

## 591B Second Language Acquisition

Week 2. First Language Acquisition

### Do kids learn the grammar by listening to their parents?

- \*What did you see the book about on the table?
- \*Who did Mary say that bought coffee?
- Eight very lazy elephants drank brandy?
- **Linguists' theories:** built by considering both grammatical *and ungrammatical* sentences.
- **Kids:** Don't hear ungrammatical sentences, nor even all of the grammatical sentences.

### Nature vs. Nurture

- Human learning derives from **innate, genetic predisposition** or derives from **social, cultural experiences**.
- **Skinner:** language is a copying and memorizing mechanism, **behaviorism**
- **Chomsky:** child built an entire on little data available to him

### Universal Grammar

- Innate core
- Set of **principles** and **parameters**
- **Principles:** apply to all natural languages
- **Parameters:** variation

### Positive and negative evidence

- Adults know if a given sentence S is grammatical or ungrammatical. This is part of the knowledge kids gain through language acquisition.
- Kids hear grammatical sentences (*positive evidence*)
- Kids are not reliably told which sentences are ungrammatical (*no negative evidence*)

### Kids often *ignore* explicit negative evidence...

McNeill (1966)

- Nobody don't like me.
- No, say 'nobody likes me.'
- Nobody don't like me.

[repeats eight times]

- No, now listen carefully; say 'nobody likes me.'
- Oh! Nobody don't likes me.

## Kids often *ignore* explicit negative evidence...

Braime (1971)

- Want other one spoon, daddy.
- You mean, you want the other spoon.
- Yes, I want other one spoon, please Daddy.
- Can you say 'the other spoon' ?
- Other...one...spoon
- Say 'other'
- Other
- 'Spoon'
- Spoon
- 'Other spoon'
- Other...spoon. Now give me other one spoon?

## How about *implicit* negative evidence, then?

- Do kids get “implicit” negative evidence?
- **For example:** Do adults understand grammatical sentences and not understand ungrammatical ones?
- Do adults respond positively to grammatical sentences and negatively to ungrammatical ones?

## Maybe some do, but kids' experiences differ...

- Different parents respond differently
  - Eve & Sarah' s parents ask clarification questions after ill-formed *wh*-questions.
  - Adam' s parents ask clarification after well-formed *wh*-questions...and after past tense errors.
- How can kids figure out what correlates with grammaticality in *their* situation?

## And what feedback there may be disappears...

- Adam and Sarah showed almost no reply contingencies after age 4
- But they still made errors after age 4
- Yet they still stopped making those errors by the time they became adults (*learning* didn' t cease).

## And in a way, it' s moot anyway...

- One of the striking things about child language is how few errors they actually make.
- For negative feedback to work, the kids have to *make* the errors (so that it can get the negative response).
- But they don' t make the errors in the first place.

## Do kids already know everything?

- Well, no. Clearly. No matter where a person is born (i.e. to parents speaking whatever language), the person will pick up the language spoken in the ambient childhood environment.
- Languages can be described in terms of rules (i.e. form plural noun in English by adding -s), and languages differ in what rules describe them.
- Kids must somehow come to know these rules, different for each language.

## Let's try figuring out some rules...

- 1 3 5 7 ...what's next?
- Answer: 11. Then 13. Then 17.
- 1 2 3 5 ...what's next?
- Answer: 8. Then 13. Then 21.
- 1 3 5 7 ...what's next?
- Answer: 9. Then 11. Then 13.
- Hmm.

## Let's try this out...

- ABCAE
- CABAE?
- DCABFCAE
- CDABFCAE?
- ABFCAECD
- -----?

## Let's try this out...

- |             |  |
|-------------|--|
| • ABCAE     | • The dog <b>was</b> the winner.               |
| • CABAE?    | • <b>Was the dog</b> the winner?               |
| • DCABFCAE  | • Fido <b>was</b> the dog that was the winner. |
| • CDABFCAE? | • <b>Was Fido</b> the dog that was the winner? |
| • ABFCAECD  | • The dog that was the winner <b>was</b> Fido. |
| • -----?    | • <b>Was the dog that was the winner</b> Fido? |
|             | • = CABFCAED?                                  |

## Yes-no questions

- 18) The man is here.  
19) Is the man here?  
20) The man who is here is eating dinner.
- **Hypothesis 1:** Move the first *is* (or modal, auxiliary) to the front.
  - **Hypothesis 2:** Move the first *is* after the initial noun phrase to the front.

