IRJABS

Exploring Similarities and Differences between L1 and L2

Majid Nemati[1] and Mahboubeh Taghizadeh[*2]

1. Assistant Professor in TEFL at the University of Tehran
2. PhD Candidate in TEFL at the University of Tehran

[*]**Corresponding Author**: mah_taghizadeh2006@yahoo.com

ABSTRACT: The first and second languages are interrelated, and the history of the first language is a participatory factor in the acquisition of the second language and its maintenance (Houmanfar, Hayes, & Herbst, 2005). This study aims to investigate the similarities and differences between first language acquisition and second language acquisition in terms of issues such as critical period hypothesis, age, language development, affective factors, phonology, language skills, context, error correction, and input.
Keywords: Critical period hypothesis, Language development, Affective factors, Language skills, Context, Error correction, Input.

INTRODUCTION

First language (L1) is being termed by different names such as native language, primary language, and mother tongue. This language is assumed to be one which is acquired during early childhood- starting before the age of about 3 years (Sinha et al., 2009). According to Houmanfar, Hayes, and Herbst (2005), the first and second languages are interrelated, and the history of the first language is a participatory factor in the acquisition of the second language (L2) and its maintenance. Though it is assumed that the processes which persons employ to learn a second language recapitulate in detail those which infants employ when learning the same language (Corder, 1967; Dulay & Burt, 1974), some researchers (e.g., Fishman, 1968, Selinker, 1972) argue that the utterances of the second language learner differ in form from those of the native speakers of that language and those of the learner's mother tongue; the learner's utterances reveal a grammar of their own. Similarly, Ho (1986) asserts that second language learning strategies are basically similar to those of the first language, and he further suggests that there is no need for the establishment of a special set of procedures for the second language training. However, he acknowledges the direct role which the first language plays in the initial stages of second language acquisition.

As suggested by Treffers-Daller and Sakel (2012), individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture – both productively when attempting to speak the language and to act in the culture, and receptively when attempting to grasp and understand the language and the culture as practiced by natives. The Contrastive Analysis Hypothesis indicates that the structures and shapes of the first language of an individual are different from those of the second language that could create errors in speaking, reading and writing (Dulay et al., 1982).

Bhela (1999) suggests that we might also expect more learning difficulties and thus more likelihood of performance interference at those points in L2 which are more distant from L1, as the learner would find it difficult to learn and understand a completely new and different usage. Hence, the learner would resort to L1structures for help (Bialystok, 1990; Blum-Kulka & Levenston, 1983; Dordick, 1996; Dulay et al, 1982; Faerch & Kasper, 1983; Selinker, 1979). The errors made in L2 are thus seen as L1 habits interfering with the acquisition of L2 habits (Beebe, 1988; Seliger, 1988). Similarly, Beardsmore (1982) suggests that many of the difficulties a second language learner has with the phonology, vocabulary and grammar of L2 are due to the interference of habits from L1. The formal elements of L1 are used within the context of L2, resulting in errors in L2, as the structures of the L1 and L2 are different.

In his Unified Competition Model, MacWhinney (2008) proposes that "the mechanisms of L1 learning are to be seen as a subset of the mechanisms of L2-learning" (p. 342). MacWhinney claims that whatever can transfer will transfer although not all subsystems of a language transfer equally easily. His model explains why transfer is

pervasive at many levels: phonetics, phonology, lexicon, conceptualization and pragmatics, and attested in production as well as comprehension.

This study explored the similarities and difference between L1 and L2 in terms of factors such as: critical period hypothesis, age, language development, affective factors, phonology, language skills, context, error correction, and input.

