad y legibilidad umbral" (2003: 104). Por el contrario, la mayoría de los manuales empieza con la práctica de los sonidos, sobre todo las consonantes, y en los niveles intermedios continúa con las prácticas de la acentuación y la entonación, lo que indica lo contrario a la teoría de la adquisición. En relación a la tipología de ejercicios, según la autora, prevalece el enfoque tradicional en la enseñanza de la pronunciación, intuitivo-imitativo. Los manuales de los años 90 añadieron a los ejercicios del tipo "escucha y repite" o "escucha y señala" de los años anteriores más contexto y soporte visual y la descripción explícita de algunos rasgos fonéticos o fonológicos españoles. Sin embargo, los ejercicios siguen siendo controlados o semi-controlados, lo cual no favorece el uso de la prosodia interactiva y creativa del alumno.

3.1 Análisis de los manuales *Diverso, Gente hoy* y *Bitácora*

Atendiendo a lo anterior, trataremos de averiguar el papel de la enseñanza de la pronunciación en los manuales de ELE recientemente publicados en España. La muestra la constituyen los manuales de español general más novedosos y, a la vez, ya certificados por el Ministerio de educación esloveno como los manuales que se pueden usar en las escuelas de secundaria en Eslovenia. Hemos analizado los libros del alumno y los cuadernos de ejercicios de, al menos, dos niveles de cada manual. Cada uno representa, a su vez, tres (sub)enfoques diferentes dentro del enfoque comunicativo ecléctico: *Gente hoy 1, 2, 3* aplica el enfoque por tareas; *Diverso 1, 2* favorece el enfoque intercultural; y *Bitácora 1, 2, 3* se adscribe al enfoque léxico. Se ha analizado la serie completa de los niveles accesible en la primavera de 2016, así que *Diverso* abarca los niveles A1 y A2, *Bitácora* del A1 al B1, y *Gente hoy* del A1 al B2. Nos hemos centrado en las siguientes preguntas de investigación:

1) ¿Los manuales siguen una enseñanza sistemática de la pronunciación por unidades y niveles?
2) ¿En qué orden se presentan los elementos segmentales (sonidos) y suprasegmentales (acentuación y entonación)?
3) ¿Cuál es la tipología de actividades? (intuitivo-imitativa, analítica, integrada)?
4) ¿Se tiene en cuenta la competencia fonológica como una de las competencias lingüísticas en la (auto)evaluación?

3.1.1 Diverso 1, 2

Los autores de este manual han previsto una enseñanza sistemática de la competencia fonológica que se aprecia ya en el índice de los dos libros. En *Diverso 1* prevalece lo segmental (sonidos), con la excepción de la enseñanza de la entonación interrogativa en

la unidad 1, después de haber introducido el alfabeto y los sonidos en la unidad 0. Tras esto, dos unidades se dedican a las vocales (la sinalefa, y/e), mientras que las demás se centran en las consonantes en forma de pares (r/rr, g/j, ch/ll, c/z, ll/y).

Diverso 2 continúa con el tratamiento de las consonantes (b/v, consonantes oclusivas) pero prevalece el tratamiento suprasegmental de la acentuación (el acento prosódico, ortográfico, el diptongo, el hiato, la acentuación de pronombres interrogativos y exclamativos y los acentos diacríticos). En el nivel A2 no se tiene en cuenta la enseñanza de la entonación. En relación a la tipología de las actividades, podemos constatar que en la mayoría se usa la técnica "escucha y repite", "escucha y marca" o "escucha y escribe", pero en algunos casos se añade otro ejercicio de sensibilización[3]. Cada unidad presenta los contenidos con las reglas de "Ortografía y pronunciación" en un cuadro siempre marcado del mismo color. Estas reglas se repiten en las páginas de gramática finales. Los dos libros contienen una página dedicada a la autoevaluación al final de cada unidad, en la cual encontramos siempre los mismos criterios para evaluar la expresión dentro de la destreza de producción oral: "Hablas con fluidez. Hablas con una buena pronunciación y entonación", mientras que los criterios para lengua y contenido cambian. En la misma página del cuadro "Mi progreso" el alumno puede valorar con *bien*, *adecuado* o *mal* los nuevos conocimientos de pronunciación aprendidos en cierta unidad.

Tabla 2. El componente fonológico en el libro del alumno y cuaderno de ejercicios de *Diverso 1 y 2*

COMPONENTE FONOLÓGICO	**Diverso 1 (A1)**	**Diverso 2 (A2)**
Secuencia	Los sonidos, la entonación interrogativa, la sinalefa y las consonantes	Las consonantes, el diptongo, el hiato y la acentuación
Localización	En cada unidad En el apéndice gramatical	En cada unidad En el apéndice gramatical
Tipología de las actividades	Escucha, observa, marca, repite, busca más ejemplos	Lee, subraya, escucha, observa, marca, repite, busca más ejemplos, clasifica
Autoevaluación	Uno de los criterios de producción oral y en "Mi progreso" (los nuevos conocimientos)	Uno de los criterios de producción oral y en "Mi progreso" (los nuevos conocimientos)

3.1.2 Gente hoy 1, 2, 3

Una mirada al índice del manual nos dice que no se tiene en cuenta una enseñanza sistemática de la pronunciación. Con una lectura más detenida del libro del alumno, en *Gente hoy 1* vemos que al principio se trata de sensibilizar al alumno sobre los diferentes

3 *Diverso 1*: "Busca más información en internet sobre la entonación en español. *El Atlas interactivo de la entonación* es un sitio interesante" (p. 25); *Diverso 2*: "Busca 20 palabras en la unidad y clasifícalas en agudas, llanas y esdrújulas" (p. 27), "¿Existen los diptongos en otras lenguas que conoces?" (p. 65).

acentos en español: por ejemplo, en la página 27 hay un ejercicio de una audición con tres versiones de la misma conversación. Se usa la tipología intuitivo-imitativa ("escucha y anota", "escucha y observa"). El apéndice gramatical contiene un apartado sobre sonidos y grafías. El cuaderno de ejercicios de *Gente hoy 1* ofrece más contenidos para desarrollar la competencia fonológica que el libro del alumno. Empieza por los sonidos y la ortografía y continúa con la distinción entonativa entre una frase interrogativa y afirmativa (marcar, repetir), y al final del cuaderno el alumno tiene que fijarse en la entonación que expresa la información principal (escuchar, marcar). En relación con los sonidos, se enseñan las consonantes r/rr y b/v y la sinalefa de las vocales, mientras que de la acentuación, solo la sílaba tónica. Al alumno se le ofrece la posibilidad de autoevaluar no solo gramática, vocabulario, lectura, audición, escritura y cultura, sino también fonética y pronunciación a pesar de no ofrecer muchos contenidos sobre esto.

En *Gente hoy 2* nos centraremos en el cuaderno de ejercicios, ya que el libro del alumno solo contiene dos menciones en el apéndice gramatical: se refiere al orden de la frase y la entonación[4] y al cambio de la sílaba tónica en los verbos irregulares (p. 130). Los ejercicios del cuaderno se ciñen a las vocales: la interferencia entre lengua materna y extranjera, la sinalefa (escuchar y practicar la lectura de un poema) y se propone una estrategia para mejorar la pronunciación memorizando poemas o canciones[5]. Así que los materiales de *Gente hoy 2* contienen un poco de los tres elementos: sonido, acentuación y entonación.

En *Gente hoy 3* solo encontramos unas actividades de pronunciación en el cuaderno de ejercicios. Esta vez solo se refieren a la entonación. Una página entera dedicada a las estrategias de aprendizaje llamada "Así puedes aprender mejor" explica el papel de la entonación (el tono) en las intenciones comunicativas y lo relaciona con los estados de ánimo[6]. En el apartado sobre las estrategias de aprendizaje de la última unidad, la explicación sobre el papel de la entonación se complementa con el contexto de la conversación coloquial y se presenta el tono vivencial con su gran carga expresiva. Después de escuchar una audición de registro coloquial, se pide a los alumnos que representen una conversación coloquial (se ofrece la transcripción del diálogo) teniendo en cuenta

4 "En la lengua oral, este orden puede sustituirse por unidades entonativas" (p. 125).

5 "Para mejorar la pronunciación, es muy útil aprender de memoria poemas y canciones, fijándose bien en la entonación y en la relación entre las palabras. Puedes hacer una selección de textos en español que te gusten e intentar memorizarlos" (p. 91).

6 "'¿Te has fijado en el tono con el que lo ha dicho?', 'No me gusta este tono', '¡Qué tono, chico!' son comentarios muy habituales en la vida cotidiana. Muestran la importancia que tiene la entonación en la expresión de nuestras intenciones comunicativas. La lengua permite decir muchas cosas con las mismas palabras. Utilizando determinados recursos, como la entonación, podemos darles diferentes significados. Así podemos demostrar actitud de asombro, aburrimiento, enfado, alegría, incertidumbre, timidez, nerviosismo…; somos capaces de diferenciar una afirmación de una pregunta, podemos subrayar la parte más importante de nuestro discurso… Para ello utilizamos la velocidad, el volumen, la intensidad, las pausas y los silencios, las curvas melódicas, etc. Estos recursos determinan, en gran parte, el significado que queremos dar a lo que decimos y la interpretación que hace quien nos escucha. En la escritura esto se refleja, aunque de manera muy pobre, mediante la puntuación" (p. 26).

la expresión de las emociones mediante la entonación. Resumiendo, el nivel B2 solo contiene los contenidos de la entonación. En cuanto a la autoevaluación, los ejercicios se hacen más abiertos y menos guiados con cada nivel, por lo tanto no se les guía directamente para que evalúen su progreso en pronunciación en los niveles B1 y B2.

Tabla 3. El componente fonológico en el libro del alumno y cuaderno de ejercicios de *Gente hoy 1, 2 y 3*

C. FONOLÓGICO	Gente hoy 1 (A1+A2)	Gente hoy 2 (B1)	Gente hoy 3 (B2)
Secuencia	Los sonidos, la sensibilización a diferentes acentos en español, la entonación interrogativa y afirmativa, la sílaba tónica, la sinalefa, las consonantes (r/rr, b/v), y la entonación (información principal)	La entonación (orden de palabras), las vocales LM/LE y la sinalefa	La entonación (estado de ánimo, tono vivencial en conversación coloquial)
Localización	En la mitad de las unidades En el apéndice gramatical	En el apéndice gramatical En el cuaderno de ejercicios solo en dos unidades	En el cuaderno de ejercicios solo en dos unidades
Tipología de las actividades	Escucha, observa, marca, repite	Escucha, observa, lee	Escucha, representa
Autoevaluación	Fonética y pronunciación	No	No

3.1.3 Bitácora 1, 2, 3

Este manual también empieza con el alfabeto y la pronunciación de los sonidos. Se propone que el alumno compare los sonidos del español con su lengua materna. El libro del alumno de A1 no contiene otra mención o ejercicios excepto las explicaciones de la pronunciación en el apéndice gramatical, pero se refieren solo a sonidos y acentuación, mientras que la entonación no se menciona. Un anexo idéntico aparece al final de *Bitácora 2*, pero los libros del alumno de *Bitácora 2 y 3* no presentan ninguna actividad, mientras que los cuadernos de ejercicios sí las incluyen aunque van disminuyendo con cada nivel. De ahí que el cuaderno de *Bitácora 1* es el que hace más hincapié en los ejercicios de pronunciación. Se ofrecen los ejercicios intuitivo-imitativos a nivel de repetición de palabras y, más tarde, de frases. No se ofrecen las reglas de los pares típicos (v/b, r/l, etc.) pero sí la audición de estos pares que hay que reconocer por escrito y, a continuación, reconocer ciertas palabras: primero marcarlas y, en las unidades siguientes, escribirlas.

Para practicar la acentuación, hay que marcar la sílaba fuerte en cada palabra y después otra vez escuchar y aprender a repetirlas “hasta que puedas decirlo como en

la grabación" (p. 118). También en el caso de la entonación se le pide al alumno que escuche las frases afirmativas e interrogativas y que las repita "hasta que tu entonación sea igual que la de la grabación" (p. 42). Otro ejercicio de tipo repetitivo es escuchar un diálogo y después tomar el papel de uno de los interlocutores e interactuar con el CD (p. 71). Se trata de practicar la pronunciación y la entonación de una manera muy implícita. El cuaderno de *Bitácora 2* repasa la distinción entre la frase afirmativa e interrogativa (escuchar y marcar). Otro ejemplo de enseñanza implícita y receptiva se da a través de un blog en el que un español describe cómo se comunican los escandinavos y los españoles y los compara haciendo referencia a las pausas, el silencio, el tono, las interrupciones y la expresión de emociones. El último de los tres ejercicios en este cuaderno es escuchar poemas y aprender a recitarlos ante la clase. En *Bitácora 3* no existen actividades de pronunciación a pesar de que la introducción al cuaderno de ejercicios de todos los niveles anuncia "ejercicios de observación de cuestiones fonéticas, de discriminación y de práctica de la pronunciación" (*Bitácora 1, 2, 3*, p. 3). Ninguno de los niveles de *Bitácora* tiene prevista la autoevaluación.

Tabla 4. El componente fonológico en el libro del alumno y cuaderno de ejercicios de *Bitácora 1, 2 y 3*

C. FONOLÓGICO	Bitácora 1 (A1)	Bitácora 2 (A2)	Bitácora 3 (B1)
Secuencia	Los sonidos, la acentuación, la sensibilización, la entonación interrogativa y afirmativa y la sílaba tónica	La entonación interrogativa y afirmativa	No
Localización	En la mitad de las unidades	En el apéndice gramatical En el cuaderno de ejercicios solo en dos unidades	No
Tipología de las actividades	Escucha, observa, repite	Escucha, marca, repite	No
Autoevaluación	No	No	No

4 CONCLUSIONES

El desafío al que se enfrenta todo aprendiente de una lengua extranjera es "sonar" lo más parecido posible a un hablante nativo pero sin dejar de ser uno mismo, como una persona "who can stand between the two languages" (Cook 1992: 583). Como la adquisición de una buena pronunciación facilita la comunicación oral fluida y eficaz, parece razonable que la pronunciación se enseñe en todos los niveles. En este artículo hemos tratado de comprobar si algunos manuales actuales de ELE (A1–B2) reflejan este pensamiento. A continuación respondemos a nuestras preguntas sobre el papel de la pronunciación en los tres manuales analizados.

1) ¿Los manuales siguen una enseñanza sistemática de la pronunciación por unidades y niveles? De los tres manuales analizados, solo *Diverso* (A1–A2) planifica la enseñanza de la pronunciación en cada unidad en los dos niveles. Es el manual que más ejercicios contiene, seguido por *Gente* (A1–B2), donde los ejercicios aparecen esporádicamente a través de los tres libros, y, finalmente *Bitácora* (A1–B1), que es el manual con menos atención a la competencia fonológica, pues los ejercicios van disminuyendo con cada nivel. De la misma manera aparece el metalenguaje sobre la pronunciación: cuanto más se enseña de manera explícita, más metalenguaje se utiliza. Como *Bitácora* solo emplea el método inductivo de enseñanza, y los ejercicios de pronunciación se esconden en "escucha y repite", el metalenguaje se omite. Cabe añadir que los libros del alumno contienen menos contenidos y actividades que los cuadernos de ejercicios, excepto en *Diverso*, donde existe coherencia entre el libro y el cuaderno. Por lo tanto podemos albergar la esperanza de que en las clases de ELE se pueden utilizar los dos de manera coherente y equilibrada.

2) ¿En qué orden se presentan los elementos segmentales (sonidos) y suprasegmentales (acentuación y entonación)? En general, los tres manuales aluden a los tres elementos empezando por los sonidos, tomando en cuenta tanto las consonantes como las vocales (sobre todo la sinalefa). Se invita al alumno a observar la diferencia entre el español y su lengua materna y, en algún caso, la diferencia entre variedades del español. En la acentuación se trabaja, sobre todo, la sílaba tónica. En cuanto a la entonación, se practica al principio de los tres manuales la distinción entre la afirmativa y la interrogativa. En *Diverso* no se practican otros aspectos de la entonación; en *Gente 2* se añade solo una actividad de recitar poemas fijándose en la entonación; y en *Gente 3* se le presta más atención dentro de las estrategias de aprendizaje. En *Bitácora 2* se ofrece un par de actividades implícitas para practicar la entonación, y en *Bitácora 3*, nada. Se puede concluir, entonces, que los elementos suprasegmentales en los manuales actuales de ELE no se enseñan de manera sistemática ni acorde con la teoría de adquisición que aboga por una enseñanza temprana de la prosodia ni con las sugerencias de los expertos (Carcedo González 1998; Gospodarič 2004; Hidalgo Navarro/Cabedo Nebot 2012; Neufeld 1987).

