

Experimental methods

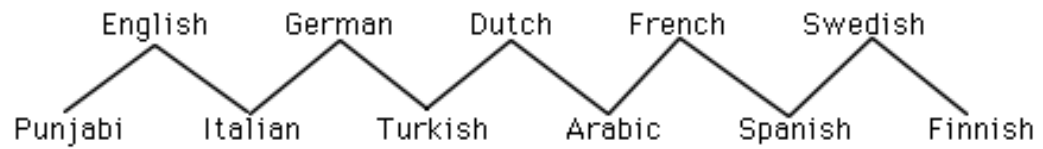
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Two major research strategies

- Observational / corpus studies
- Experimental studies

Corpus data

- CHILDES database
- ESF database on L2 acquisition



Target language

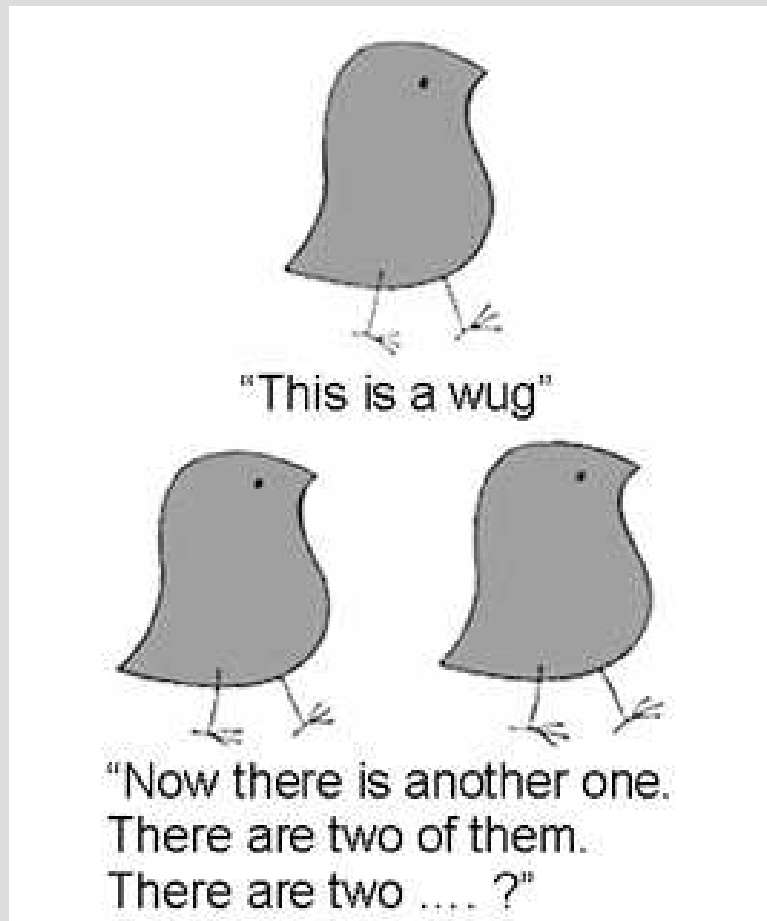
Learner language

Experimental strategies of L1/L2 acquisition



- Comprehension
- Production

Elicited imitation



Berko 1958

Elicited imitation

ADULT: I've got two foots.

CHILD: I've got two ... foots/feet.

ADULT: This is my blue big tractor.

CHILD: This is my ... blue big / big blue ... tractor.

ADULT: David runs runs up the hill.

CHILD: David runs up the hill.

ADULT: David runs up the hill hill.

CHILD: David runs up the hill.

Elicited imitation

- (1) The boy the girl kicked went home.
- (2) The girl kicked the boy very badly and then he went straight home.

- | | |
|---|------|
| (1) There is the boy who played in the garden yesterday. | SUBJ |
| (2) This is the girl who the boy teased at school this morning. | DO |
| (3) There is the girl who Peter borrowed a football from. | IO |
| (4) This is the dog that the cat ran away from this morning. | ADV |
| (5) There is the woman whose horse Peter heard on the farm. | GEN |

Elicited transformation

ADULT: He's going home ...

