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Applied Linguistics – LANE 423

# Chapter 3: Age and Acquisition

Spring 2011 | Lecturer: Haifa Alroqi

## Introduction

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- Today the applications of research findings in first language acquisition are widespread.
- In language arts education, for example, it is not uncommon to find teacher trainees studying first language acquisition, particularly acquisition after age 5, in order to improve their understanding of the task of teaching language skills to native speakers.
- In foreign language education, most standard text and curricula now include some introductory material on first language acquisition. The reasons for this are clear:
  - We have all observed children acquiring their **first language** easily and well,
  - yet the individuals learning a **second language**, particularly in an educational setting, can meet with great difficulty and sometimes failure.

## Introduction cont.

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**This chapter addresses some of the following questions:**

- How should second language teachers interpret the many and sometimes conflicting findings of first language (L1) research?
- Do childhood and adulthood, and differences between them, hold some keys to SLA theories?
  - L1acquisition ---------- childhood
  - SLA ---------- childhood/ adulthood

## Dispelling Myths

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The first step in investigating age and acquisition might be to dispel some myths about the relationship between first and second language acquisition.

## Dispelling Myths cont.

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H. H. Stern (1970) summarized some common arguments that have been raised from time to time to recommend a second language teaching method on the basis of L1 acquisition:

1. In language teaching, we must practice and practice, again and again. Just watch a small child learning his mother tongue. He repeats things over and over again. During the language learning stage he practices all the time. This is what we must also do when we learn a foreign language.

## Dispelling Myths cont.

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2. Language learning is mainly a matter of imitation. You must be a mimic. Just like a small child. He imitates everything.
3. First, we practice the separate sounds, then words, then sentences. That is the natural order and is therefore right for learning a foreign language.
4. Watch a small child's speech development. First he listens, then he speaks. Understanding always precedes speaking. Therefore, this must be the right order of presenting the skills in a foreign language.

## Dispelling Myths cont.

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5. A small child listens and speaks and no one would dream of making him read or write. Reading and writing are advanced stages of language development. The natural order for first and second language learning is listening, speaking, reading, and then writing.
6. You did not have to translate when you were small. If you were able to learn your own language without translation, you should be able to learn a foreign language in the same way.
7. A small child simply uses language. He does not learn formal grammar. You don't tell him about verbs and nouns. Yet he learns the language perfectly. It is equally unnecessary to use grammatical conceptualization in teaching a foreign language.

## Dispelling Myths cont.

8

There are flaws in each of the seven statements

- Sometimes the flaw is in the assumption behind the statement about L1 learning
- Sometimes it is in the comparison or implication that is drawn
- Sometimes it is in both

## Dispelling Myths cont.

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- These views tend to represent the views of those who were dominated by a behavioral theory of language.
- As cognitive and constructivist research on first language acquisition gathered momentum, second language researchers and foreign language teachers began to recognize the mistakes in drawing direct comparisons between first and second language acquisition.

## Types of Comparison and Contrast

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- The comparison of first and second language acquisition can easily be oversimplified.
- At the very least, one needs to approach the comparison by first considering the differences between children and adults

## Types of Comparison and Contrast cont.

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- It is, in one sense, illogical to compare the **first** language acquisition of a **child** with the **second** language acquisition of an **adult**.
- It is much more logical to compare
  - **first and second language learning in children**
  - or **second language learning in children and adults**.
- Child L1 acquisition and adult SLA are important categories of acquisition to compare though.

## Types of Comparison and Contrast cont.

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| | CHILD | ADULT |
|---|---|---|
| L1 | C1 | A1 |
| L2 | C2 | A2 |

L1 = First Language
L2 = Second Language
C = Child
A = Adult

FIGURE 3-1. First and second language acquisition in adults and children

- The figure represents four possible categories to compare, defined by age and type of acquisition.

## Types of Comparison and Contrast cont.

13

| | CHILD | ADULT |
|---|---|---|
| L1 | C1 | A1 |
| L2 | C2 | A2 |

- **Cell A1** is clearly representative of an **abnormal situation.** There have been few recorded instances of an adult acquiring a first language. e.g. Genie, a thirteen year-old girl who had been socially isolated and abused all her life until she was discovered, and who was then faced with the task of acquiring a first language.

## Types of Comparison and Contrast cont.

14

| | CHILD | ADULT |
|---|---|---|
| L1 | C1 | A1 |
| L2 | C2 | A2 |

The other three cells:

1. 1st & 2nd language acquisition in children (C1-C2), holding age constant, and manipulating the language variable
2. 2nd language acquisition in children + adults (C2-A2), holding language constant, and manipulating the age variable
3. 1st language acquisition in children + 2nd language acquisition in adults (C1-A2), manipulating both variables! (Many of the traditional comparisons were of this type.)

## The Critical Period Hypothesis

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- Most discussions about age and acquisition center on the question:

  Is there a critical period for language acquisition?
- What do we mean by a **critical period** for language acquisition?
- A biologically determined period of life when language can be acquired more easily and beyond which time language is increasingly difficult to acquire.

## The Critical Period Hypothesis

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- The **Critical Period Hypothesis (CPH)** claims that there is such a biological timetable.
- Initially, the notion of a critical period was connected only to L1 acquisition.
- In recent years, a large amount of research has appeared on the possible applications of the CPH to SLA.
- The classic argument is that a critical point for SLA occurs around **puberty**, and that, beyond it, people seem to be relatively incapable of acquiring a second language.

