



Object and event labelling in American Sign Language parent input to young deaf children

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Background

- The quality and quantity of parent input is known to have a significant effect on children's vocabulary development (Huttenlocher et al., 1991).
- There are cross-linguistic differences in the linguistic composition of parents' input to children in spoken languages, particularly with regard to the ratio of nouns to verbs (Choi, 2000; Tardif et al., 1997).
- Deaf parents interacting with deaf children in a natural sign language are known to modify their input to make it more visually accessible (Baker & van den Bogaerde, 2005; Harris et al., 1987; Holzrichter & Meier, 2000; Swisher, 2000).
- Prior work has focused on these attention-getting strategies of deaf parents, and less on the linguistic content of parents' input.
- Deaf children learning ASL have a higher proportion of verbs in their vocabulary than hearing children learning spoken English (Anderson and Reilly, 2002).

Current study

What is the linguistic content of parents' American Sign Language input to their young deaf children?

Method

PARTICIPANTS:

- Seven deaf mothers and their deaf children
- Children between the ages of 21 and 39 months

RECORDING AND CODING:

- Dyads were recorded during a naturalistic play session using a standard set of toys (school bus, picnic set, magna doodle, doll set, etc.)
- Twenty minutes of interaction was analyzed for linguistic content of maternal utterances, including MLU, lexical class of each ASL sign, lexical diversity, and function of all points.
- All coding was done by or in consultation with a Deaf native ASL signer

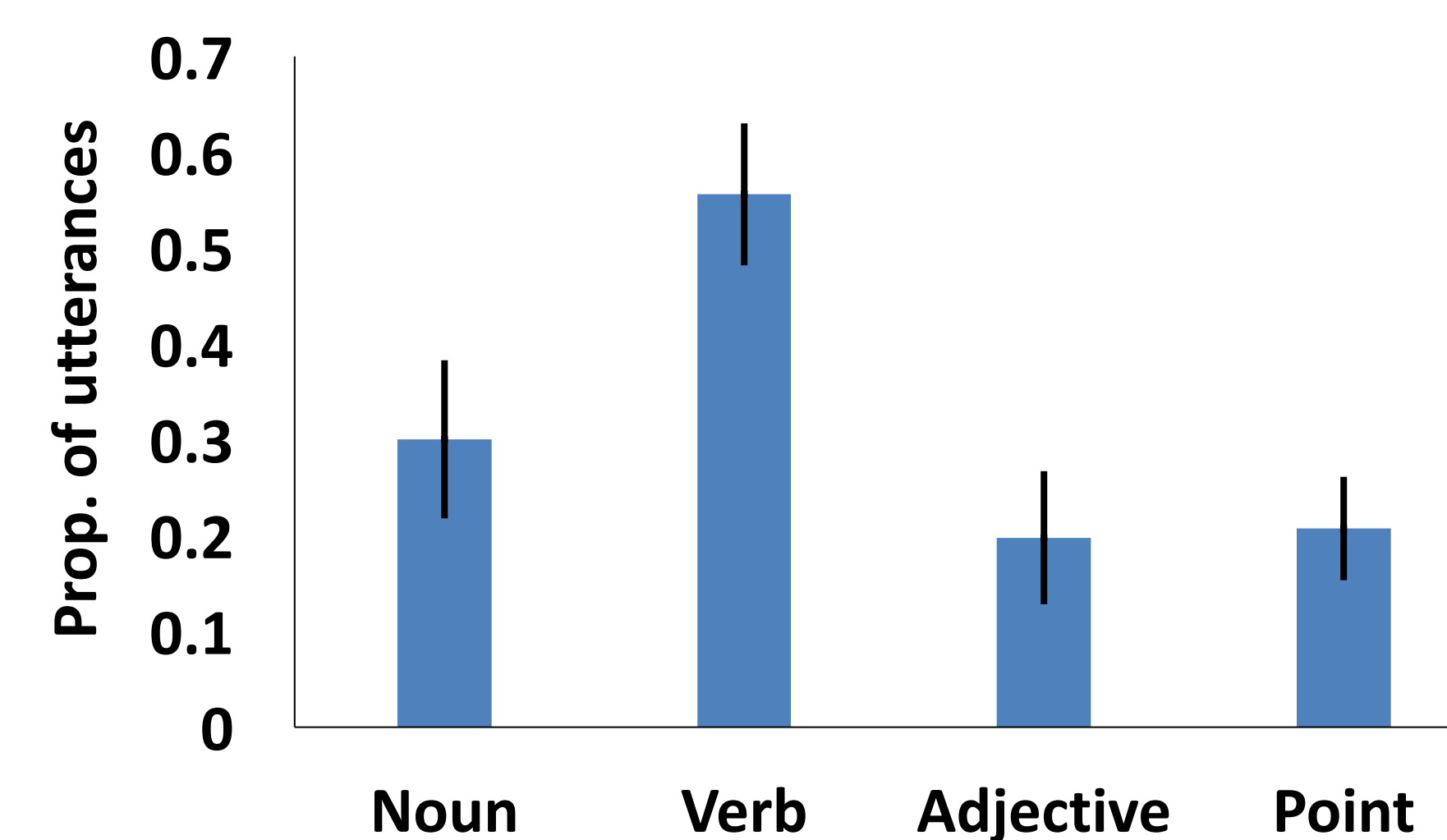
What are the characteristics of maternal utterances?