3) ¿Cuál es la tipología de actividades: intuitivo-imitativa, analítica, integrada? Las tipologías observadas no se apartan de los métodos tradicionales intuitivo-imitativos. La sensibilización o la recepción se basa en "escucha y observa", y la producción en mera reproducción. Sin embargo, es verdad que los avances tecnológicos permiten al aprendiente obtener más *input* y contexto. Los tres manuales analizados contienen muchas audiciones y vídeos en los cuales se trata de ofrecer un *input* de lengua auténtica y natural con diferentes variedades de español. El enfoque comunicativo, con sus variantes de enfoque por tareas y enfoque léxico, no favorece una enseñanza analítica o explícita, ya que el objetivo está en la eficacia comunicativa. El enfoque léxico, por ejemplo, no tiene que dejar de lado una enseñanza efectiva de la pronunciación, ya que los bloques prefabricados de palabras pueden funcionar como patrones de los diferentes tipos de entonación (Travalia 2007). Pero también dentro de estos enfoques se podría (o debería) ofrecer más ejercicios centrados también en el significado y no solo

en la forma. Estamos de acuerdo con Hidalgo Navarro y Cabedo Nebot (2012: 82), que proponen un enfoque decididamente interactivo basado en el modelo conversacional.

4) ¿Se tiene en cuenta la competencia fonológica como una de las competencias lingüísticas, en la autoevaluación? Los tres manuales difieren bastante en este aspecto. *Diverso 1* y *2* y *Gente 1*, que representan los niveles A1 y A2, incluyen la pronunciación en las fichas guiadas de autoevaluación. En los niveles B1 y B2, *Gente* ya no hace una autoevaluación guiada sino más abierta, en la que no se menciona la pronunciación de manera explícita, pero el aprendiente la puede incluir en sus reflexiones. *Diverso*, con su enfoque léxico, se centra en el aprendizaje de léxico y no prevé una ficha de autoevaluación para todas las destrezas y contenidos.

Podemos concluir que la enseñanza de la pronunciación según los manuales más recientes (*Diverso*, *Gente*, *Bitácora*) sigue ocupando un lugar poco destacado y que se tiende a entrenar la percepción de sonidos o palabras de manera aislada sin una base comunicativa. Se olvida que todo lo enunciado siempre forma parte de un contexto en el que cumple una función comunicativa y que la competencia fónica es parte integrante en las destrezas receptivas y productivas. No obstante, no podemos pasar por alto que existen propuestas de actividades interactivas e integradoras de diversos autores (Alonso 2012; Casany/Landa 2010; Cortés Moreno 2002a; Hidalgo Navarro 2015; Lahoz Bengoechea 2007; Otero Doval 2013; Santamaría 2007, entre otros) de las cuales se podría sacar mucho provecho en clase de ELE combinándolas con los manuales, ya que, según el *PCIC* (2007: 165), el profesor:

> ha de saber integrar las prácticas de fonética correctiva en el conjunto de actividades interactivas del modo más natural posible. Por consiguiente, su papel no lo puede desempeñar ni un programa informático ni una grabación de vídeo, ni ninguna otra herramienta de las que a menudo se ofertan como recursos sustitutivos del profesor, quien, por lo demás, puede aprovechar las ventajas que todas ellas le ofrecen como meros instrumentos complementarios.

5 PROPUESTAS DE ACTIVIDADES

Querríamos terminar el artículo con algunas propuestas didácticas que se podrían combinar con los manuales analizados. Para introducir la enseñanza de la entonación en los niveles iniciales, algo que hemos echado en falta en los manuales mencionados, podemos recurrir a la idea de Lahoz Bengoechea (2007: 716): el dibujo animado *Pingu* en versión española (existe *Pingu* doblado en distintos idiomas, es decir, con entonaciones diferentes). Los estudiantes pueden familiarizarse con la entonación del español porque el pingüino habla solo con entonación, sin palabras. Se puede combinar la visión del video con expresión oral sobre la posible interpretación de lo expresado y ocurrido en el dibujo animado, de este modo se combinan destrezas diferentes y no se practica la entonación de manera aislada.

Otro ejemplo integrado para practicar los elementos suprasegmentales en combinación con el uso de los manuales es la propuesta de Otero Doval (2013). El profesor puede explicar primero la entonación descendente en preguntas que comiencen con

pronombres interrogativos, después dar un modelo de una conversación. A continuación los estudiantes realizan la actividad en parejas, entrevistando a sus compañeros con las preguntas usando pronombres interrogativos y la entonación descendente. Después, presentan a sus compañeros los datos de sus respuestas al resto del grupo. Para practicar la entonación descendente de las oraciones exclamativas podemos distribuir entre los estudiantes imágenes que provoquen reacciones como, por ejemplo: ¡Felicidades!, ¡Enhorabuena!, ¡Ten cuidado!, etc. La actividad se puede hacer de manera abierta, o sea, creativa (los estudiantes comunican sus relaciones) o de manera cerrada (se propone un listado de reacciones posibles y los estudiantes eligen entre ellas).

El manual de Bitácora se podría complementar con la propuesta de Travalia (2007) de enseñar la entonación de los bloques prefabricados (*lexical chunks*) porque son unidades léxicas que se emplean de forma habitual en la vida social y representan patrones de los diferentes tipos de entonación en español. Según el enfoque léxico, después de memorizar las expresiones con su inflexión correspondiente, es recomendable presentarlas en contexto. A continuación, conviene presentar algunos ejercicios de identificación de entonación correcta. La autora destaca que lo más importante es que el aprendiz memorice las expresiones en grupos según la entonación que presenten.

En los niveles intermedios (B1–B2) podemos seguir con la sensibilización de la entonación con el uso de fragmentos de películas o cortometrajes con una clara carga expresiva. Los estudiantes adivinan o interpretan la actitud y estado de ánimo solo escuchando el fragmento (se suprime el componente visual). Después se visualiza el fragmento seleccionado y revisa la primera interpretación. (Cortés Moreno 2002a)

Aunque parece que el dictado ha desaparecido con el enfoque comunicativo, nuestra última propuesta se llama "Dictado de acento" (Baker/Rinvolucri 2005: 34). Antes de la clase el profesor escoge un texto conectado con el contenido de la clase y lo graba con tres hablantes de español, cada uno con diferente acento. Los estudiantes escuchan las tres grabaciones, comentan los acentos y votan cuál de las tres grabaciones quieren escuchar para escribir el dictado. La actividad puede seguir con la grabación escogida como un dictado, pulsando las pausas o como un *dictogloss*, sin pausas, tratando de anotar las ideas principales y reconstruir el texto, primero individualmente y después en grupo.

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Resumen

LA ENSEÑANZA DE LA PRONUNCIACIÓN EN LOS MANUALES DE ELE DE A1–B2

El principal objetivo del aprendizaje de una lengua extranjera es lograr el éxito comunicativo. Dado que no se puede alcanzar una buena competencia comunicativa sin un dominio suficiente de la pronunciación, ya que la falta de este componente dará lugar a malentendidos en la comprensión e interpretación de los mensajes hablados, entendemos que es esencial enseñarla en todos los niveles del aprendizaje de la lengua extranjera.

En este trabajo, pues, se analiza el lugar que ocupa la pronunciación en la enseñanza de ELE, en general, y en los manuales más recientes, en particular, para comprobar si este componente lingüístico, tan distintivo e importante en su doble dimensión (segmental y suprasegmental), sigue ocupando un lugar secundario entre todos los niveles de la lengua. Tratamos de comprobar si la enseñanza de la pronunciación es sistemática mediante el análisis de los siguientes elementos: a) el orden en el que se enseñan y practican los sonidos, la acentuación y la entonación; b) el tipo de ejercicios; c) y el lugar que ocupa la (auto)evaluación de la competencia fonológica. Asimismo, este análisis se complementa con los documentos para la enseñanza de ELE en los que se hace referencia a los aspectos fonológicos: el *Marco común europeo de referencia para las lenguas*, el *Plan curricular del Instituto Cervantes* y los descriptores de evaluación de pruebas orales en los exámenes DELE. Al final se ofrecen algunas propuestas didácticas para la enseñanza de la pronunciación para niveles diferentes.

Palabras clave: español como lengua extranjera (ELE), competencia fonológica, enseñanza de la pronunciación, análisis de manuales de ELE

Abstract

TEACHING PRONUNCIATION IN SPANISH/FL A1–B2 TEXTBOOKS

The principal aim of learning a foreign language is successful communication. Given that a good communicative competence cannot be reached without sufficient command of pronunciation (pronunciation errors may result in miscomprehension or misinterpretation), it is of vital importance to emphasize pronunciation at all levels of foreign language teaching.

In this article we analyse the status of pronunciation in Spanish foreign language teaching and its integration in Spanish textbooks. The aim is to explore whether this distinctive and important linguistic component still has a secondary position in relation to other linguistic components. To examine if pronunciation teaching in Spanish textbooks is systematic, we observe the following elements: a) the order of teaching and practicing sounds, word stress and intonation; b) the typology of exercises; c) the (self-) evaluation of pronunciation. In addition, the phonological competence is analysed with

respect to the *Common European Framework of Reference for Languages*, the *Cervantes Institute Curricular Plan*, and the descriptive scales for oral communication in international Spanish exams (*DELE*). Finally, we propose some activities for teaching pronunciation at different levels.

Keywords: Spanish as a foreign language, phonological competence, teaching pronunciation, Spanish textbook analysis

Povzetek

POUČEVANJE IZGOVARJAVE V UČBENIKIH ŠPANŠČINE KOT TUJEGA JEZIKA (A1–B2)

Glavni cilj učenja tujega jezika je uspešno sporazumevanje. Dobre sporazumevalne zmožnosti pa ne moremo doseči brez zadovoljive izgovarjave, saj pomanjkanje te jezikovne komponente lahko vodi v napačno razumevanje ali interpretacijo govornih sporočil, zato menimo, da je poučevanje izgovarjave bistvenega pomena na vseh ravneh učenja tujega jezika.

V članku analiziramo vlogo, ki jo zavzema izgovarjava pri poučevanju španščine kot tujega jezika na splošno in na primeru najnovejših španskih učbenikov, da bi ugotovili, ali ima ta pomembna in razlikovalna jezikovna raven drugotno vlogo v primerjavi z drugimi jezikovnimi ravnmi. Z analizo sledečih elementov poskušamo ugotoviti, ali je poučevanje izgovarjave v španskih učbenikih sistematično: a) vrstni red, v katerem se poučuje glasove, naglaševanje in intonacijo; 2) tipologija vaj; c) vključenost fonološke zmožnosti v (samo)vrednotenje. Analizo dopolnjuje pregled fonološke zmožnosti v *Skupnem jezikovnem okviru za jezike*, v španskem *Učnem načrtu Inštituta Cervantes* in v opisnikih ocenjevalnih lestvic za ustno sporočanje v mednarodnih španskih izpitih DELE. Na koncu članka predlagamo aktivnosti za poučevanje izgovarjave za različne ravni.

Ključne besede: španščina kot tuji jezik, fonološka zmožnost, poučevanje izgovarjave, analiza učbenikov španščine kot tujega jezika

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PARTICULARITÉS PHONÉTIQUES ET PHONOLOGIQUES DU FRANÇAIS PARLÉ EN EUROPE ET AU QUÉBEC

1 INTRODUCTION

La phonologie du français est un terrain fertile pour les divers cadres théoriques. De nombreux travaux (corpus, enquêtes ou base de données) étudient notamment les variétés du français. Toutefois, les français, issus ou non de la colonisation française, ont suivi leur propre évolution par rapport au français hexagonal. Dans cette contribution, notre objectif consiste à mettre en évidence les principales particularités phonétiques et phonologiques du français parlé en Belgique, en Suisse et au Québec. Enfin, elle souligne la situation linguistique actuelle et la diversité des variétés régionales du français non hexagonal. L'objectif est d'introduire le sujet et de donner un cadre de réflexion pour aborder les communautés linguistiques périphériques à la France. Notre analyse de la situation linguistique du français en Europe et au Canada est basée sur une méthode contrastive qui vise à comparer le système phonologique du français dans trois pays francophones. Pour parvenir aux résultats présentés dans cet article, nous avons eu recours aux données[1] de la base Phono qui présente les principales caractéristiques du français, de la base PFC destinée à l'enseignement et la diffusion du français parlé au sein de l'espace francophone, du corpus OFROM du français parlé en Suisse romande ainsi que certaines études déjà établies.

D'une part, nous présentons les liens historiques qui unissent ces États à la France. Puis, nous soulignons les oppositions vocaliques et consonantiques par rapport au français parlé en France. Seuls seront étudiés les traits les plus caractéristiques pour l'ensemble des variétés du français parlé en Europe et au Québec. Enfin, en soulignant la situation linguistique actuelle et la diversité des variétés régionales du français non hexagonal, nous souhaitons favoriser les connaissances en phonétique et en phonologie afin de donner un cadre de réflexion, entre autres pédagogique, pour aborder les communautés linguistiques périphériques à la France.

2 LE FRANÇAIS NON-HEXAGONAL

2.1 En Belgique

L'histoire de la France se mêle très tôt à celle de la Belgique. En effet, toutes deux sont romanisées par Jules César, puis envahies par les tribus germaniques. Il est pourtant difficile de se faire une idée précise sur les origines du wallon et du français en Belgique

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1 Voir les bases suivantes : phono.uqac.ca ; www.projet-pfc.net ; www11.unine.ch

ainsi que sur leurs particularités jusqu'à la fin du Moyen-Âge. L'histoire du français en Belgique débute au X^e^ siècle grâce aux clercs du nord qui élaborent, sous la forme d'une langue écrite supra-locale réservée à une élite lettrée, le français. Cette langue a supplanté « les langues romanes endogènes utilisées en Wallonie et est devenue la langue courante sur le territoire wallon d'abord et à Bruxelles ensuite, *via* la migration d'une population francophone vers la capitale » (Detey et al. 2010 : 203). La période française de l'histoire de la Belgique s'étend, par intermittence, de l'annexion de ces territoires par la France à partir de 1792, lorsque les Pays-Bas autrichiens et la principauté de Liège sont envahis par les troupes françaises, à la chute de l'Empire en 1814. Le français devient peu à peu la langue des élites sur l'ensemble du territoire. Tous les actes publics sont rédigés en français et Napoléon Bonaparte entame la francisation massive dans les départements du Nord tout en se heurtant à une forte opposition des Flamands. En 1797, l'Autriche reconnaît la cession officielle de ces territoires à la France lors du traité de Campo-Formio. Enfin, après la campagne de France et la chute de l'Empire français en 1814, la Belgique devient indépendante et est intégrée en 1815 au Royaume des Pays-Bas.

Actuellement, la Belgique est divisée en trois Régions linguistiques : la Région flamande, située au nord, correspond au domaine linguistique néerlandais ; au sud, la Région wallonne englobe les régions linguistiques essentiellement française, mais aussi germanophone. Le recensement étant un sujet de controverse politique, aboli en 1962, il est difficile d'évaluer la situation linguistique, mais on considère que 58 % environ de la population en Belgique est néerlandophone et 41 % francophone[2]. Enfin, la Région de Bruxelles est officiellement bilingue, mais on estime que la population francophone vivant dans la capitale est de 75% à 90%.

2.2 En Suisse

La Suisse est romanisée par les Romains à partir du II^e^ siècle av. J.-C. Une grande partie de la Suisse romande appartient à l'espace dialectal francoprovençal, une langue gallo-romane qui se développe surtout au sud-est de la France. Les particularités linguistiques du francoprovençal sont documentées en Suisse dès le VI^e^ siècle. À partir du Moyen Âge et jusqu'à la fin du XVIII^e^ siècle, les parlers francoprovençaux et jurassiens sont utilisés quotidiennement en Suisse romande, dans les régions et les milieux sociaux. Aux XVII^e^ et XVIII^e^ siècles, le prestige de la culture française s'impose en Suisse. Le français assumait essentiellement la fonction de l'expression écrite et les dialectes gallo-romans celle de l'expression orale (Detey et al. 2010 : 215). Le français est aussi fréquent à Fribourg et à Bâle. Il jouit d'un certain prestige auprès des élites en Suisse alémanique et sert de langue de contact entre Alémaniques et Romands (Knecht 1978 : 251).

