

## Ability to Acquire a Native-like Accent and the Age Factor

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### Abstract

This study investigates children's unique ability in acquiring a native-like accent. The purpose of the study is to find if this notion has really been supported enough by age related literature and how age factor actually stands behind. This qualitative and quantitative study consisted 14 Malay students doing their B.A Arabic Language and Literature at Mu'tah University in Jordan for the academic year 2014. It seems that most published articles, papers and books that have investigated this language aspect have supported children superiority. Children can learn to speak language like native speakers, but adults mostly fail to do so. To account for this phenomenon, different factors due to age have been proposed- the neurological factor, the psychomotor factor, the cognitive factor and the affective factor. For an adequate explanation of the observed phenomenon, each one of them holds part of the answer which once considered together, they help us get a plausible answer.

**Keywords:** Native-like, Accent, Age, Factor, Ability, Acquire.

### 1. Introduction

The classic argument whether there is a critical period which "occurs around puberty" and "beyond which people cannot acquire a native-like accent was initially meant to explain the first language only". Then "second language researchers have outlined the possibilities of extrapolating the critical period to second language contexts" ( Brown, 1987, p.42). The critical period was originally proposed by Penfield and Roberts in 1959. They suggested that during the critical period, language is learned naturally and effortlessly. Then, Lenneberg provided clinical evidence to support the critical period hypothesis (Ellis, 1994).

Lenneberg did not only provide evidence to prove the critical period hypothesis, but he also highlighted the role of age in second language. It holds that "early in life, humans have a superior language learning capacity. The capacity disappears or declines with maturation" (Long,1993, p.197). Furthermore, Johnson and Newport (1995) stated that the hypothesis has provided "something special about the maturational state of the child's brain" which makes children particularly adept at acquiring any language. "The hypothesis predicts that language abilities decline with maturation'. Therefore, before maturation, children will be superior in acquiring second language 'as well as first' (Long 1993, p.80). Therefore, It is generally believed that children have certain advantages over adults in language learning. The common notion is that they learn L2 easily and quickly (Ellis, 2008; Larsen-Freeman, 2008; Mayberry & Lock, 2003).

### 2. Literature Review

The superiority of children in acquiring a native accent in second language seems to be supported enough by age related studies. It seems that most published papers which have studied language acquisition have supported children superiority in acquiring a native-like accent. (e.g., Moyer, 1999; Piske Mackey & Flege, 2001) "According to a great deal of the research carried out within pronunciation, it is impossible after the age of 15-16 to achieve a near-native pronunciation in the new language, no matter how motivated one is and no matter how favorable one's access is to hearing and using the language" (Lund, 2003, p.9). This consensus applies to both... "suprasegmental features as intonation, stress and rhythm and to segmental features such as the quality of vowels and consonants"(p.9). Long

(1993) stated that 'in the proper (natural) environment' children are able to learn to speak language "like native speakers, adults cannot", because they "never seem able to rid themselves of a foreign accent"(p.245).

Moreover, after investigating many studies, comparing language two pronunciation proficiency and age of arrival in the host countries, Dulay et al. (1982, pp. 79-81) stated that children are clearly better at language acquisition than adults and this belief has been firmly "supported by scientific and anecdotal evidence". Children who have acquired second language in a natural environment exceeded and surpassed adults and sounded as native speakers - what has clearly been observed was that children who have experienced natural communication in the target language nearly always succeeded in attaining a native-like proficiency, "while those over fifteen" rarely did that. Cochran and Sachs (1979, p.145) reviewed several empirical studies and conducted their own study and the result was in line with the widespread consensus that "adults who learn new languages retain foreign accents, whereas children don't."

