The argument structure of Chinese Sign Language (CSL): a preliminary investigation

Background: The study of argument structure in spoken languages has been centered on the syntactic configuration and its relation with particular lexical items. Two approaches are generally adopted: lexicalism and (neo-)constructivism. However, relatively few studies systematically investigate the argument structure of sign languages(Geraci & Quer, 2014; Kegl, 1990; Kimmelman, 2018; Rathmann & Mathur, 2011) or echo the lexicalism-constructivism debate(Benedicto & Brentari, 2004; Kimmelman, 2018).

Aims: This study aims to fill in the gap by providing a systematic typological description of the CSL argument structure and argument alternations. By placing CSL in the whole typological picture of argument structure of sign languages, we hope to shed some light on the nature of argument realization by echoing back the theories on the lexical-syntax interface.

Methodology: A list of 80 verbal meanings from the VALPAL database(Hartmann et al., 2013) is adopted to elicit the basic argument structure data in CSL. Data is elicited from two native signers that also have good command of written Chinese, transcribed and analyzed through ELAN and further checked against our CSL corpus.

Main findings:(1) Valency: Similar to other sign languages (i.e. ASL, RSL), CLS verbs are basically classified into 5 types: verbs without argument, intransitive verb, labile verb, transitive verb and ditransitive verb. Meanwhile, there is a rough connection between verb classes and morphological verb types, i.e. intransitive verb tend to be realized by the plain verb or spatial verb while ditransitive verb is exclusively realized by the agreement verb. (2) Argument alternation: Similar to spoken languages, argument alternation is commonly detected in CSL, albeit shows its characteristic mechanism. Causative-inchoative alternation and valence-changing (reducing and increasing) alternations are explored. Compared to RSL, CSL lacks the following alternation mechanism like: body-part possessor ascension, benefactive introduction and adpositions. (3) Classifier construction are ubiquitous in CSL. we see equivalent classifier construction alternation for almost every type of the verb class above. Besides, verbal classifiers can form verbal predicate with more than three arguments. (4) lacking prepositions. This a. ZHANG SAN CL: KNIFE KNIFE^CUT MEAT

is a prominent feature of CSL argument structure compared with spoken languages. In spoken languages, non core arguments such as instrument, recipient or location are introduced by applicative head or prepositions(Baker, 1988). CSL b. ZHANG SAN BELJING GO^TRAIN lacks these elements, thus non-core arguments are integrated into the structure via the following ways: (i) being incorporated into the verb via verbal classifiers, such as instruments, see (a), which encodes 'Zhangsan used knife to cut meat meat'. 'knife' is expressed by a classifier predicate





'CL:KNIFE\(\cap\CUT\';\) (ii) being posed in the argument position, such as the recipient or location as in (b), which means (Zhangsan took train to Beijing). CSL preposes the goal ahead of predicate while the instrument 'train' is merged with 'go' in a complicated verbal classifier predicate.

Theoretical implications: CSL agrees with the basic principles in argument realization. The modality effect (visual-spatial modality by sign languages vs. audial-aural modality by speech) seems to be represented on the classifier construction. Further research needs to be conducted to clarify how far is the effect.

Keywords: Argument structure; Argument alternation; Classifier; Chinese Sign language