

## ACQUISITION OF L2 PHONOLOGY – SPANISH MEETS CROATIAN

**Maša Musulin**

University of Zagreb

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**Abstract:** The phoneme is conceived as a mental image that is stored in our mind and then represented by sounds in speech and graphemes in writing for phonologically based alphabets. The acquisition of L2 phonology includes two very important skills – reading and writing. The information stored in the mind of a speaker interferes with new information produced by the L2 (Robinson, Ellis 2008; Nathan, 2008). What is similar or equal in the target language to one's native language is, while unknown, incorporated one way or another into an existing model, based on prototypicality (Pompeian, 2004, Moreno Fernández, 2010). The process of teaching the sounds, letters and alphabet to foreign students is much shorter than for native speakers because to a foreign student must be given a tool for writing as soon as possible as they have to write what they are learning and memorize new language units (Celce-Murcia, Brinton, Goodwin, 1996). This paper discusses one type of difficulties Spanish learners of Croatian as L2 face when they are introduced to phonology through letters which represent Croatian sounds in order to display the influence of their preexisting phonological concepts. The subjects are ten students from Spain and Latin America. Their task was to read a group of words containing sounds that were predictably hard for them, minimal pairs and a short text.

**Keywords:** phoneme, grapheme, letter, phonological awareness, foreign language

## **1. INTRODUCTION**

As literacy has a big impact on phonological awareness in languages with phonological writing, the graphemes that represent the phonemes, including letters, make an integral part of their mental image. This relation is rather complex because language skills also play an important role in the process of L2 phonology acquisition. Foreign students do not perceive only different L2 phonemes as strange, but also those who are equal in speech to their mother tongue but different in writing (Jelaska, Gulešić Machata 2006). Although the alphabet is very useful for looking for words in the dictionary at the beginning of learning, it has a strong impact on phonological awareness, and the mental image of the phoneme (Jelaska 2004, Jelaska, Gulešić Machata 2014). As reading and writing are incorporated in the class at the beginning of every language course, foreign language students often had not had the opportunity to encounter the sound representations of the phonological system of Croatian or any other target language. Therefore, teaching the letters of the alphabet to foreigners in their introductory L2 classes is not advisable without presenting them the sound system of the target language first (Jelaska, Musulin 2014).

Some research has been conducted on the influence of the L1 phonological system in reading and writing of Croatian as L2: recognizing the pronunciation of American speakers (Novak-Milić 2005), evaluating the pronunciation of various foreign Croatian learners (Šafarić, Čalušić, Mildner 2006), or assessing orthographic competence (B1 level) which includes the writing of Croatian sounds (Udier, Grgić 2012).

This paper will focus on one type of difficulties Spanish learners of Croatian as L2 face at the very beginning of the course: reading words and texts written with a different spelling system. Those are the results of the complicated relation between the phonemes and graphemes of the L2 language being studied, the mother tongue of the students, and their mutual influences (v. Jelaska, Musulin 2011, Musulin 2011). When students are introduced to phonology through letters that represent Croatian sounds, the influence of their preexisting phonological concepts can be observed.

As the letters that represent particular sounds are the result of phonological analysis, the same sound may appear different in the mental image of the speakers, not based on the sounds themselves but on the basis of writing (which causes variety of written words forms with the same or very similar phonological units in different languages). In contact with L2, writing and reading the rules of L1 are transferred to it, causing positive or negative transfer. In early foreign language classes, or the main pages of the manual for beginners, sounds and letters are the first grammatical concepts. Although something similar happens with native speakers, the process of teaching sounds, letters and alphabet for foreign students takes much less time because foreign students must be given a tool to write down, as soon as possible, what they have learned and to memorize the new language units. This approach has traditionally been present for centuries (Celce-Murcia, Brinton, Goodwin, 1996). However, little attention has been given to the writing and reading in the initial teaching of foreign language, unlike the teaching of writing in the mother tongue.