Johnson and Newport (1995, p.81) revised a number of studies of "eventual attainment in phonology" and stated that "late learners do carry an accent", and this is supported by "anecdotal evidence" and "experimental findings." After that, they conducted their own study and emphasized the ability of children in acquiring a native-like accent and reaffirmed that this capacity seems to disappear or decline with maturation. They reaffirmed the strength of the critical period hypothesis. They concluded that "human beings appear to have a special capacity of acquiring language in childhood, regardless of whether it is their first or second" and Obler (1993, p.184) emphasized that "the behavioral evidence does suggest a critical period in L2, at least for accent. However, what about individuals who may acquire a native-like accent after adulthood? For Obler (1993, p.183), they form "limited small percentage". Moreover, Brown (1987, p.44) pointed out that "such individuals are few and far between" and those individuals who may speak language "flawlessly", however, appear to be no more than isolated instances.

For the limited number of studies which found adults as better in acquiring a native-like accent, compelling arguments went against them. For example, Patkowski (1990) argued that those studies failed to be convincing- some of them have contradicted themselves later on. For instance, Snow and Hoefnagel noted later on, in another report, that "adults fell increasingly behind". Patkowski (1990) revised a large number of age-related studies which all marked the unique abilities of children. He conducted a seven month period study. He found that "all(the results) have shown children superiority" (p.86).

### **3. Statement of the Problem**

The importance of acquiring a native-like accent was emphasized by many learners, teachers, and researchers. It is the "Cinderella" of language teaching (Kelly, 1969). For Gelvanovsky (2002), it has an important social value. It is directly mirroring prestige, such as intelligence, professional competence, persuasiveness, diligence, and social privilege. Some authors view it as indispensable factor for socio-economic success (Hudson, 1980; Dalton & Seidlhofer, 1994). It is the first thing people notice which can make a good impression about the quality of our language ability. Poor pronunciation makes unpleasant and misunderstanding for both speakers and listeners. It makes learners lose their self-confidence and result in negative influence for learners to estimate their credibility and abilities (Morley, 1998). Therefore, One of the major goals in the L2 learning is to speak the target language like native speakers.

Native-like accent acquisition is very sensitive issue due to the consequences and the processes it initiates. Thus, the association between accent and language variations may cause stereotyping, prejudice and make a native speaker to be more suspicious and cautious of the non-native speaker. Native-like accent acquisition is problematic as it affects the psychological and physical well-being, educational and employment opportunities (Gelvanovsky, 2002; Morley, 1998; Hudson, 1980; Dalton & Seidlhofer, 1994).

#### 4. Objectives of the Study

This research aims at achieving the following research objectives:

- i. *To Investigate the Ability to Acquire a Native-like Accent amongst Adults Who Are Non-Arab Language Learners Learning Arabic in Jordan and to account for the Sources behind Learners Readiness and their Unique Abilities in Acquiring a Native-like Accent.*

#### 5. Research Questions

In order to achieve the research objectives, this study addresses the following research questions:

- i. *Do Adults Who Are Non-Arab Language Learners Learning Arabic in Jordan Have Acquired a Native-like Accent and What are the Sources behind Learners Readiness and their Unique Abilities in Acquiring a Native-like Accent.*

#### 6. Research Methods

The present research attempts to investigate the ability to acquire a native-like accent amongst Non-Arab language learners learning Arabic in Jordan where Arabic is the native language. The sample of the study includes 14 participants whose native language is Malay. Their ages ranged between 19 to 20 when arrived to Jordan to complete their university education for 4 years period. The respondents' accents were judged by native speakers of Arabic who were specialized in the area.

##### 6.1 Measures

The respondents of the study were encouraged to undergo a questionnaire survey including individual and group tests. The questionnaire composed of a reading text in Arabic language and an oral text talking about themselves for a minute or two. The questionnaire included 11 items in which 5 items requested some personal and background knowledge information. 6 items requested information about the respondents' exposure to Arabic language in their daily life since all the participants were males. Also, the questionnaire included a reading text of Arabic language from the teaching syllabus. The reading text consisted of a short and simple sentences in Arabic language. The level of the reading materials was very easy so that respondents can avoid difficult and ambiguous lexis and vocabulary as well as syntactic constituents that may have impeded reading fluency. The reading text involved Arabic language syllables considered difficult for native Malay speakers to pronounce, as they do not exist in Bhasa Malay. In addition, respondents were encouraged to select a topic, then talk about it for two minutes at their usual speed.

