AGE AND SLA

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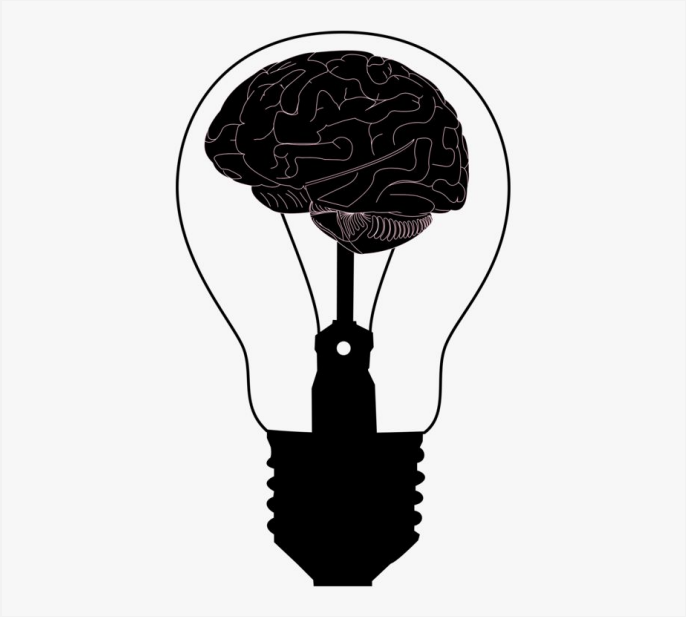
WHAT ARE WE GOING TO LOOK AT?

- Are the cognitive processes for younger learners different from those for older learners?
- Do kids learn FL better?
- Is there a critical period for SLA?
- - grammar? (adults learn explicitly and kids implicitly) - there are studies, but is evidence credible?



HYPOTHESES

- Some claim SLA is the same process as L1 acquisition and can be just as successful regardless of age
- Others claim that adults are at a disadvantage only in a few areas
- Others say that younger learners are advantaged
- **Who cares?**

- there are clear pedagogical implications -> what is the best age to learn L2?

- if L1 and L2 are fundamentally different, should we aim at «native-like»?

WHERE DO WE ALL LEARN FL?
AT SCHOOL (MFL)

- Increasingly around the world children are being taught **a Modern Foreign Language (MFL)**
- – Qiang (2002) – as of 2001 English is part of the Chinese primary curriculum **at age 8**
- – UK – MFL **returns** to primary curriculum in 2014 after a long absence starting in KS2 (age 7)

RUSSIA?

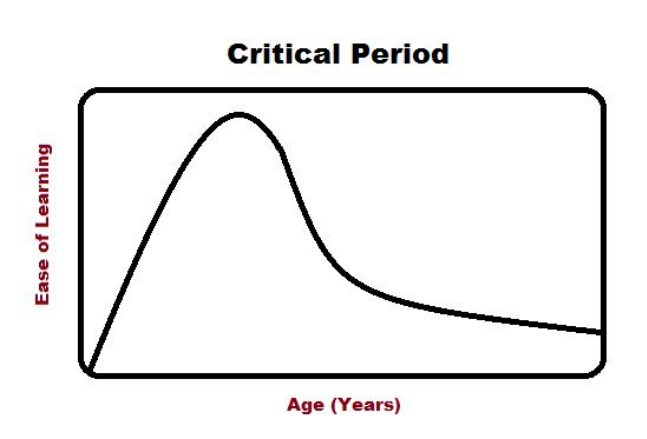
(In the 70s they pulled out modern languages from primary schools because there was a review published (Birstol) that older children learn FL better. Primary curriculum was overcrowded so they took FL out)

RUSSIA

- Согласно федеральному образовательному стандарту нового поколения **иностранный язык** (чаще всего это именно английский) изучается со 2-го **класса**. Второй **иностранный язык** (а он обязателен по ФГОС) вводится на ступени основного общего образования, как правило, с 5-го **класса**.

CRITICAL PERIOD EFFECT

- **Lenneberg (1967):** while some language is innate, it must be learned through exposure to some linguistic input **at an early time** in the child's life
- If this is true, then adult learners have passed the critical period and will be doomed to failure?
- Is there evidence that adult learners are worse than children?
- Is there evidence that adult learners can learn an L2 successfully?
- If there is a critical period for L2 learning, is it for all aspects of L2?



