

Today's topic:

- **Adult second-language learning**

Background preparation:

- *Kaplan (2016), Ch 6, "Adults can't learn a new language"*

0. Today's objectives

After today's class, you should be able to:

- Define the 'strict' and 'weak' senses of the term ***critical period***, and evaluate evidence for critical-period effects in L1 and L2
- Discuss **other factors**, besides age itself, that might partially explain differences between children and adults in L2 ultimate attainment

1. Setting the stage

- Two big Qs about learning a second language (L2):
 - Why is it (typically) less successful than L1?
 - Why are some people better at it than others?
 - Note: It is possible to have more than one so-called “first” language → *simultaneous bilinguals*

Discussion

- **What** are some key differences between L1 and L2 that might cause this difference?
- **Why** might these factors matter?

1. Setting the stage

Some key differences between L1 and L2...

- **Social context:** Learning a second language often happens in a classroom or in the course of getting around in a new society
 - Does this make learning an L2 harder?
- **Prior language learning:** When L2 is acquired, the brain has already changed to store the L1 system
 - Does this make it harder to learn / store another language?

1. Setting the stage

Some key differences between L1 and L2...

- **Age:** by definition, L1 is learned earliest
 - Does age matter because there is a biologically/developmentally determined ***critical period*** for language acquisition?

2. Age effects / critical period hypothesis

- Kaplan (2016: 112)

Critical period hypothesis (emphasis added):

- The idea, essentially, is that all humans are capable of learning a language natively while they're young.
- But **at some point** in the aging process, **maturational changes** (probably in the brain) **take this ability away**;
- if you start learning a language after this point, you will never be as fluent as a native speaker,
- because **the language-learning abilities you had as a child** are simply **gone**.

2. Age effects / critical period hypothesis

Discussion (for fun):

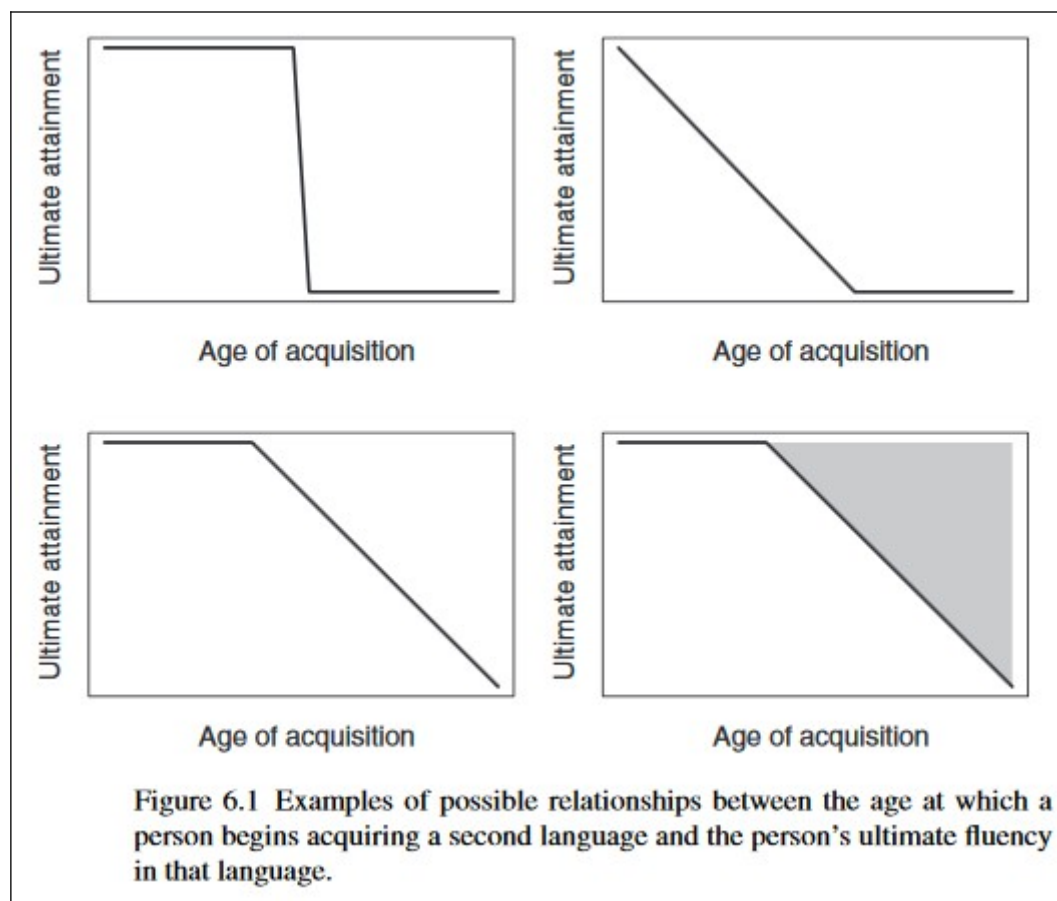
- What are some examples of **critical periods** for development in non-humans?

2. Age effects / critical period hypothesis

- Kaplan (2016: 112)
 - Does the ability to learn a second language **drop off sharply** after a certain age, or is there a **more gradual decline**?
 - After the critical period, are people **uniformly unable** to achieve native-speaker fluency in a second language, or are there a few **exceptional individuals** who can do this?
- In this chapter, we will use *critical period hypothesis* as a general term for the idea that **age matters in some way** for second-language acquisition, regardless of the specific kind of effect it has.
 - Any comments? Is this the same as above?

2. Age effects / critical period hypothesis

- Some possible **relationships** between age of acquisition and ultimate attainment in L2



- Which show a “critical period effect” in Kaplan’s terms?
- Which resemble non-human examples of critical periods?