La Suisse pratique aujourd'hui toutes les langues de ses pays voisins : l'italien dans le canton du Tessin et le canton des Grisons (le romanche est aussi parlé minoritairement dans le canton des Grisons), et l'allemand dans le reste du pays. Le français est

2 Voir le site web consacré aux statistiques : www.vivreenbelgique.be

parlé en Suisse romande, plus particulièrement dans les quatre cantons unilingues de Genève, de Vaud, de Neuchâtel et du Jura ainsi que dans la partie francophone des trois cantons bilingues de Fribourg, du Valais et de Berne. Les francophones y sont de l'ordre de 22,6 %[3].

2.3 Au Canada

Jacques Cartier découvre le Canada en 1534, mais le français ne commencera à s'établir de façon permanente en Amérique du Nord qu'avec la fondation, en 1608, de la ville de Québec par Samuel de Champlain. Ainsi, la langue du XVII^{e} siècle, issue des langues d'oïl régionales, parlée en Acadie (l'actuelle Nouvelle-Écosse) et dans la vallée du Saint-Laurent devient la base historique du franco-québécois. Le français s'étend ensuite en Louisiane, dans l'Ontario et l'Ouest canadien, puis en Nouvelle-Angleterre. Au XX^{e} siècle, des mouvements politiques militent au Québec pour obtenir plus d'autonomie. Des lois linguistiques, dont la Loi 101, feront du Québec une province officiellement unilingue française, tout en reconnaissant l'existence des communautés anglophones, autochtones et allophones.

Parmi les variétés régionales que présente le français, les parlers des Franco-Canadiens constituent, selon le recensement de 2011[4], la langue d'usage de près de 21,5% de la population du Canada, dont 20,4% habitent le Québec. Le Québec est donc francophone à environ 78%. La deuxième communauté est en Ontario où le pourcentage de locuteurs francophones n'est que d'environ 3,8%.

3 DISTINCTIONS VOCALIQUES

La prononciation du français en Europe et au Québec n'étant pas uniforme, nous présentons ici une synthèse des oppositions vocaliques et consonantiques.

3.1 Les voyelles nasales

Contrairement au français parlé en Île-de-France (le français dit standard), on note en Belgique le maintien des voyelles nasales, notamment de l'opposition [ɛ̃]~[œ̃] : on distingue *brin~brun*. Pourtant, ces nasales sont de plus en plus proches au point de vue phonétique (Delvaux/Metens/Soquet 2002).

En Suisse romande, on note également le maintien de l'opposition [ɛ̃]~[œ̃] dans les mots *fin* ou *parfum*. En outre, la nasale « en », prononcée [ɛ̃] en France (p.ex. dans *agenda*), se prononce [ɑ̃] en Suisse romande. Cette nasale possède pourtant un timbre différent de celui qui est utilisé notamment dans le nord de la France et ressemble plutôt au son [œ̃].

Les voyelles nasales, en français québécois, semblent moins nasalisées que celles du français standard (Charbonneau 1971). La voyelle nasale postérieure [ɑ̃] est souvent réalisée en français québécois comme une voyelle antérieure nasalisée [ã], parfois légèrement fermée en [æ̃]. La prononciation avec [ã] est majoritaire, les mots en [ɛ̃]

3 Voir le site www.bfs.admin.ch

4 Voir le site www12.statcan.gc.ca

sont surtout touchés par la fermeture, tandis que les mots en [ɑ̃] et ceux en [ɑ̃], prononcés [æ̃], sont les moins touchés (Martin et al. 2001–2).

3.2 Opposition de durée, de tension et de longueur vocaliques

En français standard, la durée vocalique a perdu en grande partie sa valeur phonologique.

a) L'opposition [ɑ] ~ [a]

L'opposition phonologique entre [a] antérieur et [ɑ] postérieur est aujourd'hui en grande partie inexistante en français standard. Si cette opposition se réalise en Belgique, elle est toutefois faible. Il s'agit d'une opposition, non pas de lieu d'articulation, mais de durée et de tension : p.ex., *patte~pâte*. Les deux voyelles sont antérieures, mais celle de « pâte » est plus longue et plus tendue : le [a] bref s'oppose ainsi au [a:] long.

En Suisse romande, on note des oppositions de longueur entre les voyelles brèves et longues de [ɛ]~[ɛ:] (*faites~fête*) et de [a]~[ɑ:] (*patte~pâte*).

Le français québécois ne connaît pas, comme en Belgique, de différences de longueur vocalique en syllabe ouverte phonologiquement pertinentes. Toutefois, en syllabe fermée, le [a] antérieur et le [ɑ] postérieur du franco-québécois s'opposent distinctement. Cette distinction se réalise entre les deux phonèmes : le [a] antérieur tend alors à se fermer en [œ], le [ɑ] postérieur tend à s'arrondir en la voyelle ouverte postérieure arrondie [ɒ], et à diphtonguer en syllabe fermée en [ɑu].

b) Opposition [e]~[ɛ]

On note la fréquence élevée des voyelles longues, même en syllabe atone, dans la prononciation du français de Belgique. En outre, l'opposition de durée et de tension vocalique concerne d'autres voyelles : p.ex., *mettre* [mɛtʁ] et *maître* [mɛ:tʁ]. On note également la prononciation du [ɛ] au lieu de [e] dans les syllabes ouvertes atones : ainsi, le déterminant « les » est parfois prononcé [lɛ]. La longueur vocalique marque également le féminin (*ami* [ami] et *amie* [ami:]) auquel on ajoute parfois une semi-voyelle (*aimée* se prononce [ɛ.me:j]) ou encore d'autres voyelles comme le [y] (*vendu* [v.dy] et *vendue* [v.dy:]).

En français québécois, la distinction entre [e] et [ɛ] en syllabe ouverte est réalisée phonétiquement par deux sons distincts, mais un son plus fermé ou plus ouvert que celui du français standard. La distinction entre le [ɛ] bref et le [ɛ:] long est présente et se réalise par une différence de timbre et de longueur. Ainsi, le [ɛ:] long subit une diphtongaison et tend à se prononcer [ɛ^{i}] ou même [a^{i}].

c) Opposition [o] et [ɔ]

Le français de Belgique a maintenu certaines oppositions phonologiques qui existaient autrefois en français standard. Ainsi, l'opposition entre [o] et [ɔ] en finale absolue permet d'opposer p.ex. le *mot* [mɔ] du *maux* [mo] ou *pot* [pɔ] de *peau* [po].En

français québécois, on note, dans un parler plus relâché, une perte de l'opposition entre le [ɑ] postérieur et le [ɔ] ouvert en syllabe terminée par le son [ʁ] : ainsi, « (il) part » peut devenir l'homophone de « (le) port », mais la distinction se maintient dans une diction plus soignée.

d) La semi-voyelle [ɥ]

Un trait récurrent dans la prononciation des Belges francophones concerne l'absence du son [ɥ] qui est parfois remplacé par le son [w] dans les cas de synérèse : le mot *puis* est prononcé [pwi] au lieu de [pɥi], ou encore *lui* se prononce [lwi] au lieu de [lɥi]. Il n'y a donc pas d'opposition phonologique entre [ɥ] et [w]. D'autre part, le son [ɥ] est parfois prononcé comme le son [y] en cas de diérèse : *nuage* se prononce [nya:ʒ] en deux syllabes au lieu de [nɥa:ʒ] en une seule, ou bien le verbe *tuer* devient [tye] au lieu de [tɥe].

En français québécois, comme en français standard, le son [ɥ] se prononce [y], séparant la syllabe en deux : *nuage* se prononce [ny.aʒ] et non [nɥaʒ].

3.3 Diphtongaison

En français de Belgique, la diphtongaison du [e:] long apparaît en finale de mot : p.ex., année [anej]. On retrouve également le caractère long et diphtongué des finales féminines en « -ée, -ie » en Suisse romande : p.ex. *journée* [ʒuʁne:j].

En revanche, il semble que la diphtongaison soit plus présente en français québécois. En effet, les voyelles longues sont souvent réalisées comme des diphtongues, c'est-à-dire des voyelles dont le timbre change en cours d'émission[5]. Ainsi, les voyelles longues [ɛ, a, o, ɔ, ɛ̃, œ̃, ɔ̃ et ɑ̃] peuvent être réalisées diphtonguées en syllabe fermée accentuée : [a] dans *pâte* [pɑ͡ɔt]~[pɑ:t] ; [o] dans *zone* [zo͡on]~[zo:n] ; [œ] dans *peur* [pœ͡ʁ]~[pœ:ʁ] ; [ø] dans *neutre* [nœ͡øt]~[nø:tʁ]. Les voyelles brèves, [ɛ, a, ɔ et œ] peuvent aussi se diphtonguer quand elles sont allongées par les consonnes [ʁ] et [z] en syllabe accentuée : [ɛ] dans *père* [pa͡ɛʁ]~[pɛ:ʁ] ; [ɔ] dans *fort* [fɑ͡ɔʁ]~[fɔ:ʁ]. Devant les sons [v] et [ʒ], les voyelles brèves sont allongées, mais ne se diphtonguent pas (p.ex., dans *fleuve* ou *loge*). En outre, la diphtongaison du [e] en syllabe ouverte finale est de plus en plus observée. Enfin, on note l'usage du [e:] long, tendu et fermé, mais aussi parfois diphtongué en [ei], dans les fréquents emprunts à l'anglais comme *steak* [ste:k] ou [steik], ainsi que le [o:] long, tendu et fermé, souvent diphtongué en [ou], dans d'autres emprunts, p.ex. *coach*. En français standard, ces mots se prononcent respectivement [stɛk] et [kɔtʃ] ou [kotʃ].

3.4 Opposition en finale absolue

Contrairement au français standard, la distinction entre [e] et [ɛ] en finale absolue se maintient en Belgique (*pré~prêt*) et permet de distinguer le futur simple du conditionnel : p.ex., le [e] (*je ferai*) et le [ɛ] (*je ferais*). Par ailleurs, une nasalisation de [ɛ:] dans la syllabe finale peut apparaître en Belgique, par assimilation régressive, avant

5 Voir Paradis/Dolbec (1992)

la consonne [n] : pour prononcer, par exemple, les mots « laine, peine, scène » (Pohl 1983 : 30).

En Suisse romande, on fait plusieurs distinctions en finale absolue qui sont devenues archaïques en français standard. On distingue ainsi entre [o] fermé et [ɔ] ouvert : p.ex, le mot *artichaut* [aʁtiʃo] s'oppose en voyelle finale à *abricot* [abʁikɔ]. L'opposition en finale absolue entre [e] fermé et [ɛ] ouvert s'est également maintenue et on distingue notamment les termes « pré, près et prêt ».

Comme en français standard, l'opposition entre le [ɑ] postérieur et le [a] antérieur est neutralisée en finale absolue et en syllabe ouverte en français québécois : on n'oppose donc pas *las* ou *ras* à *là* ou *rat*, mais ils se prononcent tous en [ɑ]. Toutefois, dans quelques mots en « -ois » et certains mots grammaticaux (p.ex., la voyelle antérieure de « regarde-la » s'oppose à la voyelle postérieure de « regarde là »), les « a » se prononcent alors comme une postérieure et forment des exceptions. En outre, en finale absolue accentuée et en syllabe intérieure de mot inaccentuée, le [ɑ] peut se fermer en [ɒ] ou en [ɔ]. Le phénomène peut aussi s'appliquer au [ɑ] provenant de la postériorisation du [a]. La prononciation du son [ɒ] est plus fermée que celle du [ɑ] et se confond pratiquement avec celle du [ɔ] : ainsi, le mot *pas* [pɑ] se prononce [pɔ].

4 DISTINCTIONS CONSONANTIQUES

En français de Belgique, les consonnes [b, d, g, v, z, ʒ], placées en position intérieure devant une consonne sourde ou en position finale d'un mot, perdent leur sonorité et se prononcent comme les consonnes sourdes [p, t, k, f, s, ʃ]. L'allongement de la voyelle les précédant compense la perte de sonorité : ainsi, *bac* [bak] s'oppose à *bague* [ba:k], *vite* [vɪt] à *vide* [vi:t], *bref* [bʁɛf] à *brève* [bʁɛ:f], *visse* [vɪs] à *vise* [vi:s], *bouche* [bʊʃ] à *bouge* [bu:ʃ]. En français standard, le [w] est prononcé [v], à l'exception des mots *Wallonie* et *wallon* qui se prononcent respectivement [walɔˈni] et [waˈlõ]. De même, les Belges prononcent souvent le son « w » comme un [w] : ainsi, *wagon* se prononce [wa.gɔ̃] et l'abréviation « w.-c. » devient [we.se], par opposition au français [ve.se]. En outre, les mots étrangers, issus notamment du néerlandais, sont souvent prononcés de façon différente en Belgique : p.ex., le chanteur belge Jacques Brel prononçait « Amsterdam » [amstəʁdam] avec un [ə] et non [amstɛʁdam] avec le [ɛ] du français standard.

En Suisse romande, le [ʁ] prononcé en position finale tend parfois à être sourd et rappelle le son allemand : ainsi, la prononciation de *bar* ressemble à celle de l'allemand *Bach* [bax]. En outre, on peut entendre des [e] fermés et longs dans des syllabes se terminant par un [ʁ] : p.ex. dans le mot *frère* [fʁ̥e:ʁ̥].

En français québécois, les sons [t] et [d] suivies des voyelles antérieures [i] et [y] ou des semi-consonnes [j] et [ɥ] s'assimilent en consonnes affriquées en [t͡s] et [d͡z] : ainsi, le mot *tire* [tiʁ] devient [t͡siʁ] et *dur* [dyʁ] se prononce [d͡zyʁ]. La consonne occlusive nasale [ɲ] peut parfois s'antérioriser et se prononcer [n] : l'adjectif *maligne* [malɪɲ] devient [malɪn]. Le phonème [f] peut devenir bilabial en contact avec une voyelle labialisée : *fumée* [fyme] se prononce [ɸyme]. On note également la chute de la consonne [ʁ] avant des occlusives et fricatives antérieures internes et finales de mot (*forte* [fɔr.t] se prononce [fɔ.t]) ou après une consonne suivie de [w] : p.ex. *trois* [tʁwɔ]

devient [twɔ]. De même, la consonne [f] subit une apocope en finale de mot : ainsi, le son [œ] qui n'est pas en syllabe ouverte est remplacé par [ø] : p.ex. le mot *neuf* [nœf] se prononce [nø].

5 LES VARIETES DU FRANÇAIS NON HEXAGONAL

5.1 En Belgique

La variété dialectale est complexe en Belgique[6]. En effet, les parlers de Wallonie appartiennent dans leur majorité aux parlers romans issus de la langue d'oïl. La Wallonie se divise ainsi en quatre domaines linguistiques (Bal et al. 1994 : 8) : la Wallonie occidentale (ouest et centre de la province Hainaut) est occupée par des parlers picards ; la Wallonie centrale (est du Hainaut, Brabant wallon, province de Namur, nord de la province de Luxembourg) correspondant au domaine du wallon namurois et de l'ouest-wallon (ou wallo-picard) ; la Wallonie orientale (province de Liège) est occupée par le wallon liégeois, et la Wallonie méridionale (centre et sud de la province de Luxembourg) correspond au domaine du sud wallon (wallo-lorrain) et du lorrain. Enfin, le français des Wallons se distingue du français des Bruxellois.

Par conséquent, on distingue notamment le français parlé par les Picards, les Wallons et les Bruxellois. Le premier, l'accent picard est celui que l'on retrouve dans le nord de la France et, pour la Belgique, dans la partie occidentale du Hainaut. L'accent régional, plus ou moins marqué, des Wallons est un marqueur identitaire : en effet, l'accent des Liégeois, l'un des plus typiques de la région wallonne, leur permet de se différencier des Bruxellois ou d'autres Wallons. Enfin, à Bruxelles, on note plusieurs variétés de français, plus ou moins valorisées, et une variété endogène dite « de prestige » (Detey et al. 2010 : 205).

Ces trois dialectes principaux ont de nombreux points communs, dont certains les opposent au français, mais aussi des particularités[7]. Dans la région picarde, on note certains traits particuliers par rapport au wallon, notamment le maintien de [k, g] + [a] : picard (pic.) *câr, côr* ; wallon (wal.) *tchâr, tchôr* ; français (fr.) « char » ; pic. *gambe* ; wal. *djambe, djâbe, djan.me* ; fr. « jambe » ; la palatalisation en [ʃ] de [k] devant [e, i] : pic. *chinq, chonq* ; wal. *cinq, céq* ; fr. « cinq » ; la désinence atone en « -tè, -t(e) » de la 3e personne du pluriel de l'indicatif présent : pic. *val'tè, vôt't(e)* ; wal. *valèt, val'nut* ; fr. « valent ».