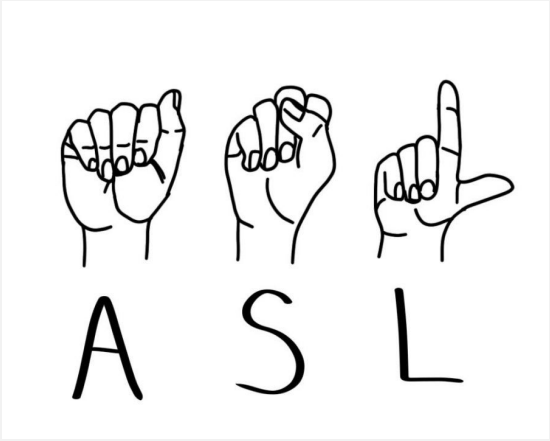
WHAT KIND OF EVIDENCE WOULD WE NEED TO PROVE THIS?

- To prove CPH we need L1 evidence (a person who didn't start learning L1 before the critical period and therefore never could learn it)
- but there are not many cases where children are not exposed to L1 before CPH (Genie)


My Brilliant Brain
Born Genius

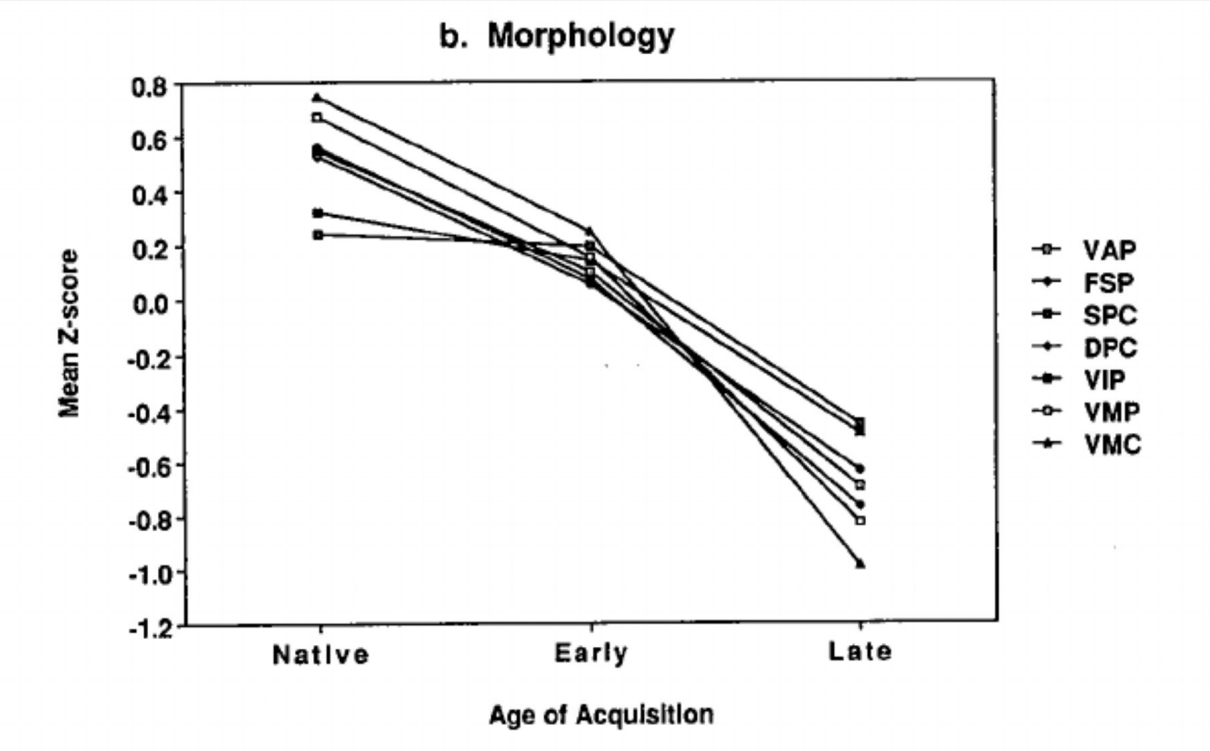
NEWPORT (1990)

– Large scale study of deaf adults who had learned **ASL** at
different times in their lives
– Is proficiency in ASL related to age when they learned ASL?



