Translating Age: Does the Critical Period Significantly Affect Second Language Learning Among Adults?

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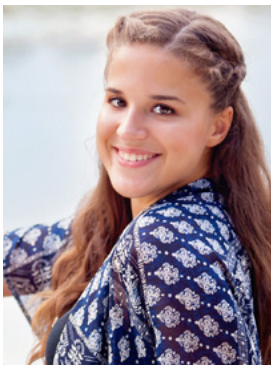

Many adults are discouraged in their attempts to learn a second language because of the widely circulated Critical Period Hypothesis. It argues that only children who begin learning a second language before puberty can become fully proficient. However, I examine ways in which scholars have been negligent in exploring factors set apart from age that contribute to performance such as motivation, teaching methods, quality of immersion, among others. I call for a reconsideration of this hypothesis as a rule for language education and its place in societal attitudes towards language learning.

Learning a second language can be helpful in finding a job, learning about the world, or simply relating to others. Unfortunately, many adults hesitate to begin learning a new language because they are told it will be too hard for them as they are no longer in the "critical period" of second language acquisition. The Critical Period Hypothesis postulates that children only have the skills to learn a second language before puberty (L2). In 1959, Wilder Penfield and Lamar Roberts first introduced the Critical Period Hypothesis (CPH) which stated that second language (L2) learning can only occur in the early years of a person's life and once they leave this stage, they can no longer adequately achieve a complete command of the language. This hypothesis was widely popularized in the late 20th century and continues to be examined and challenged by scholars around the world. While there is little doubt that there is a correlation between language acquisition and age, the idea that language ability directly stems from a biological critical period remains to be proven. In fact, it is highly contested. Many criticize the critical period by proposing that only skills like accent and pronunciation are affected by age and that more essential elements of language, like grammar and vocabulary, can actually be picked up more easily by adults than children in some cases (Palea, 2015). Other criticisms focus more on subjectivity and what many scholars neglect in their work in favor of the CPH. After all, there are many other factors that contribute to L2 learning, including motivation, environment, intelligence, approaches to learning, and others that often differ between people of various ages. (Muñoz, 2011). Unfortunately, despite these protestations, the CPH has been very widespread and accepted by the general population, most likely because of the difficulties with language learning that people have personally experienced. The popular acceptance of the hypothesis in textbooks, classrooms, and even academic conferences sharply contradicts the fact that the CPH is still a hotly debated topic among linguists and other members of the academic community.

The aim of this paper will be to challenge this widespread acceptance of the CPH and to show why the CPH is not a significant indicator of success in a second language. I will define what it means to become fluent in a language as well as why the subjectivity of terms like "better learner" or "proficiency" creates a lack of clarity in the works of many proponents of the CPH (Palea, 2015). To show that the critical period cannot indubitably have a significant effect on the ultimate acquisition of a second language I will point out the negligence that other scholars have shown by refusing to examine important factors apart from age when they are trying to indicate that the critical period is a significant hindrance to adult L2 learners. The critical period is further disproven by the way that adult L2 learners are able to obtain grammar and vocabulary levels sufficient to communicate with native speakers.

Critical period researchers often refuse to examine important factors like motivation, environment, intelligence, approaches to learning and others that differ between people of certain ages. These factors often develop alongside age and cause researchers to put too much faith in only the age factors because they see a correlation between age and ability. When arguing that the critical period is a pivotal time for language learning, many scholars cite the example of Genie, a severely neglected and abused girl who was kept inside all her life and was not

allowed to make noise. When she was found around the age of puberty, she had not learned to speak and was extremely underdeveloped. Although she made significant progress in language learning under the influence of teachers, Genie never mastered basic grammatical structures, instead using only disjointed words in an attempt to communicate meaning (Curtiss, 1977). Genie's case, however compelling, cannot be extended to apply to all cases of L1 or L2 acquisition because of its extremity, uniqueness, and difficulty of duplication. It has also been speculated that Genie may have had difficulty acquiring language because of other reasons related to her situation. For example, because of her severe abuse, Genie most likely suffered damage to her cognitive development and psychological well-being that hindered her ability to learn language. Language learning always involves a myriad of factors which is why it is impossible for proponents of the to critical period to definitively say that age alone impacts acquisition.