## The Critical Period Hypothesis cont.

17

- This has led some to assume, *incorrectly*, that by the age of 12 or 13, you are "over the hill" when it comes to the possibility of successful second language learning.
- Such an assumption must be viewed in the light of
  - What does being "**successful**" in learning a second language really mean?
  - How important is the role of ***accent*** as a component of success?

## The Critical Period Hypothesis cont.

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To examine these issues, we will look at:

- neurological considerations
- phonological considerations
- cognitive considerations
- affective considerations
- linguistic considerations

## Neurological Considerations

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- The study of the function of the brain in the process of acquisition is one of many promising areas of inquiry.

## Hemispheric Lateralization

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- Does the maturation of the brain at some stage decrease the language acquisition ability?
- Some scholars suggest that the **lateralization** of the brain is the key to answer this question.
- What is **lateralization**?
- Brain lateralization means the brain functions are divided up between the left and right brain hemispheres.

## Hemispheric Lateralization cont.

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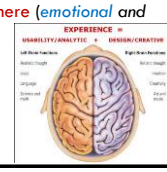
There is evidence in neurological research that **as the human brain matures,**

- certain functions are assigned, or "lateralized," to the left hemisphere of the brain (*intellectual*, *logical*, and *analytic* functions)
- and certain other functions to the right hemisphere (*emotional* and *social* needs).




## Hemispheric Lateralization cont.

22

- **Language** functions appear to be controlled **mainly in the left hemisphere**
- In general, a stroke or accident victim who suffers a lesion in the left hemisphere will manifest some language impairment, which is less often the case with right hemisphere lesions.

## Hemispheric Lateralization cont.

23

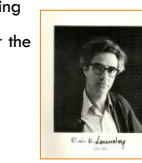
Second language researchers were interested in finding out:

- How language is lateralized in the brain?
- When does lateralization take place?
- Does the lateralization process affect language acquisition?

## Hemispheric Lateralization cont.

24

- Eric Lenneberg (1967) and others suggested that lateralization is a **slow process** that **begins** around the **age of two** and is **completed** around **puberty**.
- During this time the child is neurologically assigning functions little by little to one side of the brain or the other; included in these functions, of course, is language.



## Hemispheric Lateralization cont.

25

Thomas Scovel (1969) proposed a relationship between **lateralization** and **SLA**:

He suggested

- that the plasticity of the brain prior to puberty enables children to acquire not only their first language but also a second language
- and that possibly it is the process of lateralization that makes it difficult for people to be able ever again to easily acquire **fluent control** of a second language, or at least to acquire it with an **"authentic" (nativelike) pronunciation**.

## Hemispheric Lateralization cont.

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Much of the neurological argument centers on the ***time*** of lateralization.

- While Lenneberg argued that lateralization is **complete around puberty**,
- Norman Geschwind (1970), among others, suggested **a much earlier age**.

- Stephen Krashen cited research to support the completion of lateralization **around age five**.
- Scovel cautioned against assuming, with Krashen, that lateralization is complete by age five. He argued, "One must be careful to distinguish between 'emergence' of lateralization (at birth, but quite evident at five) and 'completion' (only evident at about puberty).

## Biological Timetables cont.

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- Walsh and Diller (1981) concluded that different aspects of a second language are learned the best at different ages:
  - **Lower-order processes** such as pronunciation are dependent on early maturing and less adaptive macroneural circuits, which makes foreign accents difficult to overcome after childhood.
  - **Higher-order language functions**, such as semantic relations, are more dependent on late maturing neural circuits.

## Biological Timetables cont.

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- This conclusion has been supported by more recent findings.
- So, now we are left with some support for:
  - a neurologically based critical period for the acquisition of an authentic (native-like) accent
  - But not very strongly for the acquisition of communicative fluency and other "higher-order" processes.

## Right-hemispheric Participation

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Another branch of neurolinguistic research focused on the role of the right hemisphere in the acquisition of a second language.

## Right-hemispheric Participation cont.

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Loraine Obler (1981) noted :

- In second language learning, there is significant right hemisphere ***participation.***
- This participation is particularly active during the **early stages of learning** the second language.
- But this "participation," to some extent, consists of what is defined as "strategies" of acquisition such as the strategy of guessing at meanings.

## Right-hemispheric Participation cont.

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- Genesee (1982) concluded that there may be greater right hemisphere involvement in language processing in
  - bilinguals who acquire their L2 late relative to their L1.
  - bilinguals who learn their L2 in informal contexts.
- While this conclusion may appear to contradict Obler's statement, it does not. Obler found support for more right hemisphere activity during the early stages of second language acquisition, but her conclusions were drawn from a study of seventh-, ninth-, and eleventh-grade subjects-all postpubescent.

## Right-hemispheric Participation cont.

32

- Such studies seem to suggest that second language learners, particularly adult learners, might benefit from more encouragement of right-brain activity in the classroom context.

## Anthropological Evidence

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- Some adults have been known to acquire an authentic accent in a second language after the age of puberty, but such individuals are few.
- Anthropologist Jane Hill (1970) provided a response to Scovel's (1969) study by citing anthropological research on non-Western societies that yielded evidence that adults can, in the normal course of their lives, acquire second languages perfectly.

## Anthropological Evidence cont.

34

One unique instance of SLA in adulthood was reported by Sorenson (1967), who studied the **Tukano culture of South America**.

- At least 24 languages were spoken among these communities, and each tribal group, identified by the language it speaks, is an exogamous unit (i.e. people must marry outside their group) and for this, they almost always marry someone who speaks another language.

## Anthropological Evidence cont.

35

- Sorenson reported that during adolescence, individuals actively and almost suddenly began to speak two or three other languages to which they had been exposed at some point.
- Field observation indicates that as a person approaches old age, he will go on to perfect his knowledge of all the languages available for him.

## Anthropological Evidence cont.

36

Hill (1970) asserts that:

- The language acquisition situation seen in adult language learners in the largely monolingual American English speech communities may have been inappropriately taken to be a universal situation
- Multilingual speech communities of various types deserve careful study.
- We will have to explore the influence of other factors such as the social and cultural ones and of attitudes as an alternative or a supplement to the cerebral dominance theory.

## Anthropological Evidence cont.

37

- Hill's challenge was taken up in subsequent decades.
- Flege (1987) and Morris and Gerstman (1986), for example, cited motivation, affective variables, social factors, and the quality of input as important in explaining the clear advantage of the child.

## Phonological Considerations

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## The Significance of Accent cont.

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- Given the existence of several hundred muscles (throat, larynx, mouth, lips, tongue, etc) that are used in the articulation of human speech, a tremendous degree of muscular control is required to achieve the fluency of a native speaker of a language.
- At birth the speech muscles are developed only to the extent that the larynx can control sustained cries.

## The Significance of Accent cont.

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- These speech muscles gradually develop
- Control of some complex sounds in certain languages is sometimes not achieved until after age five (e.g. in English, the *r* and *l* are typical)
- Although complete phonemic control is present in virtually all children before puberty.

## The Significance of Accent cont.

41

- Research on the acquisition of authentic control of the **phonology** of a foreign language supports the notion of a critical period.
- Most of the evidence indicates that persons beyond the age of puberty do not acquire an **authentic** (native-speaker) pronunciation of the second language.

## The Significance of Accent cont.

42

- There have been of course exceptions.
- However, these exceptions appear to be:
  - isolated instances
  - only anecdotally supported

## The Significance of Accent cont.

43

- There are special people who possess the ability to override neurobiological critical period effects and to achieve a almost perfect native like pronunciation of a foreign language.
- But in terms of statistics, it is clear that the chances of any individual commencing a second language after puberty and achieving a scientifically verifiable authentic native accent are extremely small.

## The Significance of Accent cont.

44

- There are a number of sample studies on adult phonological acquisition that appear to contradict the strong version of the CPH.

## The Significance of Accent cont.

45

- Gerald Neufeld (1977, 1979, 1980, 2001) undertook a set of studies to determine to what extent adults could approximate native-speaker accents in a second language never before encountered.

## The Significance of Accent cont.

46

- In his earliest experiment, 20 adult native English speakers were taught to imitate ten utterances, each from one to sixteen syllables in length, in Japanese and in Chinese.

## The Significance of Accent cont.

47

- Native-speaking Japanese and Chinese judges listened to the taped imitations. The results indicated that:
  - eleven of the Japanese imitations
  - nine of the Chinese imitations

  were judged to have been produced by "native" speakers.

## The Significance of Accent cont.

48

- While Neufeld recognized the limitations of his own studies, he suggested that:
  - older students have neither lost their sensitivity to subtle differences in sounds, rhythm, and pitch
  - nor the ability to reproduce these sounds.

## The Significance of Accent cont.

49

- In more recent years, Moyer (1999) and Bongaerts, Planken, and Schils (1995) have also challenged the strong version of the CPH.
- Moyer's study with native English-speaking graduate students of German supported the strong CPH: subjects' performance was not judged to be comparable to native speakers of German.

## The Significance of Accent cont.

50

- The Bongaerts et al. study reported on a group of adult Dutch speakers of English, all late learners,
- They recorded:
  - a monologue
  - a reading of a short text
  - readings of isolated sentences
  - Readings of isolated words

Some of the non-native performances, for some of the trials, were judged to have come from native speakers.

## The Significance of Accent cont.

51

- Scovel (1997) argued that it was also the case that many native speakers of English in their study were judged to be nonnative!

## The Significance of Accent cont.

52

- All these studies have thus left the strong CPH unchallenged.

## The Significance of Accent cont.

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H. Douglas Brown's (2007) Conclusions

- Upon reviewing the research on age and accent acquisition shows that there is persuasive evidence of a critical period for accent, but for accent only!
- It is important to remember in all these considerations that pronunciation of a language is not the sole criterion for acquisition, nor is it really the most important one.
- We all know people who have less than perfect pronunciation but who also have magnificent and fluent control of a second language, control that can even exceed that of many native speakers.

## The Significance of Accent cont.

54

- A modern version of this phenomenon might be called the "Arnold Schwarzenegger Effect" (after the actor-turned-governor in California), whose accent is clearly noticeable yet who is as linguistically proficient as any native speaker of American English.
- The acquisition of the communicative and functional purposes of language is, in most circumstances, far more important than a perfect native accent.

## The Significance of Accent cont.

55

- Perhaps, in our everyday encounters with second language users, we are too quick to criticize the "failure" of adult second language learners by nitpicking at minor pronunciation points or grammatical errors.
- Instead of being so concerned about how bad people are at learning second languages, we should be fascinated with how much those same learners have accomplished.

## The Significance of Accent cont.

56

Today researchers are continuing the quest for answers to child-adult differences by looking beyond simple phonological factors:

- Bongaerts et al. (1995) found results that suggested that certain learner characteristics and contexts may work together to override the disadvantages of a late start.
- Slavoff and Johnson (1995) found that younger children (ages seven to nine) did not have a particular advantage in rate of learning over older (tentwelve-year-old) children.

