Recording and Transcription

Recording and Transcribing Samples of Child Language
Computers have made a tremendous difference in working with language recordings. It is now possible to digitally record a language sample and copy it directly to your computer for analysis and transcription. Working on a computer makes it much easier to play a small segment of the sample many times, and to transcribe the sample using an ordinary text processor. The transcriptions may then be analyzed using programs available through the web. Ferenc Bunta, David Ingram and Kelly Ingram presented an excellent overview of these procedures at the meeting of the IX International Congress for the Study of Child Language in Madison. You can see a copy of their paper by clicking here.

THREE ASPECTS OF LANGUAGE ACQUISITION RESEARCH

A. Methodology (how we study children’s speech)
   1. Techniques of data collection
      a. spontaneous language sampling
      b. parental diary
      c. elicited imitation
      d. production and comprehension testing
      e. metalinguistic judgements


   2. Techniques of linguistic analysis developed for child language
      How do we use child language to test linguistic theory?
   3. Aspects of measurement
      What are appropriate measures?

B. Description (what we know about language acquisition)
   Canonical periods of language development
   1. Prelinguistic development–birth to first words
   2. Single word utterances–around one to one and a half years
   3. First word combinations–around one and a half years to two
   4. Simple sentences–around two to three years
   5. Complex sentences (embedded and coordinate structures)

   Are these periods genuine linguistic milestones or artifacts of our methodology and description?
   Are they true for every language?
C. Explanation (the theory of language acquisition)
   1. Explanatory vs. descriptive ‘theories’
   2. Heuristics (guidelines) for forming testable hypotheses
   3. What should a proper theory explain?
      a. Why children, but not chimpanzees, acquire language
      b. How children acquire the entire range of human language types
      c. How children make use of the language they hear
      d. Stages of language development for specific languages

THE OBSERVATION OF CHILDREN’S LANGUAGE

I. Methods of data collection
   c.f., Demuth ‘Collecting spontaneous production data’ in McDaniel et al. (1996), Methods for Assessing Children’s Syntax.
   It is important to know the strengths and weaknesses of each method

A. Spontaneous language sampling
   1. Strengths
      a. Provides a general picture of all the child’s linguistic abilities
      b. May reveal unexpected or novel features of child language, including errors, omissions and overgeneralizations
      c. Documents language environment (Input)
   2. Weaknesses
      a. Transcription and analysis of language samples is time-consuming
      b. It is easy to miss rare constructions, e.g., passives, relative clauses
      c. Variation between children requires more than one subject
   3. It is useful to have your own experience with language sampling since:
      a. Most theories of language acquisition rely on language samples
      b. You can appreciate the difficulties involved in interpreting children’s language samples

B. Parental diary–historically the first method
   1. Strength–researcher is familiar with the child and the child’s language
   2. Weakness–tends to be unsystematic

C. experimental approaches
   Strength–Can collect a great deal of data on a targeted linguistic feature
   Weakness–May fail to collect data on related features, context

D. metalinguistic judgements
   Strength–Can be applied directly to linguistic theory
   Weakness–Children under six do poorly on such tests

E. elicited imitation
   Strength–Can collect data quickly on targeted linguistic features
   Weakness–This method may fail to reveal the nature of the child’s grammar
II. Spontaneous language sampling

A. Subject selection
   1. availability
   2. volubility
   3. intelligibility
   4. language level (between 2;0 and 2;6 is best for the first time)

B. Recording techniques
   1. It’s surprisingly easy to mess up a recording session
      Check:
      i. recording volume
      ii. tape recorder–is it turned on; is it recording?
      iii. microphone placement–not near machines, running water, etc.
      iv. batteries
   2. It is never possible to record too much contextual information
      i. It is best to have 2 observers–one to take notes while the other interacts with the child
      ii. Describe objects the child plays with, what the child points to, or looks at
      iii. Transcribe notes ASAP to remember contextual details

C. Schedule
   1. first 15 minutes–set up time
      i. discuss with parent where to collect the sample (not near a tv!)
      ii. ask for the child’s age and birthdate; get parent to sign consent form
      iii. make sure tape recorder is functioning properly
      iv. let child become used to your presence and the tape recorder
   2. 30 minute sample
      i. interact naturally–don’t panic if the child seems to be shy
      ii. usually allows enough time to collect a 200 to 300 utterance sample
   3. final 15 minutes–debrieﬁ parent
      i. talk to parent about the child’s language
      ii. how typical is the taped sample?