Critical Period Hypothesis

Critical period hypothesis, as suggested by Lenneberg (1967), indicates that language acquisition should take place during a critical period ending at about the age of puberty. In other words, it refers to a biologically determined period of life when language can be acquired. Lennenberg (1967) proposed his theory of critical period in which he argued that in order to have proper language fluency, language should be acquired or learned before the onset of puberty. However, he left out the point that whether this applies only to the first language acquisition or extend up to the second language acquisition as well. Lennenberg suggested two parts; firstly, normal language learning occurs within childhood. Secondly, reaching the adult age by puberty, brain loses its plasticity and reorganizational capacities necessary for language acquisition. Long (1990) puts the critical age at 6 years, but Scovel argues that there is no evidence to support this and argues for a pre-puberty start.

Initially, the notion of a critical period was connected only to first language acquisition. The argument is that children are superior to adults in learning second languages because their brains are more flexible (Lenneberg, 1967; Penfield & Roberts, 1959). They can learn languages easily because their cortex is more plastic than that of older learners. But this model was extended to be employed with regard to SLA. With regard to SLA, the classic argument is that a critical point for SLA occurs around puberty, beyond which people seem to be relatively incapable of acquiring a native like accent of the second language. This has led some to assume, incorrectly, that by the age of 12 or 13 you are over the hill when it comes to the possibility of successful second language learning.

The critical period hypothesis has been questioned by many researchers in recent years and is presently quite controversial (Geneses, 1981; Harley, 1989; Newport, 1990). The evidence for the biological basis of the critical period has been challenged and the argument made that differences in the rate of second language acquisition may reflect psychological and social factors, rather than biological ones that favor child learners (Mclaughlin, 1992).

Age

Researchers have found a relationship between age of acquisition and ultimate attainment in at least some aspects of the second language, with age showing it to be the strongest predictor of success (Tohidian &Tohidian 2009). As Larsen-Freeman and Long (1991) point out, the age issue is an important one for theory building in second language acquisition research for educational policy-making and for language pedagogy. A related myth concerns the best time to start language instruction. Certainly, the optimal way to learn a second language, as Mclaughlin, (1992) suggests, is to begin at birth and learn two languages simultaneously. Penfield and Roberts (1959), for example, argue that the optimum period for language acquisition falls within the first ten years of life, when the brain retains its plasticity. Some researchers take a younger-is-better position and argue that the earlier children begin to learn a second language, the better (Krashen, Long, & Scarcella, 1979).

Observation of normal persons, however, does not at first sight support the idea that adults are not as good at learning languages as children. Small children generally do not go to school; they learn languages in the street. Older people generally try to learn them in school. These are basically different learning experiences. In the street, a child's attention is generally on what is being said and on what he has to say; in school attention is generally focused on language, not on what is being said in language. It could well be that there is strong peer pressure on children to conform to local linguistic standards, but not on adults. Adult learners have an initial advantage where rate of learning is concerned, particularly in grammar. They will eventually be overtaken by child learners who receive enough exposure to the L2 (Krashen, Long, & Scarcella, 1979).

The critical period for grammar may be later than for pronunciation (around 15 years). Some adult learners, however, may succeed in acquiring native levels of grammatical accuracy in speech and writing and even full linguistic competence (Tohidian &Tohidian 2009) For instance, the morpheme studies showed that the order of acquisition of a group of English morphemes was the same for children and adults (Bailey, Madden, & Krashen 1974; Fathman, 1975). Slow rates of learning in older learners, on the other hand, appear in phonetics and morphosemantics, either because there is a critical period, or because prior learning deeply affects and biases later experience (Ervin-Tripp, 2001). By morphosemantics, Ervin-Tripp refers to markers of definiteness, aspect, gender, number, etc., that is, the limited class of obligatory affixes or function words. Where the semantic classifications

underlying these systems or the mode of expression are different in L1 and L2, these are often particularly resistant to full mastery.