Alene Moyer, a professor at the University of Maryland who specializes in second language phonological acquisition, posits in her article "Ultimate Attainment in L2 Phonology: The Critical Factors of Age, Motivation, and Instruction" that the methodology used in many studies has been largely ignorant of important variables. She argues that socio-psychological factors, extent of exposure to a second language, motivation, self-perception, and instruction should also be examined alongside age. The focus of the article is a study that challenges the CPH and examines the German speech of participants who also were affected by many of these other factors. The 24 participants were all instructors at the University of Texas at Austin and were tested on their pronunciation skills. While all participants were well outside of the critical period, the ages that they began learning German varied. The study found that the other factors, especially intonation training had a correlation with the subjects' success (Moyer, 1999). Therefore, it was not simply the subject's age that affected their ability to learn, as the CPH assumes, but many other factors that contributed to their learning as well.

In a 2001 study of 61 Spanish-speaking immigrants to the United States, David Birdsong and Michelle Molis found a modest amount of native-like fluency among adult learners. However, their examination of other factors yielded the discovery that L1 and L2 pairings (such as English and Spanish versus English and Japanese), as well as the amount of L2 use, played a substantial role in the success of learners (Birdsong & Molis, 2001). For example, studies have shown that when in immersion environments, children almost always use the second language more than adults (LLanes, 2010). Many children who are new immigrants to the United States are constantly surrounded by English and being forced to use it in school and elsewhere. They are unashamed to use this new language despite any mistakes they may make at first and soon surpass their parents who are most likely still speaking their native language at home. In this case, L2 use differs between the two age groups, so naturally, we see a difference in their resulting abilities. As stated by two leading scholars, Singleton and Muñoz, in the ongoing conversation of criticisms of the CPH, the "age of L2 onset [is] typically regarded as the crucial variable and other linguistic and contextual variables [are] often insufficiently taken into account," creating a "narrow scope of much research in this area" (Muñoz & Singleton, 2011). For this reason, we cannot conclude that the CPH is a significant indicator of success in a second language because the only examines one's age rather than all of the factors that develop alongside a maturing individual or are present for other reasons.

One of the most problematic areas in critical period research is the lack of definition given to terms such as "fluency," "proficiency," and "better learner." Without a clear definition of these ideas, we are left to wonder why it is that children that began L2 learning within the critical period are said to have stronger proficiency than those who begin L2 learning as adults if adults can still communicate well. Not even native speakers pass fluency tests with 100% accuracy, and grammatical and pronunciation inconsistencies are widespread among native speakers. In a popular study, J.S. Johnson and E.L. Newport, scholars from the University of Illinois, examined 46 native Korean and Chinese speakers ages 3-39 who had lived in the United States for 3-26 years. The study tested their proficiency in English. The results gave evidence that the earlier the person came to the U.S., the stronger their English proficiency was. The study's goal was to test whether or not the critical period exists and if it can be used to determine whether or not an individual will be successful in second language acquisition. Although the study supported this conclusion, there were also noticeable exceptions where late learners also had unexpectedly mastered English grammar structures. (Johnson & Newport, 1989). However, the real problem with this study was that it lacked a clear definition of proficiency and assumed that sounding like a native speaker was the goal of L2 learning. Some of the younger learners may have grasped some syntax concepts more readily than some adult learners, but does that mean they are more "proficient" as the study claims? And if they usually are, why does that mean they should be deemed

"better learners" than adults? Why should native-like proficiency be the yardstick for measuring learners? Simply, there are other factors at play regarding ability in learning a second language. Also, as will be discussed later, there is much evidence supporting the opposite conclusion of Newport and Johnson -- that age of onset does not have a significant effect on second language ability.

But let us examine the words often used to measure language learners. "Fluency," often synonymous with "proficiency," is defined by Dictionary.com as the ability "to speak and write quickly or easily in a given language." Furthermore, Kaponen and Riggenbach, two scholars add that "language is motion" as indicated by its definitions in other languages. For example, in German and Russian, the word "fluently" is translated as "runningly [sic]" and in Finnish it means "in a flowing or liquid manner" (Kaponen & Riggenbach, 2000). In English, the word "fluent" comes from the Latin word *fluentem* meaning "to flow." So being fluent only requires a certain ease of movement from word to word and in no way requires the speaker to never make a single grammatical mistake. We should not equate being fluent with being indistinguishable from native speakers because they constantly bend and break the rules of grammar and pronunciation.

