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Categorizing adpositions in Kĩitharaka

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Abstract

In this paper, I discuss the categorial status of Kĩitharaka adpositions. I demonstrate that there are two main classes of adpositions (to be referred to as Class A and Class B). Class A adpositions are syntactic heads and they belong to the functional category P. Class B adpositions are a phrasal P category with a nominal component. They therefore spell out a more complex structure than adpositional heads do. This bipartition of Kĩitharaka Ps is based on (i) optionality of complements, (ii) case assignment, (iii) modification, (iv) recoverability of content, (v) movement, and (vi) derivational morphology.

1. Introduction

This paper explores the rather impoverished, yet interesting adpositional system of Kĩitharaka. I show that there are two classes of adpositions (i) adpositional heads such as *na* ‘with’, *kĩri* ‘dir’ and *ni* ‘loc’ (Class A) and (ii) phrasal adpositions such as *rungu* ‘under’, *rũteere* ‘beside’ or ‘on the side’, among others (Class B). The bipartition is based on a wide range of distributional facts — syntactic, semantic and morphological.

This paper is organized as follows. In section 2, I lay out the adpositional classes of Kĩitharaka, showing the exhaustive list of each class. Section 3 compares Class A adpositions with Class B adpositions indicating the systematic differences in the two classes. Here, I examine optionality of complements, case assignment and the possibility of P stranding. By the end of this section, I will take it as given that Class A adpositions are quite different from Class B adpositions. In section 4, I compare nouns and Class B adpositions. The main goal of this section will be to establish the category of Class B adpositions. Here, I will show the productive variety of modification that goes into nouns and its meagre availability in Class B adpositions. This section will also draw on facts from recoverability of content and derivational morphology to tease apart nouns from Class B adpositions. Section 5 shows how Class B adpositions fit into the overall PP system of Kĩitharaka. Here, I will show that despite their nominal origin, Class B adpositions have a distribution strikingly similar to that of PPs. Thus they are more adpositional than nominal. On this basis, I will conclude that they are *phrasal adpositions*. The last section summarizes

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the findings of the paper, exploring what the implications are for syntactic theory for claiming that Class B adpositions are phrasal. I will relate the presence of a phrasal P category to conflation, incorporation prior to lexical insertion (Baker 2003) or post-syntactic insertion of lexical categories for non-terminals (Michal Starke, p.c.).

2. Setting the scene: Kĩĩtharaka adpositional system

2.1. Class A adpositions

Like other Bantu languages (see e.g. Baker 2003 for Chichewa), Kĩĩtharaka has a very poor adposition system. Exhaustively, there are three serious candidates for Class A adpositions — two prepositions *na* ‘with’, and *kĩrĩ* ‘to’, and one postposition *ni* ‘loc’.¹

2.1.1. Kĩrĩ

Kĩrĩ expresses direction and can only be used with displacement verbs, as seen in (1).² Furthermore, *kĩrĩ* requires its object, a goal or source, to be animate. Note that animacy here is not in its strictest sense. Thus a body or organization run by people such as a government or insurance company can also be a complement of *kĩrĩ*.³

- (1) a. Maria n-a- ir -ir -e ntũmwa *kĩrĩ* mw-arimũ/
 1Maria F-SM1-take-PERF-FV 9message DIR 1- teacher/
 thirikaarĩ
 9government
 ‘Maria took the message to the teacher/government’
- b. Maria n-a- gwat-ir -e ntũmwa ku-uma *kĩrĩ* mw-
 1Maria F-SM1-hold -PERF-FV 9message 15-come DIR 1-
 arimũ/ kampuni j-a incuaransi
 teacher/9company 9-AS 9insurance
 ‘Maria got/received a message from the teacher/from the insurance company’

¹The bulk of other prepositional functions, among them bene/malfactive, instrumental, locative and circumstantial, are carried out by the applicative in Kĩĩtharaka. I do not discuss the applicative construction in this paper. There are also the i/n morphemes which occur on “demoted” subjects of passives and which resemble the focus marker in allomorphy: *i* occurring when it precedes a consonant-initial DP, and *n* a vowel-initial DP. I do not discuss them in this paper either.

²Other verbs that can be used with *kĩrĩ* include *ugia* ‘run’, *thi* ‘go’, *ingirita* ‘roll’, *thũngutha* ‘jump’, *tindĩka* ‘push’.

³Glosses are as follows: F (focus marker), SM (subject agreement), PRES (present), PERF (perfective), ST (stative), CSI (inner causative), PASS (passive), FV (final vowel), DIR (direction), DEG (degree), LOC (locative), AS (associative marker), RP (resumptive pronoun), PS (personal pronoun), Q (question particle), HAB (habitual), PN (near past), OM (object marker), PEF (prefix). A numeral on a noun indicates the class of the noun, a numeral on an agreement morpheme, modifier or pronoun indicates agreement with a noun of a particular class. ^ indicates the tense vowels.

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- c. Ka-ana ga- gû- kiny -a *kîrî* ngina/ *î-kûmbî/
 12- *child* SM12-PRES-arrive-FV DIR 9*mother*/5-*granary*/
 *jiiga
 5*stone*
 ‘The child has reached the mother/the granary/the stone’
- d. Maria a- kû- ger -a mû-biira *kîrî* John/ *î-kûmbî/
 1*Maria* SM1-PRES-throw-FV 3- *ball* DIR *John*/ 5-*granary*/
 *jiiga
 5*stone*
 ‘Maria has thrown the ball to John(/*the granary/*the stone)’

Observe that when *kîrî* ‘dir’ is used with a non-directed verb such as *ina* ‘sing’ or ‘dance’, the sentence is ungrammatical.

- (2) *Ka-ana i- ka- in -ir -e *kîrî* a-geni
 12- *child* F-SM12-sing.dance-PERF-FV DIR 2-*guest*
 ‘The child sang and danced to the guests’

Kîîtharaka *kîrî* resembles English *to* in that it can express comparison (but here the animacy requirement goes).⁴

- (3) I prefer mangoes *to* oranges
- (4) I- m- beend-eet -e ma-embe *kîrî* ma-cunkwa
 F-1PS-like- STAT-FV 6- *mango* DEG 6- *oranges*
 ‘I like mangoes more than oranges’

Directional *kîrî* therefore imposes the following requirements.

