

Parameters of morpho-syntactic variation in Bantu
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1. Introduction

In the principles and parameters framework of generative grammar *principles* characterise the invariant properties of language defined in UG while *parameters* provide language specific structural properties that are selected during language acquisition. (Chomsky 1981 and elsewhere). Similarly, typological approaches distinguish absolute from non-absolute universals (e.g. Greenberg 1963).

Principles: properties of all languages e.g. negation, argument structure, etc.

Parameters: language specific properties e.g. basic word order (SVO, SOV, VSO, etc.), syllable types (CV, CCV, etc.).

Since Bantu languages are, from a broad linguistic perspective, fairly uniform, they have the same parameter settings for broad syntactic, morphological and phonological parameters. Thus:

- Syntactic structure parameter: SVO

- (1) Chisanga a-le-beleng-a icitabo
 Chisanga SC-tns-read-FV book
 'Chisanga is reading a book'

- Morphological structure parameter: agglutinative (template) (Meeussen 1967)

1	2	3	4	5	6	7	8
Pre	SC	Post	Tense	OC	Verbal	Final	Post
Initial		Initial	Marker		Base		Final
Neg		Neg					

ta	ba		le	mu	bomb-el-	a	ko
	n	shi	le	mu	bomb-el-	a	ko

- (2) ta-ba-le-mu-bomb-el-a-ko
 'they are not working for him/her, on his/her behalf'

- (3) n-shi-le-mu-bomb-el-a-ko
 'I am not working for him/her, on his/her behalf'

- Phonological structure parameter: strictly open syllables with only homorganic clusters

- (4) landa 'speak' *planda

More recent linguistic approaches, such as Lexical Functional Grammar (LFG), Head Driven Phrase Structure Grammar (HPSG) and Dynamic Syntax (DS), do not have high-level, general parameters, but assume that the source of linguistic variation is largely, or even solely, located in the lexicon.

Furthermore, quite widely, people have concentrated on more fine-grained 'micro-variation', as found, for example, in the Italian dialects, and indeed in Bantu.

2. Micro parametric variation in Bantu

Objects and Object Concords

- 1: Co-occurrence of OC and lexical object NP ('clitic doubling')
- 2: Locative object marking
- 3: Multiple pre-verbal object clitics
- 3a: More than 2 object clitics
- 4: Symmetric double objects

Relatives

- 5: Overt anaphoric relative marking
- 6: Resumptive OCs in (object) relatives
- 6a: obligatory

Locative Subject Concords

- 7: Locative inversion
- 8: Aspectual restrictions in locative inversion
- 9: Restricted locative subject agreement (only class 17)

Agreement with conjoined NPs

- 10: Partial agreement with conjoined NPs

Main languages used

Swahili (Swa), Chaga, Ha, Bemba (Bemb), Chichewa, Nsenga, Tswana (Tswan), Sotho, Swati, Herero

Table 1

	Swahili	Chaga	Ha	Bemba	Chewa	Nsenga	Tswana	Sotho	Swati	Herero
Objects & OC										
1 OC – NPobj	yes	no		yes	yes?	yes	yes			no
2 OC loc class	yes	yes		yes	yes	yes	no?		no	yes
3 Multiple OC	no	yes	yes	no	no	no	yes		no	no
3a More than 2	no		no	no	no	no	yes		no	no
4 sym DO	no	yes		yes	no	yes	yes			yes
Relatives										
5 Agr Relative	yes			yes	yes	yes	yes	yes	no	yes
6 Res OC	yes		yes	no	yes	yes	yes	yes	yes	no?
6a obligatory	no		no	no	no	no	yes	yes	yes	no
Locative SCs										
7 Loc Invers	yes	yes	yes	yes	yes	yes	yes	yes	yes?	yes
8 LI asp restr	no	?	?	yes	yes	no	?	yes	?	no
9 only 17 SC	no	?	no	no	no	no	yes	yes	yes	no
Agr Conj										
10 Partial Agr	yes			no	no	yes			no	no

Aims of the study

- 1) further understanding of Bantu morpho-syntax
- 2) provide a cross-linguistic analysis of agreement systems (parallelism with Romance, e.g. Cocchi 2001, Cann et al. 2005)
- 3) establish a morpho-syntactic typology of Bantu, and possibly even inferences about the pre-history of Bantu languages (cf. Guardiano & Longobardi 202, 2003, Longobardi2003, Roberts 2005)

Table 2

	Sw	Bemb	Chew	Herero
<i>Objects & OCs</i>				
1. OC – NPobj	yes	yes	yes?	no
2. OC loc class	yes	yes	yes	yes
3. Multiple OC	no	no	no	no
3a. More than 2	no	no	no	no
4 symmetric DO	no	yes	no	yes
<i>Relatives</i>				
5 Agr Rel mark	yes	yes	yes	yes
6 Res OC	yes	no	yes	no?
6a obligatory	no	no	no	no
<i>Locative SCs</i>				
7 Loc Inversion	yes	yes	yes	yes
8 LI asp restr	no	yes	yes	no
9 only 17 loc SC	no	no	no	no
<i>Agr Conj</i>				
10 Partial Agr	yes	no	no	no

