

THE RELATION BETWEEN AGE AND LANGUAGE ACQUISITION AND THE DISTINCTIVENESS OF CHILD SLA AND ADULT SLA

Tran Thien Tu, M.A.

LSD Division

Introduction

The effect of age on second language acquisition (SLA) has so far been a controversial issue. Studies aimed at finding out the answer to the question of whether there exists a critical period that governs the success of second language learning keep providing evidence that supports, supports in some respects, and even challenges the maturational constraints on second language achievement (Schouten, 2009). There have been an enormous number of studies carried out on this topic with trial of different L1-L2 pairs, participants at various age ranges, and tests in almost all aspects of linguistic performance designed at various levels of difficulty. These studies, however divergent, can be categorized into two main groups. One group focuses on the effects of age on the ultimate attainment or the end state of SLA. Researchers in this group try to prove that late learners, who start learning a second language after the closure of the critical period, can not achieve nativelylike proficiency as those learners with age-onset of acquisition within that sensitive period (Lenneberg, 1967). The other group lays more emphasis on age effects on the route and rate of second language acquisition. First, this group of studies aims at finding out whether child and adult second language learners acquire their second language items in similarly or differently developmental sequences. Second and more importantly, these studies try to prove that early learners of a second language have more advantages over their older counterparts in the long run at both naturalistic and instructed learning settings, though late learners may be faster at first stages (Singleton and Ryan, 2004). In this paper, we are going to have a look at the route and rate in acquiring a second language. Some age-related factors will be looked at together with some other

possible non-CPH factors that may be useful to fully understand the difference between child and adult L2 learners.

1. Age effects on route and rate of SLA

1.1 The older are faster initially

With regard to rate of acquisition in second language, it is not unusual to find older learners who show their advantages over younger counterparts in some studies. However, the superiority of adult learners is limited generally in two respects. First, they can show their better progress in only some aspects of language. Second and more importantly, their superiority lasts for a short-term period. In other words, after a short time young learners will soon be able to keep up with or even stand ahead older learners (Singleton and Ryan, 2004).

These two limitations have been discussed in one remarkable study of Snow and Hoefnagel-Höhle (Snow and Hoefnagel-Höhle, 1978). This study investigated sixty nine English native speakers learning Dutch, twenty seven of whom had lived in the Netherlands for one year while the rest had just been there for three months. While the advanced group was tested for one time, the beginner one was tested three different times with an interval of four and a half months. Both groups were given tests in a variety of skills belonging to different areas of linguistic competence from pronunciation, vocabulary to grammar and translation.

Another recent study was carried out on forty five adults and one hundred and eighty school-aged children whose first languages were Catalan and Spanish (Álvarez, 2006). All participants who learned English as their foreign language were divided into eight groups based on two criteria; one was age of onset and the other was age at testing. All participants were required to perform an oral narrative task which was based on a series of six drawings. The results of this study showed a positive correlation between the age of participants and their average scores, which was evidence to claim that adults and older learners were faster initially.

1.2 The younger are better in the long run

Though older learners show their initial advances in acquiring some particular second language aspects, it is observed that they tend to be kept up with and even prevailed by younger learners in long-term comparison (Singleton and Ryan, 2004). There are two types of learning settings that have been taken into consideration; one is the natural exposure setting where learners acquire their target language by real exposure to it and the other is restricted to the formal instruction setting that is classrooms. Up to now, it is generally accepted among researchers that younger learners have advantages over older ones in long-term second language acquisition in natural exposure settings (Singleton and Ryan, 2004). The explanation that children acquire their L2 implicitly while adults do it explicitly is rational in the sense that adults are faster at first as they use explicit learning mechanisms which become less effective in long-term development. Children, by using implicit learning mechanisms, prove to be better in the long run though slower initially (DeKeyser, 2000).

In naturalistic settings, the study of Snow and Hoefnagel-Höhle was a good illustration for the superior of younger learners in long-term natural exposure (Snow and Hoefnagel-Höhle, 1977). Participants in the study were English native speakers who learned Dutch as their second language. At first stages older learners showed their advantages over younger ones. However, these older learners were caught up by their younger counterparts quite rapidly. The statistics showed that the younger learners performed better than the older learners on some sounds after from ten to eleven months of learning. And not long after that these younger learners apparently outperformed the adults in overall scores after eighteen months.

When it comes to formal instruction settings, it is hard to make a claim that the younger learners finally surpass their older counterparts due to the limitation of time of study. It has been claimed that “no current study, however, with the foreign language classroom as learning context has shown that young children

catch up with adults and older children in the long run” (Álvarez 2006, p. 129). It was pointed out more clearly that the period of time extended for a study carried out in formal settings is rather limited to be called “long-term” in comparison with the “long-term” in a study of natural settings (Singleton and Ryan, 2004).

