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Developmental Dyslexia and Reading in Spanish as a Foreign Language

Dislexia evolutiva y lectura del español como lengua extranjera

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RESUMEN
El presente trabajo trata de la dislexia evolutiva y de la influencia que ejercen las dificultades de lectura en la adquisición de lenguas extranjeras, con énfasis en el desarrollo de la competencia lectora en español como lengua extranjera. Tratando de aclarar la etiología de la dislexia evolutiva, partimos de los procesos cognitivos activos en la lectura y de las diversas manifestaciones de trastornos de lectura que dependen de las características lingüísticas del idioma extranjero. Las dificultades de lectura se observan también dentro del paradigma comunicativo como el enfoque didáctico más influyente. A continuación y partiendo de los enfoques actuales en cuanto a trastornos de lectura, se elaboran los ejemplos de actividades que sirven como el apoyo adicional de la conciencia fonológica, morfológica, sintáctica y ortográfica de los estudiantes de español cuya lengua materna es el croata.

Palabras clave: croata como lengua origen; comprensión lectora; dislexia evolutiva; español como lengua meta; trastornos de lectura

ABSTRACT
This paper deals with developmental dyslexia and the influence reading disabilities exert over the process of foreign language learning, placing a special emphasis on development of reading skills in Spanish as a foreign language. While trying to explain the aetiology of developmental dyslexia, one usually starts with cognitive reading processes and various reading disorder manifestations which depend on the characteristics of a foreign language. Reading disabilities are also observed in the context of a predominant communication-oriented language teaching paradigm. Further, and starting with the approaches to reading disorders applied nowadays, the elaborated exercises are oriented towards an additional stimulation of phonological, morphological, syntactic and orthographic awareness in learners of Spanish whose first language is Croatian.

Keywords: Croatian as source language; developmental dyslexia; reading comprehension; reading disorders; Spanish as a target language.

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1. INTRODUCCIÓN

The development of reading aptitude is one of the main purposes of the contemporary teaching system. A well-developed skill is considered to be one of the most important prerequisites in learning since it is by reading that we usually acquire new information. Acquiring the reading skill[1] in the first language and in the foreign language is an arduous and a long-term process, which is even harder for individuals with reading disabilities. Nowadays, developmental dyslexia is probably one of the most renowned and researched reading disabilities[2]. In a teaching context, the designation of developmental dyslexia is generally related to reading skills and intellectual capacities, considering dyslexia to be a disability in learning reading skills in children with at least an average intelligence quotient (Pavlić-Cottiero 2005; Wolf 2007). The mentioned disorders cannot be explained by sociological and economical, or motivational and emotional factors (Galaburda and Cestnick 2003).

What makes dyslexia studies very complex is the absence of the unique definition of dyslexia in the literature, which is usually explained by the fact that this term in reality merges different symptoms at different levels of represented symptoms (Pavlić-Cottiero 2005; Wolf 2007; Nijakowska 2010; Dehaene 2013). The explanation of reading disabilities conditioned by developmental dyslexia, as underlines Nijakowska (2010), necessarily includes three interrelated levels: biological, cognitive and behavioural. In the classroom, dyslexia is usually recognised during spelling, by insufficiently efficient word recognition and by a slow and difficult reading that leads to comprehension difficulties. On a behavioural level, the aforementioned difficulties are conditioned by the characteristics of the dyslexic's language processing; it is usually the lack of phonological processing that interferes with the efficiency of word recognition and/or the insufficiently adjusted cognitive processes which disable the acquiring of fluency in reading. On a biological level, divergences are explained by anatomical and functional anomalies that are, for example, visible by an insufficient activity in the left temporal lobe during reading, the asymmetry of the cerebellum, the presence of ectopia in the grey matter, etc. (Dehaene 2013).

This paper will examine the developmental dyslexia and some language-processing characteristics conditioned by dyslexia, especially within cognitive processes active in reading. Therefore, the processes included during reading comprehension will be described first with a special emphasis on the reading in a foreign language. Afterwards, some characteristics of the language processing related to the developmental dyslexia will be described. In continuation, and starting from the most common difficulties, the exercises which aim to improve the learning of reading skills at the beginner's level of learning Spanish as a foreign language will be elaborated.

2. READING AND COGNITIVE PROCESSES IN READING

Comprehensive reading in the first language is a common and an automated skill for experienced readers. In the literature, reading is described as the ability of a reader to outline the meaning of the structured three-level textual concept[3]. Linguistic processes that are active during the formation of the first conceptual level are called lower-level processes, and they are developed automatically if the reader has no difficulties in reading and comprehension. Complex processes of the text comprehension on the second and third level are linked with the formation of the mental model of the text (Grabe and Stoller 2002).

The first level of perception is related to the linguistic processes of decoding and word recognition, and also to syntactic analyses and semantic constructions (ibid.). Decoding implies grapheme-to-phoneme conversion, while word recognition is defined as the identification of a series of letters as words and their relation with its corresponding meaning in the mental lexicon (Verhoven and Perfetti 2011). In children with the correct language development, the automation of the process of decoding and word recognition stops in the third grade of elementary school or even before, depending mostly on the transparency of the orthographic system[4]. Lexical recognition develops very fast, and the experienced readers recognise more than five words per second in average (Rayner and Pollatsek 1989 according to Alderson 2000). High positive correlations are confirmed between speed and correctness in lexical recognition and comprehension, which means that the readers who read faster usually also understand the text better. Therefore, fluency, which is defined as speed and precision of the word recognition (Čudina-Obradović 2014), alongside with the reading comprehension, is considered to be one of the most reliable predictors of the reading skill development. The syntactical analysis of a sentence encompasses the process of abstracting the basic grammatical information, connecting words into bigger units, combining them into sentences and recognising the connections between sentences, while the process of forming semantic propositions entails the combination of the word meaning and structural information (Grabe and Stoller 2002). Automated linguistic lower-level processes are a predictor for fluent reading. All abstracted information in lower-level process is detained in the working memory. Only superficial codes are kept in the working memory, while the long-term memory is important for the formation of a textual and situational comprehension model (Rončević 2005), which allows conceptualisation of the second and third levels of meaning conceptions. Readers first form a textual comprehension model which contains important explicit text information integrated in a net, and followed by a situational model of interpretation which enables readers to elaborate their interpretation of the text (Grabe and Stoller 2002). Good readers' difficulties that are detected in comprehension are usually related to a non-harmonized textual and reader's code, which means that they are visible during reading of more complex texts, and that the readers do not previously dispose of useful knowledge for the understanding of these texts.