Sans relever toutes les particularités du français de Wallonie et de Bruxelles, nous pouvons observer, entre autres, la nasalisation des voyelles orales au contact d'une nasale souvent associée à Bruxelles. Bruxelles étant une région bilingue, majoritairement francophone, le français y est différent, du point de vue de son substrat, des autres aires de la Wallonie. On peut noter une autre tendance qui consiste à prononcer en inversant les deux dernières lettres : p.ex., le mot « possible » devient « possîbel ».

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6 Plusieurs contributions (Pohl 1983 ; Warnant 1997 ; Francard 2001) présentent les traits essentiels qui caractérisent la prononciation des voyelles et des consonnes en Belgique.

7 Les grandes particularités des dialectes en Belgique apparaissent sur les cartes de *l'Atlas linguistique de la Wallonie* (1953).

En outre, le français de Wallonie tend à allonger les voyelles atones [i], [y] et [u] ; on note aussi l'existence du phonème [h] (ou « xh ») dans la région liégeoise ou encore les traits suivants : le maintien des groupes [sp, st] : wal. *spène, spine* ; pic. *èpène* ; fr. « épine » ; le maintien de la labiale [w] dans [k] + [w] : wal. *cwarème* ; fr. « carême » ; la diphtongaison de [o] devant [r] + consonne : wal. *mwète, mwate* ; pic. et fr. « morte ».

5.2 En Suisse

A l'exception des parlers jurassiens qui tirent leur origine du dialecte d'oïl, les dialectes et patois de la Suisse romande appartiennent essentiellement au francoprovençal, une langue galloromane qui s'est développée dans un espace au sud-est de la France. En Suisse romande, une ligne sépare le canton suisse du Jura (oïl) et celui de Neuchâtel (francoprovençal). D'une manière générale, le français parlé en Suisse romande a le statut de langue standard et est proche du français de l'Hexagone.

Il existe toutefois quelques régionalismes (Dondaine 1972 : 31) qui sont souvent réduits à l'état de survivances locales, dont voici quelques exemples : les parlers du Valais central gardent le timbre du [u] latin qui est devenu [y] ailleurs ; les sons [ts, dz] + [a] se prononce [k, g], par ex. tsa, fr. « char » ; tsvé, fr. « cheval » ; le [ô] suivi d'une nasale devient [u] dans « un » (numéral), « un » (article) ou « chacun » ; chute de [ə] dans le suffixe -ittu, -itta par suite d'un déplacement d'accent.

Dans le Canton du Jura où règnent les patois francs-comtois (oïl), on observe de nombreux phénomènes (Reusser-Elzingre 2005), par exemple, de palatalisation consonantique : [kl] < [sy ou ch] ; d'intervocalismes : *pavore* < *pavu* ou *pèvu*, fr. « peur » ; ou de diphtongaison *die dominica* < *dūmwan*, fr. « dimanche ».

5.3 Au Québec

Le Canada abrite deux communautés francophones : d'une part, les descendants des Français qui ont peuplé la vallée du Saint-Laurent, et notamment la ville de Québec fondée en 1608, mais aussi Trois-Rivières (fondée en 1634) et Montréal (fondée en 1642). Au XVII^{e} siècle, ces premiers colons provenaient de plusieurs provinces de France[8], essentiellement du littoral de la côte atlantique (Normandie, Poitou, Aunis, Saintonge) et de l'Ile de France (Barbaud 1984 : 20–21). D'autre part, les Provinces Maritimes, sur la côte est du Canada, rassemblent le groupe des Acadiens dont la grande moitié des colons sont originaires de la province du Poitou[9]. Aujourd'hui, Québécois et Acadiens, n'ayant pas connu la même histoire, ne parlent pas la même variété de français. Pour notre part, nous nous référons au franco-québécois.

Le français québécois connaît des variations régionales et regroupe également plusieurs parlers, notamment le français parlé à Montréal, mais aussi le français ontarien, celui du Nouveau-Brunswick ou du Manitoba (Martel/Cajolet-Laganière 1996). Ces

8 La France comptait autrefois 39 provinces, supprimées lors la Révolution de 1789 et divisées en 83 départements.

9 Le Poitou comprenait alors les actuels départements de la Vendée, des Deux-Sèvres, de la Vienne et le nord de la Charente.

variétés ont les mêmes origines, mais se sont différenciées au gré de l'histoire. Ainsi, le français montréalais, à l'ouest, prononce les mots d'origine anglaise en calquant la phonologie de l'anglais américain ou bien présente des voyelles longues là où le français québécois, à l'est, présente des voyelles brèves ; il maintient aussi l'allongement des voyelles fermées [i, y, u] devant les consonnes allongées [v, z, ʒ, vʁ] tandis que la région de l'est pratique le relâchement de ces voyelles (Dumas 1987).

6 CONCLUSION

Selon les données de l'Organisation Internationale de la Francophonie, le français est la langue officielle de 32 États. En plus de la France, on compte, entre autres, la Belgique et la Suisse pour l'Europe et le Canada pour l'Amérique du Nord où la langue française s'est affirmée et développée de maintes façons à travers les siècles.

Nous avons voulu vérifier, en utilisant une méthode contrastive, l'état des oppositions phonologiques et les divergences actuelles par rapport au français hexagonal d'une part et d'autre part, souligner les variétés régionales des français parlés en Europe et au Québec. De cette étude, il apparaît que l'histoire du français parlé hors de France, notamment en Belgique et au Québec, est liée aux dialectes d'oïl et a tendance à conserver les oppositions phonologiques vocaliques qui étaient autrefois prononcées en français standard : l'opposition entre les nasales [ɛ̃] et [œ̃] ; le [ɑ] postérieur et le [a] antérieur en syllabe fermée ; le [ɛ] bref et le [ɛ:] long ; le [e] et le [ɛ] ; le [o] et le [ɔ], ainsi que le [ø] et [œ] en syllabe fermée.

La majeure différence apparaît dans l'absence du son [ɥ] en Belgique et une diphtongaison importante dans le français québécois. On note également une tendance à l'assourdissement des consonnes finales sonores pour le français de Belgique et à l'assimilation ou l'apocope pour le franco-canadien.

En revanche, le français parlé en Suisse romande, d'origine francoprovençal, se rapproche davantage du français standard, tout en gardant quelques oppositions, notamment entre le [o] et le [ɔ], et entre les nasales [ɛ̃] et [œ̃].

Enfin, il serait sans doute intéressant de poursuivre cette étude en analysant les influences des parlers limitrophes (flamand, allemand et anglais) sur le français, voire en l'élargissant aux autres États où le français est également la langue ou l'une des langues officielles. L'étude des particularités phonologiques du (des) français parlé(s) en Afrique pourrait également s'inscrire dans le prolongement de cette étude, de même qu'une étude contrastive des particularités phonologiques dans les différents registres du français parlé.

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Résumé
PARTICULARITÉS PHONÉTIQUES ET PHONOLOGIQUES DU FRANÇAIS PARLÉ EN EUROPE ET AU QUÉBEC

Dans cette contribution, l'auteure met en évidence, par une approche contrastive, les particularités phonétiques et phonologiques entre les français parlés en Europe et au Québec. Elle présente d'abord les liens historiques qui unissent ces États à la France. Puis, elle propose une synthèse des principales oppositions vocaliques et consonantiques par rapport au français parlé en France. Enfin, elle souligne la situation linguistique actuelle et la diversité des variétés régionales du français non hexagonal. L'objectif est d'introduire le sujet et de donner un cadre de réflexion pour aborder les communautés linguistiques périphériques à la France.

Mots-clés : phonétique, phonologie, langue française, Belgique, Suisse, Québec, francophonie

Abstract
PHONETIC AND PHONOLOGICAL CHARACTERISTICS OF FRENCH SPOKEN IN EUROPE AND QUEBEC

The article highlights the phonetic and phonological characteristics of the French language spoken in Europe and in Quebec using a contrastive approach. The author first presents the historical links between the French-speaking countries and France. Then a synthesis of the main vocalic and consonantal oppositions is presented and compared to French spoken in France. Finally, the author highlights the current linguistic situation and the diversity of regional varieties of non-hexagonal French. The aim is to introduce the topic and to propose a general framework for the studies of France's peripheral linguistic communities.

Keywords: Phonetics, Phonology, French language, Belgium, Switzerland, Quebec, Francophonie

Povzetek
FONETIČNE IN FONOLOŠKE ZNAČILNOSTI GOVORJENE FRANCOŠČINE V EVROPI IN QUEBECU

V tem prispevku avtorica s kontrastivnim pristopom poudarja fonetične in fonološke značilnosti francoščine kot govorjenega jezika v Evropi in Quebecu. Najprej so predstavljene zgodovinske povezave med frankofonskimi državami in Francijo. Nato avtorica predstavi sintezo glavnih soglasniških in samoglasniških opozicij v primerjavi s francoščino kot govorjenim jezikom v Franciji. Na koncu poudari

trenutno jezikovno stanje in raznolikost regionalnih zvrsti francoskega jezika izven Francije. Cilj je predstaviti tematiko in oblikovati splošni okvir za obravnavo jezikovnih skupnosti izven Francije.

Ključne besede: fonetika, fonologija, francoski jezik, Belgija, Švica, Quebec, frankofonija

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A BRIEF HISTORICAL OVERVIEW OF PRONUNCIATIONS OF ENGLISH IN DICTIONARIES

1 INTRODUCTION

In this paper we trace dictionaries mainly of British English from their beginnings, drawing especial attention to some significant neglected or underrated writers. We examine the different ways of representing pronunciation, starting with the earliest works, which indicated pronunciation by means of conventional spelling supplemented with various diacritical signs or marks, and moving on to dictionaries where this was replaced by various systems of phonetic notation, in particular the International Phonetic Alphabet. Dictionaries produced in the USA are also briefly considered. In the twentieth century the pace of development increased, with dictionaries showing British and American usages side by side; in the twenty-first century a further development has been the introduction of audio recordings.

2 BEFORE THE EIGHTEENTH CENTURY

In the sixteenth and seventeenth centuries pronunciations were not indicated in dictionaries but a small number of scholars in different parts of Britain wrote about correlations of sounds to spellings. Most of them, as did Edmund Coote in his 1596 *English Schoole-Maister*, compiled glossaries of 'hard' words but none amounted to a dictionary. An exception of importance was Henry Salesbury (*c*1560–*c*1632), an Oxford-educated Welshman, who published *A Dictionary in Englyshe and Welshe* in 1547, described in detail in Dobson (1968). The work was mentioned by Daniel Jones (1909) in *Le Maître Phonétique* in response to a question on how earlier pronunciations of English were determined. Jones replied that one useful source was writers who 'compared the English sounds with those of foreign languages.' Salesbury, he said, 'transcribed the pronunciation of English words by means of Welsh spelling and wrote a … treatise on Welsh pronunciation explaining ... the values of the Welsh letters' (Jones 1909: 122).

3 THE EIGHTEENTH CENTURY

3.1 Dyche, Bailey and Dr Johnson

Thomas Dyche, a schoolmaster from Derbyshire working in London, set about producing *A New General English Dictionary* (approximately 20,000 words) which featured

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special attention to pronunciations. Dyche died in 1727 but the work was completed and published in 1735 by William Pardon.

The Londoner Nathan Bailey (1691–1742) published his successful *Universal Etymological English Dictionary* in 1727. In its Preface he explained that 'forasmuch as many Persons…are frequently apt to accent Words wrong' he offered to guide them by the use of marks placed immediately after the stressed vowel, as for example with *Aba'ndon* and *A'bbey*. He was the first lexicographer to indicate with full regularity the positions of tonic stresses in all words.

It was Bailey's publishers who commissioned Dr Samuel Johnson (1709–1784) to produce his celebrated *Dictionary of the English Language* in 1755. He followed Bailey in using regular accentuation marks but offered little else on pronunciations. In 1884 James Murray, editor of the *Oxford English Dictionary* (OED), adopted such a system but with raised dots instead of vertical strokes, as at 'a·bi' for *abbey*. This system remained in the OED until 1989 when it was converted to the phonetic notation devised by the International Phonetic Association (see sections 5.2 and 9.1).

3.2 Kenrick and Sheridan

William Kenrick (*c*1730–1779) of Hertfordshire, in his *New Dictionary of the English Language* (1773), not only followed Bailey in his marking of stresses but was the first ever to supply full pronunciations for practically all his entries. He contrived to do this by placing numbers directly above ambiguous letters, explaining their values by a set of keywords.

Superscript numbers, over vowels only, were employed by the former actor Thomas Sheridan (1719–1788), father of the famous playwright Richard Brinsley Sheridan, in his much more complete two-volume *General Dictionary of the English Language* of 1780. He sought, its subtitle proclaimed, 'to establish a plain and permanent standard of pronunciation.' He came of an Irish family but had received his early education at Westminster School.

3.3 John Walker

During this period many people in Britain and Ireland sought to cultivate the style of speech of the metropolis and the royal court, in consequence becoming patrons of pronunciation lexicographers. The Londoner John Walker (1732–1807) became the supreme caterer to these people who were wishful to 'avoid provincialisms' when he published his *Critical Pronouncing Dictionary and Expositor of the English Language* in 1791. Using superscript numbers similar to Sheridan's, Walker included only minimal definitions but devoted maximum attention to their pronunciations. He recorded many variant pronunciations of each word and in many cases discussed the opinions on them of other 'orthoepists,' as such scholars were known. Often he quoted from such writers as Shakespeare, Spenser, Milton and Pope. He even noted down the actor David Garrick's pronunciation in his dramatic performances.

Walker annotated the traditional spellings of vowels by means of numbers placed directly over their letters. The consonants /θ/ and /ð/ were conveyed by respectively italicising and capitalising their 'th' spellings as at *th*in and THat. He had been well

aware of the weak values of very many unaccented syllables but unfortunately chose to regard them as 'corruptions,' preferring to represent their vowels with unrealistic values. That regrettable decision was no doubt influenced by Dr Johnson's ill-judged dictum that '[f]or pronunciation the best general rule is, to consider those as the most elegant speakers who deviate least from the written words,' which Walker quoted in his 1791 Preface (p. 4). For example, *Sabbath* he transcribed as /ˋsabaθ/ instead of /ˋsabəθ/, and *pavement* as /ˋpeɪvment / instead of /ˋpeɪvmənt/.

4 THE NINETEENTH CENTURY

4.1 Smart's Updating of Walker

In 1836 a new work was published by the London grammarian Benjamin H. Smart (1787–1872). Its Preface emphasised the many changes that had occurred 'in the fifty or sixty years' since the first publication of Walker's dictionary, but this new work totally failed to eclipse the general high esteem in which Walker's was held. It compared unfavourably with Walker's detailed treatment of numerous words. In particular the decision to recommend only one of two equally current usages was ill-advised. Smart would give only one version even when admitting that between the two there was 'little in point of good usage to choose.' By contrast Walker's book had quoted as many as eight authorities' opinions at some words.

Smart's updatings included a recognition that the fashion of pronouncing words such as *grass* and *plant* with the new long /ɑ/ instead of the older short /a/ was by now completely 'unaffected.' Instead of superscript numerals he revived the earlier tradition of using macrons and breves, though using a complex set of symbols, as, e.g. at *hamadryad* [hăm″-ā-drī″ăd]. A much better system of this type was adopted in 1911 by H. W. and F. G. Fowler for their new *Concise Oxford Dictionary*.

4.2 Beniowski

An especially interesting independent set of views on British pronunciation was purveyed in the middle of the nineteenth century by Polish-born 'Major' Beniowski (*c*1800–1867). In the preface to his 1845 *Anti-Absurd Dictionary* (pp. 80–83) he offered as credentials that he had come to Britain in 1836 and 'spent seven years of a studious residence in London.'

As a speaker of a relatively rationally spelt language, he was shocked by the many irrationalities in English spelling, which he found 'absurd.' He based his *Anti-Absurd Dictionary* on his observations of the speech of the educated Londoners he had lived among. His transcriptions provided independent evidence of many changes from the usages of Walker's day.

4.3 Prys

Robert Ioan Prys's 1857 *English and Welsh Pronouncing Dictionary* was similar to Salesbury's *Dictionary in Englyshe and Welshe* (section 2) in that it used a foreign language to represent the pronunciation. Prys was from north Wales, which in the nineteenth

century was almost entirely Welsh-speaking. A Welsh monoglot until adulthood, he had received virtually no formal education, but nevertheless managed to learn English without the help of a teacher. A major obstacle in achieving this aim was mastering the pronunciation of English, and having found a way of dealing with this problem himself, he felt he could assist others by publishing his dictionary with a transcription system based on the orthography of Welsh. It became one of the earliest dictionaries directed at non-native English users. It is notable that long before the phoneme concept had been developed, Prys appears to have been applying a largely phonemic transcription system; see Collins and Mees (1991) for a discussion of Prys's transcription scheme and Collins and Mees (2007) for a facsimile reproduction of extracts of the second 1888 edition of the dictionary as well as a translation of Prys's Welsh introduction.