## **2. COMPARATIVE APPROACH**

The comparisons of phonological systems of two languages reveal that it is necessary to compare several levels: the sounds that are different in listening and in writing, the

graphemes that are differently presented in writing and reading, but also the letters that occur in writing (Musulin 2014). Namely, some phonemes coincide in both languages in speaking, but on the graphemic level they do not have to correspond, which is just one of the problems.

This paper will focus on Spanish language for two reasons. One is that in the Spanish speaking countries of South America there is a large Croatian community which consists of 200 000 to 500 000 Croats (Antić, 2002), mostly emigrants coming at the beginning of 20<sup>th</sup> century and after the Second World War. They are now 4<sup>th</sup> or 5<sup>th</sup> generation and their mother tongue is Spanish. Every year some of them come to Croatia to learn Croatian. Some of them are heritage speakers (Valdes 2000), i.e. students raised in a home where Croatian is spoken in their household and able to speak or at least understand, which means they are bilingual, at least up to a certain point.

Talking about the motivation to learn the heritage language, according to one's origin and identity, Z. Jelaska (Jelaska 2005; Jelaska, Hržica, 2005) advises to differentiate between the two terms, in Croatian and English: *nasljedni govornici* 'heritage speakers' and *predački govornici* 'ancestral speakers'. According to her, in accordance with Valdes, a heritage speaker is a person who has at least one communication language skill, understanding, but typically speaking as well. The ancestral speakers by her definition are classroom learners linguistically similar to other foreign language students, and the only difference may be familiarity with their ancestors' culture and affective attitude. The Anglo-Saxon tradition continues to use the term 'heritage speaker(s)' for both categories - the term was discussed in detail by Beaudrie and Fairclough (2012).

## 2.1. SPANISH AND CROATIAN PHONOLOGICAL SYSTEM

As the phoneme is realized by a letter and a sound, it is indispensable to look at both in a phonological comparison. The Spanish alphabet has 27 letters and Croatian has 30. The Spanish alphabet is shown in (a) and the Croatian one in (b), with different letters in bold.

- (a) a b c d e f g h i j k l m n ñ o p **q** r s t u v **w x y z**  
 (b) a b c **č** **ć** **đ** **dž** e f g h i j k l **lj** m n nj o p r s **š** t u v z **ž**

As can be seen in (c), there are 22 identical letters, 4 special letters in Spanish, 8 Croatian letters that do not exist in Spanish, but among the same letters 6 are read differently, i.e. represent different sounds. Those 6 and 8 letters that do not exist in Spanish could make difficulties for Spanish learners of Croatian as L2.

- (c) i. identical letters a b c d e f g h i j k l m n o p r s t u v z  
 ii. letters that exist only in Spanish ñ q w x y  
 iii. letters that exist only in Croatian č ć đ š ž lj nj dž  
 iv. identical letters representing different sounds c g h j v z

Croatian digraphs *lj* and *nj* represent sounds found in Spanish: [ʎ] and [ɲ], which means that *lj* is Croatian equivalent of Spanish *ll* and *nj* of Spanish *ñ*, as in (d.i) and (d.ii).

Croatian letter *č* is an equivalent of Spanish digraph *ch*, letter *ć* represents a very similar sound, as in (d.iii). The distinction was not considered important in this paper because some Croatians, mostly from the capital city and north Croatia, as native speakers, do not make this distinction. The same could be said for letters and sounds *dž* and *đ*.

(d)	i. sound [ʎ]	Croatian lj	Spanish	ll
	ii. sound [ɲ]	Croatian nj	Spanish ñ	
	iii. sound [tʃ] / [tɕ]	Croatian č / ć	Spanish ch	

Sounds represented by Croatian letters *š*, *ž* and *đ*, as well as digraph *dž*, listed in (e), do not have Spanish equivalents.

(e)	letter	š	ž	đ	dž
	sound	[ʃ]	[ʒ]	[ɗ]	[dʒ]

Croatian letters *c g h j v z* represent Croatian sounds found in (f), while in Spanish they represent sounds listed in (g).