CHILD: Isn't he?

ADULT: They'll take a long time...

CHILD: Won't they?

ADULT: She can't stay with us ...

CHILD: Can she?

Elicited transformation

ADULT: The man cleaned the bath.

CHILD: The bath was cleaned by the man.

ADULT: The boy kissed the girl.

CHILD: The boy was kissed by the girl.

ADULT: The car hit the man.

CHILD: The man was hit by the car.

Sentence construction task

(1) Joan likes the professor.

(2) The professor gives easy exams to the class.

-> Joan likes the professor who/that gives easy exams to the class.

(3) Janet rode the bicycle.

(4) Your father gave the bicycle to Jim.

-> Janet rode the bicycle which/that your father gave to Jim.

(5) The chairman listened to the student.

(6) The professor gave a low grade to the student.

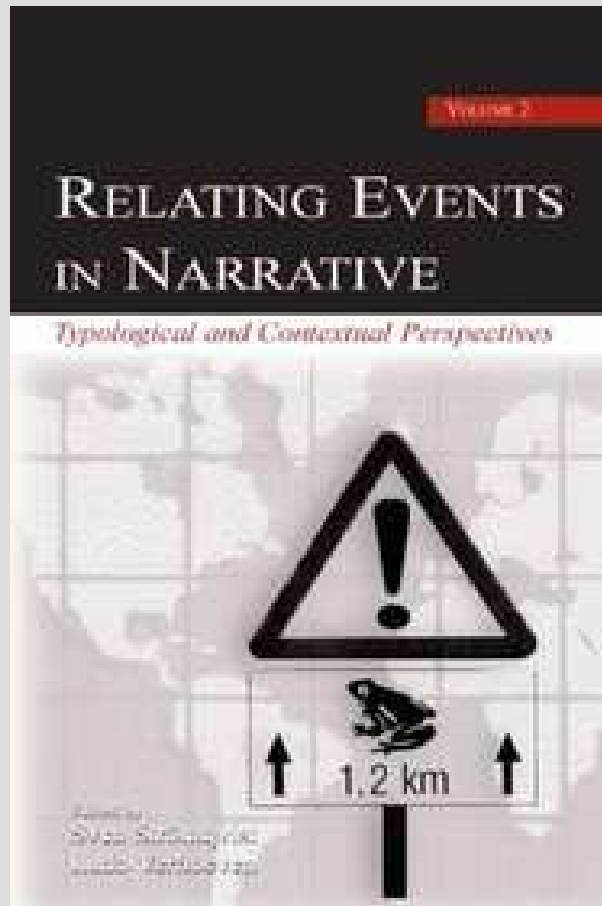
-> The chairman listened to the student who(m)/that the professor gave a low grade to.

-> The chairman listened to the student to whom the professor gave a low grade.

Elicited narratives

1. Tell me what you did yesterday.
2. Tell me about a typical day.
3. Tell me how you like to spend your free time.
4. Tell me about the town where you live.
5. Tell me your plans for the summer vacation.

Elicited narratives



Silent film

The frog stories

(Slobin and Berman 1986)

Discourse completion task

Context: In the lobby of the university library. Jim and Charlie have agreed to meet at six o'clock to work on a joint project. Charlie arrives on time and Jim is half an hour late.

Charlie: I almost gave up on you.

Jim: _____ .

Charlie: Okay, let's start working.

Discourse completion task

Yesterday everything went badly. You were flying from Dayton Ohio to New York for a job interview. You were pleased because you were one of the final candidates. On your way to the airport there was a water main break and the highway was flooded, which caused a closure of the highway. You had to take back roads to the airport, but you arrived too late for the flight. You were going to call the personnel manager to tell her of your predicament, but you couldn't find a phone. Just then you realized that there was another plane to New York that would still get you there in time. You boarded the plane but because of storms in the New York area, your plane circled and circled the airport. When you landed, you were late for your appointment. The office was closed and you had to wait until the morning to talk to the personnel manager.

