

# Towards Aligning Bengali DP-Structure with Other Southeast Asian Languages

Dustin A. Chacón<sup>1</sup>

University of Minnesota: Twin Cities

## INTRODUCTION

### Bengali DP-Structure

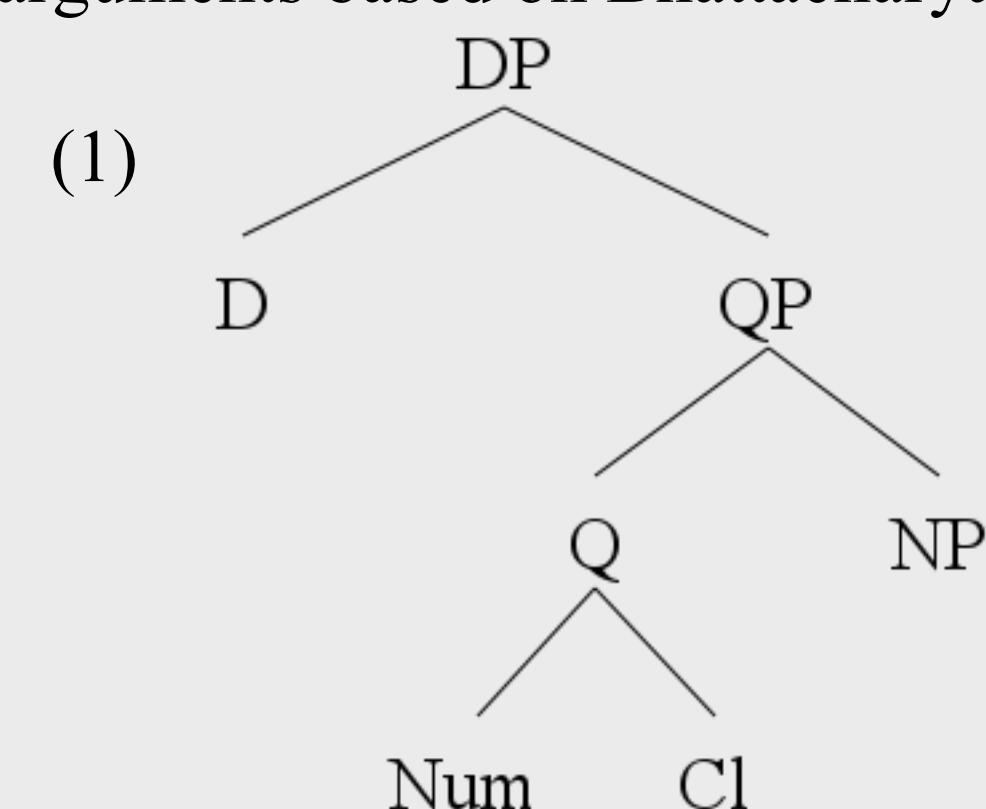
- Language bordering Southeast Asia and other South Asian languages
- Bengali DP-structure infrequently studied (Bhattacharya, 1999a, 1999b, 2000a, 2000b, Dirdal, 2004)
- Bhattacharya's (1999, *inter alia*) analysis proposes multiple unique properties of Bengali's nominal structure

### Compared to (Other) Southeast Asian languages

- Much of the Bengali data is reconcilable with other southeast Asian languages, allowing for a more unified analysis that may be more informative of universals in DP-structure in classifier-languages.
- This more unified analysis can account for further data that present analyses cannot address.

## BHATTACHARYA'S (1999) ANALYSIS

Bhattacharya (1999a, *inter alia*) has created a powerful model of the Bengali DP that accounts for much data. A simplified version of his structure is shown in (1), with a few particular points listed below. Examples and arguments based on Bhattacharya (1999a).



- Quantifiers (Num) and Classifiers (Cl) form a complex head, Q. Breaking the sequence is ungrammatical. (2)

- (2)
- ei [tin-te] [lal boi]*  
this three-CL red book
  - ei [lal boi] [tin-te]*
  - ?[tin-te] ei [lal boi]*
  - \*tin-ei-te [lal boi]*  
'These three red books'

- NPs may move to Spec[QP] to check a [SPECIFIC] feature on Q (3). This movement is only allowed when a classifier is present. NPs that do not generally take classifiers rarely move. (4)

- (3)
- du-to [lal boi]*  
two-CL red book  
'two red books'
  - [lal boi] du-to*  
red book two-CL  
'the two red books'