D. Interacting with the child, c.f., Jon Miller (1981) Assessing Language Production in Children
   1. say very little at the onset
   2. try parallel play with little talk
   3. suggest topics that the child can build on
      i. ‘I’m going to play with the …’ rather than ‘What’s that?’
      ii. ‘Where is your mother, father, brother, sister?’ ‘What are they doing?’
      iii. ‘Tell me about your pet.’
      iv. ‘Where did you go this morning?’
      v. ‘What do you do at the park?’
   4. avoid limiting topics, i.e., questions with one-word answers, e.g.,
      i. ‘Can you count to ten?’
      ii. ‘What is that?’ ‘What color is that?’
      iii. routines, e.g., rhymes, books, abcs
III. Transcription

The most important part of the process, yet most neglected aspect of language sampling

A. Listening procedure

single listening vs. multiple listening

do everything at once concentrate on one aspect each time


1. what needs to appear on the page?
   a. child’s phonetically transcribed utterance
   b. adult utterance in orthographic transcription
   c. child’s utterance in English orthography
   d. contextual notes
   e. interpretation of child’s utterance, e.g., ‘ball throw’ = ‘I threw the ball.’

2. two approaches–columns vs. sequential
   a. it is easier to read data separated in columns
   b. computer formats tend to be sequential, the simplest format for computer searches

C. Level of phonetic detail

1. orthographic ‘me play’
2. phonemic/orthographic ‘p(w)ay’
3. phonetic/orthographic ‘play’ [pwey]

Orthographic transcription is the most widely used, but phonetics can be useful in interpreting child’s utterance, e.g., [ælifə] alligator or elephant?

[ɪzæʔ] vs. [zæt] ‘What’s that?’

D. Notation

Computer analysis makes notational conventions important

1. readability
   a. proximity of related events
   b. efficiency and compactness

2. consistency

3. SALT conventions (Miller & Chapman)

$Child, Adult
+information line
<questionable utterance>
[morpheme code]
< > - unintelligible parts
= - comments/context notes

E. Coding, c.f., my minimal coding page
IV. Transcription procedure

A. first listening
1. set up transcription format; note child’s age, transcriber, and the people, objects present
2. transcribe just the utterances of people talking to the child
3. leave a blank line for each intervening child utterance
4. use phonetic or orthographic transcription to show adult adjustments

B. second listening
1. do a phonetic transcription of the child’s utterances
2. set a limit to how often you will play each utterance, e.g., 3 times
3. an utterance is a vocalization separated by pauses
4. allow room for changes

C. third listening
1. correct phonetic transcription of child’s speech

D. fourth listening–number and identify child’s sentences
1. count stuttering or word repetitions as attempts to produce a single word
   ‘I want cookie’ [ay, ay, ay wan kʊkiy]
2. write a full morpheme for each partial phonetic production
   ‘I eat cookie’ [ay iy kiy]
3. put three dots after
   i. false starts ‘I want ...’ [ay wa]
   ii. interruptions ‘can I ...’ [kænay]
4. vertical nonequivalence—one sentence corresponds to more than one utterance
   ‘I want ...’ [ay wa]
   ‘eat cookie’ [i’ kʊkiy]
5. horizontal nonequivalence–more than one sentence corresponds to one utterance
   ‘No./’ [nonono]
   ‘No’/
   ‘No.’

Boundaries between child’s sentences may not always be clear.
6. indicate which parts of the utterance are <questionable> or unintelligible < >.

**Phonetic Correspondence Restriction**–each morpheme in the interpretation should correspond to a separate phonetic sequence.

E. fifth listening
1. add contextual notes
2. add broad interpretations ‘I cookie’ (= I ate the cookie’)