Discourse completion task

What will you say when you speak with her?

- I would like to take this opportunity to apologize for missing the scheduled meeting. I'm sure I'll never let you down again.
- I would like you to give me another chance.
- I'm sorry that I didn't call earlier, but I was tired and so I slept late.
- I really, really want to work in your company. I want to make a good use of my studies.
- I sincerely apologize for not making the interview. Because of the storms, my plane circled the airport for over an hour and I couldn't call you. We didn't land until after 5:00. I would appreciate it if I could reschedule my interview.

Design an experimental task in order to test how well an L2 learner of German/English has learned the use of ...

- the past tense – present perfect
- the passive
- progressive tense
- nominative vs. accusative case
- spatial prepositions
- conditional clauses
- WH-questions
- Word order in German subordinate clauses

Tasks:

1. Consider the factors that may influence the learners performance
2. Chose a particular method
3. Design your stimuli

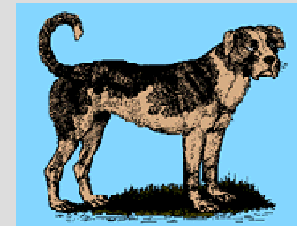
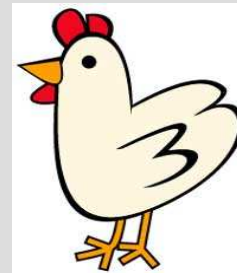
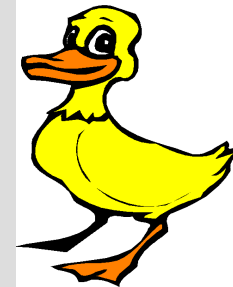
Comprehension

- Off-line task – Subjects respond after they have listened to the entire sentence / text fragment (e.g. answer a question).
- On-line task – Subjects respond as they listen to a sentence / text fragment (e.g. press a button as soon as possible).

Act-out task

- (1) The dog pushes the cow.
 - (2) The cow is pushed by the dog.
-
- (1) The duck pushed the chicken after it had jumped over the dog.
 - (2) The duck kicked the chicken before it had kissed the dog.

Picture pointing



The duck pushed the chicken after it had kissed the dog.
Who pushed the chicken after it had kissed the dog?

Acceptability judgements

Is the sentence grammatically correct?

- (1) The man Peter was talking to is my friend John.
- (2) The man Peter was talking to him is my friend John.
- (3) The man who they think that when Mary marries him everyone will be happy.

Do learners have a concept of grammaticality?

Ranking task

Do the following phrases differ in terms of their idiomaticity?