- (4)
- car paf*  
four side  
'four sides'
  - \*paf car*  
side four

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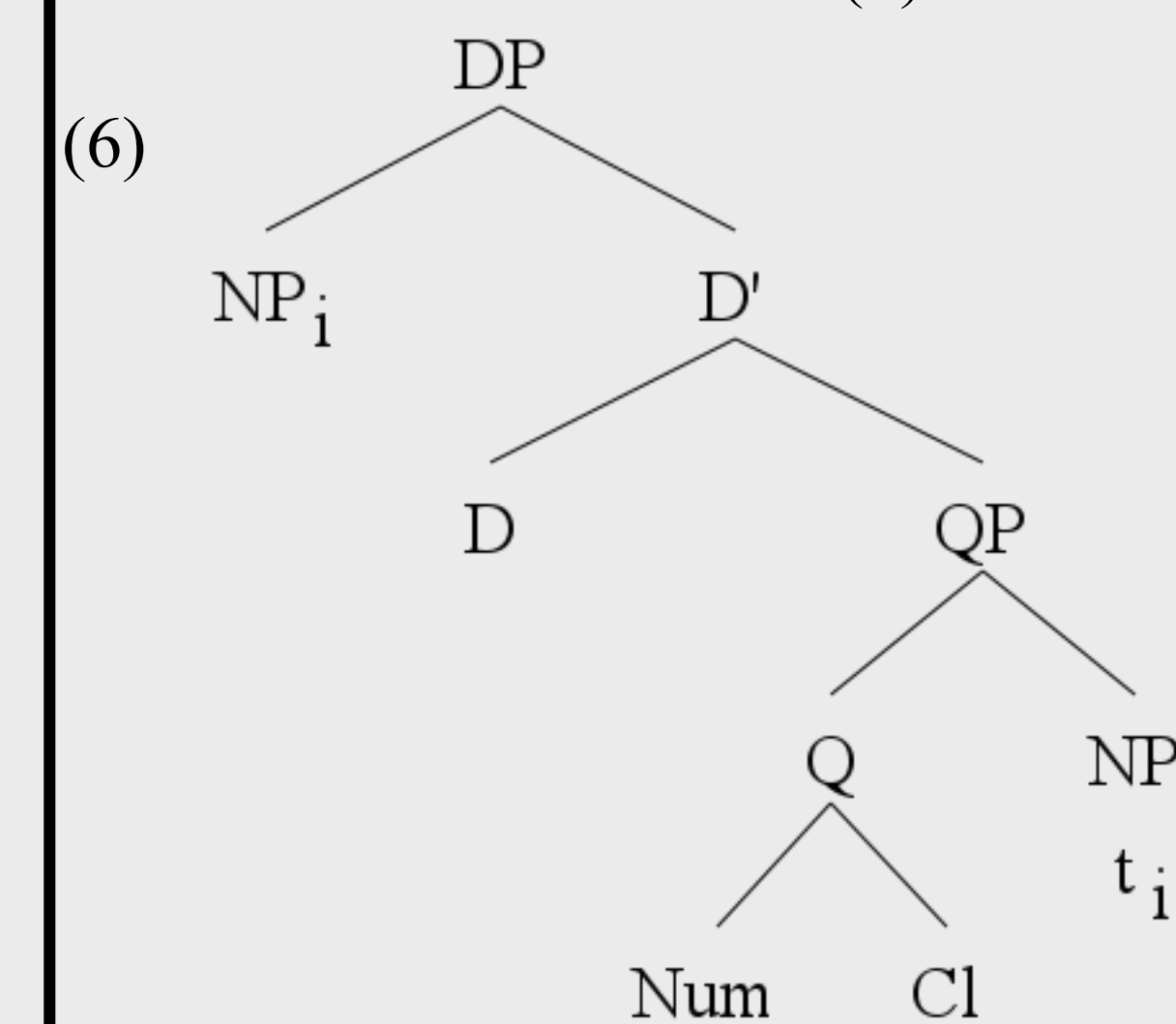
<sup>2</sup> Example found on <http://www.milansagar.commotamot/ChrianjoyDas/nepothye.html>

## NP MOVEMENT

- Bhattacharya (1999a) claims that NPs may move to Spec[QP] to check a [SPECIFIC] feature, but only when a classifier is available. Dasgupta (1983) and Junghare (1983) also link the classifier to marking specificity. These predict that postnominal classifiers will be felicitous for DP with indefinite specific readings, contradicted by (5).