(f)	letter	c	g	h	j	v	z
	sound	[ts]	[g]	[x]	[t]	[v]	[z]

(g)	letter	c	g	h	j	v	z
	sound	[θ]	[g]	[-]	[x]	[b]	[θ]

It should be noted that some of these letters are conditioned by the surrounding letters or their distribution in the syllable. For example sounds [ʎ] and [ɲ], pronounced the same in both languages, are conditioned in Spanish by their place in the syllable. They could never stand at the end of the word in Spanish, while in Croatian they could.

### 3. DATA ANALYSIS

Ten students of Croaticum<sup>1</sup> at the University of Zagreb were tested. They were between 21 and 37 years old, male and female, 5 were coming from Spanish speaking countries in America (2 from Argentina, 2 from Chile and 1 from Mexico) and 5 from Spain. All of those students had never before participated in formal learning of Croatian. The students from South America were ancestral learners; the students from Spain were foreign language learners. Their reading skill of Croatian words was tested before they had started their formal classes. Students were not instructed about Croatian alphabet or phonological system. All readings were recorded.

The students were given three types of texts; one with words in which (by author's prediction) the difficult sounds and letters occur, one with minimal pairs of words and one text with the letters that differentiate in both languages. In Table 1, for easier overview, the students are presented by countries from where they originate and are coded with numbers. The age and gender did not show any prevalence on the result so they are excluded from the Table 1. Only those Croatian letters that were different in both languages, either as forms of letters or by reading are presented in the table 1.

The letters that are correctly read, i.e. pronounced in Croatian, are marked with (+). Although some sounds, for example [s] and [c], have a somewhat different pronunciation, phonological intelligibility was the distinguishing factor. Therefore, if a sound produced in reading was

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<sup>1</sup> Center for teaching Croatian as foreign language at the Faculty of Humanities and Social Sciences, University of Zagreb.

phonologically recognizable, it was considered well read. Subsequently, the letters that were not pronounced correctly (as recognizable Croatian sounds) are marked with (-). For example, word *konj* 'horse' was always pronounced like [koni] instead of [koŋ] (presumably because Spanish does not tolerate palatals at the end of word). Croatian letters that were sometimes pronounced correctly and sometimes not, mostly depending on letter distribution in the word, are marked with (+/-).

Table 1: Croatian letters and Spanish learners' success in reading them by country.

Lettres	č/ć	s	c	š	ž	d/ dž	v	z	h	g	lj	nj	j
Participants													
Argentina1	+	+	-	-	-	-	+	+/-	+	+	+/	+/	+/
Argentina2	+	+	-	-	-	-	+	+/-	+	+	+/	+/	+/
Chile	+	+	-	-	-	-	+	+/-	+	+/-	+/	+/	+/
Chile	+	+	-	-	-	+	+	+/-	+	+	+/	+/	+/
Mexico	+	+	-	-	-	-	+	+/-	+/	+/-	+/	+/	-
Spain1	+	+	-	-	-	-	-	-	+	+	+/	+/	+/
Spain2	+	+	-	-	-	-	-	-	+	+/-	+/	+/	+/
Spain3	+	+	-	-	-	-	-	-	+/	+/-	+/	+/	-
Spain4	+	+	-	-	-	-	-	-	+/	+/-	+/	+/	+/
Spain5	+	+	-	-	-	-	-	-	+/	+/-	+/	+/	+/
Correct	<b>10</b>	<b>10</b>	0	0	0	1	5	0	6	4	0	0	0
Distribution dependent (correct / incorrect)	0	0	0	0	0	0	0	5	4	6	10	10	8
Incorrect	0	0	0	0	0	9	5	5	0	0	0	0	2
<b>Total</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>

### 3.1. Successful reading

Two (three) letters all informants pronounced correctly: letter *s* and letters *č/ć*.

Letter *s* exists in Spanish, although it is more apical in Peninsular Spanish, and it was pronounced intelligibly in reading – this is an example of positive transfer.