- (5) a. The complement of *kîrî* must be animate
 b. The directional feature of *kîrî* must be matched with a directional feature of the verb.

2.1.2. Na

Na ‘with’ is used to introduce instruments and accompaniments, (6), and is homophonous with the conjunction ‘and’, (7).

- (6) a. Maria a- kû- ûrag-a njoka *na* mû-ragi
 1*Maria* SM1-PRES-kill -FV 9*snake* with 3- *stick*
 ‘Mary has killed the snake with a stick’
- b. Maria a- kû- ûj -a *na* John
 1*Maria* SM1-PRES-come-FV with *John*
 ‘Mary has come with John’

⁴In a strictly decompositional system of PPs such as that adopted in Koopman (2000) and extended in den Dikken (2003), one might argue that directional prepositions merged in Path⁰ can move to DegPath⁰ hence indicating degree.

- (7) Maria a- rug -ir -e nkima na a- ta -a rû-jî
 1Maria SM1-cook-PERF-FV 10food and SM1-fetch-FV 11-water
 ‘Maria cooked food and fetched water’

2.1.3. Ni

Ni expresses location, (8), but a *ni*-marked DP can be used to express direction in the presence of some motion verbs, (9).

- (8) a. Maria a- mami î- kurungu-*ni*
 1Maria SM1-sleep 5-cave -LOC
 ‘Maria is sleeping in the cave’
 b. Maria a- in -ir -e ndagaca-*ni*
 1Maria SM1-sing-PERF-FV bridge -LOC
 ‘Maria sang on the bridge’
- (9) Maria n-a- ug -iir -i -e î- kurungu-*ni*
 1Maria F-SM1-run-PERF-CSI_{pseudo}-FV 5-cave -LOC
 ‘Maria ran in/into the cave’

2.2. Class B adpositions

Class B adpositions, like Class A, form a closed class. The full list of members is given in Table 1. Adpositional elements bearing the same noun class morphology are put under each other in the table.

Table 1: Class B adpositions

Adposition	Translation	Adposition	Translation
nyuma 9behind	behind	î-gûru 5-top	above/on top
mbere 9front	in front	ru-ungu 11-under	under
nja 9out	out/outside	rû-teere 11-beside	beside/on the side
nkona 9bottom	bottom	ga-tîgatî 12-centre/between	between/centre
ndeni 9inside	inside	ka-thengengani 12-edge	on the edge
		karibû near	near/next to

3. Comparing Class A and Class B adpositions

3.1. Optionality of complement

Class A adpositions differ from Class B adpositions in various ways. A Class A adposition must have a complement (cf. (10), (11), (12)), but all Class B adpositions can occur with or without a complement, (13) and (14).

- (10) a. ✓John n-a- urag-ir -e nyoka na ka-jiû
 1*John* F-SM1-kill -PERF-FV 9*snake with* 12-*knife*
 ‘John killed the snake with a knife’
 b. *John n-a- urag-ir -e nyoka na
 1*John* F-SM1-kill -PERF-FV 9*snake with*
 (‘John killed the snake with’)
- (11) a. ✓Maria n-a- ir -ir -e ntûmwa kîrî mw-arimû
 1*Maria* F-SM1-take-PERF-FV 9*message* DIR 1- *teacher*
 ‘Maria took the message to the teacher’
 b. *Maria n-a- ir -ir -e ntûmwa kîrî
 1*Maria* F-SM1-take-PERF-FV 9*message* DIR
 (‘Maria took the message to’)
- (12) a. ✓Maria a- mami î- kurungu-ni
 1*Maria* SM1-sleep 5-cave- LOC
 ‘Maria is sleeping in the cave’
 b. *Maria a- mami ni
 1*Maria* SM1-sleep LOC
 (‘Maria is sleeping in’)
- (13) a. ✓Maria a- kari ru-ngu rw-a ndagaca
 1*Maria* SM1-sit 11-under 11-AS 9*bridge*
 ‘Maria is sitting under the bridge’
 b. ✓Maria a- kari ru-ngu
 1*Maria* SM1-sit 11-under
 ‘Maria is sitting under [of some place]’
- (14) a. ✓Maria a- ciat -ir -e rû-teere rw-a î- kurungu
 1*Maria* SM1-sweep-PERF-FV 11-side 11-AS 5-cave
 ‘Maria swept the side of the cave’
 b. ✓Maria a- ciat -ir -e rû-teere
 1*Maria* SM1-sweep-PERF-FV 11-side
 ‘Maria swept (on) the side [of something]’

3.2. Adjacency to the complement

Class A adpositions must be adjacent to their complement when *in situ*, Class B adpositions can be separated from their complement by modifiers.

- (15) a. John a- mami *rû-teere* [*Compl* rw-a *î-kurungu*]
 1*John* SM1-*sleep* 11-*side* 11-AS 5-*cave*
 ‘John is sleeping on the side of the cave’
 b. John a- mami *rû-teere* *rû-ra* *rû-ngî* [*Compl* rw-a
 1*John* SM1-*sleep* 11-*side* 11-*that* 11-*other* 11-AS
î-kurungu]
 5-*cave*
 ‘John is sleeping on the other side of the cave’

Similar facts are observed with P stranding. In the strictest sense, the locative *ni* cannot be stranded. It must always be pied-piped by its complement in topic and focus constructions (cf. (16) and (17) respectively).⁵ Not even a resumptive pronoun (RP) will enable *ni* to allow P stranding, ((16c) and (17c)).