- (5) *jokhon amar baccar boes tin chilo, tokhon amra bondhu(#-ta)r baqite chilam,*  
when my baby's age three was, then we a.friend(-CL)'s house.LOC were,  
*ar amar bondhu amake boleche je...*  
and my friend me told that..  
'When my baby was three, we were at a friend's house, and my friend told me that.'

- Chacón (2008) shows that DPs with moved NPs are at least uniquely identifiable in the Givenness Hierarchy framework (Gundel et al, 1993), which has been found to be equivalent to definite (Gundel et al, 2001). I propose that the D attracts a definite N to its Spec position, and the whole phrase is pied-piped. The structure of moved NPs is shown in (6).



## NUM-CL SEQUENCE

- Bhattacharya (1999a)'s claim that Num (quantifiers) and Cl (classifiers) form a complex head does not follow from the evidence. At best, he proves that these morphemes only form a constituent. (2)
- Simpson (2005) demonstrates that crosslinguistically these heads form two separate heads. For example, in some languages, other words may intervene between the Num and Cl elements (7). Finally, one element may appear without the other in Bengali, as well (8). Simpson (2005) notes this occurs crosslinguistically, and suggests that they contribute differently to the meaning – Num quantifies, and Cl individuates the predicate NP.

- (7) a. Mandarin Chinese (T'ung & Pollard 1982 in Simpson 2005)  
*yi xiao ben shu*  
one small CL book  
'a small book'

- b. Ejagham (Watters 1981 in Simpson 2005)  
*a-mege` i-cokud a-bae*  
NC-CL GEN NC-orange.seed NC-two  
'two orange seeds'

- c. Nung (Saul & Wilson 1964 in Simpson 2005)  
*an ahn tahng nuhng ma*  
take CL chair one come  
'Bring a chair.'

- (8) a. *bən-er moddhe ək-ta hrəd-er dhar-e car bondhu bas.korto* (Sharma, 1985)  
forest-GEN among one-CL lake-GEN side-LOC four friend lived  
'Four friends lived in a forest on the side of a lake'

- b. *boi-ta*  
book-CL  
'the book'

## CLASSIFIERS

- Dasgupta (1983) notes that there are a certain class of Ns in Bengali that often occur without a classifier. Bhattacharya (1999a) claims that no NP movement is possible without a classifier. Is another analysis possible?

- (9)
- |                                                |                                                  |
|------------------------------------------------|--------------------------------------------------|
| a. <i>car paf</i><br>four side<br>'four sides' | b. <i>tin bar</i><br>three side<br>'three times' |
| a'. <i>*paf car</i><br>side four               | b'. <i>*bar tin</i><br>time three                |

- Simpson (2005) observes that many languages go through a N-to-Cl raising process for certain Ns. Many of these Ns form classes, such as measure words or time expressions. These categories overlap with the classifier-less Ns in Bengali.

- Assuming N-to-Cl raising process, we can explain why these Ns do not surface with Cls, and also why they do not undergo NP-raising. If the N moves to the Cl position, then there is no place for a Cl to surface, preventing a separate classifier from surfacing. The NP raising does not occur because the head has been removed, meaning a definite D has no head to attract in the target NP, and the rest of the NP remains *in-situ*. This would also implicate that NP-movement to check [DEF] only occurs when a N is present in the NP, otherwise there is no movement.

## VAGUE NUMBER READINGS

- There is a construction used in Bengali to express a vague reading on a number, (10). The example in (10b) shows the same construction used with a moved N. (Example 11a adapted from Dasgupta (1983))

- (10)
- |                                                                              |                                                                           |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| a. <i>car-jon sromik</i><br>four-CL laborer<br>'four laborers'               | b. <i>tin bar</i><br>three time<br>'three times'                          |
| a'. <i>jon car(-ek) sromik</i><br>CL four-D laborer<br>'four laborers or so' | b'. <i>bar tin-ek</i> <sup>2</sup><br>time three-D<br>'three times or so' |

- I propose that the D may have a [VAGUE] feature which attracts the Cl element (or the N in the Cl position if it has been moved, as in (10b)), which then undergoes head-movement to adjoin to D. Note that the inversed positions of Num and Cl confirms the separate heads hypothesis, and that the N in 10b' appears in the Cl position, confirming the N-to-Cl hypothesis for Bengali. It is unclear what to predict with a [+DEF] and [+VAGUE] D, or if this combination is even possible.

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