##### 6.2 Procedures

Respondents were encouraged to do a test at a time that is convenient to them. They were first encouraged to fill in the questionnaire section that relates to their background and exposure to Arabic language. Then, they were requested to read the text aloud after reading it for few times so that they can achieve error free-effect reading. Thereafter, each reading performed by the respondents was taped and recorded in addition to two minutes spontaneous talk. The respondents were also encouraged to self-tape in private upon their desire to avoid embarrassment since some of them felt fine to tape themselves privately on both assignment in a different setting while others were also encouraged to tape both assignments individually in their free time or any time they find convenient to them. The tape-recorded reading text and the spontaneous talk were then handled to the judges for accent evaluation on 5 Points Likert Scale as follows:

- a). 1 = Very Heavy Foreign Accent.
- b). 2 = Heavy Foreign Accent.
- c). 3= Moderate Foreign Accent.
- d). 4 = Sort of Arabic Accent, and

e). 5 = True Native Arabic Accent.

Each judge evaluated the tapes in an individual manner without sharing ideas and thoughts with the other panel members. They overlooked reading errors and/or language errors, and they evaluated the reading and the talk on two separate sheets. The judges were reported that they will be receiving the reading tapes randomly so that they can ensure that the tapes did not match the spontaneous –talk tapes.

## **7. Discussions and Findings**

The findings of the present study confirm the findings among innumerable researchers. Age seems the indispensable topic for acquiring a native-like accent (e.g., Flege, 1999; Moyer, 1999; Piske Mackey & Flege, 2001). The findings support the general consensus which is the younger the better (Mayberry & Lock, 2003; Ellis, 2008; Larsen-Freeman, 2008). The findings confirm the point that it is difficult to have a native-like pronunciation for learners who learn second language after puberty. It seems that "children and adults L2 learners pass through different developmental states in second language learning" (Bista, 2009, p. 13)

It seems quite clear that readiness and unique abilities in acquiring an accent is not available among adults. In other words, readiness and unique abilities in acquiring an accent seems available among children. It has been well observed in second language acquisition field. But what are the sources attributable to age that stand behind the observed phenomenon? First, Dulay et al. (1982) preferred to prepare an answer by saying "no single source by itself appears to be adequate to explain", but what is valid is that "each one holds a promise in accounting for the observed phenomena" (p. 82).

Brown (1987) said that the study of the neurological brain development may provide key answers to the child proficiency in acquiring a native-like accent. Some scholars have singled out that the neurological development which is also - "known as lateralization" is really the key answer for the observed phenomena (p. 42). Dulay et al. (1982) preferred to consider it as a biological factor and call it "cerebral dominance" (p. 87).

According to Lenneberg (cited in Brown 1987, p. 43), lateralization is a "slow process that begins around the age 2 and is completed around puberty" during which "the child is assigning functions little by little to one side of the brain or another....included in the functions of course is language". Brown (1987, p. 42) explained that the complete lateralization of the brain functions occurs as a result of the human brain maturation. The functions that are located in the left hemisphere are "intellectual, logical and analytic" while the right hemisphere controls functions that are related to "emotional and social needs". In terms of language functions, they are mainly "controlled in the left hemisphere" (p. 42). A crucial question that comes to one's mind is that what evidence can support the brain lateralization phenomenon so one can find why adults are unlike children? According to Wittrock and others lateralization reality has been inferred from the following evidence:

- i. Loss of speech caused by brain damage occurs far more frequently from left side lesions.
- ii. When the left hemisphere is temporally anesthetized loss of speech results; but when the right hemisphere is anesthetized this generally doesn't happen.
- iii. During verbal tasks, whether performance is overt or covert, researchers have found signs of greater electrical activity in the left hemisphere. This is shown by analysis of brain waves.
- iv. The right hemisphere damage caused "speech deficits in children". "while it rarely does in adults." This assumes an active role of the right hemisphere in language of children if compared to adults who rarely have speech deficits from the right hemisphere damage. (cited in Dulay et al, 1982, pp.87-88).
- v. Adults are more likely to suffer permanent language impairment from brain damage than children (Siegler, 2006).