5 NINETEENTH-CENTURY DEVELOPMENTS

5.1 Alexander Ellis

The scholar who did most to establish scientific phonetics in nineteenth-century Britain was the polymath Alexander John Ellis (1814–1890). His work was even recognised in the USA by the American Phonetic Council, by which he was invited to contribute to their major new *American Phonetic Dictionary of the English Language* (APDEL), produced by Daniel Smalley to a design by Nathaniel Storrs (Smalley 1855). Ellis furnished it with a lengthy General Introduction. APDEL anticipated the principles of the International Phonetic Association (see section 5.2) in its restricted use of diacritics, using a single symbol for each simple sound. It was fully qualified to be entitled a 'phonetic' dictionary: not only were its headwords all supplied with phonetic transcriptions but even its definitions were given in phonetic script!

5.2 Early Influence of the IPA

The International Phonetic Association was inaugurated in 1886 in Paris by Paul Passy (1859–1940). The Association's International Phonetic Alphabet (IPA), proposed by the great Danish linguistic scholar Otto Jespersen (1860–1943), had, after two years of planning, been finally established in 1888.

The very first full record of English pronunciations using symbols differing only marginally from the IPA alphabet was produced by Jespersen as a major contribution to the large two-volume *Dictionary of the English and Dano-Norwegian Languages* (1902–1907) edited by his fellow Dane John Brynildsen. Jespersen took great pride in giving authentic representations of the vowel and consonant reductions of the natural speech of 'even the most educated speakers' (Juul et al. 1995: 115).

5.3 George Hempl

One of the International Phonetic Association's most enthusiastic early adherents, the American George Hempl, had been at work at much the same time, contributing to the two-volume *New International French-English and English-French Dictionary*, the first edition of which was dated 1903. Its editor Robert Morris Pierce listed Hempl as

its 'Editorial Critic of English Pronunciations.' Like Jespersen, Hempl also regularly provided realistic accounts of the vowels of weak syllables. At *but* and *to*, besides /bʌt/ and /tu/, we also find /bət/ and /tə/. At *because* even the forms /bəˈkəz/ and /kəz/ were included. Although with almost no recognition of the fact, this dictionary was the very first ever to use the IPA for representations of American pronunciations.

5.4 Jon Arvid Afzelius

In 1909 the Swede Jon Arvid Afzelius (1856–1918) published an enterprising single volume of 472 double-column pages entitled *A Concise Pronouncing Dictionary of Modern English*, which, though it clearly catered for a need, strangely failed to make any notable impact (Collins/Mees 2009). His transcriptions, which were remarkably accurate, were phonemic in nature although he did not employ the term 'phoneme' since the concept was at the time unknown outside Russia and eastern Europe. In a short review Daniel Jones (1910: 157) describes the book as 'a praiseworthy attempt to carry out a work of extreme difficulty,' but finds it regrettable that 'the author has not adopted the transcription of the Phonetic Association.' Afzelius observed (1909: i) that the system he had adopted was 'a slightly modified form of the phonetic notation first employed by Henry Sweet in his *Primer of Spoken English* [1890],' i.e. Sweet's 'Broad Romic.' Sweet was the IPA's first president and his Romic had in fact largely been the basis of the International Phonetic Alphabet.

6 JONES AND PALMER

6.1 Daniel Jones (1881–1967)

Born and bred a Londoner and a son of a leading London barrister, Daniel Jones undertook from the year 1900 intensive studies in phonetics in Germany and France. In January 1907, he gave the first of a series of lectures at University College London which were to lead to his founding of its Department of Phonetics.

6.2 Jones's First Pronunciation Dictionary

In 1913 Jones published a *Phonetic Dictionary of the English Language* jointly with Herman Michaelis, a German headmaster of a 'Mittelschule' near Wiesbaden. Its headwords were not in traditional English spelling but in an alphabetic sequence of IPA symbols. This had been adopted so that a 'person hearing a word for the first time … may ascertain [its] current spelling' (p. vii). Large numbers of 'phonetic readers' were coming into use at this time so that, theoretically at least, the dictionary catered to a new need. The practical value of the volume was in fact seriously hampered by the unfamiliar arrangement of its entries.

6.3 The EPD: A True Milestone

This first lexicographical venture seems to have encouraged Jones to embark upon the writing of his *English Pronouncing Dictionary*. This much admired account of British

speech, published in 1917, became an instant and lasting success. A hundred years after its first appearance it is still a classic work of reference though it has now been extensively revised (see sections 8.3 and 8.5). The most widespread and enthusiastic reception of his work came from the ever-expanding worldwide audience of users of English as a further language.

6.4 The Influence of Palmer

After Jones, the most outstanding British figure in phonetics and language learning in the earlier twentieth century was Harold Palmer (1877–1949). Despite his lack of formal qualifications, he was employed by Daniel Jones to lecture in his Department of Phonetics in 1915. Palmer stayed with Jones until 1922 when he accepted an invitation to move to Tokyo to be 'linguistic adviser' to the Japanese government.

6.5 English Pronunciation 'with American Variants'

In 1926, Palmer issued, with the help of the American J. Victor Martin and F. G. Blandford, a *Dictionary of English Pronunciation with American Variants* (DEPAV). It acknowledged the influence of G. P. Krapp and J. S. Kenyon and 'the evidence afforded by Hempl's dictionary' (1926: vi). Although the idea was promising, the completed book contained serious design flaws. After almost fifty pages of discursive introductory matter, the main text was arranged in columns headed 'Traditional Spelling,' 'Received Pronunciation' and 'American Variants.' That third column was very often sparsely filled when not actually blank. The phonetic notation was unfortunately complicated by using, besides a normal i, both a dotless [ɪ] and an iota [ɪ] so that, e.g. *misleading* appeared as [ˊmɪsˊliːdɪŋ]. The words included were often ill-judged, even wastefully giving in full all regular noun plurals, -ing-participles, and -ly forms of adjectives.

7 AN ADVANCED LEARNER'S DICTIONARY (ALD)

7.1 The ALD Precursor

A much more successful achievement of Palmer's was his very original 300-page book *A Grammar of English Words* (1938). As stated in its subtitle, the publication contained 'one thousand English words and their pronunciations, together with information concerning the several meanings of each word, its inflections and derivatives, and the collocations into which it enters.' The unprecedented recognition of the need for pronunciation information beyond the single-word level foreshadowed the development of the important new genre to become known as 'advanced learner's dictionaries.'

7.2 The First ALD

The very first of these, entitled *Idiomatic and Syntactic English Dictionary,* was compiled in Japan and published in 1942 from the Institute Palmer had founded by his successor A. S. Hornby, aided by two researchers, E. Gatenby and H. Wakefield. This edition was reprinted 'photographically' in 1948 by OUP as *A Learner's Dictionary of Current English* and re-issued in 1952 with *Advanced* added to its title.

8 PHONETIC TRANSCRIPTIONS

8.1 American Pronunciations Added

The third edition of the *Oxford Advanced Learner's Dictionary of Current English* (OALD, Hornby et al. 1974) became a landmark publication by being the first major EFL dictionary to supply both American and British phonetic transcriptions for every one of its 100,000 entries. After this, practically all other British EFL-directed dictionaries soon became similarly equipped.

8.2 British and American Pronunciations

Almost half a century after the Palmer-Martin DEPAV, a new work was published by OUP with the same purpose: *A Concise Pronouncing Dictionary of British and American English* (CPDBAE) by J. Windsor Lewis (1972). With half the number of pages of the previous work, yet more than two-and-a-half times as many headwords, it made use of the several vowel symbols newly familiar from A. C. Gimson's *Introduction to the Pronunciation of English* (1962), the instantly accepted new standard description of British pronunciation, though without the length marks employed in Gimson's work (see 8.3 below). Corresponding to the established expression 'General American' for its US pronunciations, CPDBAE introduced the new term 'General British' (abbreviation 'GB') for the variety of UK accent it represented.

8.3 A Very Influential Set of Symbols

When Gimson revised the Jones EPD for its 1977 fourteenth edition, he represented the *kit, lot,* and *foot* vowels with the symbols /ɪ, ɒ, ʊ/, replacing Jones's vowel symbols /i, ɔ, u/, which only remained in the EPD to signify the vowel phonemes of *fleece*, *thought* and *goose* /iː, ɔː, uː/. At the same time he changed the symbol for the *nurse* vowel from /əː/ to /ɜː/. Although, strictly speaking, length marks were no longer essential because the phonemes all had symbols that were differentiated from each other without them, he decided to retain them for the sake of clarity and continuity. His revised transcription was immediately welcomed by the leading publishers, resulting in an unprecedented uniformity of British practice.

8.4 The Longman Pronunciation Dictionary

In 1990 the *Longman Pronunciation Dictionary* (LPD), compiled by J. C. Wells (b.1939), was the first major pronunciation dictionary to provide full British and American transcriptions for all its entries. This admirable work unfortunately missed the chance to replace the outdated term 'RP' with something more suitable. It included the redundant vowel length marks though, following existing Longman house style, they were withdrawn from endings of words like *happy*, where the suggestion of length in such weak syllables looked particularly inappropriate. This departure from phonemic principles had appeared earlier in the *Longman Dictionary of Contemporary English* (Editor-in-chief Paul Procter, Pronunciation Editor Gordon Walsh, 1978), the earliest of the many emulations of the immensely popular OALD.

8.5 The Cambridge English Pronouncing Dictionary

In 1997 the fifteenth edition of the Jones-Gimson EPD, newly extensively revised by Professor Peter Roach of Reading University with the collaboration of Jane Setter, at last also incorporated American pronunciations. These, supplied by the American phonetician James Hartman, were referred to as 'similar to what has been termed General American' (p. v). For the British content it proclaimed 'the time has come to abandon the archaic name *Received Pronunciation*.' The chosen replacement was the still unsatisfactory 'BBC English' (1997: v): since the 1960s the BBC had no longer been employing only GB speakers. Relatively trivial differences of transcription distinguished this revised EPD, now renamed *Cambridge English Pronouncing Dictionary* (CEPD), from the LPD. Certain complications of the transcriptions of both works have not been entirely welcome, including indications of syllabification and potential linking r's. The legibility of both also suffers from some uncomfortably condensed transcriptions. Even so both dictionaries are major achievements, especially the LPD with its valuable information on the original-language pronunciations of very many loanwords.

8.6 Sound Provided

A major development at the 2003 sixteenth edition of the EPD was the provision of an associated compact disc with audio recordings for all its British entries. American pronunciations for all entries followed in the 2006 seventeenth edition. The LPD followed suit at its 2008 third edition.

9 THE OXFORD ENGLISH DICTIONARY

9.1 A Uniquely Comprehensive English Dictionary

A few years before the IPA alphabet's launch in 1888, the publication had begun in 1884, by the Philological Society of London, of an English dictionary of unprecedented comprehensiveness entitled initially *New English Dictionary on Historical Principles* (NED), soon becoming known simply as the *Oxford English Dictionary* (OED). Its founding editor James Murray, being an enthusiastic phonetician, took the representation of pronunciations very seriously. Unfortunately, the system he devised was of such complexity that very few readers were fully able to interpret all its 65 symbols for vowels and 43 for consonants. The OED's first edition was not completed until 1933. By then many of its pronunciations had become out of date. For the 1989 second edition, its co-editors J. A. Simpson and E. S. C. Weiner had arranged that '[e]ssentially, a straightforward literal translation from the Murray system to IPA was attempted' (Introduction, p. xix).

9.2 New-style Pronunciations Again

When the OED began to incorporate American pronunciations, it was announced that '[e]ach pronunciation in the revised text is given in the International Phonetic Alphabet (IPA), according to a revised model of Received Pronunciation devised by Dr Clive

Upton of the University of Leeds,' and similarly US pronunciations were based on 'a model devised by Professor William Kretzschmar of the University of Georgia' (Preface). The 'model' of RP involved a contradiction of the key feature of OED's own definition of RP as the 'most regionally neutral form of spoken British English' in that it incorporated certain undeniably regional features, for example words like *bath* with the *trap* vowel.

9.3 Transcription Contrasts

For a dictionary representing British and American usages side by side one might have hoped that the transcribers would have provided a conveniently maximally 'trans-Atlantic' common set of symbolisations. If they had done so, they would have avoided innumerable entries giving, e.g. the pronunciation of *meat* as 'Brit. /miːt/ U.S. /mit/,' where, rather than phonetic contrasts, only tribal preferences are displayed. The British 'model' could easily have discarded its redundant length colons, a legacy of EFL didactics. It could have given up /əʊ/ in favour of /oʊ/. The American choice of /aɪ/ to represent the *price* diphthong would have made much more sense than /ʌɪ/. Preferring the use of /ʌ/ for the *cup* vowel in the American entries, as very satisfactorily employed in the USA by Kenyon and Knott in their highly respected 1944 *Pronouncing Dictionary of American English* (section 10.4), would have constituted a welcome harmony. Items like 'Brit. /ˈbeɪsbɔːl/, U.S. /ˈbeɪsˌbɔl/' for *baseball* show two meaningless contrasts. One is the British redundant length mark and the other the American redundant secondary stress mark, which is superfluous because the notation /ɔ/ makes it clear that the vowel in the latter syllable is not weak. Other types of unsuitably contrast-suggesting transcriptions are Brit. /ˈəʊvl/, U.S. /ˈoʊv(ə)l/; Brit. /ˈdʒiːnɪəs/, U.S. /ˈdʒinjəs/; Brit. /(ˌ)riːˈjuːnɪən/, U.S. /riˈjunjən/ for *oval*, *genius* and *reunion.*

The 'barred' symbols [ɨ] and [ʊ̈] were adopted to indicate free variation between /ɪ/ or /ʊ/ and /ə/. However, some pronunciations, e.g. /pɒsɪbl/ for *possible*, are either very old-fashioned or noticeably regional.

In one respect harmony did occur: the convenient Merriam-Webster-style dual stress indication, with primary and secondary marks together [ˈˌ] before syllables which can occur with either tonic or secondary stress, was happily adopted for 'Brit.' as well as 'U.S.' entries.

9.4 Sound for the OED

From 2015 the OED3 online became, extensively but not yet fully, equipped with spoken audio for at least one of the British and one of the American pronunciations for each entry. These additions, though they may not always be managed ideally by the speakers employed to produce them, undoubtedly constitute a valuable new development.

9.5 The Oxford Dictionary of Pronunciation

An OED offspring, the *Oxford Dictionary of Pronunciation for Current English* (ODPCE) appeared in 2001, with leading editors Clive Upton and William A. Kretzschmar Junior. These authors' 'models' had also been adopted for OED3, which said

'[t]he pronunciations given are those in use among educated urban speakers of standard English in Britain and the United States … avoiding strongly regionally or socially marked forms.' Nevertheless, ODPCE, like OED3, admitted numerous obviously regional (though educated) variants. Such inclusions are perfectly acceptable, indeed valuable. They were included in LPD as 'BrE non-RP,' but very sparse in CEPD. Oddly enough, they were omitted (without comment) in 2017 when, after a sixteen-year absence, ODPCE re-emerged enlarged as the Routledge DPCE.

10 THE MOST IMPORTANT AMERICAN DICTIONARIES

10.1 Noah Webster

The earliest significant American lexicographer Noah Webster (1758–1843) was at great pains to take account of the works of numerous British orthoepists, devoting six tightly packed pages (x– xvi) to their works in the Preface to his *Compendious Dictionary of the English Language* of 1806, although he had earlier (Webster 1789: 124) condemned their prescriptions as based on 'false principles.' Although his own principles were not completely scientific either, he was, of course, right that various British writers of the period had set themselves up as arbiters of correct usage on at times rather dubious grounds, as we saw with the transcription of weak syllables as if they were strong.

