Evidence for a Distinction Between Canonical and Non-Canonical Syntax-Semantics Mappings

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Two Syntax-Semantics Mappings for Psychological State Verbs
Psychological state verbs pose problems for theories of the syntax-semantics interface

*John frightens Mary*
Stimulus-Subject Verb Mapping

*Marc fears Anne*
Stimulus-Object Verb Mapping

Introduction

Theories on How these Syntax-Semantics Mappings Emerge
1. The mappings are arbitrarily stipulated for each verb
2. One of the mappings is canonical, while the other is an exception
3. Both mappings must be learned, and there is an overregularization of the statistically predominant mapping
4. SS and SO verbs have subtly different structures, making both canonical (Bowerman, 1990; Grimshaw, 1990; Jackendoff, 1990; Pesetsky, 1995; Pinker, 1984; Pinker, 1989)

Question:

Is one mapping more easily required?

Experiment 1:
At what age do kids learn the argument structure of psych verbs?

Experiment 2:
Truth-Value Judgment Task (Crain & Thornton, 1998)

Discussion: 4 y.o.s are just beginning to learn psych verbs
Task might be too challenging

Experiment 3:
New, unidirectional stories for like, love, and hate.

Discussion: Reinforcing unidirectionality improved performance on like (the most common psych verb). But love and hate remained at chance.

Experiment 4:
New stories for like, love, trust, hate, and fear, in which one of the characters is an inanimate object

Discussion: Reinforcing animacy improved performance on like, love, and hate. But fear and trust remained at chance.

Conclusions:

4 y.o.s know argument structure of some SS verbs (e.g., frighten). But have poor knowledge of argument structure of SO verbs (e.g., fear) despite more experience with SO verbs.

Hypothesis 1: If SS and SO structures are symmetric then acquisition of these verbs must be governed by linguistic generalizations.
Hypothesis 2: If the structures are not symmetric then children must have a bias to conceive of psychological events such that they fit the SS pattern, and not the SO pattern.

References: