Imagine stepping off a ship from Germany after months of unrelenting seasickness and staking your feet into solid ground for the first time in a land you’ve dreamed about for years. What was once foreign is now your home, and what was once a vague dream is now an overwhelming reality. You look around anxiously for familiarity only to have your vision clouded by a madhouse of bustling strangers. They briskly saunter past you, carrying on with their own private business, unaware of your insignificant presence. Undesired emotions and anxieties begin to swirl throughout your mind, overtaking your optimistic hopes; you can’t help but wonder if it will be worth it. You are nervous and scared, but you continue to step forth deeper and deeper into America, with weak knees and pounding heart. You are alienated from the others because of an intimidating language barrier, yet your heart persistently reassures you that you are ready for the challenge ahead. Your churning stomach, however, would have you believe otherwise. You have finally made it to the United States and are now ready to begin a new way of life, a new culture, and significantly, a new language.

My great-grandparents and grandmother experienced a very similar scenario. They immigrated to the United States in 1931 from Weimar, Germany, and were forced to learn the English language fluently if they were to survive on their own and make a comfortable life in America. After many years, and after much practice and determined effort, they were able to do so. But for some reason, the English language was unmistakably easier and more natural for my grandmother to learn at the inexperienced age of six, than it was for my great-grandmother at the mature age of twenty-seven. The former speaks with a native American-like accent, while the latter could never disguise her strong Germanic upbringing.

My grandmother relayed that no matter how hard her mother tried, she could not purge herself of her obvious German accent. It stuck with her until she died just over ten years ago (Porter). Why is it that although they both immigrated to the United States at the same time, one was able to achieve an authentic, native-like
pronunciation, while the other was ultimately unable to do so? Much of this phenomenon is credited to the passing of what is called a Critical Period for language acquisition, as well as several other factors at work in making a second language difficult for adults to acquire.

**The Critical Period**

The Critical Period is a discrete window of opportunity when children find it easiest to acquire various language components (Baron 276). If a child begins learning a second language before the age of six, it is usually spoken without an accent. But, if learning is delayed until after the age of twelve, the language will be spoken with a foreign accent (Birdsong 101). The degree of detectable accent between the ages of six and twelve varies, becoming more noticeable with age. Research by Dr. Kenji Hakuta, a professor of education at Stanford University, indicates that the Critical Period exists somewhere between the age of six, such as my grandmother, and with the onset of puberty (Hakuta sec 1).

Language comes naturally without much thought or effort for young children. The brain skillfully captures the minute details and the complicated patterns involved in learning a language, as it trains the oblivious child to speak as though blessed with the gift of tongues. This process proceeds until the child’s biological clock strikes the final hour, and the brain’s receptivity for learning a specific language has ticked out of time (Asher 334). At that point, the brain gradually becomes less and less “plastic” and the lost neural plasticity halts second language learning (Flege, Yeni-Komshian, and Liu 79).

Studies confirm that everybody will eventually lose the mental tools required for learning the abstract patterns involved in language (DeKeyser 518). As we age, we lose any uncommitted brain capacity due to fairly general aspects of neurological maturation (Flege and Liu 528). Because of this, the brain structures used to learn and process language are lost and committed to carry out other specific functions (Flege, Yeni-Komshian, and Liu 79). It is interesting to note, however, that children who learn even a small portion of a second language during childhood, will “save” uncommitted brain capacity to acquire a second language later on in life (Westphal 90).

Children and adults process language differently as well. As Sarah Graham reported in the January 2002 issue of *Scientific American*:
Conventional wisdom holds that language acquisition in adulthood cannot rest on the same brain mechanisms used in processing a native language—that is, a language learned later in life is processed in a fundamentally different and less automatic way than is a mother tongue.

While young, the plasticity of the brain is still pliable and moldable, and the process of learning a language is still relatively unconscious and unreflective (Swain and Lapkin 152). When older, the brain parts have been committed to carry out specialized jobs creating an evident disadvantage. Because the plasticity of the brain has long since congealed into stiffer matter, an adult must muster forth a special conscious and reflective effort to succeed in pure fluency of a new language (Patkowski 74). McLaughlin gives a good example: “When the learner directs attention to speech, controlled working memory processes come into play and performance is likely to be interfered with—just as driving or typing are likely to be interfered with (or at least slowed down) when these automatic skills are given too much attention” (qtd. in Kennedy 490).

My grandmother had the great benefit of the specific learning mechanisms that the Critical Period encompasses, whereas my great-grandmother was left solely to her own conscious mental ability (Hakuta sec 6).