## Cognitive Considerations cont.

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- Human cognition develops rapidly throughout the first sixteen years of life and less rapidly thereafter.
- Some cognitive changes are critical; others are more gradual and difficult to detect.

## Cognitive Considerations cont.

58

Jean Piaget (1972, 1955, 1969) outlined the course of intellectual development in a child through various stages:

- Sensorimotor stage [birth to 2]
- Preoperational stage [ages 2to 7]
- Operational stage [ages 7 to 16]
  - Concrete operational stage [ages 7 to 11]
  - Formal operational stage [ages 11to 16]

* To understand each stage, please visit the video links on my website

## Cognitive Considerations cont.

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## Cognitive Considerations cont.

60

- It has been observed that children do learn second languages well without the benefit-or hindrance-of formal operational thought.
- So, does this capacity of formal, abstract thought have a facilitating or inhibiting effect on language acquisition in adults?

## Cognitive Considerations cont.

61

- According to Piaget's outline, a critical stage for a consideration of the effects of age on SLA appears to occur at puberty (age 11 in his model).
- It is here that a person becomes capable of abstraction, of formal thinking which exceeds concrete experience and direct perception.
- Cognitively, then, a strong argument can be made for a critical period of language acquisition by connecting language acquisition and the concrete/formal stage transition.

## Cognitive Considerations cont.

62

- Singleton and Ryan (2004) offer a number of objections to connecting Piagetian stages of development with critical period arguments:
  - Vagueness
  - Lack of empirical data

## Cognitive Considerations cont.

63

- Ausubel (1964) further supported this consideration by stating that adults may in fact benefit from certain grammatical explanations and deductive thinking that would be pointless for a child.
- The benefits of such explanations however, depends on the suitability and efficiency of the explanation, the teacher, the context, and other pedagogical variables.

## Cognitive Considerations cont.

64

- Young children are generally not "aware" that they are acquiring a language.
- nor are they aware of societal values and attitudes to one language or another.
- It is said that "a watched pot never boils"; is it possible that a language learner who is too consciously aware of what he or she is doing will have difficulty in learning the second language?
- Do you agree?

## Cognitive Considerations cont.

65

- You may be tempted to answer that question affirmatively, but there is both logical and anecdotal counterevidence.
  - Logically, a superior intellect should facilitate highly complex intellectual activities
  - Anecdotal evidence shows that some adults who have been successful language learners have been very much aware of the process they were going through, even to the point of utilizing self-made model and other fabricated linguistic devices to facilitate the learning process.

## Cognitive Considerations cont.

66

- So, if mature cognition holds back successful SLA, clearly some intervening variables allow some persons to be very successful second language learners after puberty.
- These variables may in most cases lie outside the cognitive domain entirely, perhaps more centrally in affective-or emotional-domain.

## Cognitive Considerations cont.

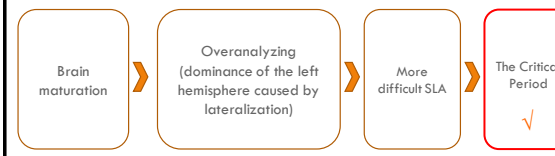
67

Lateralization:

- The lateralization hypothesis may provide another key to cognitive differences between child and adult language acquisition.
- As the child matures into adulthood, the left hemisphere (which controls the analytical and intellectual functions) becomes more dominant than the right hemisphere (which controls the emotional functions).
- It is possible that the dominance of the left hemisphere contributes to a tendency to overanalyze and to be too intellectually centered on the task of second language learning.

## Cognitive Considerations cont.

68




## Cognitive Considerations cont.

69

Equilibration:

Another construct that should be considered in examining the cognitive domain is the Piagetian notion of equilibration.

- Equilibration is defined as "progressive interior organization of knowledge in a stepwise fashion"
- Cognition develops as a process of moving from the states of doubt and uncertainty (*disequilibrium*) to stages of resolution and certainty (*equilibrium*) and then back to further doubt that is also resolved. And so the cycle continues.

## Cognitive Considerations cont.

70

Piaget (1970) claimed

- that conceptual development is a process of progressively moving from states of disequilibrium to equilibrium
- and that periods of disequilibrium mark almost all cognitive development up through age 14 or 15, when formal operations finally are firmly organized and equilibrium is reached.

## Cognitive Considerations cont.

71

- It is believed that disequilibrium may provide significant motivation for language acquisition: language interacts with cognition to achieve equilibrium.
- Perhaps until that state of final equilibrium is reached, the child is cognitively ready and eager to acquire the language necessary for achieving the cognitive equilibrium of adulthood.
- That same child was, until that time, decreasingly tolerant of cognitive ambiguities

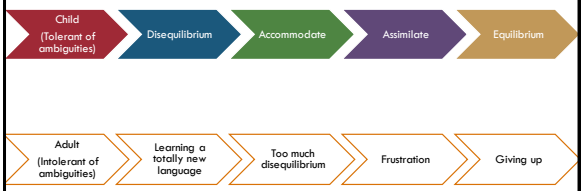
## Cognitive Considerations cont.

72

- Children are amazingly indifferent to contradictions, but intellectual growth produces an awareness of ambiguities about them and heightens the need for resolution.
- Perhaps a general intolerance of contradictions produces an acute awareness of the enormous complexities of acquiring an additional language,
- and perhaps around the age of 14 or 15, the prospect of learning a second language becomes overwhelming, thus discouraging the learner from proceeding a step at a time as a younger child would do.