- (16) a. \checkmark \hat{I} -*kurungu-ni*, Maria n-a- mami
 5-*cave*- LOC 1*Maria* F-SM1-*sleep*
 ‘In the cave, Maria is sleeping’
 b. \ast \hat{I} -*kurungu*, Maria n-a- mami -*ni*
 5-*cave* 1*Maria* F-SM1-*sleep* LOC
 (‘The cave, Maria is sleeping in’)
 c. \ast \hat{I} -*kurungu*, Maria a- mami *rîo- ni*
 5-*cave* 1*Maria* SM1-*sleep* 5RP-LOC
 (‘The cave, Maria is sleeping in it’)
- (17) a. \checkmark N- \hat{ni} -*kurungu-ni* Maria a- mami
 F- 5-*cave*- LOC 1*Maria* SM1-*sleep*
 ‘It is in the cave that Maria is sleeping’
 b. \ast N- \hat{ni} -*kurungu* Maria a- mami -*ni*
 F- 5-*cave* 1*Maria* SM1-*sleep* LOC
 (‘It is the cave that Maria is sleeping in’)
 c. \ast N- \hat{ni} -*kurungu* Maria a- mami *rîo- ni*
 F- 5-*cave* 1*Maria* SM1-*sleep* 5RP-LOC
 (‘It is the cave that Maria is sleeping in it’)

The other prepositions *na* ‘with’ and *kîri* ‘dir’ cannot also strictly be severed from their complement. Thus they can either be moved together with their complement, or, when separated from their complement, be obligatorily resumed in topic and focus constructions.⁶

⁵Topics in Kĩitharaka are moved sentence initially and are severed from the rest of the clause by a pause. On the other hand, focus and wh-constructions may appear sentence initially or after the subject. In addition, focus constructions, unlike topics, are introduced by the focus marker, which has two allomorphs — *n* prevocally and *i* preconsonantly (see Muriungi 2005 for details).

⁶The fact that prepositions cannot be stranded in Kĩitharaka but must either be pied-piped with the topicalized or focalized noun or be resumed possibly indicates that PPs are strong phases in Kĩitharaka (Abels 2003).

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- (18) [Topic with *kîrî*]
- a. ✓ *Kîrî* mw-arimû, Maria n-a- ir -ir -e ntûmwa
 DIR 1- teacher 1Maria F-SM1-take-PERF-FV 9message
 ‘To the teacher, Maria took the message’
- b. ✓ Mw-arimû, Maria n-a- ir -ir -e ntûmwa *kîrî*-wee
 1- teacher 1Maria F-SM1-take-PERF-FV 9message DIR-1RP
 ‘The teacher, Maria took the message to him/her’
- c. *Mw-arimû, Maria n-a- ir -ir -e ntûmwa *kîrî*
 1- teacher 1Maria F-SM1-take-PERF-FV 9message DIR
 (‘The teacher, Maria took the message to’)
- (19) [Focus with *kîrî*]
- a. ✓ I- *kîrî* mw-arimû Maria a- ir -ir -e ntûmwa
 F-DIR 1- teacher 1Maria SM1-take-PERF-FV 9message
 ‘It is to the teacher that Maria took the message’
- b. ✓ I- mw-arimû Maria a- ir -ir -e ntûmwa *kîrî*-wee
 F-1- teacher 1Maria SM1-take-PERF-FV 9message DIR-1RP
 ‘It is the teacher that Maria took the message to him/her’
- c. *I- mw-arimû Maria a- ir -ir -e ntûmwa *kîrî*
 F-1- teacher 1Maria SM1-take-PERF-FV 9message DIR
 (‘It is the teacher that Maria took the message to’)
- (20) [Topic with *with*]
- a. ✓ *Na* ka-jiû, John n-a- urag-ir -e nyoka
with 12-knife 1John F-SM1-kill -PERF-FV 9snake
 ‘With a knife, John killed the snake’
- b. ✓ Ka-jiû, John n-a- urag-ir -e nyoka *na*- ko
 12- knife 1John F-SM1-kill -PERF-FV 9snake *with*-12RP
 ‘The knife John killed the snake with it’
- c. *Ka-jiû, John n-a- urag-ir -e nyoka *na*
 12- knife 1John F-SM1-kill -PERF-FV 9snake *with*
 (‘The knife, John killed the snake with’)
- (21) [Focus with *with*]⁷
- a. ✓ I- ka-jiû John a- urag-ir -e nyoka *na*- ko
 F-12-knife 1John SM1-kill -PERF-FV 9snake *with*-12RP
 ‘It is a knife that John killed the snake with it’
- b. *I- ka-jiû John a- urag-ir -e nyoka *na*
 F-12-knife 1John SM1-kill -PERF-FV 9snake *with*
 (‘It is a knife that John killed the snake with’)

⁷Independently, the option where the focus marker would be attached to the fronted *with PP* is ruled out because of the requirement in Kîûtharaka that the focus marker be immediately followed by a noun class marked X. For *kîrî*, there is a possibility that it is a combination of the class 7 prefix *kî* and the locative copula *rî* but I will not go into the details here.

When we examine Class B however, we observe that they can be stranded in an A-type movement transformation. (22a) gives an example of a Class B adposition with its complement. In (22b) and (22c), the complement is moved together with the Class B adposition in topic and focus constructions, and this confirms that they form a constituent. In (22d), the associative preposition is deleted, and this time the complement (Ground DP) appears before the Class B adposition. With this latter structure, the Class B adposition cannot be moved together with the complement, (22e) and (22f), confirming that constituency has changed.

- (22) a. Maria n-a- burabur-ir -e nkona j- a ka-raî
 1*Maria* F-SM1-*wiped* -PERF-FV 9*bottom* 9-AS 12-*pan*
 ‘Maria wiped the bottom of the pan’
- b. Nkona j- a ka-raî, Maria n-a- (mî)- burabur-ir -e
 9*bottom* 9-AS 12-*pan* 1*Maria* F-SM1- OM9-*wiped* -PERF-FV
 ‘The bottom of the pan, Maria wiped it’
- c. I- nkona j- a ka-raî Maria a- burabur-ir -e
 F-9*bottom* 9-AS 12-*pan* 1*Maria* SM1-*wiped* -PERF-FV
 ‘It is the bottom of the pan that Maria wiped’
- d. Maria n-a- burabur-ir -e ka-raî nkona
 1*Maria* F-SM1-*wiped* -PERF-FV 12-*pan* 9*bottom*
 ‘Maria wiped the pan on the bottom’
- e. *Ka-raî nkona Maria n-a- burabur-ir -e
 12- *pan* 9*bottom* 1*Maria* F-SM1-*wiped* -PERF-FV
 (‘The pan on the bottom, Maria wiped’)
- f. *I- ka-raî nkona Maria a- burabur-ir -e
 F-12-*pan* 9*bottom* 1*Maria* SM1-*wiped* -PERF-FV
 (‘It is the pan on the bottom that Maria wiped’)

Note that individually, the Ground and the Class B adposition in (22d) can be moved, for example under focalization, (23).

