### Acquisition of English Adjectival Resultatives: Support for the Compounding Parameter

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#### Goals

This study investigates:

1. When English-speaking children acquire adjectival resultatives;
2. How they acquire resultatives: wait for direct evidence, or exploit a parameter-based strategy?

#### Findings

1. **An experimental study shows** that English-speaking children comprehend adjectival resultatives by age 3;07 (as early as we can test with TVJ task).
2. **A corpus study shows** that resultatives are very low-frequency in maternal speech, which supports a parameter-based approach, in that children acquire resultatives with little direct evidence.

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#### 1. Background

- **English allows a variety of complex-predicate structures, as in (1).**
  
  1. a. John painted the house red.
  2. b. Mary picked the book up.
  3. c. Fred made Jeff leave.
  4. d. Fred saw Jeff leave.
  5. e. Bob put the book on the table.
  6. f. Alice sent the letter to Sue.

- **(Resultative) (Verb-Particle) (Make-causative) (Perceptual Report) (Put-locative) (To-dative)** (Snyder 2001)

#### Unanswered Question

- **Acquisitional evidence is incomplete:**
  - Stromswold and Snyder (1995) relied on longitudinal corpora of spontaneous speech.
  - They did not check resultatives like (1a).
  - Resultatives are very low-frequency, making corpus-data less reliable.

#### Research questions:

- When do English-speaking children acquire adjectival resultatives?
- How do they acquire resultatives? Do they wait for direct evidence? Or might they be exploiting a parameter-based strategy?

#### Materials

- **4 practice items:** 2 ‘Yes’ and 2 ‘No’
  - to train children how to do the task
- **8 test items:** 4 ‘Yes’ and 4 ‘No’
  - Test sentences: *Jim is painting the chair blue*.
  - Two verbs: *paint* & *color* (four items for each verb)
  - 4 fillers: 2 ‘Yes’ and 2 ‘No’
  - They are presented in pseudo-random order.
- Four lists were created to control order effects.

#### Inclusion Criterion:

- A child had to either answer all 8 of the practice/filler items correctly, or make at most 1 error:

  \[
  \text{plat least 7 out of 8 correct} \land \text{error} = 0.035
  \]

- Significantly better than chance on the easier, non-resultative items, implies...
- Capable of performing the TVJ task.

#### Participants

- **24 English-speaking children** were tested; 20 of them (age 3;05-5;07; mean 4;03) met the inclusion criterion.

#### Sample Story

**Experimenter:** This is a story about a little girl named **Mary**, and a little boy named **Jim**. Mary has a yellow chair, and Jim has a blue chair. Jim and Mary want their chairs to be the same color. Jim says he can put blue paint on Mary's yellow chair, but Mary doesn't like it. Then he gets a great idea: he'll put yellow paint on his blue chair! See he's painting! ... Parrot, what's going on here?

**Parrot:** *Jim is painting the chair blue!*

### Results

- Children answered correctly most of the time (146/158; 92.4% correct).
- Viewed as a group, children's sensitivity to the truth/falsity of the resultatives was robustly significant (Wilcoxon Signed-Ranks W=210, n=20, two-tailed p=0.0001).
- The contrast was also significant for 18 of 20 children individually (i.e., at most one error; directional p=0.05).
- The other two children each had 4/4 ‘Yes’ on True items, and 2/4 ‘Yes’ on False items.
- Finally, when the child indicated the parrot was wrong, we asked, **“What's happening?”**
- Every child answered appropriately, and as illustrated in (3), almost all used resultatives in their answers.

#### 3. Examples of resultatives produced by children during the experiment:

- a. She's painting her box **YELLOW**!
- b. No he's coloring it! Richard is coloring his bottle ... **PINK**!

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#### References


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