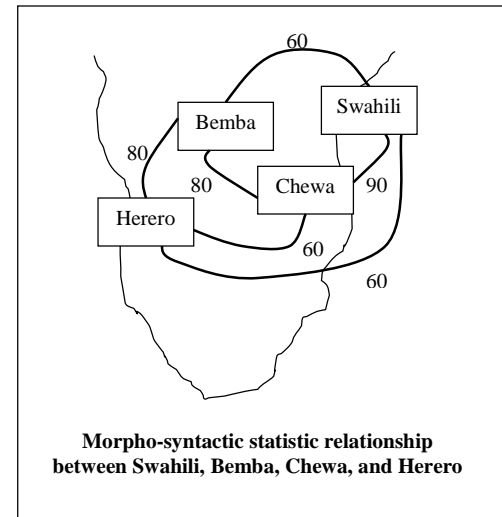
Swahili – Bemba 6 of 10 (60%)
 Swahili – Chewa 9 of 10 (90%)
 Swahili – Herero 6 of 10 (60%)
 Bemba – Chewa 8 of 10 (80%)
 Bemba – Herero 8 of 10 (80%)
 Chewa – Herero 6 of 10 (60%)

NB, notice the abstraction; Bemba-Chewa and Bemba-Herero are both 80% although they differ with respect to different parameters (and similarly for the three 60% languages).

Table 3

	Swahili	Chewa	Bemba	Herero
Swahili		90%	60%	60%
Chewa	90%		80%	60%
Bemba	60%	80%		80%
Herero	60%	60%	80%	

Figure 1



3. Discussion of parameters in detail

3.1. Parameter 1: Co-occurrence of object concord (OC) and lexical object NP

yes	Object and OC can co-occur	Swahili, Bemba, Chewa, Nsenga, Tswana
no	Object and OC cannot co-occur	Chaga, Herero

- (5) ni-li-mw-on-a (Juma) [Swahili]
 SC1sg.-past-OC1-see-FV Juma
 'I saw Juma'
- (6) n-ali-mu-mon-a (Chisanga) [Bemba]
 SC1sg.-past-OC1-see-FV Chisanga
 'I saw Chisanga'
- (7) *John me-mu-vang-a Nelson [Herero]
 John PRES-SC1-OC1-like-FV Nelson
 Intd.: 'John likes Nelson'

Co-occurrence ok with intonation break, e.g. as afterthought:

- (8) John me-mu-vanga, Nelson [Herero]
 John PRES_{SCD1}-OCD1-like Nelson
 'John likes him, Nelson'

Further variation: In Bemba, objects can be used without OC:

- (9) n-ali-mon-a Chisanga [Bemba]
 SC1sg-past-see-FV Chisanga
 'I saw Chisanga'

Furthermore, in Swahili the OC has to be used with animates:

- (10) ni-li-mw-on-a [Swahili]
 SC1sg-past-OC1-see-FV
 'I saw him/her'
- (11) *ni-li-on-a Juma
 SC1sg-past-see-FV Juma
 Intd.: 'I saw Juma'

With non-animates, the OC is often associated with a definiteness effect:

- (12) ni-li-ki-on-a [Swahili]
 SC1sg-past-OC7-see-FV
 'I saw it'
- (13) ni-li-on-a kitabu
 SC1sg-past-see-FV book
 'I saw a/the book'
- (14) ni-li-ki-on-a kitabu
 SC1sg-past-OC7-see-FV book
 'I saw the book'

In Chaga, lexical pronouns have to be used with a co-referring OC (examples from Bresnan and Moshi 1990):

- (15) n-á-f-m-lyí-f-à k-èlyá ò [Chaga]
 FOC-SM1-PRES-OM1-eat-APPL-FV 7-food 1.PRO
 'He/she is eating food for/on him/her.'
- (16) n-á-f-kì-lyí-f-à m-kà kyò
 FOC-SM1-PRES-OM7-eat-APPL-FV 1-wife 7.PRO
 'He/she is eating it for/on the wife.'
- (17) n-á-f-kì-m-lyí-f-à òò kyò
 FOC-SM1-PRES-OM7-OM1-eat-APPL-FV 1.PRO 7.PRO
 'He/she is eating it for/on him/her.'