3 Groups:
Native (deaf kids from deaf parents)
Early (exposed to ASL between 4 and 6 yrs)
Late (exposed around 12 or past puberty)

- **Results:**
- Constant decline on more complex features of language
- Learning ASL at a younger age leads to superior performance on language tests

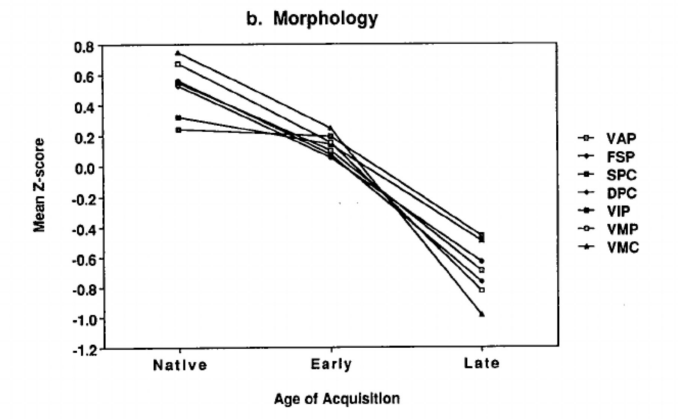


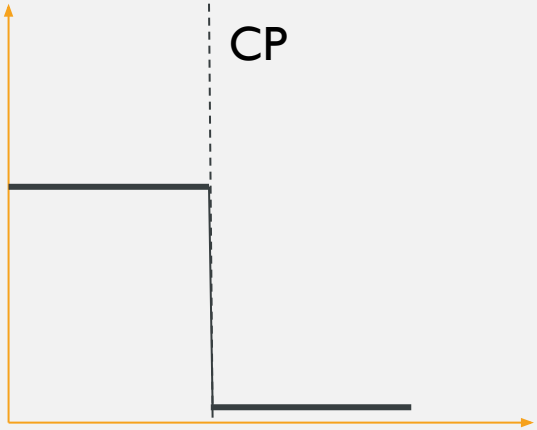
THINGS TO REMEMBER

- One of the first studies that empirically investigated CPH - classic!
- The exact onset and offset of CPH are still unclear: some people think it's 6, some - earlier, some – puberty
- Conclusion: there was a very strong correlation! From that people argued - this is evidence for CPH

BIALYSTOK AND HAKUTA

- Looking at Newport more closely, only a maximum of 5/8 measures showed natives outperforming older learners - > If CPH is true, it should not differentiate across different measures!
- Can we attribute differential success to age differences? -> There was far too much variability in how later learners acquired ASL, including formal instruction, which is not what L1 ASL children experienced!
- Claim of Critical Period is not about means and averages.. But that no one person past the critical period can learn!





JOHNSON & NEWPORT, 1989

- Native speakers of Korean and Chinese (students and profs at uni).
- Immigrated to U.S. between 3 and 39 years old
- Exposed to English between 3 and 26 years
- Tested on 276 English sentences
- Grammaticality Judgement (GJ) task

Do you see any problems here? Hint: we're testing if there is a link between age of arrival and language success

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Their experiences could have been so different! Type of school? Lang in the family? Neighbourhood? SES?

Way too many -> in adults, attention could have decreased by the end because we know that general cognitive capacities start to decline in the 20s

- GJ task tested different L2 rules:

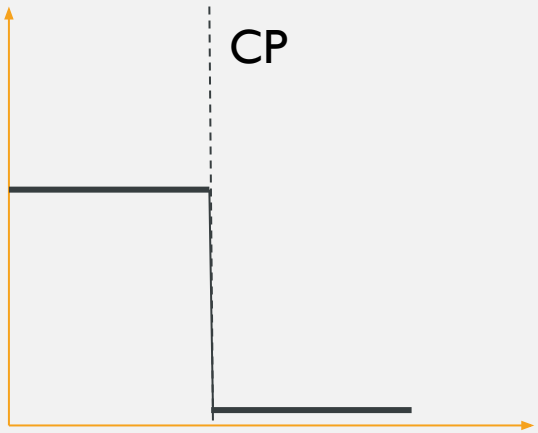
- – Articles (Tom is reading book in the bathtub)
- – Gender agreement (The girl cut himself on a piece of glass)
- – Verb structure (The bird has fall from the tree)
- Ss mark on paper which are correct(50%) and which are incorrect (50%)
- Basic result: **the earlier the Ss arrive in the U.S., the better they perform on the task**
- For earlier groups there is little variability in performance, for later groups there is more variability
- Is this good evidence for CP in L2 learning?