Asher and Price (1967) found that adults are superior at deciphering and remembering instructions given in a foreign language. In addition, an adult learning a second language could benefit from grammatical explanations and deductive thinking, whereas a child learning a first or second language would not. Unfortunately, this slight advantage in ability does not help adult second language acquisition in general. In fact, this ability almost hinders them in that they analyze too much. In addition, there are other differences between adults and children language learners: psychological focus (e.g., child egocentrism); facility with larger units of language (i.e., chunks) due to prior experience; prior semantic knowledge which facilitates recognition of comparable categories; greater practical knowledge facilitating inferences about meanings; greater range and complexity of speech events attempted (e.g., asking for information, reporting conditional relations, making analogies, adding qualifiers and specifiers to identify referents- absent from early child speech).

Language development

Language development, according to Foster-Cohen (2001), means explaining how children move from initial assumptions or representations through successive stages to a steady end-state. In addition, regardless of the learning environment, the learner's goal, as suggested by Bhela (1999), is mastery of the target language. The learner begins the task of learning a second language from point zero (or close to it) and, through the steady accumulation of the mastered entities of the target language, eventually amasses them in quantities sufficient to constitute a particular level of proficiency (Dulay, Burt & Krashen, 1982; Ellis, 1984).

However, very few L2 learners appear to be fully successful in the way that native speakers are (Towell & Hawkins, as cited in Cook, 2000). The majority of second language learners fail to reach native-speaker levels of ability. In other words, "language mastery is not often the outcome of SLA" (Larsen-Freeman & Long, 1991, p. 153). The evidence for this deficiency is held to be the lack of completeness of L2 grammars or the fossilisation in L2 learning where the learner cannot progress beyond some particular stage (Schachter, 1988). Irrespective of whether native-speaker proficiency is achieved, children are more likely to reach higher levels of attainment in both pronunciation and grammar than adults (Treffers-Daller & Sakel, 2012). Those "who begin learning a second language in childhood in the long run generally achieve higher levels of proficiency than those who begin in later life" (Singleton, 1989, p. 137).

Phonology

Singleton (1989) points out that children will only acquire a native accent if they receive massive exposure to the second language. However, some children who receive this exposure still do not achieve a native-like accent, possibly because they strive to maintain active use of their first language (Tohidian & Tohidian, 2009). The process of acquiring a second language grammar is not substantially affected by age (Mclaughlin, 1992) but that of acquiring pronunciation may be in that, according to Brown (1994), the development of the child's speech muscles is a large contributing factor to the attainment of native-like pronunciation. This control over articulatory muscles is at first basic and then develops to handle more complex sounds which may last more than the age of 5 to be completed. A number of studies (e.g., Asher & Garcia, 1969; Oyama, 1976) have found that the younger one begins to learn a second language, the more native-like the accent one develops in that language.

As Ransdell (2003) argued, cross-cultural studies showed that Asian students (e.g., Chinese, Indian, and Korean) felt more difficulty in English phonological awareness tasks than native English speaking students. The reason behind this could be various factors such as: (a) While learning L2, alphabetical shapes and structures of L1 would create interference; (b) In schools, teachers might not appropriately make them do practices or exercises in the acquiring L2 language; (c) Medium of instruction and communication in schools or colleges are mostly held in first language. Therefore, they do not get enough exposure to acquiring language(Ransdell, 2003). Adult learners may be also able to acquire a native accent with the assistance of instruction, but further research is needed to substantiate this claim.

Affective Factors

The development of cognition in adult comes along with some affective obstacles on the way of learning a second language. One of them is inhibition. A child is highly egocentric but as he grows up, he becomes more and more aware of himself and develops a more solid self-identity and after the age of puberty he tries to protect this identity (Moinzadeh, Dezhara, & Rezaei, 2012). In the case of language, he develops a language ego with reference to the language he learns (Brown, 1994). The point here is that learning a new language for an adult means adopting a new ego along with an existing one related to the mother tongue (Moinzadeh, Dezhara, &

Rezaei, 2012). This feeling of clinging to the first ego causes an inhibition on the way of learning the second language (Moinzadeh, Dezhara, & Rezaei, 2012). On the other hand, children are naturally egocentric. While learning their language they are not afraid to make mistakes, and in general, they do not feel abashed when they are corrected (Tucker, 2003). Also, their thoughts usually do not surpass their language ability. Adults, on the other hand, usually suffer form a fairly large amount of language learning anxiety (Tucker, 2003). Adults often feel frustrated or threatened in the struggle of learning a different language (Hadley, 2002).