- (23) a. I- ka-raî Maria a- burabur-ir -e nkona
 F-12-*pan* 1*Maria* SM1-*wiped* -PERF-FV 9*bottom*
 ‘It is the pan that Maria wiped on the bottom’
- b. I- nkona Maria a- burabur-ir -e ka-raî
 F-9*bottom* 1*Maria* SM1-*wiped* -PERF-FV 12-*pan*
 ‘It is on the bottom that Maria wiped the pan’

Assuming that something like UTAH holds (Baker 1988), the most obvious account for the alternation from (22a) (with the associative marker) to (22d) (without the associative marker) is case-based. Withdrawal of the associative marker leaves the DP complement without case, thus it has to move to a case position in a manner analogous to the passive transformation. Whether this conjecture is right or wrong need not concern us here. What I am trying to show is that at least a complement of Class B

adposition can move away from it.

(24) Class A adpositions cannot be stranded; Class B adpositions can

3.3. Case assignment

The adjacency requirement is possibly related to another property — that Class A adpositions assign case, while Class B adpositions cannot. In fact when a Class B preposition takes a Ground argument, it obligatorily must be followed by the case assigning associative marker *a* which agrees with the head noun. The full agreement paradigm with the associative *a* is given in Table 2.⁸

Table 2: Class B adpositions and associative agreement

Adposition	As Agr	Translation	Adposition	As Agr	Translation
nyuma 9behind	j-a 9-AS	behind	î-gûru 5-top	rî-a 5-AS	above on top
mbere 9front	j-a 9-AS	in front	ru-ungu 11-under	rw-a 11-AS	under
nja 9out	j-a 9-AS	out outside	rû-teere 11-beside	rw-a 11-AS	beside on the side
nkona 9bottom	j-a 9-AS	bottom	ga-tîgatî 12-centre	k-a 12-AS	between centre
ndeni 9inside	j-a 9-AS	inside	ka-thengangani 12-edge	k-a 12-AS	on the edge
			karibû near	na with	near next to

The associative marker is also found in possessive constructions, arguably with the same function — that of assigning case to the second noun, the possessor (cf. (25) and (26)).

(25) ga-tîgatî k- a metha
12-centre 12-AS 9table
'The centre of the table'

(26) gî-kombe ki-a Maria
7- cup 7- AS 1Maria
'Maria's cup'

That *a* is a case assigner is evident from the observation that the associative marker can only take a bare noun as its complement, not a noun with an

⁸ *Karibû* is the only Class B adposition that does not agree; it takes the preposition *na* (with) instead.

overt preposition. This observation calls to mind Stowell’s Case Resistance Principle — a case assigning category cannot bear case (Stowell 1981).⁹

- (27) Gî-kombe kî- rî ga-tîgatî k- a metha(*-ni)
 7- cup SM7-be 12-centre 12-AS table -LOC
 ‘The cup is at the centre of the table’

To sum up: I have shown in this section that Class A and Class B adpositions are syntactically distinct. Class A adpositions must have a complement, must be adjacent to their complement (cannot be stranded) and are case assigners. On the other hand, Class B adpositions only optionally have a complement, can have material intervening between them and their complements, can be stranded and they are not case assigners. Class A adpositions therefore seem to have the properties typical of adpositions in other languages. I assume therefore that they truly belong to category P. Table 3 summarizes the distinction between Class A and B.

Table 3: Class A and Class B Ps compared

Class	Optional complement	P stranding	Adjacent complement	case
Class A	*	*	✓	✓
Class B	✓	✓	*	*

The difficult task now remains of establishing the categorial status of Class B adpositions. In the next section, I provide the distributional differences between Class B adpositions and nouns. I draw on data on modification, recoverability of content, movement and derivational morphology to show that Class B adpositions cannot be nouns in the strict sense of the word. Since there is no obvious, even marginal, similarity between Class A adpositions and nouns, I will not dwell on their distinction in the next section.

4. Comparing Class B adpositions and nouns

An obvious reason for thinking that Class B adpositions are different from nouns is that they form a closed class (see Table 1). On the other hand, nouns are an open class. The behaviour in modification structures, recoverability of content, A-movement, and derivational morphology further establishes the point — if Class B adpositions are nouns at all, then they must be malnourished nouns.

⁹See however Koopman (2000) footnote 27 for a Dutch example of a P taking a PP complement. Overall, however, the case Resistance Principle seems to be operative in a number of languages (cf. Aboh 2005 for Kwa.)

4.1. Modification in nouns and Class B adpositions

Nouns in Kîûtharaka can take a wide range of postnominal modifiers, and a small number of prenominal modifiers which come in the following neutral order.

- (28) **Focus** > **Quantifier** > **NOUN** > **Dem** > **Genitives** >
even/also every N that of-mine
Num > **Adj** > **AssociativeP** > **Relative-clause** >
two red of-maths
Quantifiers
only/alone

The following sentences demonstrate by transitivity this neutral order.

- (29) Maria a- ri- ij -îit -e ma-buku ma-ma ma-kwa ma-
 1Maria SM1-PERF-steal-STAT-FV 6- book 6- this 6- mine 6-
 tano ma-tune m-a ma-thabu
five 6- red 6- AS 6- math
 ‘Maria had stolen these five red books of mine of mathematics’
 (N>Dem>Gen>Num>Adj>AsP)
- (30) John a- ra- gur-ir -e ma-buku m-a ma-thabu ma-ra
 1John SM1-PN-buy-PERF-FV 6- book 6- AS 6- math 6- that
 ma-ra- ij -îit -w -e m-onthe
 6- PN-steal-STAT-PASS-FV 6- all
 ‘John bought all the books of mathematics that were stolen’
 (N>AsP>Rel>Q)
- (31) a. Kinya kîra mw-arimû n-a- kû- ri patî -ni
even every 1- teacher F-SM1-SM17-be party-LOC
 ‘Even every teacher was at the party’
 b. Maria a- keth-ir -i -e kinya kîra mw-arimû
 1Maria SM1-greet-PERF-CSI-FV even every 1- teacher
 ‘Maria greeted even every teacher’ (Focus>Quantifier)

One clear point of similarity between nouns and Class B adpositions is that both take associative phrases marked with the associative marker *a* as complements. Other lexical categories such as adjectives and verbs do not. Furthermore, like nouns, all Class B adpositions are modifiable with the exhaustive focus particles *akî* ‘only’ and *nka* ‘alone’. These particles obligatorily follow the phrase that they associate with.¹⁰

¹⁰The Class B adposition *karibû* ‘near’ or ‘next to’ does not behave like any other of the Class B adpositions in any way. We saw already that instead of taking associative agreement it takes the preposition *na* ‘with’. *Karibu* never also displays any nominal properties. Thus it cannot be modified by any of the nominal modifiers.