Lateralization seems to play a basic role in the human brain. Therefore, It is important to know when lateralization becomes complete in the human brain. The answer is debated. However, Patkowski

(1990, p. 74) explained that the controversy concerning the age of complete lateralization is not fundamental and has not invalidated the notion of "a biologically- (neurologically) based critical period". He added what is more basic is to consider its effect.

Back to the question, Dulay et al. (1982) clarified that the majority of researchers have agreed that lateralization is complete before puberty and this consensus has come as a result of clinical evidence being shown. Opler (1993, p. 184) explained this consensus by saying all the evidence available about "childhood aphasia, hemispherectomies, and feral children" suggest firmly that lateralization is complete before puberty and the turning point is puberty at which lateralization is complete.

How may lateralization account for children's abilities in acquiring a native-like accent? There is a general answer which has been inferred from the nature of the relationship between the completeness of lateralization and the observed disappearance of acquiring a native-like accent ability. For example, when giving their "final remarks" on their study, Johnson & Newport (1995) focused on the nature of the relationship between lateralization and the linguistic abilities between age of arrival and performance. They explained that there is "a linear decline in performance" which according to them gets more and more till puberty- the age when lateralization is complete. Both lateralization and decline in performance show a very strong link. For example, they never happen suddenly or come as a "sudden drop", But they start "small" and "gradual" then end with "major changes around puberty," -when lateralization is complete, the ability is totally declined. (pp. 110-111)

Similarly, Opler (1993) linked the ability to acquire whether first language or second language to the effect of lateralization, but he clarified more when saying "certain plasticity is maintained throughout childhood". This plasticity accounts for children language abilities to acquire an accent, but when lateralization becomes complete, this plasticity is lost and consequently these abilities disappear. All loss happens around puberty. (p. 184), as Lenneberg (cited in Johnson and Newport, 1995, p. 77) noted when brain reached lateralization by puberty, it loses "its plasticity and reorganizational capacities necessary for acquiring language"

It is important to remember Scovel (cited in Patkowski, 1990, p.87) arguing that "the brain is unlike environment, cannot be subjected to much control", and it is basically important to consider the neurological factor through its serious evidence and influence, "It remains beyond any measure of doubt."

However, Brown (1987) suggested also examining other domains for more relevant evidence which may explain why adults are behind but children have the ability to acquire a native-like accent.

Brown (1987, p. 45) explained that the psychomotor factor might be added to explain the observed phenomenon. It explains the role of the psychomotor coordination of the speech muscles in the production of language. The author explained that "several hundred muscles are used in the articulation of human speech"(pp. 75-46). These muscles need tremendous degree of control, which depends mainly on their flexibility. The muscular flexibility is a natural property that is available well in children but not adults. Children have the ability to control the speech muscles and speech sounds well. As one author said, unlike adults, the vocal muscles in children are underdeveloped and still very flexible to acquire new phonological sounds. Furthermore, Brown (1986, pp. 45-46) linked between the "neurological plasticity" and muscular plasticity as "neuromuscular plasticity" which he considers as advantageous properties which children own and consequently have the ability to acquire an accent, but adults don't.

For handling the possible explanation given in the cognitive domain, it is crucially important to consider the cognitive development stage responsible for the general child-adult difference. Piaget (cited in Brown, 1987, p. 47) stated that at around puberty, happens the most critical cognitive development stage in a human being. This stage is the "formal operational stage". In which a person's intellectual ability changes to become "capable of abstraction" and "thinking formally". They begin to have deep awareness and analytical thinking which drive them to focus deeply on differences and contradictions. Adults are formal thinkers.