2.1 Reading in a foreign language

The description of reading in a foreign language starts from the research done on reading in the first language, which usually encompasses their similarities and differences. Reading comprehension in a foreign language depends on the development of the reading skill in the first language. When the reading skill is

acquired in the foreign language, most students have at least learned the basics of writing in their first language (Grabe and Stoller 2002). In addition, the reached level of reading ability in the first language is usually considered to be a reliable predictor of the reading ability in the foreign language (Nijakowska 2010). In other words, a poorly developed reading skill in the first language will most probably limit the development of reading skills in a foreign language.

When learning to read in a foreign language, the reader obviously uses the competence and skills acquired mostly in the first language. This mainly refers to the capacity of phonological processing where a very important role is assigned to the phonological awareness. Phonological awareness is defined as "the sensitivity to any segment of vocal structures" (Yopp and Yopp 2000 according to Vanšac and Ivšac 2004: 105), and is recognised in the syllable identification, recognition of rhyme forms, words' beginnings and endings, phoneme segmentation and their manipulation at the beginning and ending, syllable omission or recognition of the phoneme function in a word meaning (Yopp and bin Yopp 2000; Etchepareborda and Habib 2001), as in words like *pin* and *bin*. Some authors divide phonological awareness into syllabic level, which refers to the ability to perceiving of syllables in words, intersyllabic level which encompasses ability to notice beginnings and endings of words and rhyming patterns, and into phonemic level as the most complex aspect of the phonological awareness which includes the ability to identify connections between a phoneme and a grapheme, and the ability of phoneme manipulation (Čudina-Obradović 2014).

The development of phonological awareness in foreign language learning is important because it is considered that phonological awareness does not develop again in foreign languages an individual learns, but it is in this segment of mastering a foreign language that we rely on the transfer from the first language (Nijakowska 2010). In languages that use alphabetical orthography the function of the phonemic awareness is important, as is the under-skill of the phonological awareness, which encompasses the ability to divide the words in phonemes (Yopp and Yopp 2000; Dehaene 2013).

Even if in the learning of reading in a foreign language we always rely to a certain level on the skills developed in the first language, the differences in lexical, grammatical and discursive competence clearly influence the speed and course of reading competence in a foreign language. During comprehensive reading, the most obvious differences are noted between the expansion of the vocabulary in the beginner's reading detected in the first and the foreign language. It is estimated that reading beginners know somewhere around 5,000 to 7,000 words in their mother tongue (Grabe and Stoller 2002). In the beginning stages of reading in a foreign language, readers cannot rely on the extension of the known vocabulary, only perhaps on the transfer from the first or any other foreign language.

Apart from the vocabulary extension, the differences are also present in the degree of the metalinguistic awareness. Metalinguistic awareness in a foreign language usually tends to be more emphasised than in the mother tongue because in a foreign language learning students are focused on the conscious learning of grammatical and vocabulary competences (Grabe and Stoller 2002). Simultaneously, a more articulated metalinguistic awareness can facilitate development of reading strategies in a foreign language, even if in the application of reading strategies in a foreign language we mostly rely on the previously developed reading strategies from the first language.

As the process of acquiring of the reading skill in a foreign language is demanding and long-lasting, so are many discrepancies detected in reading as well. The most common mistakes identified by Preilowski and Matute (2011) are slow reading, a slow start in reading, long pauses, stutter, letter omission, incorrect word accentuation, changing the word order in the sentence or letters in words.

3. DYSLEXIA AND READING

The absence of a generally accepted, unique definition of dyslexia sometimes prolongs the connection of reading-induced difficulties linked with dyslexia, i.e., it prolongs a clear differentiation of difficulties resulting in language processing shortcomings caused by an insufficiently developed reading skill that is mostly generated by a poor exposure to written texts or teaching methods. Still, in reading disorders, reading and comprehension problems are connected with the difficulties in the phonological processing and increasingly with the lack of automated reading processes (Wolf 2007; Nijakowska 2010; Dehaene 2013). In the research where the reading problems in English as the first language were connected with the most common explanations of dyslexia on a cognitive level, Wolf and Bowers (1999 according to Wolf 2007) established that in 25% of the cases the phonological processing are determined by the reading difficulties, and in 20% of the cases by the processing speed difficulties. The most numerous group of questioned individuals had difficulties in the phonological processing and reading speed (the so-called double deficit), whilst the reading shortcomings in 10% of the cases could not be connected neither with the phonological processing nor with the automated reading process.

3.1 Phonological processing difficulties

Reading disorders in languages that use an alphabetic orthography are usually justified by phonological processing, respectively by decoding disorders (Pavlić-Cottiero 2005; Nijakowska 2010; Dehaene 2013). Phonological processing is one of the basic components of reading because the processes of phonological processing in different languages play a crucial role in word recognition (Nijakowska 2010). Weaknesses in the phonological processing are connected with the lack of phonological development, especially with phonological awareness. According to Dehaene (2013), a limitation of the phonological awareness is usually related to dyslexia. The development of phonological awareness is directly connected with the alphabetic code learning. Actually, literacy in languages with the orthographic system, which is based on the observation that each grapheme is connected with a specific phoneme, necessarily includes development of awareness that words are composed of sounds. This is very important during reading disorders treatment because, until now, it revealed that the most efficient methods are the treatments that included some form of stimulation of development of phonological awareness (Wolf 2007).