FLEGE, YENI-KOMSHIAN & LIU, 1999

- Past research has shown that AOA (age of arrival)of immigrants into a foreign country is associated with how 'foreign' the L2 learner sounds and accuracy on morphosyntactic tasks
- This evidence leads some to support the notion of CPH
- For others, it indicates the relative degree of L1 at the time the L2 is being learned. The more instantiated the L1 at the time of L2, the more likely L1 will influence (and inhibit) L2.
- **Purpose of the study** is to **test CPH** by investigating the effect of AOA on L2 performance in 3 different ways

DISCONTINUITY TEST

- Assumption that learners who start learning L2 before CP will do better than learners who start learning after CP
- Looking for **non linear functions**
- Problems:
- – When does CP end?
- – Absence of discontinuity might not imply CP is incorrect (hence term "sensitive" period to present a more graded view) (a weaker version of CPH)



PRE-POST CORRELATION TEST

- Calculate correlation between AOA and L2 performance for groups who started learning pre CP and those who started learning post CP
- Problem?
- Can find a correlation due to factors that are not the CP (e.g., chronological age, self-estimated use of English & Korean, years living in U.S., and amount of education in U.S.

MATCHED SUB-GROUPS TEST

- Understand that factors associated with AOA, instead of AOA itself, are implicated in L2 performance
- Subgroups matched on these other variables (e.g., age) and AOA to try and assess the relative influence of these different potentially confounding factors.

tried to reduce other variables as well as they could

- 240 native Korean Ss arrived in U.S. between 1 and 23 years.

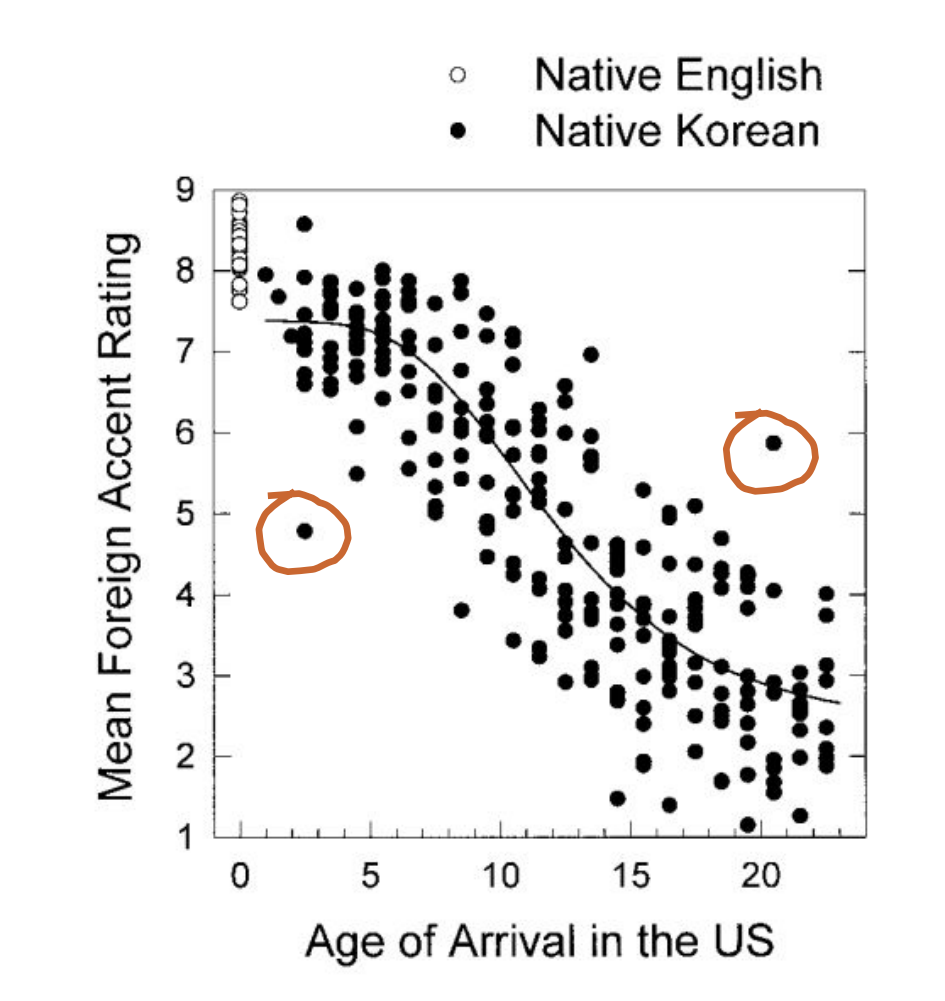
- Age at time of test was 17-47 years (mean = 26)