- (1) Take into account
- (2) Take a ride
- (3) Take this one

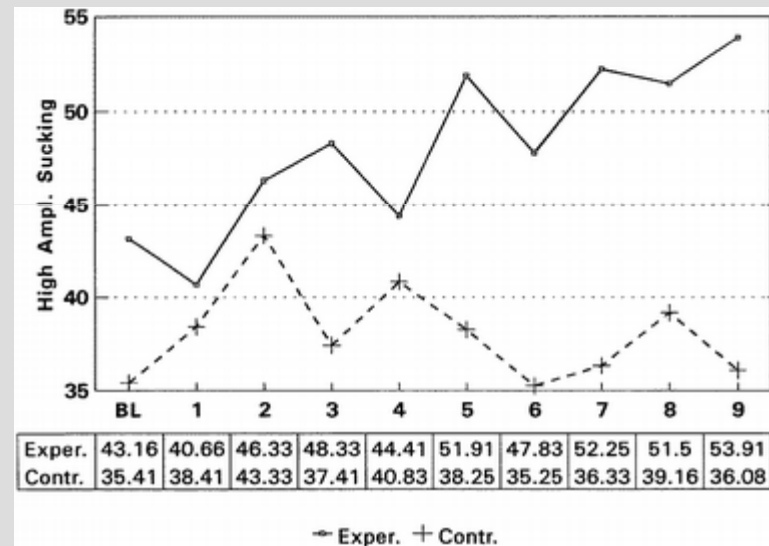
Reaction time studies



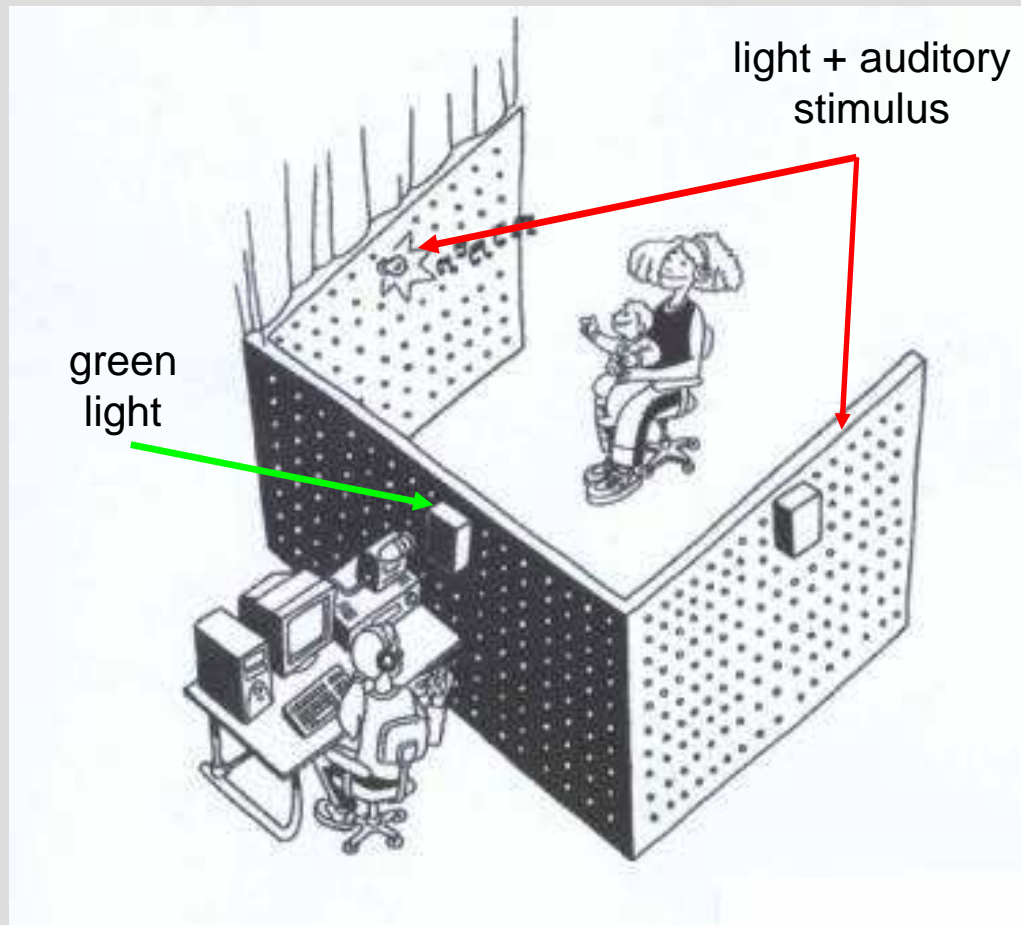
The boy was out on a walk and he watched a dog passing by