10.2 The Finest Webster Edition

In the twentieth century, pronunciations in Merriam-Webster's dictionaries were notably from 1946 to his retirement in 1973 chiefly in the expert hands of Edward Artin (1905–1974). The two hefty volumes of the still uneclipsed *Third New International Dictionary* of 1961 (Editor-in-chief Philip Babcock Gove) contained a very thorough 'Guide to Pronunciation' covering fifteen large triple-columned pages. Its transcriptions used a complicated 'diacritic-respelling' system in which phonetic values were indicated by added superscript diacritics such as macrons and diaereses to letters of traditional English spelling, e.g. ā as in *day*, ä as in *pot* etc. Artin expressed regret at being obliged to use this not very elegant type of notation because of not finding any 'desire among those who buy such dictionaries for the kind of alphabet that we would prefer to transcribe in' (Artin 1973: 1). This largest Webster was rich in information even to a certain extent on neglected matters such as the stress features of compound words.

10.3 Best of Both Worlds

James F. Bender's *NBC Handbook of Pronunciation* (1943, 1964) seems to have been the only American dictionary of moderate size which provided for all of its 'more than 20,000 entries' (p. vii) not only a 'diacritic-respelling' but also (in a separate column) 'IPA Symbols.'

10.4 Kenyon and Knott

John Samuel Kenyon (1874–1959) entered into co-operation with his fellow Webster editor Thomas A. Knott (1880–1945) for the compilation of their 1944 *Pronouncing*

Dictionary of American English (PDAE). It took them six years to complete this difficult task, one much more exacting than Daniel Jones had faced in producing his EPD. Jones had chosen only to consider a relatively narrowly definable single British accent of which he had the advantage of being himself a native speaker. Kenyon and Knott undertook to represent in their PDAE 'several different types of speech used by large bodies of educated and cultivated Americans in widely separated areas' (p. v). Astonishingly, PDAE has never been in any respect revised since a mere four-page Addenda of 1949 (pp. liii–lvi). Inevitably its wordlist has not kept up with the times but it has remained a highly regarded authority. Kenyon and Knott employed the IPA throughout their dictionary.

11 PRONUNCIATION IN DICTIONARIES TO COME

In the not very distant future it is probable that paper dictionaries will be found only in libraries if not only in museums. The OUP has already announced that its twenty-volume book form will not be revised as such. Professor Jane Setter in a blog posting of the 18th of April 2017 remarked regarding CEPD that '[t]here are no current plans to produce any further print editions of the dictionary; …and CUP have told us that the way forward…is electronic editions only.'

Spoken audio reference materials will no doubt increasingly extend beyond the provision of pronunciations of individual words. In addition, the present practice of providing a single pronunciation for each word by a single speaker may well be extended by offering for each of a word's pronunciations not only choices of transcribed variants but choices of voices and accents, going beyond General British and General American to Australian, Canadian, Caribbean, Hong Kong, Irish, New Zealand, Philippine, Scottish, Singapore and South African. Such a range of varieties has already slowly begun to feature in the OED.

Archaic and obsolete words now not even accorded transcriptions by the OED may well in future be made available in reconstructions accompanied with audio versions. Already all of the 60% of the 40,000 individual words occurring in the works of Shakespeare that were differently pronounced in his day have now been recorded with reconstructed pronunciations of his era, spoken by David Crystal in illustration of his 2016 *Oxford Dictionary of Original Shakespearean Pronunciation*. It seems very possible that such recordings will in the future become incorporated into OED entries.

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Abstract

A BRIEF HISTORICAL OVERVIEW OF PRONUNCIATIONS OF ENGLISH IN DICTIONARIES

The evolution of pronunciations in mainly British English dictionaries is traced from their beginnings, with accounts of certain neglected figures in the field. In the paper we discuss how representations of pronunciations have developed from being indicated by means of conventional spelling with the addition of marks and numbers to more sophisticated systems of phonetic notation. A significant feature of the twenty-first century is the addition of spoken pronunciations of the items.

Keywords: pronunciation lexicography, pronunciations of British English, phonetic notation, International Phonetic Alphabet, history of pronunciation dictionaries

Povzetek

KRATEK ZGODOVINSKI PREGLED ANGLEŠKE IZGOVARJAVE V SLOVARJIH

Prispevek sledi razvoju izgovarjave v slovarjih britanske angleščine od samega začetka, pri čemer opiše nekatere pogosto spregledane posameznike, ki so delovali na tem področju. Obravnava tudi razvoj zapisovanja izgovarjave, ki je sprva uporabljal navadno pisavo z nekaterimi dodatnimi znaki in številkami, do bolj izpopolnjenih sistemov fonetičnega zapisa. Pomemben doprinos slovarjev 21. stoletja je dodajanje posnete izgovarjave besed.

Ključne besede: leksikografija izgovarjave, izgovarjava britanske angleščine, fonetični zapis, mednarodna fonetična abeceda, zgodovina slovarjev izgovarjave

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SVILUPPO DELLA COMPETENZA FONOLOGICA IN ITALIANO COME LINGUA SECONDA/STRANIERA

1 INTRODUZIONE

Nei programmi e materiali didattici per l'italiano come lingua seconda e/o straniera solitamente si pone poca attenzione allo sviluppo della competenza fonetica, fonologica e prosodica e alle abilità del parlato in generale, il che è in forte contrasto con il fatto che le persone entrano in contatto con altre lingue prevalentemente attraverso il canale orale. Infatti, nell'incontro con le lingue seconde e straniere la difficoltà di primo acchito è legata all'aspetto fonologico dell'informazione linguistica con cui ci si trova alle prese. La sensazione che si ha è che il parlante nativo parli troppo velocemente in un flusso di parole raramente interrotte dalle pause. Per questo motivo il riconoscimento delle parole nella catena fonologica può risultare molto difficile e dipende soprattutto dalla conoscenza del loro significato. Nel parlato sono presenti pause,[1] che però non demarcano accuratamente dove iniziano e finiscono le parole.

Un primo aiuto nella segmentazione delle parole nella catena fonologica apparentemente ininterrotta, arriva proprio dalle caratteristiche prosodiche delle singole lingue.[2] L'accentuazione delle parole italiane, tipicamente sulla penultima sillaba, permette di riconoscere come parole varie combinazioni sillabiche come *bella* e *casa*, mentre non verrà riconosciuta come parola la combinazione *lacà*.[3] Nelle lingue con un accento tipico, come l'italiano, questo può rappresentare l'elementare informazione prosodica della lingua parlata che, oltre al vocabolario, permette all'ascoltatore di individuare le parole nella catena fonologica durante l'ascolto.

Un secondo problema di natura fonologica che si verifica nel contatto con la lingua seconda o straniera è l'inaccurata percezione e produzione di fonemi che sono diversi da quelli della prima lingua dell'allievo, o delle lingue che questi conosce; in tale caso si tende a adattare l'informazione fonologica percepita alle preconoscenze, spesso dando

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1 Uno dei tratti fonologici soprasegmentali, insieme all'altezza tonale, intensità, tempo e ritmo, che si riferisce all'arresto dell'attività fonatoria tra due catene fonologiche contigue.

2 Nelle ricerche di Safran, Aslin a Newport (1996: 1927) e Aslin, Safran e Newport (1998: 323) viene dimostrato come le caratteristiche prosodiche permettano ai bambini sin dai primi mesi di discriminare le 'parole' dalle 'non parole' grazie alle capacità di calcolo delle probabilità statistiche condizionali nella lingua parlata con cui sono in contatto.

3 Nella distinzione tra 'parole' e 'non-parole' l'allievo è gradualmente sostenuto anche da altre informazioni linguistiche pertinenti, oltre a quelle fonologiche, per es. semantiche (il significato delle parole), morfosintattiche, pragmatiche e sim.

così luogo al transfer negativo da queste lingue. Nonostante i sistemi fonologici dello sloveno e dell'italiano non siano fortemente diversi, nella coppia sloveno lingua materna e italiano lingua seconda si possono osservare alcuni adattamenti alla fonologia slovena:[4] (1) neutralizzazione delle consonanti geminate in scempie o piane, per esempio, /'late/ invece di /'latte/; (2) aggiunta dell'occlusiva palatale [d] per recuperare la durata delle consonanti geminate in italiano, per esempio, /ba'rilda/ invece di /ba'rilla/, /'fɛrdo/ invece di /fɛrro/; (3) separazione dei fonemi costituenti dittonghi, trittonghi e iati con l'aggiunta della consonante [v] o [j], per esempio /'duve/ invece di /'dwe/, /e'manuvel/ invece di /e'manwel/, /'mijo/ invece di /'mio/. Alcuni errori sono invece dovuti al transfer negativo dallo sloveno, per esempio /pis'cɔtti/ invece di /bis'cɔtti/.

Nelle prime fasi dell'apprendimento di una lingua seconda o straniera l'attenzione è rivolta soprattutto allo sviluppo delle abilità di ascolto. In questo periodo pertanto viene sviluppata la sensibilità alle caratteristiche prosodiche della lingua, soprattutto l'intonazione, la percezione e la pronuncia delle singole parole, nella ricerca di individuare il loro significato.

2 RASSEGNA DI RICERCHE PRECEDENTI

Le modalità e le possibilità di adattamento al sistema fonologico della lingua seconda o straniera al sistema della lingua madre dipendono soprattutto dal grado di contrasto tra i due sistemi fonologici. L'acquisizione dei sistemi fonologici delle lingue che corrispondono grossomodo al sistema fonologico della lingua madre è più facile dell'acquisizione di sistemi fonologici che si differenziano da quello della lingua madre. Dalla ricerca di Tsukada (2004: 566) risulta che i parlanti adulti thailandesi avessero riconosciuto più facilmente i fonemi del coreano dagli adulti parlanti l'inglese, dove le differenze tra i risultati dei due gruppi erano statisticamente significative. Il solo fatto che il coreano e il thailandese abbiano sistemi fonologici più affini rispetto a quello inglese ha reso i parlanti thailandesi capaci di riconoscere i fonemi coreani, benché nessuno di loro parlasse il coreano.

Bisogna comunque sottolineare che anche all'interno di gruppi linguisticamente omogenei si verificano differenze nelle dinamiche e nella qualità dell'acquisizione del sistema fonologico della lingua obiettivo. Le capacità percettive e di articolazione dei fonemi delle lingue seconde o straniere dipendono da una parte dalle caratteristiche dello sviluppo in comune degli allievi e dall'altra dalle capacità specifiche di ciascun allievo, legate anche alla conoscenza dei sistemi fonologici delle lingue con cui si è in contatto.

Le ricerche sull'adattamento alla fonologia delle lingue seconde e straniere hanno dimostrato che questo avviene relativamente velocemente, sia negli adulti (Tsukada 2004: 566) che nei bambini (Mikeš 1975: 84), a patto che gli allievi siano in contatto diretto con la lingua parlata (Kuhl 2004: 837; Kuhl/Tsao/Liu 2003: 9099; Maye/Weiss 2004: 508). Il contatto uditivo con la nuova lingua attraverso i media non ha particolare effetto sulla percezione e pronuncia di fonemi divergenti dalla lingua madre (Kuhl 2004: 837; Kuhl/Tsao/Liu 2003: 9099). La ricerca di Kuhl/Tsao e Liu ha preso in esame le capacità

4 Gli esempi sono relativi alle osservazioni di bambini in diversi contesti comunicativi nella zona bilingue del Litorale sloveno: in famiglia, con gli amici, in asilo e nei primi anni della scuola elementare, raccolti dall'autrice nel periodo dal 2001 al 2006.

di discriminazione uditiva dei fonemi del mandarino (cinese standard) in bambini di nove mesi, appartenenti a famiglie anglofone e residenti negli USA. Nel primo esperimento i bambini del gruppo sperimentale sono stati esposti al contatto diretto con il mandarino attraverso la lettura di libri e il gioco con parlanti nativi di mandarino, che utilizzavano il linguaggio bambinesco, di cui sono tipiche l'esagerazione e l'alta variabilità dell'informazione fonologica, mentre i bambini del gruppo di controllo hanno svolto le stesse attività in inglese. Al termine di un programma della durata di sole quattro settimane, in cui si sono svolti 12 incontri da 25 minuti, i bambini del gruppo sperimentale sono stati in grado di riconoscere le differenze tra i fonemi del mandarino meglio dei bambini del gruppo di controllo; inoltre, le differenze tra i risultati ottenuti sono apparse statisticamente significative e i risultati dei bambini del gruppo sperimentale si sono rivelati addirittura paragonabili alle capacità di discriminazione fonologica dei bambini parlanti mandarino. Nel secondo esperimento, condotto su un nuovo campione di bambini, metà dei bambini del gruppo sperimentale ha seguito le registrazioni audiovisive del primo esperimento, che mostravano gli incontri dei bambini con adulti parlanti mandarino, mentre l'altra metà ha ascoltato solo le registrazioni audio (i bambini del gruppo di controllo hanno seguito le attività svolte con i parlanti inglesi). Il risultato fondamentalmente importante che emerge da questo secondo esperimento è che il contatto dei bambini del gruppo sperimentale con il mandarino attraverso le registrazioni non ha avuto effetto sulle loro capacità di discriminazione fonologica del mandarino. La prima metà dei bambini ha seguito con maggiore interesse da quelli che hanno seguito solo le registrazioni audio, tuttavia entrambi i gruppi hanno ottenuto risultati simili nella discriminazione dei fonemi del mandarino, compresi i bambini del gruppo di controllo che avevano seguito le registrazioni in inglese. I risultati di questa ricerca indicano come il contatto diretto con il parlante della lingua seconda o straniera sia di vitale importanza e come l'apprendente abbia un ruolo attivo in questa interazione, mentre l'apprendimento della lingua seconda o straniera in un ruolo passivo da ascoltatore non produce effetti sull'apprendimento della fonologia di questa lingua. A questo punto si può dedurre che l'apprendimento fonologico da un complesso input linguistico si basa non solo sull'informazione percepita attraverso il canale uditivo, ma è strettamente legato pure alla partecipazione del parlante a una situazione comunicativa autentica, in cui sono presenti anche informazioni contestuali che focalizzano l'attenzione dell'allievo direttamente sul contenuto del discorso, potenziandone la motivazione a far parte dell'interazione e di conseguenza favorendo l'apprendimento linguistico.

Presupponendo che la competenza fonologica (Frith/Wimmer/Landerl 1998: 50; Zorman 2005: 41–42) e la percezione uditiva (Goswami et al. 2001: 650; Heeren 2006: 36) si sviluppino nell'interazione con parlanti della lingua obiettivo, soprattutto se in attività e scambi comunicativi mirati, ci siamo proposti come obiettivo della ricerca di studiare gli effetti dello sviluppo della consapevolezza fonologica e della competenza fonologica in italiano come lingua seconda (L2) degli allievi dei primi anni della scuola elementare sullo sviluppo delle loro capacità di percezione uditiva come componente della competenza ortografica e di conseguenza sullo sviluppo della competenza comunicativa in italiano in generale.

Nella fase della sperimentazione abbiamo ricercato le correlazioni tra lo sviluppo della consapevolezza fonologica e la competenza fonologica tramite un programma strutturato e estensivo (dalla I alla IV classe della scuola elementare) e la competenza ortografica, che si compone di diverse sottocompetenze o competenze parziali, tra cui anche la percezione uditiva e l'elaborazione fonologica dell'input linguistico.

I risultati della ricerca hanno confermato che il programma sperimentale di sviluppo dell'ascolto discriminativo e di segmentazione fonologica aveva influito significativamente sulle capacità di percezione uditiva degli allievi, sulla loro competenza ortografica, abilità di ascolto e la competenza comunicativa in italiano L2.

3 METODOLOGIA DI RICERCA

3.1 Obiettivo

I risultati presentati in questo articolo fanno parte di una più ampia ricerca longitudinale con cui si è cercato di dimostrare che a confronto con le metodologie tradizionali di apprendimento della lettura e della scrittura, bisogna sviluppare metodicamente e sistematicamente le abilità percettive uditive, la consapevolezza fonologica e l'apprendimento delle corrispondenze tra fonemi e grafemi nelle lingue seconde e straniere, presi in considerazione in particolare in chiave contrastiva con la prima lingua. Seguendo tale percorso si riesce a potenziare l'ascolto discriminativo, la pronuncia, le competenze ortografiche e la competenza comunicativa nella lingua seconda o straniera in generale.