Another factor often cited to endorse the Critical Period Hypothesis is accent. A 2009 study considered the accent "proficiency" levels of Spanish/Swedish bilinguals whose second language was Swedish. The study examined speakers who began L2 acquisition at ages 1-47 and claimed their speaking skills to be practically native-like. The subjects were examined by native Swedish speakers and many of the learners who began before age 12 (the supposed end of the CP) were perceived as native speaker and a minority of the learners who began after 12 were perceived as native speakers (but there were some). The surprising finding of this study was that after this listening portion with native speakers, the participants were tested extensively on their linguistic performance (accent) and most of the subjects who began learning *within* the critical period did *not* pass these tests (Abrahamsson & Hyltenstam, 2009). Abrahamsson and Hyltenstam show that native-like fluency in regards to accent is less achieved by learners who begin within the critical period than was previously thought.

Regardless, why are a native-like accent and perfect grammar the benchmarks for determining whether or not someone is "fluent" in a second language? There is absolutely "no intrinsic reason why the L2 user's attainment should be the same as that of a monolingual native speaker" (Singleton & Muñoz, 2011, pg. 11). After all, widespread languages like English have vastly different-sounding accents and dialects. An individual's accent merely indicates to the listener where they are from. Therefore, if it is not a hindrance to true communication, it should not be used as an indicator of fluency. That would be like an American using accent as a reason to say that Australians are not fluent in English when, of course, English is probably their first language. Instead of using native-like language levels to measure speakers' abilities in a second language, we should examine whether or not they can communicate with others in that language. After all, the goal of second language learning is not to become indistinguishable from a native speaker but to be understood.

In terms of the differences we *do* see in some studies between adult learners and child learners, these should not be used to say that any individual is a "better learner" than another. Lucia-Larissa Palea, a well-known researcher in the linguistics field, discusses how generalizations should not be made about whether or not someone is a better learner than another because every situation is different. She states:

> There is a common general belief that young persons are better language learners than adults, based on the fact that they gain easier mastery of a second language. However, many researchers dispute this assumption by questioning the concept of *better learner*. If we are to consider the speed of learning, no actual advantages have been found for young learners but rather for adults. Another variable involved could also be the type of learning task, as it can be over the cognitive capacity of young people (Palea, 2015).

Every individual has different levels of motivation, intelligence, circumstances, and resources when it comes to learning a second language.

But for the sake of argument, let us say that native-like fluency is an appropriate measure of success in a second language. The central ideas of the Critical Period Hypothesis claim that learning a language later in life is problematic because only prepubescent children can fully acquire a second language (Lenneberg, 1967). Therefore, if even one post-critical period L2 learner showed native-like fluency, then it would be sufficient to reject the CPH (Long, 1990). This very occurrence has shown up again and again in studies (Johnson & Newport, 1989) (Abrahamsson & Hyltenstam, 2009). So although these studies may have found evidence to support the CPH, the emergence of exceptions and the lack of consideration of other factors are more than enough to disprove the hypothesis.

In summary, many scholars have shown a neglect of important factors set apart from age when trying to show that the critical period is a significant hindrance to adult L2 learners. In light of this and evidence that shows the way that adult L2 learners are able to obtain grammar and vocabulary levels sufficient to communicate with native speakers, I have concluded that the critical period does not have a significant effect on the ultimate acquisition of a second language and should therefore not be widely accepted in the academic and educational spheres. For many adults, this so-called critical period seems a daunting obstacle to language learning, but my hope is that these findings will encourage them to keep trying. After all, "mastering a language is a difficult and complicated task at any stage in life, commonly requiring years of practice" (Strid, 2016). More significantly, these findings may contribute to the way we approach learning and teaching language. We know that adults learn language much differently than children, but we still need studies that can help us pinpoint what exactly is different and how we can use those differences to change the way we teach language to adults.

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