

## Coding Rubrics

### Referential forms

Referential forms	Mandarin	English
Nominals	+ <b>[Num-CI-N]</b> e.g., <i>Lai le yi zhi mao.</i> ‘There comes a cat.’ <i>Liang zhi xiaoniao hen haipa.</i> ‘The two birds are very scared.’	+ <b>[Indef./Def./Num. determiner-NP]</b> e.g., <i>There comes <u>a cat</u>. <u>The birds</u> are scared. There are <u>two birds</u>.</i>
	+ <b>Bare noun</b> e.g., <i>You <u>mao</u>.</i> ‘There is a cat. / There are cats.’ <i><u>Huli</u> hen e.</i> ‘The fox is very hungry.’	+ <b>No determiner singular N (used as a proper noun)</b> e.g., <i><u>Cat</u> is so naughty.</i>
	+ <b>Demonstrative NP</b> e.g., <i>na zhi yang</i> ‘that goat’	+ <b>Demonstrative NP</b> e.g., <i>that goat</i>
	+ <b>Kinship term</b> e.g., <i>mama</i> ‘Mommy’	+ <b>Kinship term</b> e.g., <i>Mommy</i>
	+ <b>Complex NP containing a possessor, a relative clause, or adjectival modification</b> e.g., <i>ta (de) mama</i> ‘her mother’, <i>diaojin shuili de yang</i> ‘the goat who just dropped into the water’, <i>hei de niao</i> ‘the black bird’	+ <b>Complex NP containing a possessor, a relative clause, or adjectival modification</b> e.g., <i>her babies, the goat who just dropped into the water, little birds</i>
Pronominals	+ <b>Personal pronoun</b> e.g., <i>ta</i> ‘it’	+ <b>Personal pronoun</b> e.g., <i>it</i>
	+ <b>Demonstrative</b> e.g., <i>zhe(ge)</i> ‘this’, <i>na(ge)</i> ‘that’	+ <b>Demonstrative</b> e.g., <i>this, that</i>
Null forms	+ <b>Null subject/object</b> e.g., <i>zhuadao le.</i> ‘[It] got [the bird].’	– <b>Null subject/object</b> e.g., <i>*[It] got [the bird].</i>
Others	N/A	+ <b>nonspecific lexical items</b> e.g., <i>someone</i>

Notes: ‘+’ = allowed, ‘–’ = disallowed, ‘\*’ = ungrammatical, ‘[]’ = lexically unrealized

### Syntactic position of first mentions

Syntactic position	Examples (target referential form underlined)		
	Mandarin		English
Preverbal	Canonical subject	<i>Zai shuxia de <u>xiaomao</u> kanjian le shushing de <u>xiaoniao</u></i> 'A cat under the tree saw the birds in the tree.'	<i><u>The cat</u> saw the birds.</i>
	NP in <i>ba</i> -construction	<i>Xiang yao ba <u>xiaoyang</u> chi diao.</i> '[The fox] wanted to have the little goat eaten up.'	N/A
Postverbal	Canonical object	<i>Ta zhengzai wei <u>ta de niaobaobao</u>.</i> 'She's feeding her baby birds.'	<i>The cat caught <u>a bird</u>.</i>
	SV inversion	<i>Shu xia ye lai le <u>yi zhi xiaohuanggou</u>.</i> 'Under the tree there comes a little yellow dog.'	<i>Along came <u>a cat</u>.</i>
	NP after <i>you</i> (there be) in existential construction	<i>You <u>yizhi huli</u> lai le.</i> 'There is a fox coming.'	<i>There is <u>a cat</u> looking at his baby.</i>
Unanalysable	NP-only	<i>Liangzhi <u>xiaoyang</u>.</i> 'Two baby goats.'	<i><u>A cat</u>.</i>
	Verbal predicate missing	N/A	<i><u>The three little goats</u> the grass on there.</i>  <i><u>The small sheep</u> in the water.</i>

### Discourse functions

*Discourse function* was coded largely following Serratrice (2007), with reference to Colozzo and Whitely (2014). The unit of analysis is "clause" defined by the presence of a verbal predicate (Serratrice, 2007). The verbal predicates are mainly verbs and may include adjectives in Mandarin.

Introduction: the very first mention of the referent (including NP-only).

Reintroduction: reference involving topic shift across adjacent clauses.

To be coded as reintroduction, a referential form must meet one of the following criteria: (i) it is a subject/object argument referring to a previously identified referent which has not been mentioned in the immediately preceding clause; (ii) it is a subject argument and has been mentioned in the adjacent clause as a non-subject (e.g., an object, or an adjunct); or (iii) the reference shifts from two or more characters together to only one of these characters (and vice versa). All subsequent mentions other than reintroduction were coded as maintenance.

Sample coding of discourse functions in English and Mandarin Chinese is provided below.