- (32) Maria a- th-ir -e ndeni akî/ yo- nka
 1Maria SM1-go-PERF-FV 9inside only/9PR-alone
 ‘Maria went inside only’

The particles *akî* ‘only’ and *nka* ‘alone’ in Kîitharaka are actually very relevant in this context because they require that the category they associate with be a noun. Thus a VP or an adjective with regular prefixal verbal morphology such as subject agreement cannot be what the exhaustive focus particles *akî* ‘only’ and *nka* ‘alone’ associate with, as illustrated in (33) and (34). In order for adjectives and verbs to be focused with exhaustive *akî* and *nka*, they must first be nominalized with Class 15 *kû*, (33b) and (34b), and appear in the traditional predicate cleft construction.¹¹

- (33) a. *Maria n-û- mû- ûgî akî/ gu-nka
 1Maria F-SM1-PREF1-intelligent only/15-alone
 (‘Maria is only intelligent’)
 b. ✓I-kû-ûgia akî/ gu-nka Maria a- rî mû-
 F-15-intelligent only/15-alone 1Maria SM1-be PREF1-
 ûgî
intelligent
 ‘It is only intelligent that Maria is’
- (34) a. *Maria n-a- rug -ir -e akî/ gu-nka
 1Maria F-SM1-cook-PERF-FV only/15-alone
 (‘Maria only cooked’)
 b. ✓I-kû-ruga akî/ gu-nka Maria a- rug -ir -e
 F-15-cook only/15-alone 1Maria SM1-cook-PERF-FV
 ‘It is only cooking that Maria did’

Undoubtedly therefore, Class B adpositions have a small share of nouniness.

But when it comes to other nominal modifiers, nouns and Class B adpositions start to part ways. The strange fact is that no sweeping statement can be made for all Class B adpositions. The adpositions *rûteere* ‘beside’ or ‘on the side’ and *rungu* ‘under’ are the most nominal like. More precisely, *rûteere* ‘beside’, ‘on the side’ is the most nominal probably because it refers to some physical space — the sides of the table (four of them for example), the sides of the sea. Thus *rûteere* can take all the nominal modifiers (note that in (35) *rûteere* ‘beside’, ‘on the side’ appears in the plural form — the singular marker is *ru* (Class 11), the plural is *n* (Class 10) (see section 4.4 for details). Taking the plural is further confirmation of its nominal status. I give below a few of the modifiers that *rûteere* takes.

¹¹Note that the focus particle *nka* ‘alone’, which always agrees with the NP it associates with, suggests the obligatoriness of a nominal associate because it bears Class 15 pronominal agreement. The agreement that *nka* ‘alone’ takes is the strong pronoun. *Akî* ‘only’ does not agree with the associate.

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- (35) a. John n-a- thamb-ir -i -e nteere ino i- nya
 1 *John* F-SM1-*wash* -PERF-CSI-FV 10*side* 10*this* 10-*four*
 ntune ci- onthe
 10*red* 10-*all*
 ‘John washed all these four red sides [of the table, for example]’
 (Dem, Num, Adj, Q)
- b. Kinya kîra rû-teere i- fû- kû-rî na ki-ngarurî
even every 11-*side* F-SM11-17-*be with* 7- *scorpion*
 ‘Even on every side [of something] there was a scorpion’
 (focus, quantifier)

The same degree of tolerance for modification will hold for *rungu* ‘under’ when it refers to a physical location, for example, the underspace of a granary, but not an abstract space, for example the underspace of a tree.

Since different granaries can have different underspaces, it is possible to modify ‘under’ in this context with *all* ‘all’.

- (36) Maria n-a- ciat -ir -e ndungu ci-onthe
 1 *Maria* F-SM1-*sweep*-PERF-FV 10*under* 10-*all*
 ‘Maria swept all the unders [of something]’

Demonstratives are much more felicitous with Class B adpositions in yes/no and rhetorical questions.

- (37) a. Gi-ciati kî- rî nja î- no anga
 7- *broom* SM7-*be* 9*out* 9-*this* Q
 ‘Is the broom here outside?’
- b. Nkaarî n-î- rî mbere/ nyuma î- no kana
 9*vehicle* F-SM9-*be* 9*in.front/9behind* 9-*this* Q
 ‘Is the vehicle here in front/behind?’ (I can hear some noise)

When Class B adpositions take adjectives, the adjective forces a reading where it modifies some non-overt noun (see Carstens 1991 for a related observation for Chichewa)

- (38) a. ?Maria n-a- ngaranger-ir -e ru-ngu rû-tune
 1 *Maria* F-SM1-*scrub* -PERF-FV 11-*under* 11-*red*
 ‘Maria scrubbed a red spot on the under [of some place]’
- b. ?Maria a- mam-ir -e î-gûrû rî-jerû
 1 *Maria* SM1-*sleep*-PERF-FV 5-*top* 5-*white*
 ‘Maria slept on a white thing on the top [of something]’

Adjectival modification therefore prefers to go with nouns, not PPs or PP-like things (Class B adpositions).

As far as I can tell, no Class B adposition other than *rûteere* ‘beside’, ‘on the side’ can take modifiers such as numeral, every, even, also. Even relative clauses are really odd with Class B adpositions.

4.2. Recoverability of content

I demonstrated in section 3.3 that possessive structures and complements of Class B adpositions are introduced by the associative case assigner. Some relevant examples are given in (39) and (40) for the associative marker in possessive and Class B structures respectively.

- (39) Maria a- gû- tûmir-a gû-kombe *ki-a* Musa
 1*Maria* SM1-PRES-*use* -FV 7- *cup* 7- AS 1*Musa*
 ‘Maria has used Musa’s cup’
- (40) Maria a- mami î- gûrû *ri-a* metha
 1*Maria* SM1-*sleep* 5-*top* 5- AS 9*table*
 ‘Maria is sleeping/lying on top of the table’

The head noun in the possessive construction can be deleted if its content is recoverable from context, (41), but even when the context is salient for Class B adpositions, they cannot be deleted, (42).

