5. First and Second Language Acquisition

By Professor Peter Robinson

I. Pre-listening

1. Discussion: What do you know about hypotheses in linguistics? A “hypothesis” is an idea or explanation that is based on facts, but is still not proven. It is usually the starting point for further research. In class, write down your answers to the following questions. Compare them with a partner. Be prepared to share them with the class.

   a. You have been learning English for many years, so, you probably know quite a lot about successful and unsuccessful methods of language learning. What’s your hypothesis for how people learn how to speak a language?

   b. Do you believe that all people learn language in the same sequence, no matter what the language? Why or why not?

   c. Under what circumstances do people fail to learn a language?

   d. How do you think you could prove your hypothesis?
2. Reading: For homework, read the following passage and answer the questions. Also, complete the vocabulary exercise.


The Critical Period Hypothesis

The idea that there is a specific and limited time period for language acquisition is referred to as the critical period hypothesis (CPH). There are two versions of the CPH. The strong version is that children must acquire their first language by puberty or they will never be able to learn it. The weak version is that language learning will be difficult and incomplete after puberty. The following case studies support either the weak or the strong version of the CPH.

Natural experiments: Victor and Genie

It is difficult to find evidence for the critical period hypothesis since all normal children are exposed to -- and acquire -- language at an early age. However, history has recorded a few “natural experiments” where children have been deprived of contact with language. One of the most famous cases is that of a child called Victor. François Truffaut created a film, L’enfant Sauvage (The Untamed Child) about him and about the efforts to teach him to speak.

In 1799, a 12-year-old boy was found wandering naked in the woods of Avignon in France. When captured, he was found to be completely wild, apparently having had no contact with humankind. A young doctor, Jean-Marc Gaspard Itard, devoted five years to the task of civilizing Victor and teaching him language.

Although Itard succeeded to some extent in developing Victor's sociability, memory, judgment, and all the functions of his senses, Victor remained unreceptive to all sounds except those which had meaning for him in the forest, such as the cracking of a nut, animal sounds, or the sound of rain. Victor only succeeded in speaking two words, his favorite food “lait” (milk) and his governess's frequent exclamation “O Dieu!” (Oh, God!). Moreover, his use of “lait” was only uttered when he saw a glass of milk. He could not be brought to call for the one object he was capable of naming. Even when Itard deprived Victor of milk in hopes of making him call for it, Victor never used the word to communicate. Finally, Itard gave up.

Another famous case of a child who did not learn language normally in her early years is that of Genie. Genie was discovered in 1970, a thirteen-and-a half-year-old girl who had been almost completely isolated, deprived, neglected, and abused since the age of 20 months. Because of the demands of a crazed father and the
submission and fear of her abused mother, Genie spent more than eleven years tied to a crib in a small, darkened room. Her father had forbidden his wife to speak to her and had only growled and barked at Genie. She was beaten every time she spoke or made any noise, and she had become completely silent. Genie was unsocialized, primitive, and under-developed physically, emotionally, and intellectually. Needless to say, she had no language.

After she was discovered, Genie was cared for and educated in the most natural surroundings possible, and to the fullest extent possible. With the participation of many teachers and therapists and a normal, loving foster home and special schools, Genie made progress in becoming socialized and cognitively normal. She developed deep personal relationships and a strong personality.

However, after five years of exposure to language, a period during which a normal child would have acquired a language system, Genie’s language contained many of the features of abnormal language development. These include a large gap between language comprehension and production, inconsistency in the use of grammatical forms, a slow rate of development, over-use of routine speech, and the absence of certain grammatical forms.

Genie’s language shared features shown by adults with brain damage who have had to re-learn language, by children in the earliest stage of language acquisition, and by chimps attempting to learn language. It is the most carefully documented and tested case of a child brought up in isolation, allowing linguists to study the CPH hypothesis.

Genie’s case seems to support a weak version of the critical period hypothesis, while Victor's case seems to support a strong version. However, it is difficult to support the CPH with examples from such unusual children because of the unknown circumstances of their early lives and what other factors such as social isolation or physical abuse might be contributing to their inability to learn language. For now, our evidence for the CPH is that every child learns language in a very similar way despite the differences between languages and cultures.
3. Reading Comprehension
   a. What is a “natural experiment”?

   b. What was the difference between the amount of language learning achieved by the two children?

   c. Why is the CPH still unproved?

4. Vocabulary
Write a definition of the key words found in the pre-reading. Use each in a sentence.

<table>
<thead>
<tr>
<th>Acquisition</th>
<th>Crazed</th>
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</thead>
<tbody>
<tr>
<td>Abnormal</td>
<td>Circumstances</td>
</tr>
<tr>
<td>Foster</td>
<td>Versions</td>
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<tr>
<td>Abused</td>
<td>Therapists</td>
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<tr>
<td>Primitive</td>
<td>Deprived</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>Neglected</td>
</tr>
<tr>
<td>Cognitively</td>
<td>Isolation</td>
</tr>
</tbody>
</table>

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II. Listening
1. Listen to part of the introduction about Second Language Acquisition and fill in the blanks.