On a behavioural level, difficulties in phonological processing are visible as decoding difficulties. Considering the fact that comprehension – as a construction of a textual and situational model – is the most common target of reading, the impossibility of automation in establishing of the connection between grapheme and phoneme puts decoding among processes where a high automation degree is the prerequisite for comprehension. Good readers' lower-level linguistic

processes are so automated during reading of a text of an appropriate difficulty in their first language that they are performed unconsciously, if there is such a stimulus as a word or a sentence. In other words, in the major part of dyslexic individuals the difficulties are displayed on the decoding level which represents the key for the successful word recognition, and consequently, for the comprehension. Therefore, the deficit on a lower level of reading causes difficulties on a higher level, that is, in comprehension.

Furthermore, reading difficulties will not be expressed in a completely equal way in all languages, depending mostly on the orthographic systems used by the particular language (Wolf 2007; Nijakowska 2010; Knudsen 2012; Dehaene 2013). The differences in language processing are partly justified by the characteristics of the alphabetic and logographic orthography system. At the same time, it is considered that different representations of the difficulties – mostly connected with phonological processing in languages that use the alphabetic orthography – are conditioned by the grade of orthographic depth (Wolf 2007; Dehaene 2013). In other words, "[d]epending on what is emphasized in any given language (fluency in German, visual spatial memory in Chinese, phonological skills in English), there will be somewhat different manifestations of dyslexia, as well as different predictors of reading difficulties" (Wolf 2007: 190).

The orthographic depth hypothesis explains different representations and different forms of reading difficulties in languages that use the alphabetic orthography. The orthographic system of a language partly determines the grade of the reading complexity. Following the regularity of the relation established between the phoneme and grapheme, languages are divided in languages with a shallow orthography and languages with a deep orthography (Katz and Frost 1992). In languages with a shallow orthography, the relation between the grapheme and the phoneme is regular and predictable, unlike languages with an orthographic system defined as deep, where the relation between grapheme and phoneme is less regular and hardly predictable. Examples of languages with a shallow orthography include Italian, Spanish and Croatian, whereas the most common example for a deep orthography language is English. The regularity of the orthographic system is also important in order to learn reading skills in the first language. It has been demonstrated that an automated decoding and word recognition in languages with shallow orthography occurs even one year earlier than in languages with deep orthography (Seymour 2009; Dehaene 2013).

Furthermore, difficulties in the phonological processing are hardly discernible in languages with a shallow orthography (Wolf 2007). Some studies started with a perception that the frequency of dyslexia differs in different languages (Paulesu et al. 2001). These studies proved that a minor presence of dyslexia in languages with a shallow orthography can be explained by a more correct orthographical system, where it is more difficult to distinguish the weaknesses in phonological processing. However, comparative readings proved that the differences in reading speed for dyslexic individuals remain regular in all languages. Difficulties in comprehension are also partly conditioned by the regularity of the orthographic system. Studies conducted in Spanish and Hebrew indicate that the difficulties in language processing impede to a lesser extent comprehension in these languages. In other words, more emphasized difficulties in phonological processing and then in comprehension can be expected in deep orthographies. This is usually explained by the grapheme-to-phoneme regularity which "disburdens" complex phonological processing, and gives more time to

readers with phonological processing difficulties to focus on comprehension (Wolf 2007).

3.2 Reading speed

Nowadays, increasingly more studies connect some forms of dyslexia with the processing speed conditioned by a lack of connected structures that interact in reading, causing a lack of automated processes during reading. Even if this explanation is not generally accepted in the literature[5], it is however possible to explain the causes of the divergence in dyslexia that cannot be explained by means of a phonological deficit. This explanation of dyslexia starts from the fact that the RAN test consisting of objects and number naming is one of the most reliable elements used in the diagnosis of dyslexia in different languages, and is also a pretty trustworthy predictor of reading difficulties in the early age language period (Wolf 2007; Dehaene 2013; Čudina-Obradović 2014).

Regardless if it generates difficulties in reading, limitations in phonological processing, incoherence in reading processes or the so-called double deficit, dyslexia is linked with a deficit of the working memory (Pavlić-Cottiero 2005; Wolf 2007; Nijakowska 2010), and connected with this, also with reading processes which can be categorized as the so-called lower-level processes. Decoding difficulties, word recognition difficulties and eventually also difficulties in the analysis of syntax and meaning conditioned by the working memory deficits will necessarily influence comprehension, i.e., it will disturb the construction of the textual and situational comprehension models.

3.3 Dyslexia and reading in a foreign language

Reading difficulties in the first language will appear to a certain extent in a foreign language. Generally speaking, the connection of reading difficulties in the first and foreign language is usually explained by the so-called linguistic coding deficits hypothesis. With this in mind and starting from the assumption that the foreign language learning is based on the skills developed in the first language, Sparks and Ganschow (according to Ganschow et al. 1998) encompassed the difficulties observable in less successful students of a foreign language. Therefore, for the individuals whose phonological skills are less developed in the first language, and regardless of the causes of the insufficiently developed mentioned processes, the difficulties will be visible during the learning of a foreign language. While the phonological coding affects the capacity for discerning and differentiating between the sounds, and discerning the rules of grapheme-to-phoneme connection, syntactic coding is connected with the use of grammatical rules of a language system (Nijakowska 2010). Difficulties in language processing usually complicate the semantic coding, that is, comprehension.

In short, difficulties present in the first language will be manifested in the foreign language learning.[6] As typical deviations in reading, Pavlić-Cottiero (2005: 41) mentions difficulties in grapheme-to-phoneme and sound-to-syllable connection, letter replacement or addition, graphical and phonological confusion of similar letters, changing of syllables and words and finally, memorized reading.

Dyslexia represents a continuous difficulty which is not possible to overcome completely. However, by different approaches and procedures in the classroom, it is possible to influence the difficulties detected in reading. Although

we, as already mentioned, rely on the skills and strategies developed in the first language during reading in a foreign language, the limitations in language processing will cause difficulties for dyslexic individuals, regardless of the degree of literacy and the developed compensatory strategies from the first language. In doing so, difficulties in individuals with phonological processing disabilities can be expected even in languages with coherent orthographic systems such as Croatian or Spanish. Moreover, reading makes the amount of vocabulary in foreign language even more difficult. It is well-known that during reading, dyslexic individuals use a series of strategies to compensate the weaknesses in language processing. One of the more utilized strategies is the one of deducing the meaning of words based on the surrounding context (Davis 2011; Pavlić-Cottiero 2005; Knudsen 2012). However, in the development of reading skills in a foreign language, at least in the beginning stages of learning, it is not efficient to rely on the context due to reduced vocabulary which additionally sets back comprehension. Moreover, according to Knudsen (2012), even when using reading strategies, it is not always possible to rely on the positive transfer. Some of the reading strategies that individuals with reading difficulties use in the first language need to be acquired anew in the foreign language.