**Interference of First Language Factor**

Those learning a second language at an older age are bound to have difficulty due to interference of their first language. How well they learned to pronounce their first language, and how often they continue to speak it, will determine how much of an accent they keep (Birdsong 125). The retention of a foreign accent will also depend on how fully developed their first language was when they began learning the second language (Birdsong 105). This is because as we get older, we lose the capacity to adapt our brains to different pronunciations of sounds (vowels and consonants) (Birdsong 126). If certain sounds are not used in our native language, we are not likely to have mental categories for them. Paul Iverson of University College London concluded, “Our auditory systems get tuned up to be especially sensitive to the details critical in our own native language. When you try to learn a second language, those tunings may be inappropriate and interfere with your ability to learn the new categories” (Gibbs par 6). As Kathy Teng, my native Taiwanese neighbor explained, “I still don’t understand suffixes (e.g. ed, ing, etc.), because we don’t have those in the Chinese language” (Teng).
If the phonological system has already been established before the learning of the second language has begun, the first language will resist any kind of alteration or expansion to include any new sounds from the second language (Kennedy 483). The individual will over-rely on categories of speech from his first language, instead of developing new categories in the second (Bongaerts et al. 449). It’s as though the first language warps everything one hears later (Gibbs par 2).

Unlike my grandmother, my great-grandmother had already developed her mental categories for pronunciation of speech in the German language. Because of this, it was hard to hear the slight subtleties of the English language (Johnson sec 2). It was also difficult to associate the two because specific parts of the German language don’t exist in English, and vice-versa. If there is no equivalent system of determiners (e.g. a, the, some), then the unfamiliar snippet will be categorized with whatever is closest to that of the first language, thereby preserving the accent (Kennedy 485). Also, confusion is more prominent depending on how similar or dissimilar the two languages are. If the languages are similar, the learner is unlikely to notice the subtle differences that exist between two sounds (Bongaerts et al. 449). For example, vending machine might be mistaken for “wending” machine by a native German (Anderson), or a Japanese speaker may not be able to distinguish “river” from “liver” (Gibbs). This is due to the training of neural networks to devote more or fewer brain cells to distinguish different sounds, depending on the language (Gibbs). My grandmother can attest to this. She explains: “Many times I cannot hear specific sounds, and often I say words incorrectly because I truly can’t hear the small differences that exist between German and English.” She gives the example of adhesive tape. She thought for many years that the word was pronounced “hesive tape”, excluding the “ad” (Porter).

**Physical Factors**

Another reason why my great-grandmother was shadowed by her accent was because of physical constraints of muscles in her mouth. The pronunciation of speech has a “neuromuscular basis, requires neuromotor involvement, and has a physical reality” (qtd. in Bongaerts et al. 447). During childhood, the speech muscles are still malleable, contributing to an authentic native-like pronunciation (Hadley sec 4). This is much like a young athlete compared to an older one. When one is young the muscles are still fresh and trainable, but over time they become weak and stiff. Since speech involves hundreds of muscles, this gives a child a
considerable advantage over an adult. My neighbor Kathy Teng, an immigrant from Taiwan at the age of twenty-three, expressed that some sounds are more difficult to pronounce still to this day. “I just can’t make my mouth say what I’m thinking!” (Teng). My native-German grandmother agreed, claiming that certain letters such as ‘Q’ and ‘J’ are hard for her to pronounce (Porter).

**Affective Factors**

Affective factors such as motivation, anxiety, and self-confidence, are characteristics that might affect a person’s attitude towards learning (Twyford sec 4). Other variables like “empathy”, “ego-permeability”, and “perceived social distance”, also combine into various combinations to slow down learning by filtering input so it cannot reach the brain areas responsible for language acquisition (Long 275). All of these factors influence second language learning in unique ways for a child and for an adult.

There are two types of motivation: “integrative motivation” and “instrumental motivation.” “Integrative motivation” encourages one to catch onto the new language in order to become closer with or to identify oneself with the speakers of the target language. The other type, “instrumental motivation,” drives one to acquire the language for practical purposes, such as promoting one’s career (Hadley sec 4).

My great-grandmother was driven primarily by “instrumental motivation.” She wanted to learn the language for economic survival; she was aware that communication with other adults would be essential for her future success. My great-grandmother was so determined to learn the language well that she actually went to elementary school with her daughter (my grandmother). She learned the language at a first-grade level with a class full of six-year-olds. She sat beside my grandmother each day and struggled to soak up all the English she possibly could (Porter). My great-grandmother was highly motivated despite unpromising circumstances, which accounts for much of her later success with the English language. Skehan points out:

Although it is not always the case that high motivation leads to high achievement, it seems reasonable to say that motivation is nevertheless important for adult learners because, without motivation, it is difficult for them to continue the tedious and sometimes embarrassing task of learning a new language (qtd. In Hadley sec 6).
My grandmother on the other hand, emphasized “integrative motivation.” She said that what pushed her to learn the new language was her hope of making friends and her concerns of fitting in with the other children at school. Participating fully with peers is a major motivation among children learning a new language (Twyford sec 4). It wasn’t until later in her education that fluency in the English language became an important motivational factor for her academic success (Porter).