3. Case-studies: Overall results

Discussion

- Is there evidence for an **age effect** in adult L2 learning?

3. Case-studies: Overall results

- Is there evidence for an **age effect** in adult L2 learning?
Kaplan (2016: 124)
 - It seems fairly safe to conclude that age probably matters,
 - but it's much less certain that the language-learning window ends abruptly.
- The age effect may be different for different aspects of language learning
 - Phonology (accent): Success may gradually decline with increasing age of first exposure
 - Morphology, syntax (word and sentence structure): Some evidence for a cut-off point (?)

4. A critical period for L1 acquisition?

Discussion

- What evidence has been put forward to support the critical period hypothesis for L1 acquisition?

Is it convincing?

4. A critical period for L1 acquisition?

- Children isolated from language input
 - When discovered young, they may acquire language normally
 - 'Genie' — discovered at 13; never acquired adult-like syntax
- Some issues with this evidence
 - Hard to separate the effects of linguistic isolation and social isolation
 - Did Genie have general developmental delays?

4. A critical period for L1 acquisition?

- Deaf children — 90% have hearing parents
 - In many cases, the parents don't sign (or not well) — but the children still have *social, emotional* support
 - Such children typically learn to sign from peers
 - Earlier learning correlates with greater mastery of the sign language

4. A critical period for L1 acquisition?

- Can an adult's language system continue to change over the course of a lifetime?

4. A critical period for L1 acquisition?

- Can an adult's language system continue to change over the lifetime?
 - Queen Elizabeth's vowel system changed over time, according to Harrington (2000)
 - Queen Elizabeth's '[Christmas Broadcasts](#)' — compare 1957, 2015 (from the BBC)

4. A critical period for L1 acquisition?

- Can an adult's language system continue to change over the lifetime?
 - Longitudinal study of Montreal French by Sankoff & Blondeau (2007)
 - *r* sound was in the process of change
 - most speakers stayed consistent (old vs. young)
 - some speakers did shift to the new pronunciation

4. A critical period for L1 acquisition?

- What can we conclude about a critical period for **L1** acquisition?

Does age matter in any way?

Does age determine everything?

4. A critical period for L1 acquisition?

- Critical period for L1 acquisition?

Does age matter in any way?

Does age determine everything?

- It does look like absence of language input in childhood makes it difficult or impossible to acquire language natively
- Some people can change their pronunciation (phonology) over the course of their life, perhaps in response to social factors (what about other parts of the mental grammar?)

5. A critical period for L2 acquisition?

- Can we draw any overall conclusions?
 - Do age effects in adult L2 look like evidence for a 'strict' critical period? A 'weak' one?
 - Might there be a difference between **syntax** and **phonology**?

6. Age effects unrelated to true critical period?

- What factors does Kaplan discuss in sec 6.3 that might possibly make language learning different for children and adults, even if there is no critical period for L2 acquisition?

6. Age effects unrelated to true critical period?

- Some general factors about **social contexts**
 - Children are less afraid of making mistakes, so they experiment and learn
 - Society is sympathetic to L2 adults, but less so to L2 children
 - Adults might have more reasons to feel affiliation with their L1 and therefore retain L1 features in their L2

6. Age effects unrelated to true critical period?

L1 interference?

- Effects of interference from L1 may be stronger in adults
 - Learning L1 means closing off possibilities in your grammatical system
 - Maybe it's harder to reopen those possibilities once a learner has been trained (by L1 data) to ignore them
 - Older speakers have more “training” in L1

6. Age effects unrelated to true critical period?

L1 interference?

- Werker & Tees (1984) and subsequent research
 - Some contrasts between phonetically similar sounds are perceived by young infants (around 4 months) but not perceived by older infants (around 10 months)
 - Update from subsequent research: Other contrasts work the other way — exposure is needed for acquisition

6. Age effects unrelated to true critical period?

Motivation?

- Children may be more 'motivated' than adults
 - Are children more likely than adults to have to function in monolingual contexts?
 - Are children more susceptible to peer pressure, leading them to eliminate L1 features from their L2?

6. Age effects unrelated to true critical period?

Motivation?

- Research has certainly found a role for motivation in (adult) L2 learning — but how can we assess or compare this in infants and toddlers?

6. Age effects unrelated to true critical period?

Motivation?

Kaplan (2016: 127)

By itself, the motivational hypothesis has the potential to blame second-language learners for their failures: if you haven't reached native-speaker fluency in your new language, that's because you just didn't try hard enough.

But decades of research on second-language acquisition have made it clear that adult second-language learners face very real and difficult obstacles. Motivational differences ... cannot be the whole story.

6. Age effects unrelated to true critical period?

Ineffective learning methods?

- Tendencies...

Adults	Children
classroom settings	immersion; from peers
explicit teaching	implicit inference
simpler lg from peers	peers unlikely to simplify
fewer situations to use L2	more situations to use L2
formal education in L1	formal education in L2

6. Age effects unrelated to true critical period?

Ineffective learning methods?

- Again, these factors surely matter
- They are probably not the whole story
- To what extent can experiments testing for a critical period control for these kinds of factors?

7. Back to the “myth”

“Adults can’t learn a new language”

- Do adults have a more difficult time learning a new language?
- Is it impossible for adults to learn a new language well?

7. Back to the “myth”

“Adults can’t learn a new language”

- Do adults have a more difficult time learning a new language?
 - In general, overall, yes
- Is it impossible for adults to learn a new language well?
 - No! But there are large individual differences
- Is there a qualitative difference between the way adults and children learn a new language? ...???