Even if reading difficulties, conditioned by weaknesses in language processing, are visible in all teaching subjects, particularly emphasised difficulties can be manifested in foreign language classrooms more frequently due to various issues. These difficulties are not only ascribed to a limited success of the language processing, on which reading depends, but also to the methods of the foreign language teaching (Schneider 2009 according to Knudsen, 2012). In the next section of this study, some of these difficulties will be analysed in the context of modern foreign language teaching.

4. FOREIGN LANGUAGE TEACHING AND READING DIFFICULTIES

Nowadays, a communicative approach to teaching is probably one of the most represented ways of teaching foreign languages. The fundamental aim of this teaching approach is the development of a communicative competence, which can be accomplished by developing language activities focused on reading, writing, listening, talking and language mediation.

However, as has been noted (Nijakowska 2010; Knudsen 2012), teaching methods concerning some language contents in a foreign language classroom – which, in individuals with reading disorders, remain problematic even in the first language – additionally aggravate an already complicated reading skill development process. This mostly refers to the contents connected with phonological competence. In the communication-oriented classroom, especially in languages with shallow orthographic systems, phonological knowledge is not taught equally: users are expected to make a letter-to-sound connection by exposing themselves to conversation and writing. Moreover, the largest difficulties in foreign language learning can be expected when it is required from individuals with difficulties in phonological processing to discern the grapheme-to-phoneme connection by themselves (Wolf 2007). As this particular difficulty is usually associated with dyslexia, a direct teaching of grapheme-to-phoneme connection, i.e., an aimed stimulation of phonemic awareness can facilitate development of reading competence. Moreover, the most successful dyslexia treatments are considered to be those that encourage the development of the phonemic awareness and decoding (ibid.).

Difficulties in the phonological processing in the first language are a trustworthy predictor of the difficulties in the phonological processing and phonological competence in the foreign language, regardless of the regularity of the orthographic system of the target language (Nijakowska 2010). Even if somewhat difficult, decoding can be also expected in languages with a more regular orthographic system, and the difficulties will be more accentuated in languages with deep orthography. Therefore, it is advised when choosing a foreign language one should consider the language capacities of the user, but also some of the characteristics of the target language, such as phonological, morphological and syntactical complexities. Results of studies conducted until now indicate that students with reading difficulties easily learn a language with a predictable grapheme-to-phoneme connection (Thes 2011).

Furthermore, in the communication methodology, compared to some other teaching approaches, proportionally represented is the inductive method, which usually does not satisfy the individuals with reading disabilities. Moreover, regarding the grammatical contents in the classes adjusted to the learners with reading difficulties the advantage should be given to a very gradual but direct teaching of the grammatical structures with more repetitions and practice. (Cimermanová 2015; Šifrar Kalan and Furlan 2015).

In addition, even if the communicative approach, as opposed to some other approaches and methods, does not establish the order of language activities' introduction in teaching, it has been demonstrated that listening activities should be complemented with reading and writing activities (Sparks et al. 1992 according to Nijakowska 2010). This demonstrated to be useful not only to students with reading difficulties but also to students with a poorly developed reading skill in their first language.

The necessity of adjusting the approach in the classroom to the students with reading disabilities even partially has also been confirmed by analysing individual classroom factors, more specifically, by studies analysing language anxiety. The results of these studies indicate expectedly that language anxiety is more present in groups of students with reading difficulties (Piecurska-Kuciel 2008 according to Nijakowska 2010). As reading remains one of the basic components in a communicative-oriented classroom, and something upon which the future mastering of new language contents greatly depends on, adjusting the teaching approaches to the individuals with dyslexia is a question which needs more attention due to a widespread presence of reading disorders[7], and due to the contemporary educational policy which encourages multilingualism.

4.1 The teaching approach to dyslexia

Even if dyslexia remains a life-long condition, its symptoms, and especially the levels at which these symptoms are visible, obviously change. This change is influenced by the learning and teaching approaches. In the last 50 years few approaches were invented with the aim of adjusting language teaching to the individuals with disorders. Even if dyslexic individuals cannot completely overcome reading disabilities, the difficulties they have can be reduced with suitable treatments (Nijakowska 2010; Knudsen 2012; Dehaene 2013). Approaches which are applied in foreign language teaching are usually taken in an adapted form from the first language approach to dyslexia[8]. Below are given examples of the activities used to additionally stimulate phonological (Table 1), orthographic (Table 2), morphologic (Table 3) and syntactic awareness (Figure 1) in the beginner phase of the Spanish language learning[9]. Examples of exercises

which will be presented below rely on an approach based on the multisensory structured learning approach. The multisensory structured learning approach is one of the most represented language teaching approaches targeted at the students with reading difficulties (Nijakowska 2010). The approach itself originated from the works of Gillingham and Stillman, with the purpose of reducing or removing learning disorders. It was first intended for individuals with difficulties in reading and writing in the first language. In the next version, the approach was adapted to foreign language learning. The multisensory structured learning approach requires a direct and structured way of teaching complex language contents to dyslexic individuals, such as grapheme-phoneme correspondence, the training to manipulate phonemes into words, and also a direct teaching of root and affix morphemes. The multisensory structured learning approach is based on the application of various teaching techniques which include auditory, visual and kinaesthetic components, with the aim of additionally stimulating the management of new contents. Different studies confirmed that it is possible to apply the multisensory structured learning approach in the first and foreign language. Since the majority of studies dealing with dyslexia in a foreign language have been researched in English as a foreign language, a preference has been given to the multisensory structured learning approach due to its proven efficiency in learning Spanish as a foreign language, as has been confirmed through several studies (Ganschow and Sparks 1995 according to Nijakowska 2010).