Another factor which is also much affected by emotional change is motivation. As Tucker (2003) suggests a child's motivation is simple. In order to communicate and to be a part of family and society the child must master the target language. This motivation is quite weighty, especially when compared to the motivation that adults have, or rather, must find (Tucker, 2003). In second language acquisition studies, a large part of the variation between learners is due to motivation (Ervin-Tripp, 2001). The most obvious mechanism for motivation to have such effects is via self-imposed increase in exposure to target language. Adult motivations usually fall into one of two categories: integrative motivation (which encourages a learner to acquire the new language in order to become closer to and/or identify themselves with the speakers of the target language) or instrumental motivation (which encourages a learner to acquire proficiency for such practical purposes as becoming a translator, doing further research, and aiming for promotion in their career) (Hadley, 2002). Either one of these types of motivation must be prevalent for successful acquisition to take place (Tucker, 2003).

Another affective factor causing difficulty for the learners is attitude. There is now a body of research (e.g., Gardner & Lambert, 1972; Gardner, Smythe, Kirby, & Bramwell, 1974) showing that attitudes correlate with success in language class. The research also supports the claim that the type of attitude has an effect (i.e., instrumental or utilitarian attitude) which is not as good as an integrative one. Since young children are not yet cognitively developed to raise a solid attitude toward a certain races, cultures, ethnic groups, and languages, the attitude is established when the child grows up and if it is positive, it can enhance the process of second language learning and vice versa (Ellis, 1994).

Affective variables can act as a mental block (i.e., affective filter) and can prevent comprehensible input to be absorbed. When the learner is unmotivated and lacks confidence, the affective filter goes up. When the learner is not anxious and wants to be a member of the group speaking the target language, the filter goes down (Du, 2009). McLaughlin (1987) argues that children are at an advantage when learning a first or second language because their affective filter is low while adults are likely to have a higher affective filter due to events that occurred in adolescence.

Context

For children, the language is mostly acquired in a natural context and the social group in which the child is growing (Moinzadeh, Dezhara, & Rezaei, 2012). In child-directed speech, as Krashen (1987) states, "the topic first comes from the child's immediate 'here and now' surroundings" (p. 23). Later on "it can include things the child did" (Lightbown & Spada, 1999, p. 24). In this way the child can make associations between the input and the context of its use (Moinzadeh, Dezhara, & Rezaei, 2012). These egocentric topics enable the child to associate the language with the specific context at hand. On the other hand, "in a language classroom, it is quite difficult for the teacher to always come up with something so interesting or so relevant that every student wants to find out more about it" (Macnamara, 1975, p. 88).

Another major difference between language classes and natural settings is the amount of time spent on languages. The idea is that time, rather than approach, is the explanation of why children do not fare as well in language class. There is no doubt that time is an important variable; language learning is always gradual. Small children spend much more time listening to and practicing their native tongue than students in a language course do. In addition, Mcnamara (2003) suggested that one of the reasons that adults' progress in a language becomes arrested or fossilized, whereas a child's does not, might be absence of peer pressure on adults, goading them to conform.

Error Correction

Parents are proud of any effort which a small child makes to express himself in words. They welcome and interpret his phonological innovations; they accept his bits of words; they understand his telegraphese. As a matter of fact, parents seldom correct a small child's pronunciation or grammar. In contrast to parents, the teacher pounces on all departures from phonological and syntactic perfection; he does not care what the student says as long as he says it correctly. As a result, classroom conversations seem remote, unreal, and often lifeless compared with the conversations of a mother and child.