OK, today I’m going to 1.__________ first and second language acquisition in particular the question of whether first language 2.__________ is the same as, or similar to second 3.__________ acquisition.

This is a 4.__________ interesting question and 5.__________ interesting as well. A theory of second language acquisition attempts to explain the 6.__________ involved in the process of second language learning, usually for adults. And so if we find that second language acquisition and first language acquisition take place as a 7.__________ the same mechanisms, that 8.__________ to the theory of SLA (Second Language Acquisition).

It’s a practically 9.__________ question too, because…huh…in classrooms, we want to know what the best 10.__________ for language learning is. And so, if second language learning is the same as first language learning a good option is to 11.__________ the environment that the child had when they were learning their first language. And in fact, some second language teachers and people who 12.__________ second language teaching and 13.__________ do think that first and second language acquisition are the same process and they do try to recreate the environment in the 14.__________ that the child had as a learner. So, there are theoretical and practical 15.__________…huh…that follow from this issue.

Select the missing words or phrases from the following list:
talk about acquisition language theoretically
consequences result of contributes interesting
practically mechanisms environment think about
recreate classroom pedagogy
2. In the next section, the speaker explains the 5 areas he will cover in his lecture. They involve differences between the way children and adults learn their first language, and adults learn a second language. Make an outline of the talk along with any supporting details that you’re able to catch.

a. Topic:
   Supporting Details:

b. Topic:
   Supporting Details:

c. Topic:
   Supporting Details:

d. Topic:
   Supporting Details:

e. Topic:
   Supporting Details:
III. Note-taking by editing the main points

“So what I’m going to do now, then, is go back in more detail and talk about each of these five things, child versus adult cognitive differences. For the first basic difference between child and adult is their ability to pay attention to things. When children are learning a language, remember this takes place by and large, for children, language learning is largely complete by the age of four years. And within those four years, children are developing other cognitive abilities, too. When children are zero, or one, or two, or even three years old, they’re not able to maintain voluntary attention. So voluntary attention means attention that you can control, that you choose to pay to things. So for example, when you decide to…when adults decide to revise for an exam, they spend time concentrating on things that they have to learn. When adults take part in conversations, they spend time, they pay attention to other people who are speaking in the conversation. Children are very bad at allocating voluntary attention.”

1. First, cross out the words that are not the main words.
2. Next, cross out any words or phrases that have been repeated.
3. Cross out sentences that do not contain main ideas.
4 Finally, reduce this paragraph to three sentences.

IV. Supporting an Idea with an Example

Take notes on the next example mentioned by the speaker on the videotape. Compare your results with a classmate.
V. Fill in the Table comparing adults and children learning a language

<table>
<thead>
<tr>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td></td>
</tr>
<tr>
<td>a. Memorizing lists of words</td>
<td>a. Memorizing lists of words</td>
</tr>
<tr>
<td>b. Phonological memory</td>
<td>b. Phonological memory</td>
</tr>
<tr>
<td>c. Metalinguistic awareness</td>
<td>c. Metalinguistic awareness</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>2)</td>
<td></td>
</tr>
<tr>
<td>d. ultimate attainment</td>
<td>d. ultimate attainment</td>
</tr>
<tr>
<td>e. brain lateralization</td>
<td>e. brain lateralization</td>
</tr>
</tbody>
</table>
VI. Paragraph Writing: Language Development in Adults and Children

Write a 10-sentence paragraph contrasting language development in adults and children. Choose three or four of the differences for your paragraph. Use appropriate transition words such as “on the other hand,” “in contrast,” “however,” “although,” “though,” “while,” and “but.” Later, you will be asked to compare your paragraph with those of other students. Your teacher may ask you to write your paragraphs on the blackboard.

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VII. Note-taking by editing the main points

“So how can we explain the fact that children’s ultimate attainment is high and adults’ is very low, or not necessarily high? Huh…One explanation has been something called ‘the critical period.’ And to explain the critical period, I have to, unfortunately, show you a picture of the brain. Now, I’m not a very good artist, but, basically, this is a brain, you know, the stuff inside a head. And we know that for children, when they’re born, that language learning takes place in all areas of the brain. The brain is undifferentiated. Yeah? By the age of seven years…by the age of seven years, the adult brain, believe it or not, your brain, has divided into two halves, pretty much like a walnut. Yeah? And these two halves are connected by…by a little passageway. And so during the period from zero to seven years, the child’s brain is actually altering structurally. And what happens is that the brain divides into two halves, and the left half is responsible for language. Yeah? The left half is responsible for language. So, and this is a little joke, don’t take me seriously, take very good care of the left side of your head if you want to learn a second language, because it’s the side of your head that does the most work when you’re learning a second language. OK…huh…I can’t go into any detail about this, but by the age of seven, lateralization has taken place in the child.”

1. First, cross out the words that are not the main words.
2. Next, cross out any words or phrases that have been repeated.
3. Cross out sentences that do not contain main ideas.
4. Finally, reduce this paragraph to three sentences.
VIII. Listening for numbers

We know that before the age of ____________ if you are to begin learning a language, you have a ____________ percent, cash-back guarantee that you will be successful—and become like a native speaker—after the age…after the age of ____________, up to the age of ____________, the guarantee becomes less and less reliable. So if you begin to learn a second language after the age of ____________, just after, you’ve got a ____________ percent chance of becoming a native speaker. If you begin to learn a second language before just around the age of ____________, let’s say, you’ve got a ____________ percent chance.

