

Cantonese Classifiers in HPSG

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N = Noun; X = Numeral; C = Classifier; D = Determiner (Demonstrative)

- N (mainly generic or kinship terms/names)
N(x)
- X C N (indefinite)
N(x); C(x); X(x)
- C N (definite/indefinite; not good as answer to how many)
N(x); C(x); 1(x)
- D X C N (definite)
N(x); C(x); X(x); D(x)
- D C N (definite)
N(x); C(x); 1(x); D(x)



N can be missing from an NP, right after the classifier:

- C (indefinite)
G(x); C(x); 1(x);
- X C (indefinite)
G(x); C(x); X(x);
- D C (definite)
G(x); C(x); 1(x); D(x)
- D X C (definite)
G(x); C(x); X(x); D(x)



Classifiers can be reduplicated to indicate universal quantification; In such cases, nothing can appear to the left of the reduplicated classifiers:

- CC N
N(x); C(x); every(x) (universal quantification)
- *D CC N

Following Borthen and Haugereid (2005), Bender and Goss-Grubbs (2008) and Sio and Song (2015):

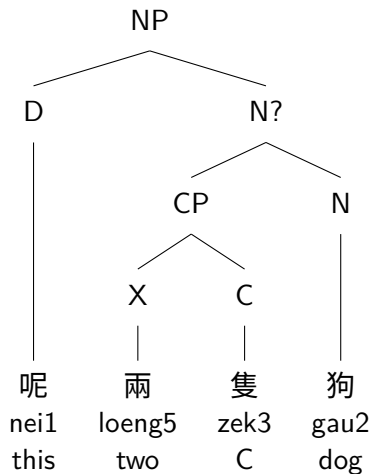
Table: Cognitive status

type	example	Cantonese
D-(X)-C-N	呢 (三) 隻狗	uniq-or-more
X-C-N	三隻狗	type-id
C-N	隻狗	cog-st
N	狗	type-id

- definite is shorthand for **uniq-or-more**
- indefinite is shorthand for **type-id**



How to build?

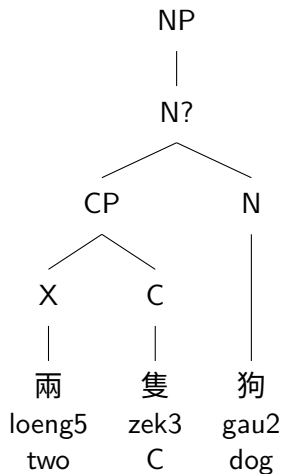


Definite (from D: demonstrative)

D is SPR? what is C? Zhong says MOD, but, ...



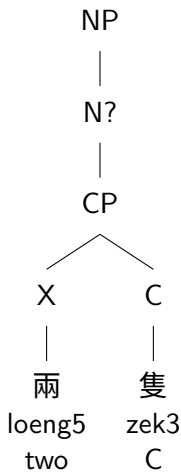
X C (N)



Indefinite only

Weird pumping rule?

How can I see X from N??



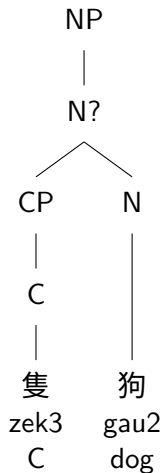
Indefinite only

Weird pumping rule?

How can I see X from N??



C (N)



Definite or indefinite
different pumping rule?

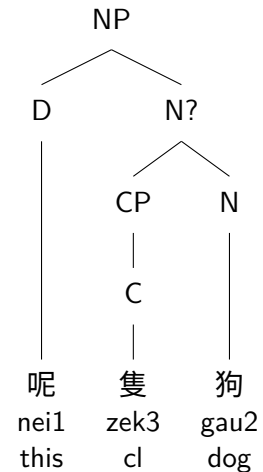


Indefinite only
different pumping rule?

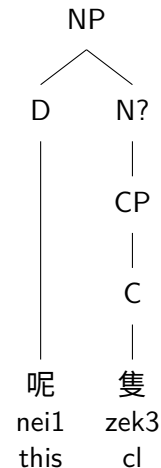


- In some Chinese varieties, certain classifiers can show definiteness contrast in forms (e.g., one specific classifier in Zhongshan-Min, a Min variety spoken in Guangdong). When the demonstrative is present, both the definite and indefinite form of the classifier can be used.
- It has been proposed that classifiers can encode definiteness (in addition to determiners) (Cheng and Sybesma (1999); Sio (2006)), in addition to the demonstrative.
- A post-classifier noun can generally be elided/missing in a Cantonese nominal, except in two contexts (i) when the classifier (with the missing noun) appears in the subject position (a position where a definite NP is required); (ii) *[Mod-C] ([Mod-C-N] phrases are always definite).
- In Zhongshan-Min with the classifier that shows explicit marking for definiteness, the noun can only be elided/missing after a classifier that is marked as indefinite.





Definite, also from D



Definite, also from D

Modification

Modifiers (with a modification marker GE) general appear either before the demonstrative (outer position) or between the classifier and the noun (inner position);

- (Modifier-GE-)D-X-C-(Modifier-GE-)N
- X-C-(Modifier-GE-)N
- C-(Modifier-GE-)N
- (Modifier-GE-)N

Modifiers (with GE) can also appear to the left of the numeral (X), though this requires a more restricted context:

- (Modifer-GE-)X-C-N

A bare modifier can be placed before [C-N]. The interpretation is only definite:

- (Modifier-)C-N



Ungrammatical NPs

You do not want to generate:

- *D
- *D-N
- *D-X
- *Modifier-GE-C-N
- *Modifer-X-C-N
- *Modifier-C
- *Modifier-X-C
- *Modifier-GE-C



Approaches for Mandarin Chinese

- Classifier as modifier (Zhong)
hard to model interactions
- Classifier as specifier of N,
Determiner as specifier of Classifier (Gao, 1994)
But determiner can scope over *XCN and XCN*
- Two specifiers (Ng, 1997; Wang and Liu, 2007; Zhang et al., 2011)
But icky
- Add CLS <> to VALENCE
Lots of changes to pass it up, ...



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