Input

One of the big differences between a child learning an L1 in a natural setting and L2 learners in the classroom is the input they receive in terms of both quality and quantity (Moinzadeh, Dezhara, & Rezaei, 2012). Krashen (1982) has put forward the Input Hypothesis which reveals the importance he places on input. He argues that the learner needs to receive comprehensible input to acquire language. The input a first language learner receives is simple and comprehensible at the beginning and gets slightly more complicated. Krashen suggests that input should be slightly above the level of the language learner (i+1). He argues that the L2 learner should be exposed to the target language as much as possible and that the lack of comprehensible input will cause the language learner to be held up in his development (Ellis, 1994).

Many of those who see a crucial teaching role for input are, indeed, proposing that children acquire something that is external to them, even if the ability to make sense of the data is partially determined by the nature of the human organism (Foster-Cohen, 2001). Generative linguistic researchers, who see a more triggering role for input, on the other hand, take a more endogenous stance, both in the sense that UG may unfold with maturation, and in the sense that the incoming data triggers already existing partial knowledge of the nature of the system to be learned. A particular version of the exogenous/endogenous distinction can be seen in the debates over acquisition vs. learning, stimulated by Krashen's (1985) dichotomization of these terms. Krashen was criticizing learning precisely because it was artificially and consciously forced on the learner from outside, rather than being internally driven within the learner. While most discussions of acquisition vs. learning have acknowledged that such distinctions are too simplistic, there remains the need to determine both the extent to which SLA traces the same sorts of paths as L1 acquisition and the extent to which SLA is the result of triggering a priori knowledge, rather than (consciously or unconsciously) capturing the L2 from the environment (Smith, 1994).

The quantity of exposure to a target language a child gets is immense compared to the amount an adult receives. A child hears the language all day every day, whereas an adult learner may only hear the target language in the classroom which could be as little as three hours a week. A child receives a torrent of L1 on a daily basis in a natural way while an L2 learner's exposure to the language he is learning is much more limited.

Language Skills

The L2 reading process involves the interplay of two language systems. When reading in an L2, readers have access to their L1 and often use their L1 as a reading strategy (Carson, Carrell, Silberstein, Kroll, & Kuehn, 1990; Upton & Lee-Thompson, 2001). However, L1 and L2 reading differ in many ways. Grabe (2009) indicates three major sets of differences: linguistic and processing differences, cognitive and educational differences, and sociocultural and institutional differences. Although L1 and L2 reading differs in a number of important ways, to better understand L2 reading, it is important to understand what role L1 literacy plays in the development of L2 reading (Hudson, 2007). The role of L1 literacy in L2 reading development had largely been a missing variable in empirical research until the 1990s, and only recently have researchers emphasized the importance of the impact of L1 literacy knowledge on L2 reading development (Bernhardt, 2005; Koda, 2005, 2007).

According to the Linguistic Interdependence Hypothesis, L1 literacy provides a good foundation for L2 reading development. The hypothesis posits that fundamental similarities exist between first and second language skills, and that they are interdependent. Specifically, reading performance in a second language is largely shared with reading ability in a first language (Bernhardt & Kamil, 1995). When students are literate in their primary language, they possess funds of knowledge about various aspects of reading, and this knowledge provides an experiential base for literacy development in the second language (Moll, 1994; Peregoy & Boyle, 2000). In other words, language operations such as reading and writing should be transferable across languages. Once a set of language operations has been acquired, they will also be available within second language contexts. As Jiang (2011) argues, it is logical to assume that normal adult L2 readers with good educational background in L1 have developed sufficient L1 reading skills and strategies, and that they actually apply these skills and strategies when reading in L2.

Oller and Tullis (1973) compared processing times of native and non-native readers of English in reading English text. They found that non-native readers produced the same number of fixations and regressions as did native readers, but their fixations were much longer. This indicated that bilinguals process more slowly in their second language. Marsh and Maki (1976) found a similar result when measuring the time bilinguals needed to compute answers to simple mathematical problems: they computed much faster in their preferred language. The main reason could be that bilinguals have less time to practice language processing in either language, that is, less automaticity (Sinha, Banerjee, Sinha, & Shastri, 2009).

