

LING5702: Lecture Notes 26

Acquisition of Meaning

Contents

26.1 Acquisition of Semantics	1
26.2 Syntactic Bootstrapping	1

26.1 Acquisition of Semantics

Semantic acquisition presents a major challenge ...

Quine (1960): A rabbit hops by; your companion says '*Gavagai!*'

- may mean '*Rabbit!*' — species
- may mean '*Animal!*' — general class (kingdom)
- may mean '*American Fuzzy Lop!*' — specific class (breed)
- may mean '*Peter!*' — proper name
- may mean '*Edible!*' — purpose class
- may mean '*Female!*' — gender class
- may mean '*Ears!*' — sub-part
- may mean '*Bucolic scene!*' — super-part
- may mean '*Hopping!*' — eventuality involving rabbit
- may mean '*Hunting!*' — eventuality involving speaker

With all this ambiguity, how does child learn meaning?

26.2 Syntactic Bootstrapping

Brown (1957): kids use syntactic categories to guide word learning

- **subjects:** 3- to 5-year-old children
- **stimuli:** someone kneading dough / cutting cloth / ..., followed by:
 - (a) '*show me the sib*' (count noun form, following '*the*')
 - (b) '*show me some sib*' (mass noun form, following '*some*')
 - (c) '*show me sibbing*' (gerund form, with suffix '*-ing*')
- **measure:** what subjects pointed to

- **results:**

- (a) '*show me the sib*' — subjects indicate bowl/knife
- (b) '*show me some sib*' — subjects indicate dough/cloth
- (c) '*show me sibbing*' — subjects make kneading/cutting gesture

Brown thought these vary across languages (e.g. no count/mass distinction).

Yuan & Fisher (2009): extend Brown results to syntax

- **subjects:** 2-year-old children
- **stimuli:** recorded sentence:

- (a) '*She blicked!*' (intransitive)
- (b) '*She blicked her!*' (transitive)

followed by images of person raising arm, pulling another person's leg

followed by request: '*Can you show me blicking?*'

- **measure:** what subjects pointed to
- **results:**
 - (a) '*She blicked!*' — person raising arm
 - (b) '*She blicked her!*' — person pulling another person's leg

Pinker (1994): problems with syntactic bootstrapping

- children may have instinct for semantic frame

References

- Brown, R. W. (1957). Linguistic determinism and the part of speech. *Journal of abnormal psychology*, 55(1), 1–5.
- Pinker, S. (1994). *The Language Instinct: How the Mind Creates Language*. New York: Harper-Collins.
- Quine, W. V. O. (1960). *Word and Object*. MIT Press.
- Yuan, S. & Fisher, C. (2009). “really? she blicked the baby?”. *Psychological Science*, 20, 619–626.