According to the Development Psychology (cited in Dulay et al. p. 60) the formal thinker is someone who possesses "meta- awareness" and "seems to reflect on the rules and thoughts" because of their "deep awareness and strong analysis." Piaget (cited in Elis, 1985, p. 108) described formal thinkers (adults) as if they are "predisposed to recognize differences as well as similarities." They think flexibly and become increasingly decentred (p.108).

However, children who have not reached the formal operational stage seem to be cognitively different. Dulay et al (1982, p. 61) preferred to call them "quasi-awareness". They are not "meta awareness." "Quasi-awareness" behavior is well observable among children "especially when two languages are being learnt". The authors pointed out to Lindholme and Padilla's notes when studying children learning two languages. The children as bilinguals have been observed to keep their languages separate"(p.61).

For Elis, (1985) children ,unlike adults, cognitively consider language as a "tool" not a "form" which helps them express meaning. Neither they seem to "comprehend language as a formal system" nor "learn about language by consciously studying linguistic rules". Therefore, the best description given to them was probably Rosansky's-when saying children are "cognitively open" (Elis 1985, p. 108).

Rosansky (cited in Elis, 1985, p. 108) linked this cognitive difference to second language acquisition. Children cognitively owns the "pre-requisites of automatic language acquisition". They are not totally aware of what they are doing, they view only similarities, they "lack flexible thinking, and is self-centered". These child properties are the "pre-requisites of automatic language acquisition", so they deserve to be described as "cognitively open to another language" (p. 108) , but adults overanalyze and focus more on differences, contradictions and ambiguities which all create problems, difficulties and become as obstacles which make the process of second language acquisition difficult and overwhelming (Rosansky, cited in Brown 1987, p.47).

Readiness and unique abilities in acquiring a native-like accent among children but not adult learners may also be attributed to the role of the affective factor which Dulay et al. (1982. p. 46) called "the filter" and considered it "the first major hurdle" which "incoming language must encounter before it is processed further". The affective factor includes "motives, needs, attitudes and emotional states."

Brown (1987) investigated certain affective factors which he thought to be different between adults and children. One of them is the role of "egocentricity" and its effects. The author stated that children are markedly "egocentric". They "see everything around them as inseparable from them", so they seem to be totally involved in the event around them. However, when they grow, they start to develop an awareness of themselves and the world around them, and they start to recognize that they have distinguished egos.

The complete awareness of egos happen around the age of puberty when "critical, physical, cognitive and emotional changes" happen. Therefore, they become more aware of their egos which according to them should be protected from the world and events around which minimizes their social interaction (Brown 1987, pp. 49).

Guiora (cited in Brown 1987 p.50) linked the notion of egocentricity to language and proposed what he called "language ego", to mean "the self identity a person develops in reference to the language. He stated that an adult is aware of his language ego and its influence on his self-identity. Therefore, "it is no wonder that, the acquisition of a new language ego forms a great threat on his first ego"- the one with which he "has grown comfortable and secure" and has developed, as a result, comfortable and secure self-identity. For this reason, a wall of defense against his language ego would be set just to protect it. In other words, "making the leap to a new or second identity is no simple matter" which explains why adults usually seem to be more inhibited and less-relaxed, while children are less inhibited and consequently commit errors more and prospect- or as Macnamra stated "a child suddenly taken from Montreal to Berlin "will quickly begin learning German no matter what he thinks of German" (cited in Brown, 1987, p. 51).

## **8. Conclusion**

The present study confirms the plausibility to state the younger you start to learn L2, the better you can master a native-like accent. The findings of the present study support strongly the critical period hypothesis and are in line with most findings showing that only children who start to learn a new language can acquire a pronunciation that does not differ from a native-speaker's. This highlights age as an important factor in accent acquisition and confirms that adults are unlike children in this language area. Then, it entails the factors to be due to differences. That is, Children are innately predisposed to acquire a native-like accent as L2 learners because they are neurologically, muscularly, cognitively and affectively different from adults.

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