In the end, even though working with individuals who have reading disorders demands step-by-step approach, the same type of exercises are put together for easier reference. All exercises connect the language activities of listening and reading, and mostly writing.

4.2 Examples of teaching activities aimed at stimulating reading skills in teaching Spanish as a foreign language

Studies conducted in the last fifteen years pointed out towards the connection between certain language characteristics and mastering of the reading skill. It has therefore become clear that in the approach to reading disorders in the foreign language learning, apart from differently identified forms of reading difficulties, it is necessary to also consider language characteristics of the target language and possibly even the relation to the students' mother tongue. Because of this, and starting from the literature overview regarding the subjects of reading and foreign language dyslexia, the paper will proceed to present the examples of activities with the aim of additionally stimulating the development of reading skills in the first stage of learning Spanish as a foreign language. Considering the fact that, until now, the most efficient treatments in the first and foreign language were those that were oriented towards the improvement of phonological processing, especially phonemic awareness (Wolf 2007; Nijakowska 2010), focus in the exercises was put on stimulating phonological awareness and on promoting orthographic, morphological and syntactical awareness to a less extent. In the cases where it was estimated purposeful, the starting points in creating activities were differences between Croatian and Spanish language system. Since, it is known, there are no specialized courses in Croatia intended for students with disorders from dyslexia spectrum, the exercises show the examples of additional activities for stimulating reading in teaching Spanish as a foreign language.

4.2.1 Stimulating phonological awareness

Exercises which additionally develop phonological awareness are directed toward boosting its syllabic and phonemic components in learning Spanish as a foreign language for students with Croatian as their mother tongue. As reading disorders in languages with an orthographic system based on an alphabetic principle are mostly connected with the phonological processing, the consistency of the orthography of the target language will influence the learning of the reading skill. Even if more difficulties are to be expected during the mastering of the languages whose orthography is described as opaque or partly transparent, such as English, Danish or Portuguese, the weakness in phonological processing of the students will be visible in the languages described as orthographically shallow.

If we regard the orthographic clearness, Spanish and Croatian are categorised as orthographically clear languages, that is, languages with "considerable orthographic regularity and small syllable complexity" (Čudina-Obradović, 2014: 73). Since the approach to forming exercises was based on the comparison of the phonological systems of the two languages, activities were primarily focused on the differences in writing conventions which exist between Croatian and Spanish language. Additionally, the position of Spanish as a foreign language within the Croatian educational system has also been taken into account. The representation of the Spanish language in elementary schools and also in high schools, is still mostly negligible, and is usually learned as the second language or, more often as the third foreign language. This is why the examples of these activities were adapted to the students who have at least learned literacy in their first language. The examples are oriented towards pronunciation and sound recording in Spanish language, that is, towards the established writing differences in both languages[10]. In other words, reading of those phonemes which are registered with different graphemes comes first, that is, by a group of graphemes such as the phonemes /j/, /k/ or /z/. For example, the phoneme /j/ is written with the grapheme *j* or *ge* and *gi* in Spanish*,* while the phoneme /k/ is written with the grapheme *c* in combination with the vowel *a*, *o* and *u* and the letter *k,* usually in foreign words, and also with a digraph *qu* which in front of the vowels *e* and *i* does not have a phonic value[11]. The phoneme /z/ in Spanish is represented with the grapheme *z* in combination with vowels *a, o* and *u,* rarely with *e* and *i*, and *ce* and *ci.* Because the emphasis is being placed on the differences between both systems, examples where the realization of the phoneme mostly corresponds with those in the Croatian language have been left out, as is the case with the realisation of the phoneme /g/ in words like *ganso* or *gato*. At the same time, examples of the use of the digraph *gu* and *qu* before the vowel *e* and *i* where the letter *u* represents only a graphical sign is encompassed, that is, its voice realisation is omitted, as it is the case in the words *guisante* and *queso*.

Moreover, these examples also cover phonemes /ch/, /ll/ and /y/, in different word positions, where their use is justified and allowed. Encompassed are also phonemes /b/ and /v/ in Spanish bilabial voiced consonants, which are not distinctive in the pronunciation but their use is distinct in writing, where this difference is especially conditioned by the etymological criteria.

Furthermore, the cases mentioned are the prototypical patterns of the use of the European norms of the Spanish standard. Wherever it was possible, the samples were extracted from the basic vocabulary of Spanish language applicable, or at least as applicable as possible, to the first level of language learning. Example activities have taken into consideration the complexity of

cognitive activities in the exercises, and the starting point has been the recognition of a phoneme in the initial position within a word, and subsequently in the central and final position within a word.

Additionally, although it is considered that the skill of syllable word segmentation precedes the recognition and segmentation of words into sounds, which is connected with direct teaching of the alphabetic principle, and with it connected with the development of phonemic awareness, exercises start off with a phoneme-to-grapheme connection, while those exercises aiming to recognise and segment syllables into words cover the pronunciation and writing of those letters where the phonemes are written with graphemes *ge*, *gi*, *ce* or *ci*, *ca*, *co* and similar. Considering the needs of the users, exercises do not consciously insist upon the determination of a grapheme as an exclusively simple graphic sign.