## Cognitive Considerations cont.

73




## Cognitive Considerations cont.

74

Rote and meaningful learning:

The final consideration in the cognitive domain is the distinction that Ausubel made between rote and meaningful learning.

- Ausubel noted that people of all ages have little need for rote, mechanistic learning that is not related to existing knowledge and experience.
- Rather, most items are acquired by meaningful learning, by relating new items and experiences to knowledge that exists in the cognitive framework.
- It is a myth to say that children are good rote learners, that they make good use of meaningless repetition and mimicking.

## Cognitive Considerations cont.

75

Rote and meaningful learning:

- Adults have developed even greater concentration and so have greater ability for rote learning, but they usually use rote learning only for short-term memory or for somewhat artificial purposes.
- So, foreign language classrooms should not become the locus of excessive rote activity: rote drills, pattern practice without context, rule recitation, and other activities that are not in the context of meaningful communication.

## Affective Considerations

76

- Human beings are emotional creatures. So, it is logical to look at the affective (emotional) domain for some of the most significant answers to the problems of contrasting the differences between first and second language acquisition.
- Research on the affective domain in SLA has been mounting steadily for a number of decades.
- Linguists want to discover if, in the affective side of human behavior, there lies an explanation to the mysteries of language acquisition.

## Affective Considerations cont.

77

- There are many factors that can be relevant to second language learning: empathy, self-esteem, extroversion, inhibition, imitation, anxiety, attitudes, etc.
- We are only going to look briefly at three selected affective factors as they relate to the age and acquisition issue:
  - Egocentricity
  - Attitude
  - Peer pressure

## Affective Considerations cont.

78

Egocentricity:

- Small babies at first do not even distinguish a separation between themselves and the world around them.
- Very young children are highly egocentric.
- As children grow older they become more aware of themselves, more self-conscious as they seek both to define and to understand their self-identity.
- Preadolescence children develop an acute consciousness of themselves as separate and identifiable entities but ones which, in their still-wavering insecurity, need protecting. They therefore develop inhibitions about this self-identity, fearing to expose too much self-doubt.

## Affective Considerations cont.

79

Egocentricity:

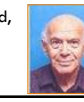
- At puberty these inhibitions are heightened in the trauma of undergoing critical physical, cognitive, and emotional changes.
- Adolescents must acquire a totally new physical, cognitive, and emotional identity.
- Their egos are affected not only in how they understand themselves but also in how they reach out beyond themselves, how they relate to others socially, and how they use the communicative process to bring on affective equilibrium.

## Affective Considerations cont.

80

Egocentricity:

- Several decades ago, *Alexander Guiora*, a researcher in the study of personality variables in second language learning, proposed what he called the 'language ego' to account for the identity a person develops in reference to the language he or she speaks.
- For *any monolingual person*, the language ego involves the interaction of the native language and ego development.
- One's self-identity is inextricably bound up with one's language, for it is in the communicative process that such identities are confirmed, shaped, and reshaped.



## Affective Considerations cont.

81

Egocentricity:

- Guiora suggested that the language ego may account for the difficulties that adults have in learning a second language.
- The child's ego is dynamic and growing and flexible through the age of puberty.
- A new language at this stage does not pose a substantial "threat" or inhibition to the ego, and adaptation is made relatively easily as long as there are no contradicting sociocultural factors such as, a damaging attitude toward a language or language group at a young age.

## Affective Considerations cont.

82

Egocentricity:

- Then the simultaneous physical, emotional, and cognitive changes of puberty give rise to a defensive mechanism in which the language ego becomes protective and defensive.
- The language ego clings to the security of the native language to protect the fragile ego of the young adult.
- The language ego, which has now become part of self-identity, is threatened, and thus a context develops in which you must be willing to make a fool of yourself in the trial-and-error struggle of speaking and understanding a foreign language.

## Affective Considerations cont.

83

Egocentricity:

- Younger children are less frightened because they are less aware of language *forms*, and the possibility of making mistakes in those forms does not concern them greatly.

## Affective Considerations cont.

84

Egocentricity:

- So, it is no wonder, then, that the acquisition of a new language ego is an enormous undertaking not only for young adolescents but also for an adult
  - who has grown comfortable and secure in his or her own identity
  - and who possesses inhibitions that serve as a wall of defensive protection around the ego.
- Making the leap to a new or second identity is no simple matter; it can be successful only when one musters the necessary ego strength to overcome inhibitions.

## Affective Considerations cont.

85

Egocentricity:

- It is possible that the successful adult language learner is someone who can bridge this affective gap.
- Some of the seeds of success might have been sown early in life.
  - e.g. In a bilingual setting, if a child has already learned one second language in childhood, then affectively, learning a 3rd language as an adult might represent much less of a threat.
  - Or such seeds may simply have arisen out of whatever combination of nature and nurture makes for the development of a strong ego.

## Affective Considerations cont.

86

Egocentricity:

- In looking at SLA in children, it is important to distinguish younger and older children.
- Preadolescent children of 9 or 10, for example, are beginning to develop inhibitions, and it is conceivable that children of this age have a good deal of affective conflicts to overcome as they attempt to learn a second language.
- This could account for difficulties that older pre-pubescent children encounter in acquiring a second language.

## Affective Considerations cont.

87

Egocentricity:

- Adult vs. child comparisons are of course highly relevant.
- We know from both observational and research evidence that mature adults manifest a number of inhibitions.
- These inhibitions appear in modern language classes where the learner's attempts to speak in the foreign language are often filled with embarrassment.
- The same inhibition can also be found in the "natural" setting (a non-classroom setting, such as a learner living in a foreign culture), although in such instances there is the likelihood that the necessity to communicate overrides the inhibitions.