The boy was out on a walk and he watched to a dog passing by

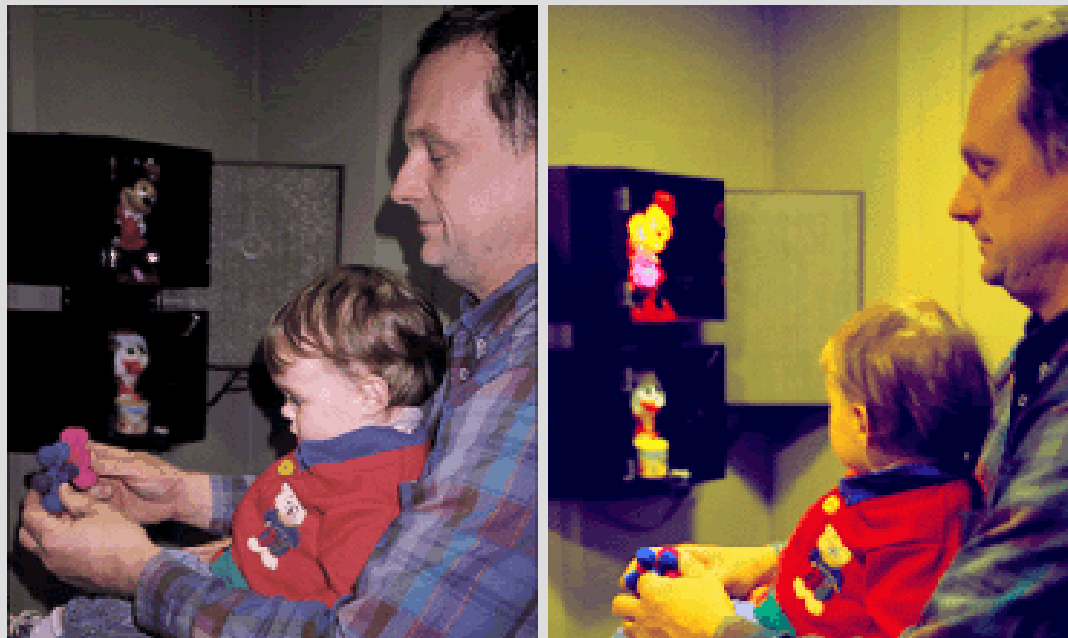
High-amplitude sucking procedure



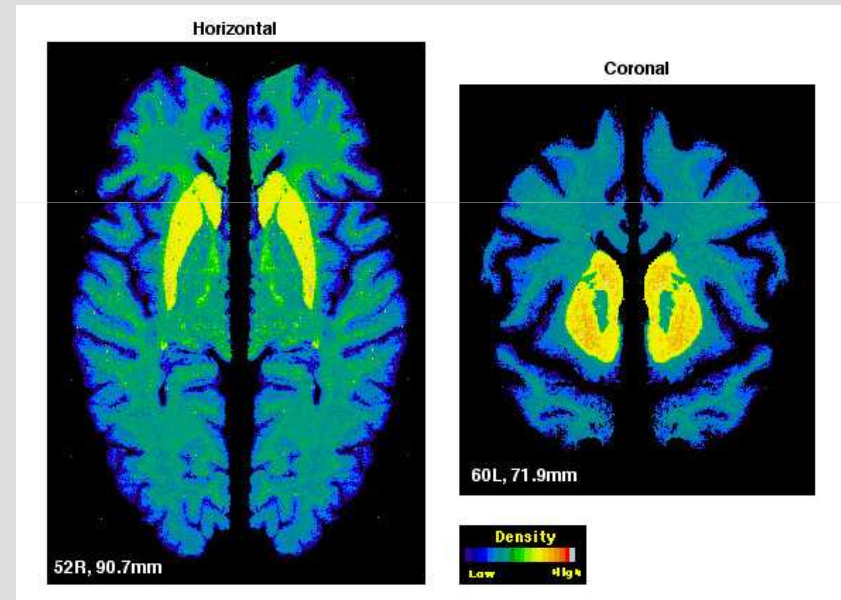
High-amplitude sucking procedure



Preferential looking procedure



Functional Magnetic Resonance Imaging (fMRI)



Questionnaire

FIELDS OF INVESTIGATION	Production	Sales	Western Division	Head office	
Organization Strategy	Yellow	Green	Green	Green	
Organization Fabric	Red	Yellow	Yellow	Yellow	
Organization Climate	Yellow	Green	Yellow	Green	
Operations Management	Red	Yellow	Red	Red	
Information	Red	Yellow	Yellow	Green	
Individual Competences	Yellow	Yellow	Yellow	Red	
OVERALL					
Responses to all questions in all fields	Yellow	Yellow	Yellow	Green	