Sample coding of discourse functions in English (target referential form underlined)

Unit ID	Clause	Referent	Function
1	there is <u>a goat</u> in the pond .	Baby goat1	Introduction
2	<the other> [/] <u>the goat in the pond</u> ask for the other goat for help .	Baby goat1	Reintroduction
2	<the other> [/] the goat in the pond ask for <u>the other goat</u> for help .	Mommy goat	Introduction
3	<u>the other goat</u> push him out of the [/] the pond	Mommy goat	Reintroduction
3	the other goat push <u>him</u> out of the [/] the pond	Baby goat1	Maintenance
4	when <the the goat> [/] <u>the other goat</u> was eating grass .	Baby goat2	Introduction
5	<u>the wolf</u> wanted to eat the [/] the one in the pond .	Fox	Introduction
5	the wolf wanted to eat the [/] <u>the one in the pond</u> .	Baby goat1	Reintroduction
6	so then the [/] <u>the wolf</u> come	Fox	Maintenance
7	and $\phi$ chase the [/] the goat .	Fox	Maintenance
7	and $\phi$ chase the [/] <u>the goat</u> .	Baby goat2	Reintroduction
8	and $\phi$ pull one of the goat's leg .	Fox	Maintenance
9	<u>he</u> almost fell	Baby goat2	Reintroduction
10	when <u>two of them</u> was drinking water .	Baby goat1 and Mommy goat	Reintroduction
11	<u>the bird on the tree</u> was so angry	Crow	Introduction
12	that he [/] <u>the bird</u> flew to the [/] the wolf	Crow	Maintenance
12	that he [/] the bird flew to the [/] <u>the wolf</u>	Fox	Reintroduction
13	and $\phi$ bite his [/] his tail .	Crow	Maintenance
14	then the [/] the wolf , I [/] I mean , <u>the goat</u> was so happen [/] happy .	Baby goat2	Reintroduction

Notes: Units with more than one referential form are repeated as many times as the number of referential forms they contain.  $\phi$  = null form.

Transcription follows the CHAT-format (MacWhinney, 2000): "[/]" indicates self-correction and "[/]" self-repetition.

Sample coding of discourse functions in Mandarin Chinese (target referential form underlined)

Unit ID	Clause	Referent	Function
1	有一天, <u>一只小山羊</u> 在 草地上面吃草.	Baby goat2	Introduction
2	然后呢, <u>一只山羊</u> 不小心[:一不小心] 跑到水里面.	Baby goat1	Introduction
3	然后 <u>那个大一点的山羊</u> 去救那个小山羊.	Mommy goat	Introduction
3	然后 <u>那个大一点的山羊</u> 去救那个小山羊.	Baby goat1	Maintenance
4	突然, <u>一个狐狸</u> 看到那个小山羊在吃草.	Fox	Introduction
4	突然, 一个狐狸看到 <u>那个小山羊</u> 在吃草.	Baby goat2	Reintroduction
5	<u>它</u> 想要抓住那个山羊.	Fox	Maintenance
5	它想要抓住 <u>那个山羊</u> .	Baby goat2	Maintenance
6	然后 然后呢, <u>那个大山羊</u> 看到它在吃草.	Mommy goat	Reintroduction
6	然后 然后呢, 那个大山羊看到 <u>它</u> 在吃草.	Baby goat1	Reintroduction
7	然后呢, <u>那个小山羊</u> 刚刚在吃草的时候	Baby goat2	Reintroduction
8	$\phi$ 看到一只狐狸要抓它 xxx.	Baby goat2	Maintenance
8	$\phi$ 看到 <u>一只狐狸</u> 要抓它 xxx.	Fox	Reintroduction
8	$\phi$ 看到一只狐狸要抓 <u>它</u> xxx.	Baby goat2	Maintenance
9	<u>它</u> 就要快跑走.	Baby goat2	Maintenance
10	但是呢, <u>那个狐狸</u> 已经抓住它的脚了.	Fox	Reintroduction
11	然后 <u>一只鸟</u> 看见.	Crow	Introduction
12	<u>它</u> 想要救那个羊.	Crow	Maintenance
12	它想要救 <u>那个羊</u> .	Baby goat2	Reintroduction
13	然后 <那一> <u>那个鸟</u> 快快把 狐狸的 尾巴给咬住.	Crow	Maintenance
14	然后 <u>那个狐狸</u> 它觉得很痛.	Fox	Reintroduction
14	然后 那个狐狸 <u>它</u> 觉得很痛.	Fox	Maintenance
15	然后 <它就> <u>它</u> 就把 把手松掉.	Fox	Maintenance
16	然后 <u>那个山羊</u> 看到它.	--	--
16	然后 那个 <u>它</u> 看到它.	Fox	Maintenance

Sample coding of discourse functions in Mandarin Chinese (*continued*)

Unit ID	Clause	Referent	Function
17	<u>它</u> 说 +"/.	Baby goat2	Maintenance
17	+ " 嗯 ?	--	--
18	然后呢, <u>它</u> [/] <u>它们</u> 就被救了.	Baby goat1&2 and Mommy goat	Reintroduction
19	然后 <u>那个大</u> [/] <u>大一点的</u> 山羊 xxx <u>它们</u> .	Mommy goat	Reintroduction
19	然后 <u>那个大</u> [/] <u>大一点的</u> 山羊 xxx <u>它们</u> .	Baby goat1&2	Reintroduction
20	然后 <那 只 鸟> [///] <u>狐狸</u> 跑 走 的 时 候 ,	Fox	Reintroduction
21	<u>那 只 鸟</u> 还 在 追 那 个 <u>狐狸</u> .	Crow	Reintroduction
21	<u>那 只 鸟</u> 还 在 追 <u>那个狐狸</u> .	Fox	Maintenance

Notes: Units with more than one referential form are repeated as many times as the number of referential forms they contain.  $\phi$  = null form.

Transcription follows the CHAT-format (MacWhinney, 2000): "[//]" indicates self-correction, "[/]" self-repetition, "xxx" unintelligible words, "[?]" unclear, "+"/" start of direct speech from next line, "+" direct speech, and "[///]" false start.