EXERCISES OF PHONOLOGICAL AWARENESS	**EXAMPLE**
Recognition of the beginning sound in the word	**Do these words begin with the same sound? Which sound is it?** a) Javier, jamás, jaula, jarabe, José **Is it represented with the letter *j*?** b) chico, chicle, churros, chocolate, champú **Is it represented with the letter *ch*[12]?** c) lluvia, llave, llorar, llegar, lleno **Is it represented with the letter *ll*[13]?** d) vino, visita, vestido, verde, ver **Is it represented with the letter *v*?** e) beso, boca, bolsillo, bocadillo **Is it represented with the letter *b*?** f) yo, ya, yate, yema **Is it represented with the letter *y*?** g) zapato, zanahoria, zorro, zutano **Is it represented with the letter *z*?**
Recognition of the same sound in the initial position within a word	**Which sound is repeated in the following words? How has it been represented?** a) jurar, juez, jabón, jersey, judía b) chica, chaleco, chantaje, chandal c) llaga, llama, llanto, llevar, llover d) viudo, vacaciones, valor, vaquero e) yacer, yoga, yogur, yeísmo f) zapatilla, zapatero, zoólogo, zurdo
Recognition of the same sound in the central and final position within a word	**Which sound (consonant) is repeated in the following words? How has it been represented?** a) pijo, bajo, esponja, espejo, mejor b) mucho, noche, ocho, horchata, mochila c) pollo, calle, toalla, muella d) joya, hoy, hoyuelo, apoyo e) arroz, feliz, pez, taza, cazar
Recognition of the same syllable in the initial position within a word	**What syllable is repeated in the words? How is it represented?** a) como, cosa, codo, copa, coro, cola b) casa, caja, casar, cabeza, casi, caro, caracol c) cueva, cuello, cuero

	d) cebolla, cepillo, ceja, celoso, celebrar, cena, cenicero e) cine, cigüeña, cita, civil, ciprés, ciruela, cigarrillo f) querer, quedar, queja, queso, quemado g) quilo, químico, quimono, quitar, quitasol, quizás h) gemelo, general, generar, genial, gerundio i) gigante, girar, girasol, gibraltareño, ginebra, gitano j) guitarra, guiso, guineo, guiñar, guiño, guisante k) guerra, gueto, guerrilla
Recognition of the same syllable in the central and final position within a word	**Which syllable is repeated in the words? How is it represented?** a) desconocido, loco, marisco, mocoso, flamenco b) mosca, pescador, flaca, impecable, incapaz c) doncella, sincero, romancero d) bicicleta, simplicidad, cocinar, coincidir e) ingeniero, ingerir f) digital, imaginar, legítimo g) inquieto, esquina, taquilla, paquito h) pequeño, raqueta i) llegué, lleguemos, otorgue
Recognition of the same voice which is represented with different letters or groups of letters	**Which voice sounds similar in the following words? Which letters were used to represent the voice?** a) jirafa, ginebra, jaula, juez, generoso, genial? b) zapato, cielo, cena, ceja, zanahoria, zurdo c) casa, querer, quien, cola, cuenta, kilómetro

Table 1. *Exercises of phonological awareness according to the complexity of cognitive activities*

4.2.2 Stimulating orthographic awareness

Spanish, as aforementioned, belongs to the orthographically consistent languages, even to the languages easier to read than to write. Namely, it is estimated that relations between a grapheme and a phoneme in Spanish are unambiguous in 83% of cases, whereas the relations between a phoneme and a grapheme are compatible in 43% of cases (Leal and Matute 2001 according to Preilowski and Matute 2011). Thus, it is desirable to include the exercises that promote orthographic awareness in teaching practice, and not only in teaching individuals with reading difficulties. This refers in particular to the differentiation between the grapheme *r* and the digraph *rr,* or possibly to the difference between *n* and *nn* (although Spanish orthography does not consider this last one as a digraph), because this can be very demanding for the individuals with problems in phonological processing (Šifrar Kalan and Furlan 2015). Since the words with *nn* occur relatively seldom and are not usually encountered at the beginner level of studying, further are given examples of activities used to direct students to differentiate and write grapheme *r* and digraph *rr.* The samples of tasks given relate further to the explanation and word examples with sounds *r* and *rr*, and the students are requested to notice the differences in pronunciation of the sound *r* in various positions in a word, and to mark which words are written with the grapheme *r* and which with the digraph *rr*. Moreover, the writing of the grapheme *h*, which in modern Spanish, with the exception of some foreign words, does not have a pronunciation value, but is mostly preserved in writing for etymological reasons, has been covered as well.

<table>
<tr><th>EXERCISES OF STIMULATING ORTOGRAPHIC AWARENESS</th><th>EXAMPLES</th></tr>
<tr><td>Allocation of graphemes which lack pronunciation value</td><td>Which letter is not pronounced in the following words:

a) hola, hombre, hija, hoy
b) buho, ahora, ahorrar</td></tr>
<tr><td>Differentiation of sounds r and rr in pronunciation and writing</td><td>amor – arroz
rubio – Andorra
agarrar – rosa
amarillo – árbol

Students listen to the example, then note how to write each.

<table><tr><td></td><td>r</td><td>rr</td></tr><tr><td>1.</td><td></td><td></td></tr><tr><td>2.</td><td></td><td></td></tr><tr><td>3.</td><td></td><td></td></tr><tr><td>4.</td><td></td><td></td></tr></table></td></tr>
<tr><td>Memorizing of writing of more frequent familiar words</td><td>Students make a list of familiar words creating groups of words with the grapheme r and the digraph rr including pronunciation differences conditioned by the position of a sound in a word or phonological surroundings.

<table><tr><td>rr</td><td>r</td><td>r (more vibrant)</td></tr><tr><td>perro</td><td>árbol</td><td>rosa</td></tr><tr><td>arroz</td><td>parte</td><td>río</td></tr><tr><td>barrio</td><td>mar</td><td>rubio</td></tr></table></td></tr>
</table>

Table 2. *Inciting orthographic awareness in the examples of words with grapheme h, r and digraph rr*

4.2.3 Stimulating morphological awareness

Morphological awareness is defined as „the conscious knowledge of the word formation patterns in a language" (Coutu-Fleury 2015: 74). Considering the fact that language processing mostly means morphological division of words (Wolf 2007), especially in the beginner phase of a foreign language learning when the student's orthographic dictionary is in the early stages of creation, the activities promoting morphological awareness can positively influence the ability of spelling and reading, especially among the individuals with reading difficulties (Hurii et al. according to Nijakowska 2010). The activities suggested for stimulation of morphological awareness in individuals with reading disorders are mostly based on noticing more frequents affixes in words, in particular prefixes or suffixes, or on perceiving and raising awareness regarding belonging to the same formative family. The tasks in which more frequent affixes in words are put on separate cards give students insight into the formative processes, i.e. that knowing and

remembering of more common affixes can be useful, not only in reading, i.e. understanding meaning, but also in formation and learning of the new words.

