

The Language Bioprogram Hypothesis

I) Criticism of current acquisition theories

- apply only to „normal“ case (⇒input)
 - can not even account for normal acquisition: sluggish start, rapid acceleration, slower advance to mastery
- ⇒single mechanism responsible for both processes (for creole and normal languages)

II) Creole Languages

- in former colonial towns, pidgins (substrate-superstrate) instead of mother tongue, linguistic chaos in environment, lack structural and grammatical elements, collection of system fragments.
 - if pidgin is input, then children develop creole language, fully developed grammar.
- ⇒observation of striking similarities in semantics and syntax of Creole languages (SVO; similarities among grammatical morphemes and their properties;)

III) The LBH

A) How is it that children acquire a novel language when input is too severely degraded for them to acquire a preexisting language? B) Why are the languages acquired by children under the foregoing conditions so strikingly similar to one another?

Thesis

The distinctive pattern of creole features represents the surfacing of an innate program for creation of language that forms part of our species' biological endowment. Program may be subject to modification (cf. Chomsky: potential variability of innate grammar).

- a) earliest linguistic efforts not guided by syntactic bioprogram, but reflect protolanguage developed by earlier species and still available to our species when linguistic communication (pidgin-situation) breaks down.
- b) At age 2, **syntactic bioprogram** will come on line: exponential increase in capacity of child to form structures of grammatical complexity. A single development is seen as providing all that is necessary for acquisition of language (preexisting or novel). (contrary to maturational models).

Maps theta structure (verbs and their complement of thematic roles) onto binary-branching hierarchical structure. Automatic, neurophysiologically instantiated, invariant, universal. Regardless of input, as long as there is any at all!

- c) The **semantic bioprogram**: consists of a list of options, child is obliged to choose those that are instantiated in target language: Features that can be grammatically marked (by gramm. Morphemes not lexical items). List probably universal: number, gender, tense, specificity etc.

In pidgin input: no semantic distinctions are grammaticized. ⇒set of default distinctions which will be grammaticized in case no gramm. Distinctions present in input.

Four semantic distinctions: punctual-nonpunctual, specific-nonspecific, stative-nonstative, causative-noncausative

- part of UG
- expressed either in syntax or gramm. Morphology
- lead to rapid and errorless acquisition in languages where distinctions clearly expressed
- cause creole-like „errors“ in languages where expression obscured or distorted by other, language-specific factors (f.ex. in English mistakes with causatives).

Example: specific-nonspecific

Marked in all creole languages by the use of articles, ⇒children biologically programmed to make it in acquiring language.

Cziko: Is SNS acquired at universally early age?

Most studies did not directly investigate SNS; rather focused on children's sensitivity to presupposedness. Nonetheless: strong evidence for SNS provided by

Brown: never *the* for -S, *the* for +S+P

Maratsos: *a* for -S, *the* for +S

Karmiloff-Smith: 3-5 year-old children used zero article for naming; 6-11 never used it

No studies indicated that children failed to attend to SNS. All article errors could be understood as involving failure to take account of presupposedness and of interaction of it with specificity (egocentric use of definite article for -P)

Impressive support for 4SH. Only problems with stage 2: not errors as predicted but correct use of indefinite article for +S-P (stage 2: definite article for all +S)

⇒Empirical support for universality of SNS in early LA and for 4SH of acquisition of English and French articles springing from interaction of SNS with child's developing sensitivity to presupposedness.

IV) Conclusion

- Novelty: use of linguistic analysis of structure of diverse creole languages to discover similarities which can be explained only by positing universal and species-specific biological program for LA

- Criticism: of aspects of linguistic and historical account of creoles; of thesis that LA faculty innate and specific to LA rather than consequence of more general aspects of cognitive development.

- Little direct empirical support for specific predictions for child language. More research needed to evaluate aspects of LBH (such as specific-nonspecific). Few studies focused on acquisition of SNS. Presupposedness major variable of interest.

⇒all instances of zero article use, sufficient contextual information

⇒acquisition of languages like Japanese that is without SNS distinction

⇒study of other aspects of LBH

- at the moment, no new creole languages are created. Problems to find data.

Bibliography

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