- 24 native English Ss, mean age = 27

- Participants read out loud a series of English sentences which were then rated by native speakers of English

- GJ task like Johnson & Newport's

RESULTS

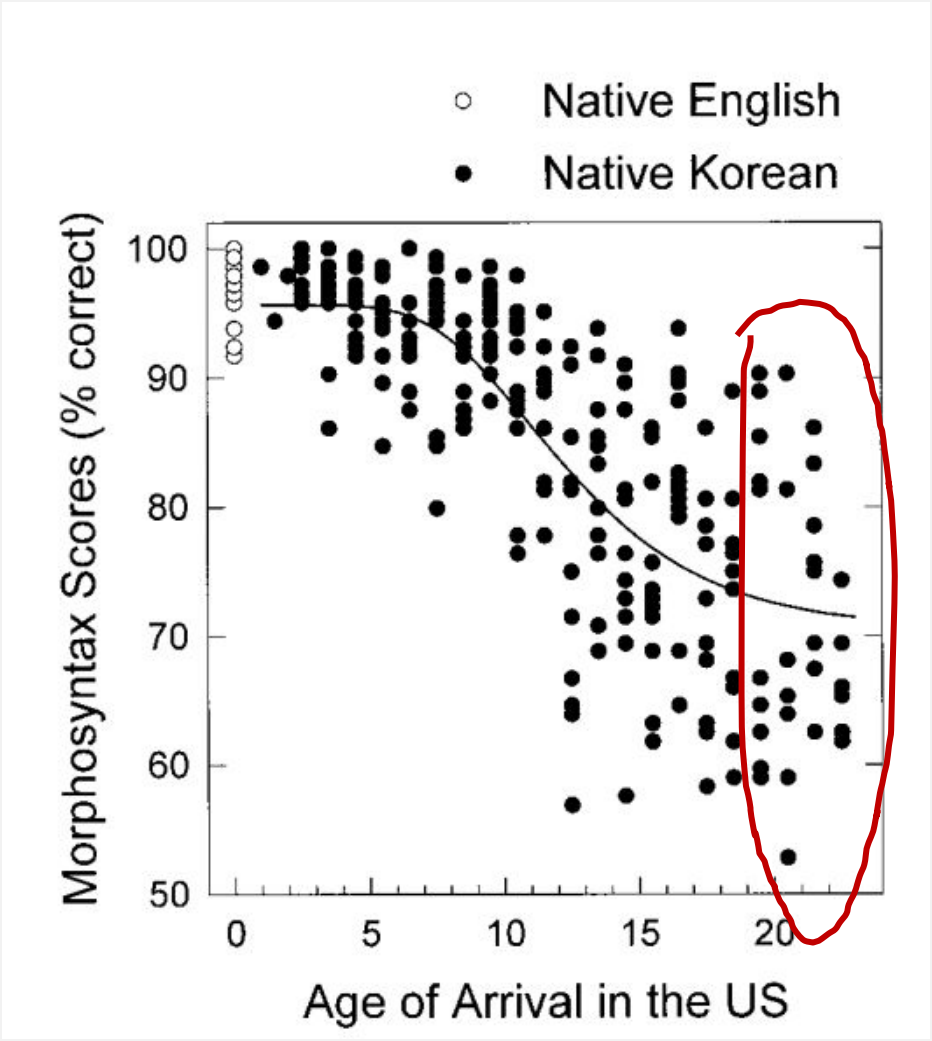


What do we see?