Regardless of the type of motivation present, there is an overarching conclusion that motivation is a key factor in the success of learning a new language at any age, and not just because of the enhancement of willpower. As Stevens points out, “Motivation can ease language learning by virtue of the association of the cortical processes responsible for language acquisition with parts of the limbic structure that are strongly involved in emotion” (560).

Anxiety also plays a major role in the success or failure of learning a new language. Low levels are associated with paths of ease and clarity. High levels can cause confusion. The more anxiety one develops, the trickier it will be to learn the language. It’s no wonder children are natural learners, and adults are not. Adults and adolescents are typically too fearful of failing and looking or sounding foolish in front of others. This concern often blocks optimal performance that could be achieved if one were in a completely relaxed state of mind (Twyford sec 4). A lot of this anxiety stems from feelings of personal inferiority and self-confidence issues. Learning a new language isn’t an effortless hobby, and almost anyone, to some degree, wishes to hide and protect his fragile ego from scrutiny. But if one is self-conscious about flubbing up and making silly slip-ups, one is unlikely to ask for clarification if something is not understood. This obviously impedes a person’s progression.

**Conversational Input Factors**

The type of conversational input received makes a difference in the language fluency ultimately attained. Children are once again at an advantage because they tend to receive better “tuned, linguistically less complex, and simplified input, providing them with more and clearer samples from which to learn the target language” (Long 275). It’s common knowledge that an adult will speak differently to a small child than he will when speaking with another adult. The conversation between an adult and a child will be less intricate and
abstract than a conversation between adults. Children are babied through the language process, whereas adults are expected to already know the basics. Because of this, adults are often slapped with comprehensive, confusing, and intricate conversational input, from which to draw conclusions based upon their limited knowledge of the new language. Nevertheless, in some cases this frustration may actually be a blessing in disguise. Studies have shown that if the input one receives is slightly above one’s current level of competence, he will be able to acquire the target language (qtd. in Hadley sec 3). So success may really depend on how large of a stretch conversational input is from familiarity.

Another dynamic of input is the amount received by an individual, and where one has the opportunity to practice it. One who has been instructed in a classroom to memorize splices of a foreign language may find his classroom-polished skills nearly useless in the foreign country. Interacting with the natives is an entirely different experience than what is taught in the classroom (Teng). Instead, one must have vast exposure to hear, learn, and use the language in a natural setting (Stevens 561). This takes practice, patience, and time. Research suggests that the longer an adult immigrant has been in the new country, the higher levels of overall proficiency in the new language he will have (Stevens 561).

**Domestic and Education Factors**

Age at immigration strongly affects domestic and education opportunities. My great-grandmother immigrated to the United States at the age of twenty-seven. She had already completed her formal education in Germany, and had married my greatgrandfather (a German himself), before arrival in the country. These details alone gave her less of an opportunity to excel in the English language because she had less available exposure to the natives. My grandmother, however, entered the country very early in life and began her education in an English-dominated school system. It has been proven that years of schooling in the U.S. are strongly associated with skill in the English language (Stevens 562). My grandmother was able to reach relatively higher levels of schooling, form more intimate social relationships with native English speakers (thus marrying my grandfather, a fluent English speaker), and participate more fully in American society (Stevens 563). She eventually spoke English exclusively in the home, whereas my greatgrandmother continued to speak German for practical purposes (Porter). Her experience supports Stevens’ conclusion that “age at immigration may be strongly
associated with immigrants’ life exposure in social settings and institutions that differentially encourage or
discourage second language learning” (563).

There are many factors that join forces to make second language acquisition more difficult for adults
than for children. It is disappointing to conclude that most, if not all, of these factors cannot be avoided. Once
the Critical Period has passed, there is no way to turn back the hands of time and start the developmental
process over again. Also, one cannot simply forget one’s native language; the first language is too strongly
developed and will undoubtedly interfere with the second language by habit. Physical constraints on the mouth
muscles also act to cut short any hope of native-like pronunciation. Once the muscles are formed, they cannot
be easily altered. And further, it is also very difficult to maintain a positive attitude and remain constantly
motivated throughout the long and frustrating process of learning a new language. And finally, one doesn’t
always have control over the conversational input received; one has to take whatever one can get. Opportunities
for adults simply aren’t the same as they are for children, and adults must surely put forth more effort if they are
to succeed at learning a second language.


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