On the DP/NP status of Mandarin Chinese and its implications

Introduction Traditionally, a phrase such as *the book* has been analyzed as an NP, with *the* occupying [Spec, NP], as in (1). Since Fukui (1986) and Abney (1987), it has been widely assumed that articles such as *the* also head their own projections and take an NP as complement, as in (2). Under the so-called *universal DP hypothesis*, many authors have proposed that, despite the absence of overt articles, DP does exist in Mandarin Chinese (MC) (Tang (1990), Li (1998, 1999), Simpson (2003), Saito, Lin and Murasugi (2008) (SLM), among others). Recently, Bošković (2008) has argued that there are systematic syntactic and semantic differences between languages with DP and those without DP, with MC belonging to the latter group. This thus casts doubt on the existence of DP in MC. In this paper, I provide new evidence from binding paradigm to argue that DP indeed does NOT exist in MC. I also show that Japanese patterns with MC in this respect, thus also arguing against DP in Japanese (contra Watanabe (2008)).

Claim Under the standard approach, the grammaticality of (3a,b) follows, since, as the Spec of the subject DP (3c), *his* and *John* do not c-command *John* and *him*, respectively. Under Kayne's (1994) LCA and his definition of c-command, in which specifiers are adjuncts and can c-command out of the subject DP, the well-formedness of (3a,b) is unexpected. Kayne assumes that possessors in fact occupy [Spec, PossP] and there is a null DP on top of it, as in (4), along the lines of Szabolcsi (1987). The null DP is crucial for Kayne and is responsible for the grammaticality of (3a,b). The relevant constructions in MC, as in (5,6), however, do not behave similarly with English. The ungrammaticality of (5,6) shows the possessor indeed c-commands out of the subject and binds *Akiu* and *he*, respectively, causing Condition C and B violations. This means the null DP does not exist in MC; otherwise, (5,6) should be grammatical. (7a,b) serve as control to indicate that when the relevant binder is more deeply embedded, the sentences become grammatical. The above paradigm is also observed in Serbo-Croatian (Despić (2009)), another language without overt articles, adding support to the DP/NP parameter. Interestingly, when the relevant binders are contained in another projection, such as Cl(assifier)P, as in (8,9), the sentences become grammatical. This is expected since this extra projection will behave just like the null DP in English and block the c-command domain. It is thus predicted that when the possessor appears in [Spec, ClP] (or adjoins to ClP), it will c-command out of ClP and result in ungrammaticality. This prediction is indeed borne out, as in (10) and (11). This provides further support that there is no null DP on top of ClP in MC.

Discussion After examining relevant sentences in MC, I turn to Japanese to see how it behaves with these tests since some authors (eg. Watanabe (2008)) also claim that Japanese have DP. It is expected that Japanese should behave differently from MC with respect to the binding paradigm. This prediction, however, is not borne out and Japanese patterns just like MC, as in (12a-c). When there is no classifier, *kare-no* 'his' will c-command out of the NP and bind *Taroo*, resulting in ungrammaticality (12a). Again, this shows (contra Watanabe) that there is no null DP in Japanese. Similarly, an extra layer of phrase will be projected when numeral+classifiers appears before the possessor (12b), blocking the c-command domain. The ungrammaticality of (12c) is explained in the same way as (10). The contrast between (12a,b) also provides a piece of argument against SLM's claim that classifiers in Japanese do not head projections but simply adjoin to NPs. The same behavior between MC and Japanese from the binding facts shows classifiers head their own projections in both languages.

Implications This paper also has implications on the status of classifiers. Given the possibility of an extra ClP on top of the possessor in (8), one might wonder why can't there also be a null ClP in (5) (cf. Cheng & Sybesma (1999)), which would make (5) grammatical. I claim that this follows if classifiers in MC (and Japanese) are enclitics and must attach to a preceding host. The absence of a host in (5) prevents a null classifier from appearing higher than *his*, as in (13a). As an enclitic, the null Cl can only be licensed when the possessor *his* appears in [Spec, ClP], as in (13b), in which case the null Cl can be affixed to *his*. This only option allows the possessor *his* to c-command out of the phrase, causing in Condition C violation. The ungrammaticality of (5) thus provides evidence to the claim that classifiers are enclitics and should attach to their hosts.

(1) [$_{NP}$ the [$_{N'}$ book]] (2) [$_{DP}$ the [$_{NP}$ book]]

(3) a. His$_1$ friend considers John$_1$ highly intelligent.
b. John$_1$'s friend considers him$_1$ highly intelligent.
c. [$_{DP}$ possessor [$_{D'}$ D [$_{NP}$ NP]]]

(4) [$_{DP}$ [$_{D'}$ D [$_{PossP}$ John [$_{poss'}$'s [$_{NP}$ friend]]]]]

(5) *Ta$_1$-de pengyou renwei Akiu$_1$ hen congming.
he-gen friend think Akiu very smart
'His friend thinks Akiu is very smart.'

(6) *Akiu$_1$-de zhaopian xiaodao-le ta$_1$
Akiu-gen picture scare-asp he
'Akiu's picture scared him.'

(7) a. [xihuan Akiu$_1$ de ren] ye xihuan ta$_1$-de didi
like Akiu DE person also like he-gen brother
'The person who like Akiu also likes his brother.'
b. [xihuan ta$_1$-de didi de ren] ye xihuan Akiu$_1$.
like he-gen brother DE person also like Akiu
'The person who likes his brother also likes Akiu.'

(8) You san-ge ta$_1$-de pengyou renwei Akiu$_1$ hen congming.
have 3-cl he-gen friend think Akiu very smart
'Three of his friends think that Akiu is very smart.'

(9) You san-zhang Akiu$_1$-de zhaopian xiaodao-le ta$_1$
have 3-cl Akiu-gen picture scare-asp he
'Three of Akiu's pictures scared him.'

(10) *Ta$_1$-de san-ge pengyou renwei Akiu$_1$ hen congming
he-gen 3-cl friend think Akiu very smart

(11) *Akiu$_1$-de san-zhang zhaopian xiaodao-le ta$_1$
Akiu-gen 3-cl picture scare-asp he

(12) a. *kare$_1$-no tomodachi-ga [Taroo$_1$-ga atama-ga ii to] omotteiru
he-gen friend-nom Taroo-nom head-nom good C think
'His friends think that Taroo is smart.'
b. San-nin-no kare$_1$-no tomodachi-ga [Taroo$_1$-ga atama-ga ii to] omotteiru
3-cl-gen he-gen friend-nom Taroo-nom head-nom good C think
'Three of his friends think that Taroo is smart.'
c. ?*Kare$_1$-no san-nin-no tomodachi-ga [Taroo$_1$-ga atama-ga ii to] omotteiru
he-gen 3-cl-gen friend-nom Taroo-nom head-nom good C think

(13) a. *[$_{ClP}$ Cl [$_{PossP}$ he [$_{poss'}$'s [$_{NP}$ NP]]]] b. [$_{ClP}$ his [$_{Cl'}$ Cl [$_{PossP}$ [$_{NP}$ NP]]]]

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