Il programma sperimentale, utilizzato nella ricerca, è diviso in due parti: nella prima parte (relativa ai primi due anni della scuola elementare) vengono sviluppate le capacità audio percettive e di elaborazione fonologica dell'input linguistico (consapevolezza fonologica) con l'obiettivo di sensibilizzare gli allievi alla pronuncia e all'intonazione dell'italiano, sviluppare le abilità di ascolto discriminativo e analitico, la percezione dei fonemi all'interno delle catene fonologiche, il loro confronto e pronuncia. Le attività si basano sull'imitazione del parlato del docente nella recita di brevi testi in rima, in massima parte scritti appositamente (Zorman 2001), la 'lettura' di coppie minime o di parole contenenti contrasti selezionati (doppie vs piane, /ts/ vs /dz/, /tʃ/ vs /dʒ/ e sim.), la divisione delle parole in sillabe, che permette una migliore percezione di fonemi in posizione fonologica debole (per es. i gruppi consonantici -mb- e -mp- all'interno di parola) ed infine la divisione in fonemi della catena fonologica (parola). [5]

La seconda parte del programma sperimentale prevede invece l'apprendimento delle coppie fonema-grafema in italiano, in particolare quelle che si distinguono dallo sloveno. Le attività si basano sulla costante e contemporanea percezione audio e visiva dei fonemi e i corrispondenti grafemi. (Zorman 2003b).[6]

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5 Per un approfondimento si veda il quaderno di esercizi *Suoni in sintonia* (Zorman/Čok/Mršnik 2001).

6 Per un approfondimento si veda il quaderno di esercizi *Gioco e parlo*: *Lettere in Allegria* (Zorman 2003a).

3.2 Metodologia

Il modello di ricerca scelto è stato la sperimentazione didattica con l'introduzione del fattore sperimentale nella situazione di ricerca, che permette di misurare gli effetti della novità introdotta nell'insegnamento. Il fattore sperimentale prevedeva lo sviluppo delle capacità fonologiche, della consapevolezza fonologica e l'apprendimento delle corrispondenze tra grafemi e fonemi in italiano.

È stato programmato il modello monofattoriale dell'esperimento, con due modalità del fattore sperimentale, con classi di allievi come gruppi messi a confronto. Essendo stata la sperimentazione effettuata in classi formate dalle scuole, i due gruppi, sperimentale e di controllo, non sono stati randomizzati. Avendo i modelli sperimentali con la randomizzazione una maggiore validità interna rispetto ai modelli senza la randomizzazione, l'effetto della struttura dei gruppi messi a confronto (sperimentale, di controllo) sull'interpretazione dei dati statistici è stato verificato con il test del chi-quadrato e con il test di Hotelling (test T), laddove sono stati presi in considerazione i fattori, legati agli allievi, non controllati prima della sperimentazione (genere, età, livello di consapevolezza fonologica, voto in italiano).

3.3 Campione

Alla ricerca hanno partecipato 140 allievi delle scuole elementari con sede sul territorio etnicamente misto dell'Istria slovena, e aventi lo sloveno come lingua d'insegnamento e l'italiano come lingua seconda; all'inizio della ricerca, nell'anno scolastico 2001/02, gli alunni frequentavano la classe prima, mentre al termine, nell'anno scolastico 2004/05, essi erano iscritti in quarta. Gli allievi sono stati divisi in due gruppi, quello sperimentale (GS) e quello di controllo (GC). La divisione nei due gruppi è stata effettuata sul criterio 'scuola' allo scopo di prevenire il passaggio della metodologia e del contenuto del fattore sperimentale anche nel gruppo di controllo. I due gruppi erano costituiti da 70 allievi ciascuno. Con il gruppo sperimentale hanno lavorato due insegnanti, mentre con quello di controllo tre insegnanti.

3.4 Strumenti di misura

Prima dell'introduzione del programma sperimentale è stato misurato il livello di consapevolezza fonologica degli allievi con il test di discriminazione e manipolazione fonologica dell'input linguistico (identificazione del fonema finale, segmentazione sillabica e fonemica delle parole, fusione fonemica ed elisone sillabica e fonemica).[7] Lo stesso strumento è stato utilizzato nel re-test delle capacità di discriminazione e manipolazione fonologica al termine della sperimentazione per verificare gli effetti del programma sperimentale. I test sono stati condotti con gli allievi individualmente al termine delle lezioni.

Durante lo svolgimento del programma sperimentale è stata effettuata un'autoverifica costante del progresso nello sviluppo dell'abilità di discriminazione fonologica

7 Il test è stato costruito in base ai test realizzati da Magajna (1995) e Iozzino (1998). Prima di essere utilizzato nella ricerca sono state verificate la sua validità, attendibilità, oggettività e sensibilità. Per un approfondimento si veda Zorman (2007: 211–213)

attraverso l'attività presente nel quaderno degli allievi (*Il trenino dei suoni* in Zorman/Čok/Mršnik 2001).

Lo sviluppo della competenza fonologica, come componente delle competenze fono-ortografiche, è stato infine misurato con il dettato, quale prova dell'abilità di rappresentazione grafica dell'informazione fonologica. Il dettato misura gli effetti finali dello sviluppo delle competenze di ascolto, assieme a quelle ortografiche (Giovanardi Rossi/Malagutti 1994a: 31–32). Gli allievi che hanno preso parte nella ricerca sono stati sottoposti alla scrittura di 36 parole di varia difficoltà fonologica (doppie, lunghezza della parola, tipo di sillaba, posizione dell'accento nella parola) e ortografica (doppie, digrammi e trigrammi, I e H diacritiche). Per potenziare l'oggettività della prova, il foglio per le risposte (il disegno di un trenino con vagoni come spazi nei quali scrivere le parole del dettato) è stato fotocopiato e fornito agli insegnanti, insieme alla registrazione delle parole del dettato.

I dati personali sugli allievi (età, genere) e la valutazione della loro competenza comunicativa in italiano, come pure i dati sulla formazione e collaborazione professionale degli insegnanti, sono stati ottenuti tramite un questionario compilato dagli insegnanti.

4 RISULTATI

I procedimenti di elaborazione statistica a livello descrittivo e inferenziale sono stati effettuati con il programma informatico SPSS 8.0. Nell'elaborazione dei dati è stato applicato il test di Hotelling (test T) con cui sono stati verificati gli effetti del fattore sperimentale sui risultati ottenuti dagli allievi del gruppo sperimentale a confronto con i risultati ottenuti dagli allievi del gruppo di controllo, che non avevano seguito il programma sperimentale. Al fine di ottenere una più valida analisi e interpretazione dei risultati, i dati sono stati elaborati anche con l'analisi della covarianza. Per l'analisi dei risultati al termine della sperimentazione è di vitale importanza che, prima della sperimentazione, non ci siano significative differenze tra il gruppo sperimentale e il gruppo di controllo, relative alle variabili cognitive e di controllo (numero, età e genere degli allievi, la loro capacità nell'elaborazione fonologica dell'input linguistico prima della sperimentazione e il livello della loro competenza comunicativa in italiano) . Nel caso di grosse divergenze tra i gruppi, le differenze tra i risultati ottenuti non possono essere attribuite esclusivamente al fattore sperimentale, essendo attribuibili anche all'iniziale disuguaglianza dei due gruppi. L'analisi della covarianza elimina statisticamente l'effetto del diverso stato iniziale nel gruppo sperimentale e nel gruppo di controllo. Infine, è stato calcolato il coefficiente di correlazione di Pearson tra i risultati ottenuti con gli strumenti di misura utilizzati nella sperimentazione, ovvero la valutazione della comprensione uditiva e della competenza comunicativa in italiano in generale.

4.1 Verifica della significatività statistica delle differenze tra i gruppi confrontati prima della sperimentazione

Prima della sperimentazione, l'effetto della struttura delle due modalità del fattore sperimentale (gruppo sperimentale e gruppo di controllo) è stato controllato con il test del

chi-quadrato e con il test di Hotelling (test T). Sono stati sottoposti a controllo il genere e l'età degli allievi, la loro consapevolezza fonologica e la valutazione della loro competenza comunicativa in italiano.

Dai test è emerso che i due gruppi erano perfettamente equipollenti riguardo il numero (χ^2=0,000, g=1, P=1,000) e il genere (χ^2=0,000, g=1, P=1,000). È stato riscontrato un lieve contrasto nella valutazione della competenza comunicativa tra i due gruppi, ma la differenza non è risultata statisticamente significativa (χ^2=4,610, g=4, P=0,330). Si sono riscontrate differenze significative nell'età degli allievi (χ^2=8,190, g=2, P=0,017) e nella loro consapevolezza fonologica (χ^2=12,535, g=3, P=0,006), in entrambi i casi a favore del gruppo di controllo. I contrasti tra i due gruppi, riscontrati prima della sperimentazione, sono stati ripresi in considerazione nella verifica della significatività statistica tra le due modalità del fattore sperimentale al termine della sperimentazione.

4.2 Verifica della significatività statistica delle differenze tra i gruppi confrontati dopo la sperimentazione

L'acquisizione delle corrispondenze tra fonemi e grafemi è stata verificata con il dettato proposto da Giovanardi Rossi e Malaguti (1994b: 14). Per ciascun errore nella sequenza dei grafemi relativi alla sequenza dei fonemi (fonema omesso o aggiunto, inversione dei grafemi, sostituzione del fonema) e nelle doppie è stato tolto mezzo punto, mentre per gli errori dovuti alle convenzioni ortografiche e al transfer negativo è stato tolto un punto, con un punto e mezzo di penalizzazione massima. I risultati della somma dei punti e della somma degli errori possono pertanto differire. Di conseguenza, sono stati analizzati i risultati ottenuti dai due gruppi sia per il punteggio complessivo sia per il numero e la tipologia degli errori:[8] errori di origine fonologica, errori ortografici, errori di transfer negativo dallo sloveno (Zorman 2007: 234–248). In questa sede verranno presentati solo gli errori di origine fonologica.

4.2.1 Risultato complessivo

Al termine della sperimentazione abbiamo osservato differenze nel punteggio, raggiunto al dettato, fra gli allievi del gruppo di controllo e quelli del gruppo sperimentale, a vantaggio di questi ultimi. Per verificare in quale misura i punteggi si differenziassero, vi abbiamo applicato il test di Hotelling (test T), che ha dimostrato che la differenza era statisticamente significativa (2P=0,005).

8 La classificazione degli errori è stata elaborata in base alle tipologie degli errori utilizzate in altre ricerche sulle competenze alfabetiche in interazione con la competenza fonologica e altre sottoabilità della competenza alfabetica generale, in particolare *Valutazione delle abilità di scrittura. Analisi dei livelli di apprendimento e dei disturbi specifici* (Giovanardi Rossi/Malaguti 1994a: 15–17, 41–48); *Test CEO* (Bozzo et al. 2000: 29–34, 103–107); *Batteria per la valutazione della scrittura e della competenza ortografica nella scuola dell'obbligo* (Tressoldi/Cornoldi (2000); *Recupero in ortografia. Percorsi per il controllo consapevole dell'errore* (Ferraboschi/Meini 1995: 12–13).

Tabella 1: Risultati del test di Hotelling per il gruppo sperimentale (GS) e il gruppo di controllo (GC) riguardo al punteggio complessivo nel dettato

	Risultato complessivo del dettato							
				Test di Levene		Test T		
Gruppo	N	M	dev ST	F	P	t	2P	df
GS	70	38,34	6,30	0,074	0,786	2,839	0,005	138
GC	70	35,40	5,95					

Per assicurarsi che la differenza fosse dovuta al programma sperimentale, e quindi escludere gli effetti regressivi delle covariabili che non erano state controllate all'inizio della sperimentazione, abbiamo verificato la significatività statistica tra i due gruppi anche con l'analisi della covarianza. Come covariabili sono state prese in considerazione la valutazione della competenza comunicativa degli allievi prima della sperimentazione (IT1), l'età degli allievi (E) e il risultato della verifica della consapevolezza fonologica degli allievi prima della sperimentazione (TCF).

Tabella 2: Impatto del fattore sperimentale sull'acquisizione delle corrispondenze tra fonemi e grafemi in italiano al termine della ricerca

Sorgente	Somma dei quadri	df	Media dei quadri	F	P	Eta quadrato parziale
IT1	212,602	1	212,602	7,055	0,009	0,050
E	6,183	1	6,183	0,205	0,651	0,002
TCF	639,036	1	639,036	21,207	0,000	0,136
Metodo (fattore sperimentale)	556,748	1	556,748	18,476	0,000	0,120
Errore	4068,035	135	30,134			
Totale	195822,000	140				

I dati della tabella 2 riferiscono che l'analisi della covarianza ha identificato come statisticamente significativi l'effetto del fattore sperimentale (GS-GC, F=18,476, P=0,000), la valutazione della competenza comunicativa degli allievi prima della sperimentazione (IT1, F=7,055, P=0,009) e la consapevolezza fonologica degli allievi prima della sperimentazione (TCF, F=21,207, P=0,000). Complessivamente, le variabili prese in considerazione spiegano il 30,8% della varianza (colonna 'eta quadrato parziale'), di cui il 12,0% il fattore sperimentale, il 5,0% la valutazione della competenza comunicativa degli allievi prima della sperimentazione (IT1) e il 13,6% la consapevolezza fonologica degli allievi prima della sperimentazione (TCF).

4.2.2 Errori di origine fonologica (EF)

L'impatto dello sviluppo della competenza fonologica nelle fasi iniziali della sperimentazione sarà analizzato in dettaglio con la discussione degli errori che possono essere attribuiti all'origine fonologica, ovvero a una scarsa competenza fonologica.

Precisamente, tra gli errori di origine fonologica sono stati considerati gli errori dovuti alla scarsa percezione uditiva e/o alla scarsa capacità di elaborazione fonologica dell'input linguistico e/o alla scarsa memoria fonologica.[9] Vengono classificati come tali i seguenti errori:

- omissioni di lettere, per es. **suoia* invece di *stuoia* (EO), comprese le doppie, per es. **strilo* invece di **strillo* (EOD);
- aggiunta di lettere, per es. **stuoria* invece di *stuoia*, **sefida* invece di *sfida* (EA), compresa l'aggiunta di doppie, per es. **sccudo* invece di **scudo* (EAD) ; in questo gruppo non sono stati considerati gli errori dovuti alla scarsa conoscenza delle corrispondenze tra fonemi e grafemi, per es. **gienio* invece di *genio*, **sognio* invece di *sogno*, che vengono analizzati come errori ortografici;[10]
- inversione di lettere, per es. **tettioa* invece di *tettoia*, **grolia* invece di *gloria* (EI), compresa l'inversione delle doppie, per es. **puzolla* invece di **puzzola* (EID);
- sostituzione di lettere, per es. **fabore* invece di *favore*, **lugerna* invece di *lucerna*, anche nelle doppie, per es. **chiarso* o **ciacso* o **ciasto* invece di *chiasso*;[11] in questo gruppo sono stati presi in considerazione esclusivamente i 'reali' errori di sostituzione di lettere, e non gli errori dovuti chiaramente ad altri fattori, per es. errori dovuti alla scarsa conoscenza delle corrispondenze tra fonemi e grafemi (**lucherna* invece di *lucerna*, **calsa* invece di *calza*) e errori di transfer negativo dallo sloveno (**calca* invece di *calza*) (ES);
- vari tipi di 'non parole' (ENP), tra cui
  - parole mancanti;
  - sequenze di lettere modificate al punto tale da rendere la parola irriconoscibile, per es. **brofo* invece di *trionfo*, **sturia* invece di *stuoia*, **lluigerda* invece di *lucerna*;
  - scrittura di altre parole dal significato compiuto al posto delle parole dettate, per es. **lettere* invece di *lepre*, **sporco* invece di *sforzo*.

Alle differenze nella frequenza degli errori di origine fonologica (EF) tra i due gruppi sono stati applicati il test di Hotelling (test T) e l'analisi della covarianza. Il primo ha mostrato che gli allievi del gruppo sperimentale avevano commesso un numero minore di errori di origine fonologica rispetto gli allievi del gruppo di controllo, e che le differenze tra i due gruppi sono risultate statisticamente significative (2P=0,047).

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9 La maggior parte delle parole del dettato sono state sconosciute agli allievi. Prima di far sentire il nastro con l'elenco delle parole da scrivere le insegnanti hanno avvisato gli allievi che avrebbero scritto delle parole 'aliene'. Pertanto, le differenze nella capacità di percezione uditiva combinata a quella di elaborazione fonologica e alla memoria fonologica sono da attribuire prevalentemente alla partecipazione o meno al programma sperimentale e al livello di consapevolezza fonologica prima della sperimentazione, come è stato dimostrato anche con l'analisi della covarianza (si veda sotto).

10 Per un approfondimento Zorman (2007: 234–237).

11 Si vedano gli esempi della sostituzione delle doppie con gruppi consonantici, presentata nel paragrafo 1.

Tabella 3: Risultati del test di Hotelling per il gruppo sperimentale (GS) e il gruppo di controllo (GC) riguardo alla frequenza di errori di origine fonologica

	Errori di origine fonologica (EF)							
				Test di Levene		T test		
Gruppo	N	M	dev St	F	P	t	2P	df
GS	70	9,86	5,36	0,001	0,978	-2,007	0,047	138
GC	70	11,66	5,25					

Nell'analisi della covarianza sono stati presi in considerazione come covariabili la valutazione della competenza comunicativa degli allievi prima della sperimentazione (IT1), l'età degli allievi (E) e il risultato della verifica della consapevolezza fonologica degli allievi prima della sperimentazione (TCF).