<table>
<tr><th>EXERCISES OF STIMULATING MORPHOLOGICAL AWARENESS</th><th>EXAMPLES</th></tr>
<tr><td>Noticing more common affixes and their role in word formation processes and in word meaning</td><td>Words are formed by adding more frequent affixes to the mobile cards.
<table><tr><td>digni</td><td>dad</td></tr><tr><td>in</td><td>dignar</td></tr><tr><td>dignar</td><td>se</td></tr><tr><td>digni</td><td>tario</td></tr></table>
<table><tr><td>propie</td><td>dad</td></tr><tr><td>im</td><td>propio</td></tr><tr><td>propie</td><td>tario</td></tr></table></td></tr>
<tr><td>Noticing words that do not belong to the formative family flor.</td><td>flor – fumar – florería – florista
floral – frigorífero – florear
física – enflorecido – florero – floración.</td></tr>
<tr><td>Noticing and separation of words that do not belong to the same formative family</td><td>zapato – zapatón – zumo – zapatito – zapatilla
camisa – camisería – coche – camisón – camiseta.</td></tr>
</table>

Table 3. *Examples of tasks in promoting morphological awareness based on the role of affixes in word formative processes and belonging of a word to a formative family*

4.2.4 Stimulating syntactic awareness

Syntactic awareness refers to the ability to abstract grammatical information at the sentence level. Since the individuals with reading difficulties frequently have problems in mastering abstract notions and contents, understanding of grammatical categories and their automatization necessary for foreign language usage can also be aggravated. When teaching grammatical contents one usually insists on total and direct teaching of grammatical structures (Cimermanová 2015), as well as on larger number of repetitions and practice. As a very effective approach in teaching individuals with reading disorders is often emphasised the one in which grammatical structure is represented visually, most commonly in a schematic way. Namely, various authors point out the role of visualisation in understanding individuals with reading difficulties (Davis and Braun 1997 according to Cimermanová 2015; Šifrar Kalan and Furlan 2015). Thus, it is attempted to improve their understanding and memory by means of the schematic presentation of grammatical structures. Below is the example of the teaching scheme for gerund formation in verb ending in –ar, the structure translated into Croatian with present of imperfective verbs which cannot be copied for Croatian examples because it represents a prototype example of usage of the verb *estar* as a peculiarity of Spanish language.

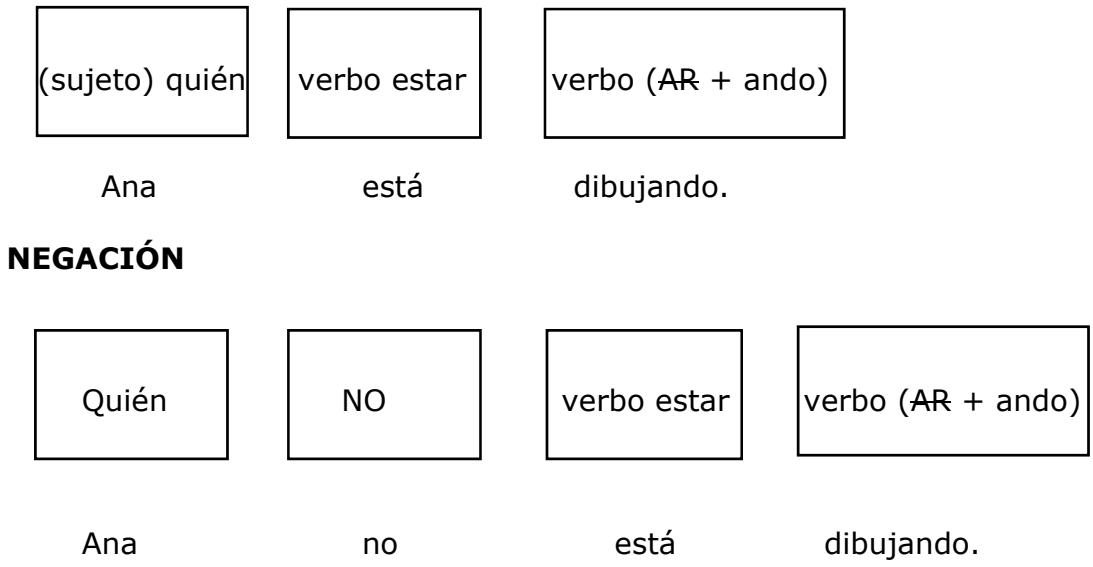

Figure 1. *Scheme for studying of gerund in verbs ending in –ar in infinitive form*

Since it is very often advised to avoid meta-language because of possible difficulties in learning of abstract contents, a possibility of additional simplification of chromatic coding according to a certain criterion is mentioned (Cimermanová 2015; Šifrar Kalan and Furlan 2015), for instance, starting from the role of words in a sentence. So Koromos and Smith claim (2012 according to Cimermanová 2015: 51) that by systematic representation of verbs, subjects and objects in a certain colour, with time a student should connect specific colour and "agents of action, action and the objects of action".

Finally, the schematic presentation of grammatical structure is not reserved only for those elements which are not compatible in the source and the target language, but it is more applicable to the compatible or partly compatible structures, for example to present indicative, which then offers possibility of noticing the similarities and forming analogies between Croatian and Spanish language.

4.3 Typographical adjustments of teaching materials

To modify the teaching materials to suit the needs of users with reading difficulties means including some of the typographical characteristics of text which enable reading. Usually the following is singled out: the font, the dimension of the letters, the space between lines and the use of different forms of stylisation of the letter (Thes 2011). It is recommended that the typographical formatting of teaching materials sets the norm of the font letter size to 12 typographical points or more, with an equal letter size throughout the text. When discussing fonts, the preference should be given to those with separate characters, such as Verdana or Courirer. Namely, according to the research results in which Rello and Beaza-Yates (2013) studied the influence of readability in individuals with reading disabilities, priority should be given to the fonts such as Helvetica, Courierr or Arial, because the text written in these fonts are more legible for individuals with reading difficulties. There are also specialized fonts

aimed for individuals with reading difficulties, such as Dyslexia Font, Read Regular or OpenDyslexic. With regard to the writing stylisation, it is better to use bold letters, while italic or/and underlining should be avoided. It is advisable to increase the space between the letters and line spacing to make reading easier. It is also desirable to use the left alignment and indentation, and a more visible division of individual paragraphs of the text using empty lines (Thes 2011; Cimermanová 2015).