	Child's age (months)	Child's ASL CDI score	Total maternal ASL sign tokens	Total maternal utterances	Mother's MLU (in signs)
Dyad 1	21	238	292	128	2.2
Dyad 2	22	200	402	182	2.2
Dyad 3	27	n/a	297	131	2.2
Dyad 4	33	343	562	301	1.8
Dyad 5	38	411	558	207	2.6
Dyad 6	38	526	689	234	2.9
Dyad 7	39	39	438	172	2.5
Mean	31	363	463	195	2.4

Total number of maternal ASL tokens was marginally correlated with child's age ($p = .05$)

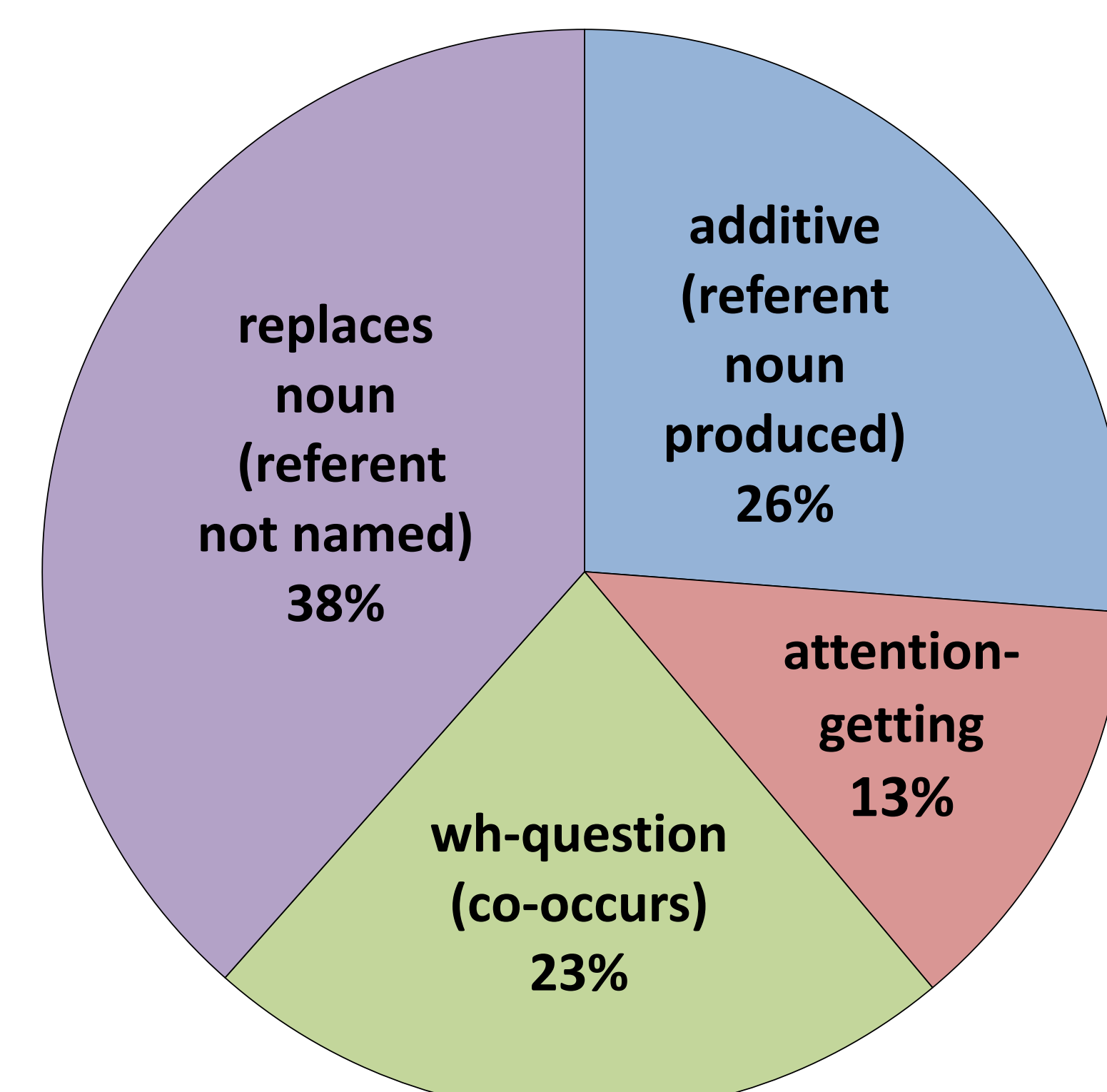
What lexical category of ASL signs appear most frequently in maternal utterances?

Proportion of maternal utterances containing nouns, verbs, and adjectives



- All signs were categorized by lexical class to determine the proportion of utterances containing each type of sign.
- Verbs (including classifiers) appeared in a higher percentage of utterances than any other word class.

What is the function of points within an utterance?



- Points primarily served linguistic functions (replacing or co-occurring with the referent noun, or co-occurring with a wh-question)
- A small percentage (13%) of points were used as attention-getters

What are the most frequent signs in maternal input?

Nouns	# Tokens (n mothers)	Verbs	# Tokens (n mothers)	Adjectives	# Tokens (n mothers)
BABY	44 (5)	WANT	113 (6)	SAME	20 (5)
FOOD	20 (6)	SEE	41 (6)	HOT	10 (4)
MOM	19 (4)	COME	40 (6)	BLUE	10 (3)
BUS	19 (5)	HAVE	32 (6)	RED	9 (4)
CAT	16 (2)	SEE-SEE	32 (5)	HUNGRY	9 (5)

Summary and Discussion

- Mothers' input in ASL shows a higher percentage of utterances containing verbs than nouns and all other word classes. This pattern contrasts with that of English-speaking caregivers, and is more similar to input by Korean- and Mandarin-speaking caregivers (Choi, 2000; Tardif et al., 1997). This may reflect both linguistic and cultural differences between ASL and English.
- Maternal input includes rich lexical diversity with a high number of unique nouns, verbs, and adjectives. Maternal MLU did not correlate with child's age, although mothers used more sign tokens overall with older children.
- The prominence of verb use in parent input may help to explain the high proportion of verbs in deaf children's early vocabulary (Anderson & Reilly, 2002). Future research should further explore the relationship between input and acquisition in ASL.

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Acknowledgements

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