When writing or speaking the target language, second language learners, as Bhela (1999) states, tend to rely on their native language structures to produce a response. If the structures of the two languages are distinctly

different, then one could expect a relatively high frequency of errors to occur in L2, thus indicating an interference of L1 on L2 (Dechert, 1983; Ellis, 1997).

CONCLUSIONS

The first and second languages are interrelated and the history of the first language is a participatory factor in the acquisition of the second language and its maintenance (Houmanfar, Hayes, & Herbst, 2005). In other words, this perspective takes into account the participation of the individual's history of the first language in the acquisition of the second language and thereafter (such as thinking in first language while speaking in second language) (Houmanfar, Hayes, & Herbst, 2005). Given this issue, in this study, a number of similarities and differences between L1 and L2 were described, and it is hoped that this study encourages more research and further reflection on what it means to learn and to teach a new language at different stages of language development and in the various learning contexts.

REFERENCES

Albert ML, Obler LK.1978. The Bilingual Brain: Neuropsychological and neurolinguistic aspects of bilingualism, Academic press: New York.
Asher JJ, Garcia R.1969. The optimal age to learn a foreign language. Modern Language Journal, 53, 334-341.
Bailey N, Madden C, Krashen S.1974. Is there a "natural sequence" in adult second language learning? Language Learning, 21, 235-43.
Beardsmore HB.1982. Bilingualism: Basic principles. Tieto: Avon.
Beebe LM. (ed.).1988. Issues in second language acquisition: Multiple perspectives. Newbury: London.
Bernhardt E, Kamil M.1995. Interpreting relationships between L1 and L2 reading: Consolidating the linguistic threshold and the linguistic interdependence hypotheses. Applied Linguistics, 16, 15-34.
Bernhardt E. 2005. Progress and procrastination in second language reading. Annual Review of Applied Linguistics, 25, 133-150.
Bialystok E.1990. Communication Strategies: A psychological analysis of second language use. Basil Blackwell: Oxford.
Blum-Kulka S, Levenston EA.1983. Universals of lexical simplification, In Strategies in Interlanguage Communication, (eds), Faerch, C. and Kasper, G., Longman: London.
Brown HD. 1994. Principles of language learning and teaching (3rd ed.) New Jersey: Prentice Hall.
Carson JE, Carrell PL, Silberstein S, Kroll B, Kuehn PA.1990. Reading-writing relationships in first and second language. TESOL Quarterly, 24, 245-266.
communication, (eds). Faerch C. and Kasper, G., Longman: London.
Dechert HW.1983. How a story is done in a second language. In Strategies in interlanguage
Dordick M.1996. Testing for a hierarchy of the communicative interference value of ESL errors, System, 24, 299-308.
Du X. 2009. The Affective filter in second language teaching. Asian Social Science, 5(8), 162-165.
Dulay H, Burt M, Krashen S.1982. Language two. New York: Oxford University Press.
Ellis R.1984. Classroom second language development: A study of classroom interaction and language acquisition. Pergamon Press: Oxford.
Ellis R.1994. The study of second language acquisition. China: Oxford University Press.
Faerch C, Kasper G.1983. Plans and strategies in foreign language communication. In Strategies in interlanguage communication, ed. C. Faerch and G. Kasper, Longman: London.
Gass M, Selinker L.2001. Second language acquisition. London: Lawrence Erlbaum Associates Publishers.
Genesee F.1981. A comparison of early and late second language learning. Canadian Journal of Behavioural Science, 13, 115-127.
Grabe W.2009. Reading in a second language: Moving from theory to practice. New York, NY: Cambridge University Press.
Hadley H.2002. Reviewing first and second language acquisition: A comparison between young and adult learners. Niigata Studies in Foreign Languages and Cultures, 8, 37-48.
Harley B.1989. Age in second language acquisition. San Diego: College Hill Press.
Houmanfar R, Hayes LJ, Herbst SA. 2005. An Analog study of first language dominance and interference over second language. Anal Verbal Behav, 21(1), 75–98.
Hudson T.2007. Teaching second language reading. New York, NY: Oxford University Press.
Koda K.2005. Insights into second language reading: A cross-linguistic approach. New York, NY: Cambridge University Press.
Koda K.2007. Reading and language learning: Crosslinguistic constraints on second language reading development. In K. Koda (Ed.), Reading and language learning (pp. 1-44). (Special issue of) Language Learning Supplement, 57, 1-44.
Krashen S, Long M, Scarcella R.1979. Age, rate, and eventual attainment in second language acquisition. TESOL Quarterly, 13, 573-582.
Krashen S.1982. Theory versus practice in language training. In R. W. Blair (Ed.), Innovative approaches language teaching. Rowley, MA: Newburry House Publishers.
Krashen S.1985. The input hypothesis: Issues and implications. Harlow: Longman.
Larsen-Freeman D, Long MH.1991. An introduction to second language acquisition research. London: Longman.
Lenneberg E.1967. Biological foundations of language. New York: Wiley.
Lightbown PM, Spada N.2006. How languages are learned. China: Oxford University Press.
Long M.1990. Maturational constraints on language development. Studies in Second Language Acquisition, 12, 251-86.
Macnamara J.1975. Comparison between first and second language learning. Working Papers on Bilingualism, 7, 71-94.
MacWhinney B.2008. A unified model. In P. Robinson and N. C. Ellis (Eds.), Handbook of cognitive linguistics and second language acquisition (pp. 341–371). New York and London: Routledge.
Marsh P, Maki P. 1976. Efficiency of arithmetic operations in bilinguals as a function of language, Memory and cognition, 4, 459-464.