## Affective Considerations cont.

88

Attitude:

- Another affectively related variable that deserves mentioning is the role of attitudes in language learning.
- Based on studies, it seems clear that negative attitudes can affect success in learning a language.
- Very young children, who are not developed enough cognitively to possess "attitudes" toward races, cultures, ethnic groups, classes of people, and languages, may be less affected than adults.

## Affective Considerations cont.

89

Attitude:

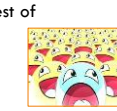
- As children reach school age, they also begin to acquire certain attitudes toward types and stereotypes of people.
- Most of these attitudes are "taught," consciously or unconsciously, by parents, other adults, and peers.
- The learning of negative attitudes toward the people who speak the second language or toward the second language itself has been shown to affect the success of language learning in persons from school age on up.

## Affective Considerations cont.

90

Peer Pressure:

- Peer pressure is a particularly important variable in considering child-adult comparisons.
- The peer pressure children encounter in language learning is quite unlike what the adult experiences.
- Children usually have strong constraints upon them to conform. They are told they had better "be like the rest of the kids."
- Such peer pressure extends to language.



## Affective Considerations cont.

91

Peer Pressure:

- Adults experience some peer pressure, but of a different kind.
- Adults tend to tolerate linguistic differences more than children, and therefore errors in speech are more easily excused.
- If adults can understand a second language speaker, for example, they will usually provide positive cognitive and affective feedback, a level of tolerance that might encourage some adult learners to "get by."
- Children are harsher critics of one another's actions and words and may thus provide a necessary and sufficient degree of mutual pressure to learn the second language.

## Linguistic Considerations

92

Bilingualism:

- Bilinguals can be divided into two groups, which differ in the way they structure and store information in their two languages.
  - Compound bilinguals
  - Coordinate bilinguals

| COMPOUND BILINGUAL | |
|---|---|
| One Semantic System | |
| Language 1 | Language 2 |

| COORDINATE BILINGUAL | |
|---|---|
| Semantic System 1 | Semantic System 2 |
| Language 1 | Language 2 |

## Linguistic Considerations

93

Bilingualism

- The compound bilingual is described as having learned a single set of concepts, each of which has two labels,
  - one in the first language and
  - one in the second language.

| COMPOUND BILINGUAL | |
|---|---|
| One Semantic System | |
| Language 1 | Language 2 |

- Typically such organization would arise from either of two acquisition histories:
  1. a situation in which from early childhood both languages were used interchangeably by the individual and his primary interlocutors,
  2. a situation in which, having fully acquired a first language, a second language is then learned within the general context of the first language by translating and associating second language lexical items to first language words and concepts

## Linguistic Considerations

94

Bilingualism

- The coordinate bilingual is seen as having learned his second language in a cultural context different from that in which he learned his first language.
- Often words that are accepted as translation equivalents do in fact reference somewhat different concepts in the two cultures.
- Therefore, the coordinate bilingual, acquiring lexical items in the second language in conjunction with the relevant concepts in the second culture, develops two sets of verbal labels, each tied to its respective conceptual system.

| COORDINATE BILINGUAL | |
|---|---|
| Semantic System 1 | Semantic System 2 |
| Language 1 | Language 2 |

## Linguistic Considerations cont.

95

Bilingualism

- Children generally do not have problems with "mixing up languages," regardless of the separateness of contexts for use of the languages.
- "Bilinguals are not two monolinguals in the same head" (Cook, 1995).
- Most bilinguals, however, engage in code-switching (the act of inserting words, phrases, or even longer stretches of one language into the other), especially when communicating with another bilingual.

## Linguistic Considerations cont.

96

Bilingualism

- We sometimes hear people express the opinion that it is too difficult for children to cope with two languages. They fear that the children will be confused or will not learn either language well.
- However, there is little support for the myth that learning more than one language in early childhood is a problem for children (Genesee, Crago, and Paradis 2004).

## Linguistic Considerations cont.

97

Bilingualism

- Although some studies show minor early delays for simultaneous bilinguals, there is no evidence that learning two languages substantially slows down their linguistic development or interferes with cognitive and academic development.
- Indeed many simultaneous bilinguals achieve high levels of proficiency in both languages.

## Linguistic Considerations cont.

98

Bilingualism

- Ellen Bialystok (1991, 2001) and other psychologists have found convincing evidence that bilingualism can have positive effects on abilities that are related to academic success.
- Limitations that may be observed in the language of bilingual individuals are more likely to be related to the circumstances in which each language is learned than to any limitation in the human capacity to learn more than one language.
  - e.g. if one language is heard much more often than the other or is more highly valued in the community, that language may eventually be used better than, or in preference to, the other.

## Linguistic Considerations cont.

99

Interference between1st and 2nd languages:

A good deal of the research on non-simultaneous SLA, in both children and adults, has focused on the interfering effects of the first and second languages.

## Linguistic Considerations cont.

100

Interference between1st and 2nd languages:

- Many researchers have concluded that, in children, strategies and linguistic features that are present in first language learning are similar to those found in second language learning.

## Linguistic Considerations cont.

101

Interference between1st and 2nd languages:

Examples:

Dulay and Burt (1974) found that 86% of more than 500 errors made by Spanish-speaking children learning English reflected:

- normal developmental characteristics [normal = expected intralingual (within one language) strategies]
- not interference errors from the first language.