Tabella 4: Impatto del fattore sperimentale sulla frequenza di errori di origine fonologica nel dettato al termine della ricerca

Sorgente	Somma dei quadri	df	Media dei quadri	F	P	Eta quadrato parziale
IT1	89,935	1	89,935	3,717	0,056	0,027
E	6,742	1	6,742	0,279	0,598	0,002
TCF	386,014	1	386,014	15,956	0,000	0,106
Metodo (fattore sperimentale)	239,368	1	239,368	9,894	0,002	0,068
Errore	3266,023	135	24,193			
Totale	20198,000	140				

Nella tabella 4 vediamo che si sono rivelati statisticamente significativi l'impatto del fattore sperimentale (GS-GC, F=9,894, P=0,002) e la consapevolezza fonologica degli allievi prima della sperimentazione (TCF, F=15,956, P=0,000). I dati nella colonna 'eta quadrato parziale' indicano che, complessivamente, le variabili hanno spiegato il 20,3% della varianza, di cui il 6,8% il fattore sperimentale e il 10,6% la consapevolezza fonologica degli allievi prima della sperimentazione (TCF).

Il Grafico 1 mostra la media dei singoli errori di origine fonologica (EF) nel gruppo sperimentale (GS) e nel gruppo di controllo (GC):[12]

12 Legenda: EO-errore di omissione di lettere, EA-errore di aggiunta di lettere, EI-errore di inversione di lettere, ES-errore di sostituzione di lettere, ENP-non parole, EOD-errore di omissione di doppie, EAD-errore di aggiunta di doppie, EID-errore di inversione di doppie.

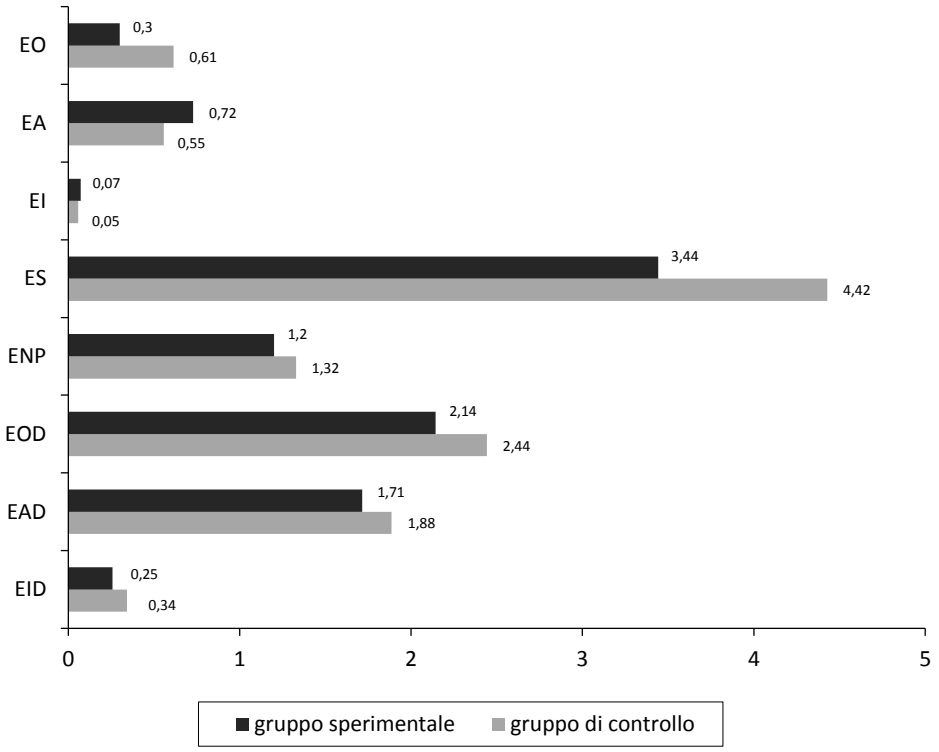

Grafico 1: Media degli errori di origine fonologica nel gruppo sperimentale e nel gruppo di controllo

Dal Grafico 1 emerge che nella frequenza degli errori di origine fonologica (EF) gli allievi del gruppo sperimentale sono risultati in vantaggio rispetto agli allievi del gruppo di controllo nella maggior parte di tipi di errore (EO, ES, ENP, EOD, EAD, EID), laddove la differenza a favore del gruppo sperimentale si è rivelata statisticamente significativa negli errori di omissione di lettere (EO) (t=-2,238, 2P=0,027, df=138) e sostituzione di lettere (ES) (t=-2,491, 2P=0,014, dfg=138). Si sono notate differenze non significative tra i gruppi anche negli errori di inversione di lettere (EI) e di aggiunta di lettere (EA) (t=0,927, 2P=0,355, df=138).

La minore occorrenza di errori di origine fonologica (EF) tra gli allievi del gruppo sperimentale è dovuta indubbiamente all'effetto del programma di sviluppo delle competenze fonologiche proposto all'inizio del trattamento sperimentale, e in particolar modo alle attività di sviluppo dell'ascolto discriminativo e segmentazione dell'informazione uditiva. La correlazione tra programmi di sviluppo della percezione e discriminazione uditiva, programmi di sviluppo della consapevolezza fonologica e apprendimento della lettura e scrittura è oggigiorno indiscutibile. Gli errori di origine fonologica (EF) sono stati meno frequenti negli allievi che avevano ottenuto ottimi risultati al

test di consapevolezza fonologica prima della sperimentazione (TCF). L'impatto delle buone capacità di elaborazione fonologica della lingua sull'apprendimento della lettura e scrittura è stato confermato anche dall'analisi della covarianza, che ne ha rilevato il ruolo di variabile con effetti statisticamente significativi (TCF, F=15,956, P=0,000) e in grado di spiegare più della metà (10,6%) della varianza complessiva (20,3%).

5 DISCUSSIONE E CONCLUSIONI

La ricerca presentata nell'articolo ha studiato gli effetti dello sviluppo sistematico e estensivo della competenza fonologica sulle competenze fono-ortografiche, in particolare sulle abilità di ascolto discriminativo e analitico dei fonemi e della realizzazione dei fonemi in italiano, diversi dallo sloveno. Nella ricerca ci siamo chiesti come e in quale misura un programma di sviluppo delle competenze fono-ortografiche faciliti lo sviluppo delle abilità di ascolto in generale e di conseguenza l'apprendimento delle corrispondenze tra fonemi e grafemi in italiano e lo sviluppo della competenza comunicativa in italiano da parte degli allievi.

I risultati ottenuti nel dettato indicano che lo sviluppo sistematico e estensivo delle competenze fono-ortografiche influiscono significativamente sulla percezione uditiva degli allievi e la loro abilità di manipolazione fonologica dell'input linguistico. La differenza di punteggio fra gli allievi del gruppo di controllo e quelli del gruppo sperimentale, a vantaggio di questi ultimi, era statisticamente significativa (Tabella 1). L'analisi degli errori di origine fonologica ha inoltre mostrato che gli allievi del gruppo sperimentale avevano commesso un numero minore di errori di origine fonologica rispetto gli allievi del gruppo di controllo, e che le differenze tra i due gruppi sono risultate statisticamente significative (Tabella 3). La minore frequenza degli errori di origine fonologica va senza dubbio attribuita al programma sistematico e estensivo di sviluppo della competenza fonologica e della consapevolezza fonologica, seguito dagli allievi del gruppo sperimentale, rispetto al programma offerto agli allievi del gruppo di controllo, che non prevedeva un intervento sistematico nel campo delle competenze fonologiche (Tabella 2 e Tabella 4). La correlazione tra programmi di sviluppo della competenza fonologica e della consapevolezza fonologica, sistematici, intensivi e estensivi, e l'apprendimento della lettura e scrittura è stata dimostrata con numerose ricerche.[13] Nella nostra ricerca è stata riscontrata una parziale correlazione[14] negativa tra l'abilità di manipolazione fonologica dell'input linguistico al termine del programma sperimentale e l'occorrenza di errori di origine fonologica (r=0,330); e tra l'occorrenza di errori di origine fonologica e le abilità di ascolto[15] (r=0,331). Una correlazione negativa media è stata riscontrata tra l'occorrenza di errori di origine fonologica e la competenza comunicativa degli allievi al termine della ricerca (r=0,410). Tutte le correlazioni indicate erano statisticamente significative a livello 0,01. Il valore negativo

13 Per un approfondimento si veda Zorman (2007: 111–124, 133–138; 2013: 33–56).

14 È stato calcolato il coeficiente di correlazione di Pearson.

15 La valutazione delle abilità di alscolto e quella della competenza comunicativa al termine della ricerca ci sono state riferite dagli insegnanti.

del coefficiente di correlazione indica un rapporto rispettivamente inverso tra le variabili. In tal senso, negli allievi che hanno raggiunto punteggi alti al test di manipolazione fonologica al termine del programma è stata riscontrata una minore occorrenza di errori di origine fonologica nel dettato, e vice versa. Dunque, gli allievi che hanno commesso pochi errori di origine fonologica nel dettato hanno raggiunto, al termine della ricerca, punteggi alti al test di manipolazione fonologica e/o avevano un voto alto relativo alle abilità di ascolto e/o della competenza comunicativa in italiano.

Nel campo dello sviluppo delle abilità fonologiche, nonostante poco numerose, le ricerche effettuate hanno comunque dimostrato che con gli anni i centri responsabili della percezione dei fonemi, situati nel nostro cervello, si adattino alla fonologia presente nell'ambiente del bambino. La capacità di percepire i fonemi delle altre lingue non si perde del tutto, come si credeva in passato (Maye/Weiss 2004). Recenti ricerche neurologiche hanno dimostrato che l'acquisizione della fonologia delle lingue seconde e straniere è veloce sia negli adulti (Tsukada 2004: 566) sia nei bambini (Mikeš 1975: 84), a patto che gli allievi siano in contatto diretto con la lingua parlata (Kuhl 2004: 837; Kuhl/Tsao/Liu 2003: 9099; Maye/Weiss 2004: 508) e che l'interazione con il parlante nativo sia attiva. Il contatto uditivo e/o visivo con la nuova lingua attraverso i media, soprattutto in posizione passiva, non ha particolare effetto sulla percezione e sulla pronuncia di fonemi divergenti da quelli della lingua madre (Kuhl 2004: 837; Kuhl/Tsao/Liu 2003: 9099).

A partire dalle ricerche neurologiche e neurolinguistiche, nella nostra ricerca si è cercato di dimostrare che un programma sistematico e intensivo di sviluppo delle capacità di ascolto discriminativo e segmentazione della catena fonologica (consapevolezza fonologica) possa favorire lo sviluppo della competenza fonologica e, in generale, delle abilità di ascolto.

Nonostante la didattica delle lingue seconde e straniere sia progredita significativamente dagli anni '50 dello scorso secolo in poi, rimane pur sempre il bisogno di sviluppare ulteriormente metodologie e approcci di apprendimento e acquisizione più vicini all'allievo e allo stesso tempo più efficaci. Nelle prime fasi di apprendimento o acquisizione delle lingue seconde o straniere si dovrebbe pertanto dedicare l'attenzione principalmente alla percezione uditiva, all'imitazione dei fonemi diversi da quelli della lingua madre, all'imitazione della prosodia della lingua obiettivo, e con ciò all'identificazione delle parole nella catena fonologica e alla scoperta del loro significato.

La nostra ricerca ha dimostrato che il programma metodico e sistematico di sviluppo delle competenze fonologiche proposto all'inizio del trattamento sperimentale, e in particolar modo lo sviluppo dell'ascolto discriminativo e la segmentazione dell'informazione uditiva, hanno contribuito significativamente allo sviluppo delle abilità di ascolto in generale, e in particolare alla percezione dei fonemi del sistema fonologico italiano diversi da quelli dello sloveno. Con tale programma si è inteso ovviare ai problemi di natura fonologica cui l'allievo va incontro: si tratta di problemi nel riconoscimento delle parole nella catena fonologica, principalmente legati alle caratteristiche prosodiche delle lingue (soprattutto l'accento delle parole e l'intonazione) e nella percezione mancata o inadatta di quei fonemi nella catena fonologica che non sono presenti nella lingua madre oppure che nella lingua obiettivo si realizzano diversamente che

nella lingua madre. Con la ricerca è stato dimostrato che un programma sistematico e intensivo di sviluppo della competenza fonologica nella lingua seconda o straniera, soprattutto relativo all'ascolto discriminativo, alla segmentazione delle parole e alla capacità di elaborazione fonologica della lingua in generale, può contribuire in modo (statisticamente) significativo a un migliore sviluppo della competenza fonologica e delle abilità di ascolto, e di conseguenza favorire la comprensione, l'apprendimento della lettura e scrittura e lo sviluppo della competenza comunicativa nella lingua obiettivo.

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Riassunto

SVILUPPO DELLA COMPETENZA FONOLOGICA IN ITALIANO COME LINGUA SECONDA/STRANIERA

Nella ricerca, nei programmi di insegnamento e nei materiali didattici per l'italiano come lingua seconda o straniera viene generalmente data scarsa attenzione allo sviluppo della competenza fonologica e delle abilità del parlato. La presente ricerca, cui hanno partecipato 140 allievi delle scuole con lingua d'insegnamento slovena dell'Istria slovena, dove l'italiano è insegnato come lingua seconda, ha studiato l'impatto dell'insegnamento della fonologia e dello sviluppo della capacità di elaborazione fonologica dell'input linguistico sulla percezione uditiva dell'informazione fonologica. I risultati della ricerca indicano che i programmi di sviluppo dell'ascolto discriminativo e di segmentazione fonologica influiscono significativamente sulle capacità di percezione uditiva, a patto che avvengano nell'interazione diretta con il parlante della lingua obiettivo (seconda o straniera) e che siano sistematici, intensivi e estensivi. Di conseguenza, tali programmi influiscono anche sullo sviluppo della comprensione uditiva e della competenza comunicativa nella lingua obiettivo.

Parole chiave: fonologia, competenza fonologica, consapevolezza fonologica, transfer negativo, didattica delle lingue seconde o straniere

Abstract

PHONOLOGICAL COMPETENCE DEVELOPMENT IN ITALIAN AS SECOND/FOREIGN LANGUAGE

In language courses and teaching materials for Italian as a second or foreign language little attention is generally paid to the development of phonological competence and of speaking ability. The present study involved 140 pupils of elementary schools with Slovene as the language of instruction in the bilingual area of the Slovene Coastal area where Italian is taught as a second language. The research investigated the impact of phonology teaching and the development of phonological awareness on auditory perception abilities. The findings show that programs for the development of discriminatory listening and phonological segmentation of linguistic input critically influence the pupils' ability of auditory perception, provided such programs are long-term, systematic, intensive, and carried out through direct interaction between the pupils and speakers of the target language. Consequently, such programs also enhance enhance the development of listening comprehension and communicative competence in the target language.

Key words: phonology, phonological competence, phonological awareness, negative transfer, second and foreign language teaching

Povzetek
RAZVOJ FONOLOŠKE ZMOŽNOSTI V ITALIJANŠČINI KOT DRUGEM/TUJEM JEZIKU

Razvoj glasovnih zmožnosti in zmožnosti govorjenja na splošno sta redkeje obravnavani temi, tako na področju raziskovanja kot na področju načrtovanja in priprave učnih gradiv za poučevanje italijanščine kot drugega/tujega jezika. V raziskavi, v katero je bilo zajetih 140 učencev osnovnih šol s slovenskim učnim jezikom in italijanščino kot obveznim drugim jezikom na slovenski Obali, smo preučevali vpliv poučevanja fonologije in razvoja glasovnega zavedanja na sposobnost slušne zaznave. Rezultati raziskave kažejo, da programi razvijanja razločujočega in razčlenjujočega poslušanja ključno vplivajo na sposobnosti slušne zaznave, pod pogojem, da je program dolgotrajen in se izvaja sistematično in intenzivno v neposredni interakciji z govorcem drugega oziroma tujega jezika. Posredno ti programi vplivajo tudi na razvoj slušnega razumevanja in sporazumevalne zmožnosti v tem jeziku.

Ključne besede: fonologija, fonološka zmožnost, glasovno zavedanje, negativni transfer, didaktika drugih in tujih jezikov

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