Moinzadeh A, Dezhara S, Rezaei O. 2012. A contrastive study of L1 and L2 acquisition. Practice in Language Studies, 2(1), 66-70.

Moll LC. 1994. Literacy research in community and classrooms: A sociocultural approach. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), Theoretical models and processes of reading (pp. 179-207). Newark, DE: International Reading Association.

Newport E. 1990. Maturational constraints on language learning. Cognitive Science, 14, 11-28.
Oyama S. 1976. A sensitive period for the acquisition of nonnative phonological system. Journal of Psycholinguistic Research, 5, 261 -284.
Penfield W, Roberts L. 1959. Speech and brain mechanisms. New York: Atheneum Press.
Peregoy SF, Boyle OF.2000. English learners reading English: What we know, what we need to know. Theory into Practice, 39(4), 237-247.
Ransdell S.2003. The care and feeling of monolingual and bilingual University students in South Florida: Implications for assessment and training. Psychol. Learn. Teach. 3(2), 126-130.
Scovel T.1969. Foreign accents, language acquisition, and cerebral dominance. Language Learning, 19, 245-253.
Seligar H.1988. Psycholinguistic Issues in Second Language Acquisition' in Issues in second language acquisition: Multiple perspectives, ed. L.M. Beebe, Newbury, London.
Selinker L.1971. The psychologically relevant data of second language learning. In The psychology of second language learning, ed. P. Pimsleur and T. Quinn, Cambridge University Press: London.
Singleton D.1989. Language acquisition: The age factor. Clevedon, Avon: Multilingual Matters.
Sinha A, Banerjee N, Sinha A, Shastri R. 2009. Interference of first language in the acquisition of second language. Journal of Psychology and Counseling, 1(7), 117-122.

Tohidian I, Tohidian E. 2009. Effects of age on second language acquisition. California Linguistic Notes, XXXIV(2), 1-16.

Upton T, Lee-Thompson L.2001. The role of the first language in second language reading. Studies in Second Language Acquisition, 23, 469-495.