## Linguistic Considerations cont.

102

Interference between1st and 2nd languages:

Examples:

Hansen-Bede (1975) examined such linguistic structures as possession, gender, word order, etc. in an English-speaking three-year-old child who learned Urdu upon moving to Pakistan.

- The child's acquisition did not appear to show first language interference.
- He showed similar strategies and rules for both the first and the second language.

## Linguistic Considerations cont.

103

Interference in Adults:

- Adult second language linguistic processes are more vulnerable to the effect of the first language on the second, especially the farther apart the two events are.
- Whether adults learn a foreign language in a classroom or out in the real world,
  - they approach the second language systematically
  - they attempt to formulate linguistic rules on the basis of whatever linguistic information available to them.

## Linguistic Considerations cont.

104

Interference in Adults:

- The importance of interference from the 1st language does not imply that interference is the most relevant or most crucial factor in adult 2nd language acquisition.
- Adults learning a 2nd language manifest some of the same types of errors found in children learning their first language.

## Linguistic Considerations cont.

105

Interference in Adults:

- Adults, more cognitively secure, appear to operate from the solid foundation of the first language and thus manifest more interference.
- The first language may be more readily used to bridge gaps that the adult learner cannot fill by generalization within the second language.
- So, the first language can be a facilitating factor, and not just an interfering factor.

## Issues in First Language Acquisition Revisited

106

- Having examined the comparison of first and second language acquisition across a number of domains of human behavior, we turn in this final section to a brief consideration of the eight issues in first language acquisition that were presented in Chapter 2.

## Issues in First Language Acquisition Revisited

107

Competence and Performance

- It is as difficult to "get at" linguistic competence in a second language as it is in a first.
- For children, judgments of grammaticality may elicit a second language "pop-go-weasel" effect. (Read the example, p. 36)
- You can be a little more direct in inferring competence in adults; adults can make choices between two alternative forms, and sometimes they manifest an awareness of grammaticality in a second language.

## Issues in First Language Acquisition Revisited

108

Competence and Performance

- But you must remember that adults are not in general able to verbalize "rules" consciously even in their native language.
- Furthermore, in judging utterances and responses, in the modern language classroom, teachers need to be cautiously attentive to the discrepancy between performance (on a given day or in a given context) and competence in a second language in general.
- Remember that one isolated sample of second language speech may on the surface appear to be rather malformed until you consider that sample in comparison with the everyday mistakes and errors of native speakers.

## Issues in First Language Acquisition Revisited

109

### Comprehension and Production

- Whether or not comprehension is derived from a separate level of competence, there is a universal distinction between comprehension and production.
- Learning a second language usually means learning to speak it and to comprehend it!
- When we say "Do you speak English?" or " هل تتحدث العربية ؟ " we usually mean "and do you understand it, too?"
- Learning involves both modes (unless you are interested only in, say, learning to read in the second language).
- So teaching involves attending to both comprehension and production.
- Adult second language learners will, like children, often hear a distinction but not be able to produce it.
- The inability to produce an item, therefore, should not be taken to mean that the learner cannot comprehend the item.

## Issues in First Language Acquisition Revisited

110

### Nature or Nurture?

- What happens after puberty to the LAD? Does lateralization signal the death of LAD?
- We do not have complete answers to these questions, but there have been some hints in the discussion of physical, cognitive, and affective factors.
- What we do know is that adults and children alike appear to have the capacity to acquire a second language at any age.
- The only trick that nature might play on adults is to basically rule out the acquisition of authentic accent.
- If an adult does not acquire a second language successfully, it is probably because of intervening cognitive or affective variables and not the absence of innate capacities.
- Defining those intervening variables appears to be more relevant than investigating the properties of innateness.

## Issues in First Language Acquisition Revisited

111

- Universals
- Systematicity and Variability
- Language and Thought
- Read pp. 76-77

## Issues in First Language Acquisition Revisited

112

### Imitation

- While children are good deep-structure imitators (centering on meaning, not surface features),
- adults can succeed better in imitating surface structure (by rote mechanisms) if they are explicitly directed to do so.
- It might be better for adults learning a second language to attend consciously to truth value and to be less aware of surface structure as they communicate.
- The implication is that meaningful contexts for language learning are necessary;
- second language learners should not become too preoccupied with form in order not to lose sight of the function and purpose of language.

## Issues in First Language Acquisition Revisited

113

### Practice and Frequency

- Too many language classes are filled with rote practice that centers on surface forms.
- Most cognitive psychologists agree that the frequency of stimuli and the number of times spent practicing a form are not highly important in learning an item.
- What is important is meaningfulness.
- In the case of second language learning, it appears that contextualized, appropriate, meaningful communication in the second language seems to be the best possible practice the second language learner could engage in.

## Issues in First Language Acquisition Revisited

114

### Input

- In the case of classroom second language learning, parental input is replaced by teacher input.
- Teachers might do well to be as deliberate, but meaningful, in their communications with students as the parent is to the child since input is as important to the second language learner as it is to the first language learner.
- And that input should foster meaningful communicative use of the language in appropriate contexts.

### Discourse

Read p. 78

## Some "Age-and-Acquisition-Inspired" Language Teaching Methods

115

- In Chapter 2, we saw that research on language teaching in the "modern" era have been sparked by Francois Gouin's observation of his young nephew's first language acquisition.
- Another look at language teaching methodology in a historical context reveals a number of examples of methods that were inspired by observation of and research on child SLA.
- Two of these methods described here, as examples of extending an understanding of children's SLA to the adult second language classroom.