We do see a gradual decline, but there is no definite cut-off

many speakers who arrived early are still worse that NS

Outliers?



We still see a decline pattern but its not as clear

Decline seems to begin at around 7, but there are so many exceptions

Some people could have gone to an immersion school at home before they came to the US, that's why they are doing so well

Giant variability

- This study is methodologically superior, but its SOOOO difficult to falsify! We need studies like this, but also look beyond that, because no individual study is going to be definitive.
- E.g. compare results of children who participate in diff. educational programs: L2 is very different, even if they are the same age. If age was the main variable, there would be less variability. **So age is an important variable in L2, but it's not a determining variable.** Certainly not as much as people used to think.

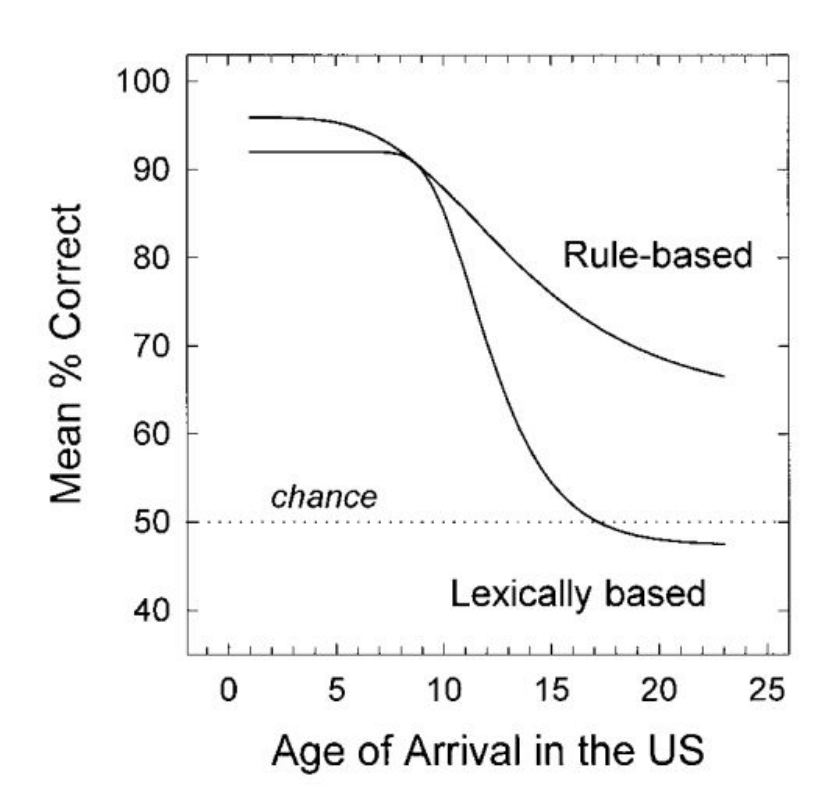
DISCONTINUITY TEST

- Koreans' degree of foreign accent did not increase sharply near the end of the critical period (AOA of 12 or 15)

- Seems to be more linear which does not fit the CP hypothesis

- **BUT!** Evidence of non linear relationship on GJ test.. Around AOA of 12 or 15 which *does* fit the CP hyp.

- Came from an increase in the no. of Ss who accept ungrammatical sentences as grammatical on GJ task



Rule-based: regular past tense, plural, personal pronouns (logical)

Lexically based: irregular past tense, prepositions, particles (have to memorise)

CONCLUSIONS

- **Foreign accents grew stronger, and scores on GJ task got smaller as a function of AOA**
- Why?
- – Phonology might be due to CP, BUT Flege et al. prefer an account which relies on interaction of L1 and L2 phonological system
- – Morphosyntax comes from variations in education and language use which are correlated with AOA and so cannot be explained by CP

SUMMARY

- If we assume a CP for L1, the question is whether or not language can be learned later on in life for L2 learning
- **If there is an age-related decline, it is progressive, not abrupt** – I.e., no study shows rapid deterioration after puberty
- There is difficulty pinpointing the **exact age** boundary
- Lenneberg argued for puberty, but evidence suggests perhaps closer to 5 years old.
- Flege (1987): **For phonology, older children still have an accent**
- Age effects seem related to specific linguistic structures (similar sounds, specific linguistic structures) etc.
- **Most convincing evidence so far concerns phonology**

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