## Yes-no questions

- 21) The man who is here is eating dinner.  
22) \*Is the man who here is eating dinner?  
23) Is the man who is here eating dinner?
- No kid's ever said (22) to mean (23). Why?
  - Kids don't even *entertain* Hypothesis 1.

## What kids need to do

- Learning the L1, a kid needs to hear what's going on in the Primary Linguistic Data and set the parameters to the setting which corresponds to the target language.

## So what is the language faculty?

- Part of being human (genetic).
- Provides parameters by which languages may vary (constrains the possible human languages).
- Provides universal principles of language (either parameterized or invariant).
- Also includes a component for first language acquisition (effortless, fast).

## L1 acquisition, in sum.

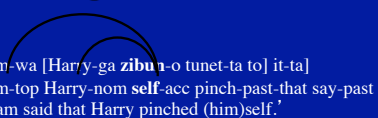
- We posit a genetic predisposition for language, something which guides the kinds of languages kids learn (Universal Grammar):
  - Kids learn *fast*
  - Kids end up with systems that are more complicated than the input data justifies (they can judge ungrammatical sentences in the same way as other native speakers).
  - Kids don't fail to learn language despite differences in environment
  - Kids seem to go through stages of acquisition which are similar across kids.

## Another parameter: The domain for anaphors (like *himself*)

24) Sam believes [that Harry overestimates **himself**]



25) Sam-wa [Harry-ga zibu<sub>1</sub>-o tunet-ta to] it-ta]  
 Sam-top Harry-nom self-acc pinch-past-that say-past  
 'Sam said that Harry pinched (him)self.'

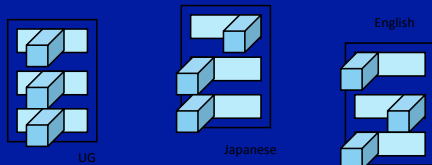


## Principle A

- **Principle A.** An anaphor must have a higher antecedent in some domain.
- *Parameter:*
  - Option (a): domain = smallest clause containing the reflexive pronoun
  - Option (b): domain = entire sentence containing the reflexive pronoun

## The model of language

- Part of the genetic endowment (UG) is a specification of the parameters by which languages can vary from one another.

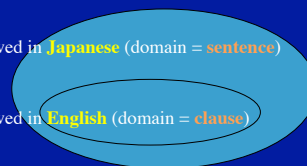


## Wait... how can a kid set this parameter?

- The set of relevant sentences allowed in English is a *subset* of the set of sentences allowed in Japanese. Starting with the English value, you could learn the Japanese value, but not vice-versa.

Sentences allowed in **Japanese** (domain = **sentence**)

Sentences allowed in **English** (domain = **clause**)

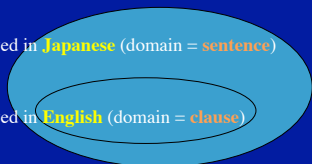


## Wait... how can a kid set this parameter?

- A possible way out for a kid would be to *start* supposing the English parameter setting (the *subset*) and move to the Japanese setting if there is evidence for that in the Primary Linguistic Data.

Sentences allowed in **Japanese** (domain = **sentence**)

Sentences allowed in **English** (domain = **clause**)



## Points

- Language is complex beyond what kids are taught growing up; kids learn L1 quickly and uniformly.
- This is made possible by UG, which delimits the set of possible languages; UG provides parameters by which languages may differ, LAD sets those parameters based on PLD.
- L2 acquisition is typically "less successful" presuming the goal is native speaker-like knowledge of the language. Also typically harder.
- L2 acquisition is affected by various things (motivation, intelligence, strategies, confidence) which don't seem to affect L1A.