2. Explanation for age-related effects on SLA

After observing the effects that age may have on the acquisition of a second language, researchers try to look at some causes which serve as explanation for the differences between early and late L2 learners.

It was pointed out that “the varied sources of age-related effects” could be divided into four major different categories (Birdsong, 2009, p.404). The first category is “neurobiological” which refers to the systematic declines in plasticity of the brain over age. It is the lack of plasticity in the adult brain that makes it difficult to receive new linguistic items. The second category is “neurocognitive”. It is explained that our cognition is affected by neurological changes. As a result, this leads to the changes in brain volume and organization of hemisphere that consequently affect SLA. The third category is “cognitive-developmental”. This category differentiates between the adult and child language learners in their ways of acquiring a second language. While adult learners try to take in too much linguistic information at one time, children tend to process less information at once. As children take in and process less linguistic information at one time, they are able to reach complete achievement of the language in the long run. The tendency to take in too much linguistic information at a time by adults due to their large memory capacity makes it impossible for them to process it and leads to the incompleteness in their final achievement. The final category is “linguistic-experiential” which is simply explained by the increasing entrenchment of the first language over age. This entrenchment makes the second language acquisition become more difficult (Birdsong, 2009).

Besides factors that are typically age-related, there are also some other factors that can be used to explain to some extent differences existed between early and late learners in acquiring a second language. Singleton (2003) proposed four “non-CPH explanations for age effects” known as “motivational factors, cross-linguistic factors, educational factors, and general cognitive factors” (p.16).

There have been some studies in which late learners were able to achieve nativelike proficiency, which was hard to explain in terms of the critical period hypothesis. In cases of ultimate attainment found out in adult learners, motivation was a factor that should be considered. Take the case of the outstanding subject in the study carried out on English learners of German (Moyer, 1999). Though this participant started learning German at the age of 22, rather too late with regard to the CPH, he was surprisingly rated among the range of native speakers. His success was unbelievable in the light of CPH.

Cross-linguistic factors refer to “a trade-off between L2 and L1 proficiency” (Singleton, 2003, p.17). With regard to the aspect of phonology, there are differences in the choice of the authenticity in L2 accent between child and adult learners. Child learners after their immersion in L2 environment find it natural to make a shift from the use of first language to second language which finally leads to their nativelike accent. Adult learners, on the other hand, keep being influenced by the use of their first language due to the deliberate intention to use it or regular contact with the first language community. This first language influence on SLA makes it difficult for them to attain nativelike accent in the L2.

The education factors refer to the advantages that the education system of the L2 environment brings about for immigrated child L2 learners after immigration. The experience of acquiring academic subjects using the second language as the language of instruction at school helps child learners develop some certain skills like literacy which plays an important role in developing their proficiency in the second language (Singleton, 2003). In the meantime, adult learners do not possess such advantages, which limit the chances for them to reach ultimate proficiency.

Though general cognitive factors are listed as non-CPH factors in acquiring a second language, they actually refer to some kinds of abilities which change according to the change in our ages. The ability to perform task under time pressure can be taken as an example. As you get older this ability tend to decline. The decline in this skill is considered to have effects on the learning process of human beings in general not just acquiring a second language. Some other abilities like recalling details and establishing long term memory codes are also seen as having effects on the possibility to reach nativelike proficiency in a second language (Singleton, 2003).

Conclusion

Until now a straightforward answer to the question whether there exists a critical period in SLA still awaits more future research. More importantly, if such a critical period in language acquisition ever exists, how we can define it is also a job of much debate. There is a fact we know for sure that though many studies have been carried out so far on the issue, they go no further than consolidating the general assumption that the younger you are when you start learning a second language, the closer you get to the levels of native users in that language. However, the possibility to find out second language learners with ultimate attainment depends a lot on the requirements of the tests. If a test asks for more scrutiny as shown in some recent studies, there are few opportunities for even learners with very early age of arrivals to be ranked among nativelike users (Abrahamson and Hyltenstam, 2009). So, scrutiny as a criterion of the test for second language users may shorten the length of the critical period that has generally been assumed so far. In other words, in order for a learner to reach ultimate attainment in a second language, he or she must be immersed in the second language environment at an age much earlier than around puberty (Hyltenstam, 1992). Therefore, it is necessary that researchers should first of all

reach an agreement on the concept of ultimate attainment in SLA as it has a close relationship with how we can define the critical period in SLA.

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