## Some "Age-and-Acquisition-Inspired" Language Teaching Methods

116

- Total Physical Response
- The Natural Approach

## Total Physical Response

117

- The founder of the Total Physical Response (TPR) method, James Asher (1977) noted that children, in learning their first language,
  - appear to do a lot of listening before they speak,
  - their listening is accompanied by physical response (reaching, grabbing, moving, looking, etc)
- He also gave some attention to right-brain learning.
  - According to Asher, motor activity is a right-brain function that should precede left-brain language processing.
- Asher was also convinced that language classes were often the locus of too much anxiety and wished to devise a method that was as stress-free as possible, where learners would not feel overly self-conscious and defensive.

## Total Physical Response cont.

118

- The TPR classroom, then, was one in which students did a great deal of listening and acting.
- The teacher was very directive in orchestrating a performance: "The instructor is the director of a stage play in which the students are the actors" (Asher, 1977).

## Total Physical Response cont.

119

- A typical TPR class utilized the imperative mood, even at more advanced proficiency levels.
- Commands were an easy way to get learners to move about and to loosen up: "Open the window," "Close the door," "Stand up," "Sit down," "Pick up the book," "Give it to John," and so on.
- No verbal response was necessary.
- More complex syntax was incorporated into the imperative: "Draw a rectangle on the chalkboard." "Walk quickly to the door and hit it."
- Humor was easy to introduce: "Walk slowly to the window and jump." "Put your toothbrush in your book".
- Interrogatives were also easily dealt with: "Where is the book?" "Who is John?" (students point to the book or to John).
- Eventually students, one by one, presumably felt comfortable enough to venture verbal responses to questions, then to ask questions themselves, and the process continued.

## Total Physical Response cont.

120

- TPR was especially effective in the beginning levels of language proficiency, but lost its distinctiveness as learners advanced in their competence.
- Today, TPR is used more as a type of classroom activity, which is a more useful way to view it.
- Many successful communicative, interactive classrooms utilize TPR activities to provide both auditory input and physical activity.

## The Natural Approach

121

- Stephen Krashen's (1982) theories of SLA have been widely discussed and hotly debated since the 1970s.
- One of the hallmarks of Krashen's theories is that adults should acquire a second language just as children do:
  - They should be given the opportunity to "pick up" a language
  - They shouldn't be forced to "study" grammar in the classroom.
- The major methodological branch of Krashen's work was manifested in the Natural Approach, developed by one of Krashen's colleagues, Tracy Terrell.

## The Natural Approach cont.

122

- Acting on many of the claims that Asher made for TPR, Krashen and Terrell felt that:
  - learners would benefit from delaying production until speech "emerges"
  - learners should be as relaxed as possible in the classroom
  - a great deal of communication and "acquisition" should take place, as opposed to analysis

## The Natural Approach cont.

123

- In fact, the Natural Approach advocated the use of TPR activities at the beginning level of language learning, when "comprehensible input" is essential for triggering the acquisition of language.
- The Natural Approach was aimed at the goal of basic interpersonal communication skills, that is, everyday language situations (conversations, shopping, listening to the radio, etc).

## The Natural Approach cont.

124

- What was the role of the teacher? What was the role of the learner?
- The initial task of the teacher was to provide comprehensible input (spoken language that is understandable to the learner) or just a little beyond the learner's level.
- Learners did not need to say anything during this "silent period" until they felt ready to do so.
- The teacher was the source of the learners' input and the creator of an interesting and stimulating variety of classroom activities (commands, games, skits, and small-group work)

## The Natural Approach cont.

125

Criticism:

- The most controversial aspects of the Natural Approach were
  - its "silent period"
  - its reliance on the notion of "comprehensible input."
- One could argue with Richards & Rodgers (2001) and Gibbons (1985), that the delay of oral production can be pushed too far and that at an early stage it is important for the teacher to step in and encourage students to talk.
- Also, determining just what we mean by "comprehensible" is exceedingly difficult.
- Language learning is an interactive process, and therefore an overreliance on the role of input at the expense of the stimulation of output could hinder the SLA process.

## The Natural Approach cont.

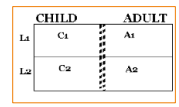
126

- The Natural Approach, like TPR, also tend to lose its distinctive identity once a course was well under way.
- But, of course, we also can look at the Natural Approach and be reminded that sometimes we insist that students speak much too soon, thereby raising anxiety and lessening the possibility of further risk-taking as the learner tries to progress.
- And so, once again, your responsibility as a teacher is to choose the best of what others have experimented with, and to adapt those insights to your own situation.
- There is a good deal of insight to be gained, and intuition to be developed, from examining the merits of methods such as TPR and the Natural Approach.

## Summary

127

- Several significant perspectives on questions about age and acquisition have been identified.
- In all this, it is important to maintain the distinction among the three types (Cl-C2; C2-A2; Cl-A2) of age and language comparisons.
- While some answers to our questions are not conclusive, in many cases research has been historically revealing.




## Summary

128

- We are led to believe that children are better at learning foreign languages without fully considering all the evidence and without looking at all aspects of acquisition.
- On at least several levels -literacy, vocabulary, pragmatics, schematic knowledge, and even syntax- adults have been shown to be superior learners.
- There appears to be some potential advantages to an early age for SLA, but there is absolutely no evidence that an adult cannot overcome all of those disadvantages except one, accent, which is hardly the most relevant or most crucial criterion for effective interpersonal communication.

129

Thank you