Apart from the typographical characteristics, text comprehension and understanding can be improved by emphasising the key words, by grouping the important information, titles and subtitles, even if this does not necessarily improve decoding but only makes text comprehension easier.

5. CONCLUSION

First language reading skill is widespread and automated, making its complexity thus often forgotten. Comprehension complexities are therefore presented in the literature on the examples of the reading skills development in a foreign language. The difficulties in the development of reading skills will especially be emphasized in the students with reading disorders. The elaboration of the approach aimed at the individuals with reading difficulties includes at least three different perspectives: researcher's perspective, therapist's perspective and foreign language teacher's perspective (Nijakowska 2010). Although reading disorders demand an individual approach and an elaborated treatment, which surpasses the competences of the foreign language teachers, the insights into the causes of the reading disorders, and the difficulties which manifest themselves in the foreign language learning, enable teachers to modify some teaching materials and apply selected techniques, and elaborated teaching materials to customise the approach to the students with reading difficulties.

At the same time, according to Dehaene (2013: 272), "it is still very difficult to differentiate the causes, the consequences and casual connections with dyslexia". In foreign languages teaching the approach to reading difficulties is additionally complicated by the fact that dyslexia is not equally detectable in all languages. However, the existing insights into the difficulties which these students encounter, and which influence the whole process of the foreign language learning, refer to the importance of generating approaches with which these students can be additionally motivated to develop reading skills.

The topics related to reading difficulties are still relatively underrepresented within the teaching education[14]. Considering the European educational policy which promotes multilingualism and the prevalence of dyslexia in the general population, it is certain that teaching education should cover at least the basic knowledge of the reading disorders and the ways they manifest themselves in practice. Keeping this in mind, this paper considered the causes of the reading difficulties within the framework of the cognitive processes active in reading, and in the correlation with certain characteristics of the communicative oriented teaching as the prevalent approach in the foreign language teaching today. This approach is applicable to teaching for several reasons. Firstly, it enables an insight into the reading difficulties and the various ways they manifest themselves in the classroom. And, secondly, it allows a choice of applying suitable exercises and shaping of those activities, which can, in turn, influence the development of the reading skill. The activities described in this paper are created as possible examples of tasks which additionally stimulate

phonologic, orthographic, morphologic and syntactic awareness at the beginner level of the Spanish language learning. However, since some empirical studies warned about the need of repetition and longer practice of necessary skills in individuals with reading difficulties (Rueda 1995), the described examples can be complemented with more complex tasks, also with more demanding types of activities which can be applied in the further learning phases. In boosting phonological awareness, for instance, the tasks can be supplemented with phonemic manipulation exercises; stimulation of morphological awareness can include formation of new words by adding more familiar affixes to the root morpheme. The schematic presentation of the grammatical structures is recommended to be applied gradually, and to add other types of exercises, especially work on the text, which will be enabled by the acquired competency in the Spanish language.

NOTES

1 In the literature, the difference between skill and competence is usually established by way of learning – skills are considered those language activities developed by learning and training (reading and writing), while competences are activities learned automatically in the first language, such as speaking and hearing.
2 Dyslexia is not a generally accepted term in the literature. In the most recent edition of *Diagnostic and Statistical Manual of Mental Disorders* (2014), one of the more influential qualifications of this type, dyslexia is indexed as a specific learning disability, but in other qualifications it is referred to as a reading disability. The mentioned terms are often used as synonyms. This work will focus mostly on the difficulties in phonological awareness, starting from the differences between the phonologic systems of the Croatian and Spanish language and to a less extent on orthographic, morphological and syntactic awareness.
3 Such description of the reading comprehension results from research of discourse comprehension. The first to present readings on a three-level text structure were Teun van Dijk and Walter Kintsch in 1983. This is nowadays probably one of the most influential descriptions of the reading comprehension, see for example Perfetti and Friskoff (2007), Grabe (2009), Sparks (2012), etc.
4 See *Difficulties in Phonological Processing*.
5 See Dehaene (2013: 272-274).
6 Manifestation of dyslexia spectrum disorders depends on the language systems; for instance, difficulties in the phonological process can be less noticed in the languages whose writing systems are logographic as well as in the languages whose orthographic systems are described as shallow. For more details see Wolf (2007: 170).
7 According to Čudina-Obradović (2014), the prevalence of dyslexia in Croatia is estimated at around 10%. By contrast, in European countries dyslexia occurs less often and affects around 5 - 7% of the population.
8 A concise review of the approach to reading disorders in the first and foreign language can be found in Knudsen (2012).
9 The tasks are formed according to the examples which are described for teaching of English as a foreign language by Nijakowska (2010) and are adjusted to the beginner level of learning of Spanish language. Some examples can also be found again in teaching of English as a foreign language in Cimermanová (2015).
10 As already mentioned, the starting point in creating exercises intended for the additional promotion of phonological awareness were differences between the phonological systems of the Croatian and Spanish language. However, some of the suggested activities match to those applied in the development of phonological awareness in Spanish as the first language. The examples of tasks for developing of

phonological awareness in Spanish as the first language can be found in Cabeza Pereiro (2006).
11 Examples where the phoneme /k/ is represented with the grapheme *q* are omitted because they are rare and are not usually present in the first stage of learning.
12 Due to the applicability of the exercises, determining the grapheme as an exclusively simple sign is here consciously avoided, whereby digraphs *ch* and *ll* are not treated as individual letters, and are excluded from the letter list in the Spanish alphabet. For additional information, see [Real Academia Española] (2010). *Ortografía de la lengua española*.
13 See note 12.
14 This is not only inherent to Croatian teaching system; see Knudsen (2012).

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