- (41) ✓ Maria a- rî- tûmir-a *ki-a* Musa
 1*Maria* SM1-PRES-*use* -FV 7- AS 1*Musa*
 ‘Maria is using of Musa’s [class 7 object]’
- (42) *Maria a- mami *ri-a* metha
 1*Maria* SM1-*sleep* 5- AS 9*table*
 (‘Maria is sleeping/lying [somewhere] of the table’)

In fact, the phrase without the possessee can be focused and thus fronted in (41), but the phrase without the Class B element cannot, (42).

- (43) ✓ I- *ki-a* Musa Maria a- gû- tûmir-a
 F-7- AS *Musa* 1*Maria* SM1-PRES-*use* -FV
 ‘It is [something of class 7] of Musa’s that Maria is using’
- (44) *I- rî-a metha Maria a- mami
 F-5- AS 9*table* 1*Maria* SM1-*sleep*
 (‘It is [somewhere] of the table that Maria is sleeping/lying’)

This is strange given that there are potentially many nouns of class 7 that can be possessed and that agree with the associative marker, while there is only one Class B adposition ‘on top’ that has class 5 agreement. The possibility here might be that only items that can refer, and consequently bear a referential index (cf. Baker 2003), can be resumed. Class B adpositions cannot therefore be true nouns.

4.3. A-movement properties

It is common knowledge that nouns trigger agreement on verbs and nominal modifiers in Bantu. An example with verbal agreement is given in (45).

- (45) *Tû-ana i- tû- ring-ir -e mû-biira*
 12- *child* F-SM12-*kick*-PERF-FV 3- *ball*
 ‘The children kicked the ball’

The same is true of some Class B adpositions. They agree with the verb when they are used as subjects (cf. also (35b)).

- (46) *ga-tîgatî ka- rî na rûko mîno*
 12-*centre* SM12-*be with dirt* *very*
 ‘The centre [of some thing] is very dirty’

The same is true of other adpositions such as *rûteere* ‘beside’ *îgûrû* ‘on top’ and *rungu* ‘under’. Other Class B adpositions such as *nyuma* ‘behind’, *nkona* ‘bottom’, *ndeni* ‘inside’ are a bit marginal with their own noun Class Agreement. The locative class 17 agreement is much more acceptable.

- (47) *Ndeni ?j-/ kw- î na rûko mûno*
 9*inside* SM9-/SM17-*be with dirt* *very*
 ‘The inside [someplace] is very dirty’

Like nouns, Class B adpositions can undergo A-movement in passive constructions. Again for these constructions, there is great preference for locative agreement, except for *rûteere* ‘beside’, ‘on the side’ and *îgûrû* ‘on top’.

- (48) a. *Rû-teere i- √rû/ √gû- ciat -ir -w -e*
 11- *side* F- SM11/ SM17-*sweep*-PERF-PASS-FV
 ‘The inside [of something] was swept’
 b. *Î- gûrû i- √rî/ √gû- ciat -ir -w -e*
 5-*top* F- SM5/ SM17-*sweep*-PERF-PASS-FV
 ‘The top [of something] was swept’
 c. *Nyuma (n-?i)/ √(i-gû-) ceng -ir -u -e*
 9*behind* F-SM9/ F- SM17-*cut.grass*-PERF-PASS-FV
 ‘The behind was cleared/cut of grass’

4.4. Derivational morphology

Some Class B adpositions are like nouns in that they can be pluralized (cf. also (35a) and (36) for *rûteere* ‘beside’ and *rungu* ‘under’ respectively).

- (49) a. *ga-tîgatî*
 12-*centre/between*
 ‘centre/between’
 b. *tû- tîgatî*
 13-*centre/between*
 ‘centres/betweens’

Other Class B adpositions are potentially unpluralizable because the plural would mean something else.¹²

- (50) a. *î-gûrû*
 5-*top*
 ‘on top’
 b. *ma-gûrû*
 6- *top*
 ‘*tops/√legs’
 c. *ngûrû*
 10*top*
 ‘*tops/√ugly thin legs’

Other forms such as *nkona* ‘bottom’ are pluralizable without any change in noun class morphology, the effects of the plural being seen when it takes an associative phrase for example. And the other Class B prepositions just can’t be pluralized: *mbere* ‘in front’, *nyuma* ‘behind’, *nja* ‘outside’, *ndeni* ‘in side’, *karibû* ‘near’, *kathengani* ‘on the edge’.

In Bantu, nouns already bearing a class prefix can be preprefixed to form augmentatives. Augmentatives usually express bigness, often with some negative or derogatory connotation. When it comes to formation of augmentatives, only *rûteere* ‘beside’ can. Even then, the extremely nominal-like *rûteere* does not have the productivity of nouns which can have singular and plural derogatives (cf. (50) and (51) with (52) for a regular noun).¹³

- (51) a. *kî-rû-teere*
 7- 11-*side*
 ‘this ugly side’
 b. **i-rû-teere*
 8-11-*side*
 (‘these ugly sides’)
 c. **ma-rû-teere*
 6- 11-*side*
 (‘these ugly sides’)

- (52) a. *mu-ntû*
 1- *person*
 ‘person’
 b. *kî-mu-ntû*
 7- 1- *person*
 ‘this big/ugly person’

¹²The same point could be made for English; *beside* and *besides*, *on the front* and *on the fronts* (war zones).

¹³Derogatives in Kĩtharaka are formed by pre-prefixing class 7/8 prefixes *kî* and *î*, and class 6 prefix *ma*.

- c. i- mu-ntû
8-1- *person*
'these big/ugly people'
- d. ma-mu-ntû
6- 1- *person*
'these big/ugly people'

Furthermore, only 'on the side' can take a pre-prefix to form a diminutive; even then, the plural diminutive is unavailable.

- (53)
- a. ka-rû-teere
12-11-*side*
'on this narrow side'
 - b. *tû-rû-teere
13-11-*side*
('on these narrow sides')

Summing up: I have shown in this section that Class B adpositions and nouns seem to cluster together in being able to take associative phrases as complements and in being modifiable by the exhaustive focus particles *akî* 'only' and *nka* 'alone'. I have however demonstrated that despite this fact, there are other things that point to dissimilarity. Except for the striking nominal *rûteere* 'beside', 'on the side', the productivity of other Class B adpositions with nominal modification, A-movement, or derivational morphology was either shown to be severely restricted, marginal, or even non-existent. In fact even for the best nominal candidate *rûteere* 'on the side', 'beside', plurals with derogatives and diminutives were shown to be non-existent. All these facts point in the same direction — Class B adpositions are not nouns, but they potentially have a nominal ancestry. Synchronically, these facts suggests that Class B elements must either contain an overt or a null preposition. This would account for the mixed nominal and PP behaviour of Class B (see section 6 for a theoretical speculation based on spell out and conflation).