IX. Noting Sentences

Cloze: Listen and write down the missing phrases.

So there are three linked things left to talk about differences between children and adults in second language learning. ________________________________.

We…I’ll make a distinction here between rate and route of development. Rate and route. So rate means the speed by which you learn a second language, ________________________________.

Let me illustrate rate and route with a little diagram. Huh…we can say that it’s pretty much like…huh…______________________________.

We know that for first and second language learners, the route, the direction of second and first language learning are pretty much fixed.

______________________________ in a certain order. One example in English is that you will learn a morpheme like “ing” at the end of verb “run.”

______________________________ before they are able to learn a morpheme like “I go,” “you go,” “he goes” like this. So this is learned early, at this
point on the route, and this one is learned much later, at this point on the route.

That the route or direction you take is constrained, not only in English, but in Japanese, Swahili, Estonian, and other languages, too.

Now, children pretty much, so this is the route, children pretty much all progress at the same rate. So that, by the age of four years, they’ve reached the end and they all begin it at the age of zero years. is very similar for children. But here’s the difference with adults. and can quickly leave behind some people who are much slower. So, in terms of amount of variation, we find no variation for first or second language learners in the route of development, the direction they take. , quite a lot of variation for adults in terms of the rate of development.

X. Noting Examples
Please explain the following two terms using the example described on the video.

1. Explicit Negative Correction

2. Implicit Negative Correction

3. Affective factors
XI. Comprehension Questions
1. According to the speaker, why is it more important for children to learn a language than adults?

2. Why does he think adults have more anxiety about language learning than children?

XII. Outlining the Lecture
Listen to the whole tape. Put the following points into the correct sequence.

INTRODUCTION
a. _________ This is both a theoretically and practically interesting question.

b. _________ They are similar but fundamentally different in five areas.

c. _________ Is first language acquisition the same as second language acquisition?

A BRIEF SUMMARY OF DIFFERENCES
d. _________ Furthermore, they differ in whether negative evidence and correction are effective or not.

e. _________ Another difference is their levels of ultimate attainment.

f. _________ The difference between child and adult language acquisition is a cognitive difference.

g. _________ The final one is the role of affective factors.

h. _________ An additional one is the amount of variation that language learners experience.
COGNITIVE DEVELOPMENT
i. ________ Children have poorly developed voluntary attention whereas adults are better at it.

j. ________ Adults have metacognitive awareness but children don’t.

k. ________ Children have better phonological memory than adults.

l. ________ Adults have better explicit memory than children.

ULTIMATE ATTAINMENT
m. ________ A child’s level of ultimate attainment is very high because they learn their first language before their brain gets differentiated by the age of seven.

n. ________ The period from the age of seven up to twelve is called “the critical period” for second language learning, after which the possibility of becoming a native speaker declines dramatically.

o. ________ Children and adults differ in the highest level they can reach in language learning.

VARIATION
p. ________ Teaching can not really change the route of second language learning but can speed up the rate of acquisition.

q. ________ The rate, the speed by which they learn languages is very similar for children, but varies for adults.

r. ________ The route, the direction of first and second language learning is generally the same.

NEGATIVE EVIDENCE AND CORRECTION
s. ________ Adults receive and can respond to explicit negative correction because they have metacognitive and metalinguistic awareness with which they can think about language.

t. ________ When learning their first language, children do not get explicit negative correction but some implicit negative correction.
THE ROLE OF AFFECTIVE FACTORS
u. _________ Children’s motivation for learning their language is that they need it to live, and their motivation is much greater than for adults.
v. _________ Children do not get anxious when learning their first language, whereas adults often do when learning their second language.

CONCLUSION
w. _________ First and second language learning are really different processes.

XIII. Post-listening
1. Imagine that you are going to interview someone who is bilingual. Prepare a series of questions for them, using complete sentences, in order to test “the critical period theory.” Use the following terms or phrases in your questions:

   a. age of exposure to the language

   b. accent

   c. country

   d. language

   e. length of time

   f. school

   g. difficulties
2. Compare your questions with a partner. Edit them for clarity and grammatical correctness.

3. Interview two classmates using the questions. Then, let them interview you. (If there is no one in your class who studied a second language before the critical age, the teacher will ask some students in the class to pretend that they have learned other languages -- for example, English, French, Chinese, or Russian -- and prepare answers to the questions.)

4. In a small group, discuss the following statements and decide whether your group agrees or disagrees with them.

   a. Being a bilingual student is an advantage in Japan.

   b. Other students discriminate against bilingual students.

   c. It would be a good thing to introduce second language instruction in kindergarten.

   d. Rank the following languages in terms of difficulty (1-easiest to 5-hardest)
      - Chinese
      - Russian
      - Japanese
      - German
      - French
      - English

   e. Rate the list in terms of usefulness in trade in the world (1--most useful to 5 least useful) Try to find information on the Web to back up your ordering.