The distinction *č/ć* (prepalatal / palatal affricate) was not considered important because many Croatians, mostly from the capital city and north Croatia, also do not make this distinction. The success in reading could be explained by cultural knowledge of Spanish learners who

must have met letter *ć* as typical and frequent letter in Croatian surnames (for example *Kovačić*).

### 3.2. Unsuccessful reading

Letters *c*, *š* and *ž* were not read (pronounced) as Croatian letters should be even once.

Letter *c* was never pronounced correctly, but as [k] or [s], depending on distribution. Letter *c* is read (pronounced) differently in Spanish; hence this is an instance of negative transfer.

Letters *š* and *ž* do not have Spanish equivalents and Croatian L2 learners simply could not read them. The letter *š* was pronounced as [tʃ], and *ž* as [ʃ]. It was hard for learners to make a distinction between these letters because they have no equivalent in Spanish (in later investigation where their listening skill was tested, they also had difficulties hearing those sounds).

Letters *đ* and *dž* were pronounced correctly only by one student.

### 3.3. Partially successful reading

Some letters were read more or less successfully because they represent sounds that exist in both languages but are written differently or vice versa.

Letters *lj* and *nj* were pronounced correctly in the cases where the letter distribution corresponds in both languages by all participants. This is due to the fact that, although not as graphemes, those phonemes exist as sounds. Therefore they were pronounced correctly except at the end of the word (unacceptable in Spanish letter distribution).

Letter *g* was pronounced as Croatian [g] when it was preceding back and low vowels (o, u, a), which is a case of positive transfer. Negative transfer caused pronunciation [x] before *e* and *i*, as in Spanish.

Letter *h* and *j* were pronounced correctly in cases where the letter distribution corresponds in both languages. Letter *h* is not pronounced in Spanish but it is always pronounced as [x] in Croatian. Letter *j* is pronounced as [x] in Spanish and as [j] in Croatian.

Letters *v* and *z* were pronounced correctly by Hispano-American students only. These could be attributed to the fact that in South and Central America, due to greater exposure to the different languages (immigrants), *v* is sometimes pronounced as [v] and *z* [z], while in Spain *v* is always [b] and *z* is always [θ]. These are the only two letters where a difference on the diatopic level was shown. However, Hispano-American students pronounced *v* correctly all the time, while they pronounced *z* correctly depending on distribution.

## 4. CONCLUSION

The findings mostly confirm previous research that the same letters which are similarly pronounced in L1 and L2 were easy for the students to read, enabling positive transfer. Letters that do not exist in Spanish and those that exist in Spanish but are read differently in Croatian may or may not cause problems in the initial reading of L2, as different factors may play a role: distribution in L1, grapheme representation, possible transfer from other L2 letter-sound relationships, or cultural knowledge. Therefore, some special Croatian letters, as

well as the same letters representing different sounds were simply mispronounced, but some were pronounced as Croatian phonemes. It shows that the initial reading of L2 letters and words is a more complex language skill as is often perceived when a L2 alphabet is being presented at the introduction of a beginners class.

As this short study deals with the initial knowledge of phonological systems in reading, future studies should, on one hand, deal with Spanish learners of the Croatian pronunciation of allophones, and on the other hand on pronunciation of sounds on the basis of hearing. The findings could be useful for letter and reading teaching of other languages as well.

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#### Curriculum vitae

Born on 1976 in Zagreb. In 2002 she got a degree in Croatian language and literature and Spanish language and literature at the University of Zagreb, Faculty of Philosophy. In 2000/01 she spent six months in Rosario, Argentina, where she taught Croatian in the Croatian cultural center, and in 2002/03 she worked as a foreign instructor at the University of Alcalá, Spain. Since 1998, she has been working as an associate of University School of Croatian Language and Literature, and since 2013 she has been working as an instructor of e-courses of Croatian language HIT and HEJ. Since 2011 she has been working on the Faculty of Philosophy, Department of Spanish language where she teaches Spanish linguistics. She is an author or co-author of scientific and professional papers, one Croatian-Spanish and Spanish-Croatian dictionary, one book chapter and she presented her work at many international scientific conferences in Croatia and Europe.