Thus far, I have shown that Class A adpositions belong to a functional category P. I have also shown that Class B adpositions are not nouns, at least not full DPs. One might therefore legitimately ask: why do you call Class B things adpositions? Why are they not a species of nouns for example? The next section shows that Class B elements occur in a variety of contexts that are typical of prepositional phrases. In a sense to be made precise in the last section, Class B adpositions are condensed PPs.

5. Comparing Class B adpositions and PPs

Class B adpositions show properties typical of prepositional phrases, not shared by nouns and other lexical categories. For example only PPs and 'here' and 'there' occur as the complement of the 3rd person, present tense

copula. Class B adpositions are also fine in this context but nouns, adjectives and verbs are not.

- (54)
- a. Maria a- rî Nairobi/cukuru
1*Maria* SM1-*be* Nairobi/school
'Maria is in Nairobi/ in school' (Bare Place PP)
 - b. Maria a- rî aga
1*Maria* SM1-*be* 1*here*
'Maria is here' (Here)
 - c. Maria a- rî aara
1*Maria* SM1-*be* 1*there*
'Maria is there' (There)
 - d. Maria a- rî r-ungu/ ru-teere/ ga-tîgatî/ nyuma/
1*Maria* SM1-*be* 11-*under*/11-*beside*/12-*between*/9*behind*/
mbere
9*in.front*
'Maria is under/beside/between/behind/in front' (Class B)
 - e. *Maria a- rî mû- ajie
1*Maria* SM1-*be* PREF14-*sick*
'(Maria is sick)' (Adjective)
 - f. *Maria a- rî mw-arimû
1*Maria* SM1-*be* 1- *teacher*
'(Maria is a teacher)' (Noun)
 - g. *Maria a- rî kû-ruga
1*Maria* SM1-*be* 15-*cook*
'(Maria is cooking)' (Verb)

Like other members of the P family, Class B adpositions occur in locative inversion structures. Nouns and other categories cannot.

- (55)
- a. I- kûmbi-*nî* i- kû- mam-ag -a mbea nyinî mûno
F-*granary* F-SM17-*sleep* -HAB-FV 10*mouse many very*
'In the granary sleep many mice' (NI-PP)
 - b. Nairobi i- kû- mam-ag -a mbea nyinî mûno
17*Nairobi* F-SM17-*sleep* -HAB-FV 10*mouse many very*
'In Nairobi sleep many mice' (Place)
 - c. Aga i- kû- mam-ag -a mbea nyinî mûno
here F-SM17-*sleep* -HAB-FV 10*mouse many very*
'Here sleep many mice' (Here)
 - d. Aara i- kû- mam-ag -a mbea nyinî mûno
there F-SM17-*sleep* -HAB-FV 10*mouse many very*
'There sleep many mice' (There)

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- e. R- ungu/ rû-teere/i- gûrû/ ga-tîgatî/ nja i- kû-
 11-*under*/11-*side*/ 5-*on.top*/12-*between*/9*outside* F-SM17-
 mam-ag -a mbea nyinî mûno
sleep-HAB-FV 10*mouse many very*
 ‘Underneath/on the side/between/outside sleep many mice’
 (Class B)
- f. *John i- kû- mam-ag -a mbea nyinî mûno
John F-SM17-*sleep*-HAB-FV 10*mouse many very*
 (‘On John sleep many mice’) (NP)

Class B adpositions and other members of the P family can be complement of *iga* ‘put’, which requires an obligatory PP complement, but ordinary nouns and other lexical categories cannot.

- (56) a. John n-a- ig -ir -e î- buku i- kurungu-*ni*
 1*John* F-SM1-*put*-PERF-FV 5-*book* 5-*cave*- LOC
 ‘John put the book in the cave’ (NI-PP)
- b. John n-a- ig -ir -e î- buku cukuru
 1*John* F-SM1-*put*-PERF-FV 5-*book* *school*
 ‘John put the book in school’ (Bare Place)
- c. John n-a- ig -ir -e î- buku aga
 1*John* F-SM1-*put*-PERF-FV 5-*book* *here*
 ‘John put the book here’ (Here)
- d. John n-a- ig -ir -e î- buku aara
 1*John* F-SM1-*put*-PERF-FV 5-*book* *there*
 ‘John put the book there’ (There)
- e. John n-a- ig -ir -e î- buku ru-ngu/ rû-teere/i-
 1*John* F-SM1-*put*-PERF-FV 5-*book* 11-*under*/11-*side*/ 5-
 gûrû/ ga-tîgatî/ ndeni
on.top/12-*between*/9*inside*
 ‘John put the book underneath/on the side/between/inside’
 (Class B)
- f. *John n-a- ig -ir -e î- buku metha
 1*John* F-SM1-*put*-PERF-FV 5-*book* *table*
 ‘John put the book table’ (NP)

Like other prepositional phrases, Class B adpositions are modifiable by *here* and *there*. Modification by ‘here’ and ‘there’ forces obligatory use of class 17 locative morphology.

- (57) a. Aga cukuru kû- rî na mati mûno
here 5*school* SM17-*be with vegetation* *very*
 ‘Here in school is a lot of vegetation’ (Bare NP)
- b. Aga mu-roo -ni kû- rî na mati mûno
here 3- *river*-LOC SM17-*be with vegetation* *very*
 ‘Here at the river is a lot of vegetation’ (Here NI-PP)

- c. Aara gî-tandani-ni kû- rî na ma-buku maingi mûno
there 3- bed -LOC SM17-be with 6- book 6many very
 ‘There on the bed are very many books’ (There NI-PP)
- d. Aga ru-ngu *rû- rî/ kû- rî na rûko muno
here 11-underneath SM11-be/SM-be with dirt very
 ‘Here underneath is very dirty’ (Here Class B)
- e. Aara ru-ngu *rû- rî/ kû- rî na rûko muno
there 11-underneath SM11-be/SM-be with dirt very
 ‘There underneath is very dirty’ (There Class B)

When Class B adpositions, other PPs and ‘here’ and ‘there’ are modified by *ngwa* ‘self,’ a location is singled out.

- (58) a. Karaî ka- rî î- gûrû rîo- ngwa/ru-ngu ruu- ngwa/ga-
1pan SM12-be 5-top PS5-self/ 11-under PS11-self/ 12-
tîgatî ko-ngwa
between 12-self
 ‘The pan is right on top/under/between’
- b. Maria a- rî cukuru jo- ngwa
1Maria SM-be 9school 9PS-self
 ‘Maria is right in school’ (Bare PP)
- c. Ka-raî ka- rî aga ao- ngwa
12- pan SM12-be 14here PS12-self
 ‘The pan is right here’ (Here)

On the other hand, when *ngwa* ‘self’ is used with a noun, the interpretation is that the referent of the DP is alone.

- (59) Maria a- ak -ir -e nyomba wee- ngwa
1Maria SM1-build-PERF-FV 9house PRON1-self
 ‘Maria built the house herself’
 ‘Maria built the house alone’

Without doubt therefore, Class B things are more members of the P family than the N family.

6. The analysis

6.1. What needs to be explained

The preceding sections have led us to two main conclusions. One is that Class B elements are actually phrasal. It’s no wonder therefore that they can undergo phrasal A-bar movement such as topicalization and focalization.

- (60) Ndeni, Maria n-a- (mî-) ciat -ir -e
9inside 1Maria F-SM1-OM9-sweep-PERF-FV
 ‘The inside [of something], Maria swept it’

- (61) I-ndeni Maria a- ciat -ir -e
 F-*inside* 1*Maria* SM1-*sweep*-PERF-FV
 ‘It is the inside [of something] that Maria swept’

The other conclusion is that Class B adpositions are a kind of hybrid lexical category between N and P. Like nouns, Class B adpositions can be modified by the exhaustive focus particles *akî* ‘alone’ and *ngwa* ‘alone’. Like PPs, they appear under 3rd person, present tense copula, as the complement of put (see section 5 for details).

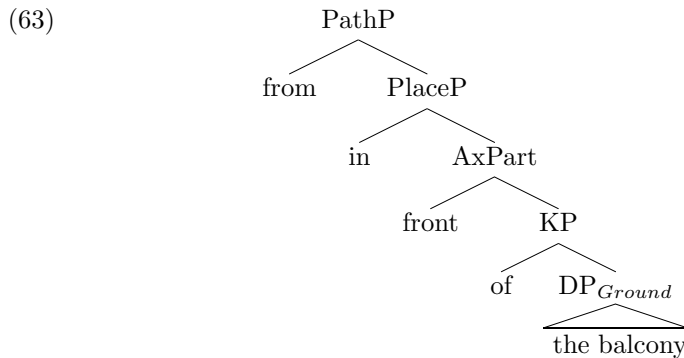
The big questions we need to answer therefore are (i) why are Class B elements phrasal (ii) what is the source of the hybrid syntactic category status?

6.2. The syntactic source of the hybrid category

I argue in this section that the hybrid category either has a source in conflation Baker (2003) or post-syntactic insertion of Class B elements for a PP or a relational noun structure (Michal Starke, p.c.).

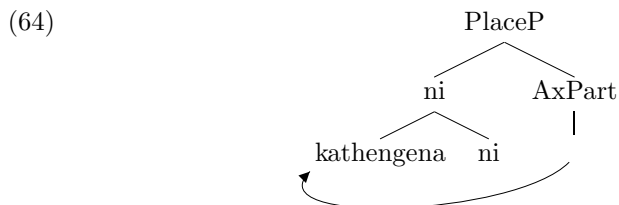
In order to see what happens in KĪĪtharaka, let us first put in place the structure of PP. Here I will assume along with Koopman (2000), den Dikken (2003), Svenonius (2004), and Svenonius (2005-6) that the structure of PPs is more articulated. An English phrase, such as (62), thus has the structure in (63) (I leave the specifiers out since rarely are both the specifier and the head activated at the same time, Starke 2001).

- (62) from in front of the balcony



The structure proper has the following 3 main components — PathP, with Path⁰ hosting directional prepositions such as *to* and *from*, PlaceP, Place⁰ hosting locative prepositions such as *on* and *in* and the AxPart, which hosts Class B adpositions such as ‘top’, ‘front’, ‘between’ etc.

In KĪĪtharaka, two Class B adpositions occur with the locative postposition *ni*, *ndeni* ‘inside’ and *kathengengani* ‘on the edge’. This suggests that the head of AxPart moves and adjoins to the locative postposition in the overt syntax.



I will assume here that this is the general case. Thus even for the Class B elements that do not have an overt P, they involve movement of the AxPart head to a null P_{loc} but this time prior to lexical insertion, producing a kind of phrasal adposition. Class B items are therefore inserted to realize both AxPart and P_{loc} . This will account for much of the PP behaviour of Class B (section 5). The remnants of nouniness are perhaps a consequence of the fact that P_{loc} is null. Recall that the most nominal Class B items such *rûteere* ‘beside’, ‘on the side’ do not have an overt P_{loc} *ni*.

Another way to approach the ambiguity in Class B is to assume that Class B elements are a complex of features, say,

(65) $+P_{loc}, +\text{relational noun}$

The hybrid category status of Class B would follow from the nature of post-syntactic insertion in a Starkean way.

(66) α , a lexical item, is inserted into β , a syntactic constituent, iff the features of α are a superset of the features of β

(65) will therefore be inserted both when there is a PP structure, or a relational noun since in both cases the features of α are a superset of those of β . The ambiguity in Class B would therefore follow from the fact that they realize either a full PP structure or shrink to a bare relational noun.

I leave a choice between a Baker-style conflation and a Starkean shrinking for future research.

7. Conclusion

In this paper, I have argued that Class A adpositions are syntactic heads, and clearly belong to the functional category P. On the other hand, I have argued following Baker (2003) that Class B adpositions portray mixed properties because they involve conflation — incorporation into a null P head prior to lexical insertion. In a Starkean architecture, I have hinted that Class B items are a hybrid category because they can be inserted in structures ambiguous between a PP and a bare relational noun.

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