3.2. Parameter 2: Locative object marking

yes	Locative objects can have OC	Swahili, Chaga, Bemba, Chewa, Nsenga, Herero
no	Locative objects do not have OC	Swati, Tswana?, (Lozi, Chasu, Ciruri)

Some languages allow locative objects to be marked by a locative OC:

- (18) ni-na-pa-ju-a [Swahili]
 SC1sg-pres-OC16-know-fv
 'I know it (i.e. there)'
- (19) ni-pa-manya Mlogholo (alt.: ni-ha-manya) [Luguru]
 SC1sg.-OC16-know Morogoro
 'I know Morogoro' (i.e. the place)
- (20) n-ali-pa-mon-a [Bemba]
 SC1sg-past-OC16-see-FV
 'I saw it (ie that place there)'
- (21) kuLilongwe n-a-ku-ziw-a [Nsenga]
 17-Lilongwe SC1sg-pres-OC17-know-fv
 'Lilongwe I know it (there)'

In other languages, this is not possible:

- (22) na-ziba kwaLealui [Lozi]
 SC1sg-pres-know 17-LeaLui
 'I know Lealui'
- (23) *na-ku-ziba
 SC1sg-pres-OC17-know
 'I know it (i.e. there)'

Often locative complements are marked by post-verbal clitics, either as the only possible structure, or as an alternative:

- (24) n-ali-mon-a-mo [Bemba]
 SC1sg-past-see-FV-Loc18
 'I looked inside'

3.3. Parameter 3: Multiple pre-verbal object clitics

yes	More than one OC	Chaga, Ha, Tswana, (Kirundi, Kinyarwanda)
no	Only one OC	Swahili, Bemba, Chewa, Nsenga, Swati, Herero

Only one pre-verbal OC in the inflected verb:

- (25) n-ali-mu-peel-a [Bemba]
 SC1sg-PAST-OC1-give-FV
 'I gave him (it)'
- (26) n-ali-ya-peel-a
 SC1sg-PAST-OC6-give-FV
 'I gave it (e.g. water) (to him)'
- (27) *n-ali-mu-ya-peel-a
 SC1sg-PAST-OC1-OC6-give-FV
 Intd.: 'I gave him it (e.g. water)'
- (28) *n-ali-ya-mu-peel-a
 SC1sg-PAST-OC6-OC1-give-FV
 Intd.: 'I gave him it (e.g. water)'
- (29) ni-li-m-p-a [Swahili]
 SC1sg-PAST-OC1-give-FV
 'I gave him (it)'
- (30) *ni-li-i-m-p-a
 SC1sg-PAST-OC9-OC1-give-FV
- (31) *ni-li-m-i-p-a
 SC1sg-PAST-OC1-OC9-give-FV

Languages like Ha (Harjula 2004: 132/3) allow up to two OCs (even though Harjula notes that in Ha these structures are rare), see also ex (17) from Chaga above:

- (32) ya-wu-mú-haa-ye [Ha]
 SC1.PAST-OC3-OC1-give-PERF
 'She gave it to him'
- (33) ke mu e ape-ets-e [Tswana]
 SC1 OC1 OC9 cook-appl-perf
 'I cooked him/her it'
- (34) ke e mu ape-ets-e [Tswana]
 SC1 OC9 OC1 cook-appl-perf
 'I cooked him/her it'

3.4. Parameter 4: 'Symmetric' double objects

Yes	Symmetric double objects	Bemba, Chaga, Nsenga, Tswana, Herero
No	Asymmetric double objects	Swahili, Chewa

Languages like Chewa and Swahili are asymmetric languages, because with an applied verb 1) the order of the benefactive object before the theme object is strongly preferred, 2) only the benefactive object can have an OC, and 3) only the benefactive object can become subject of a corresponding passive construction:

- (35) Juma a-li-m-pik-i-a Asha chakula cha asubuhi [Swahili]
 Juma SC1-past-OC1-cook-appl-fv Asha food of morning
 'Juma is cooking breakfast for Asha'
- (36) *?Juma a-li-m-pik-i-a chakula cha asubuhi Asha
 Juma SC1-past-OC1-cook-appl-fv food of morning Asha
 'Juma is cooking breakfast for Asha'
- (37) *Juma a-li-ki-pik-i-a Asha chakula cha asubuhi
 Juma SC1-past-OC7-cook-appl-fv Asha food of morning
 'Juma is cooking breakfast for Asha'
- (38) Asha a-li-pik-il-iw-a chakula cha asubuhi na Juma
 Asha SC1-past-cook-appl-pass-fv food of morning by Juma
 'Asha was cooked breakfast for by Juma'
- (39) *chakula cha asubuhi ki-li-pik-il-iw-a Asha na Juma
 food of morning SC1-past-cook-appl-pass-fv Asha by Juma
 'breakfast was cooked for Asha by Juma'

In contrast, languages like Chaga or Tswana are symmetrical, since both the benefactive and the theme object can follow the verb directly, both can be expressed by an OC, and both can become subject under passivisation.

- (40) ke ape-ets-e ngwana kuku [Tswana]
 SC1 cook-appl-perf 1.child 9.chicken
 'I cooked the child the chicken'
- (41) ke ape-ets-e kuku ngwana
 SC1 cook-appl-perf 9.chicken 1.child
 'I cooked the chicken for the child'
- (42) ke mo ape-ets-e kuku
 SC1 OC1 cook-appl-perf 9.chicken
 'I cooked him/her the chicken'

(43) ke e ape-ets-e ngwana
 SC1 OC9 cook-appl-perf 1.child
 'I cooked it for the child'

(44) ngwana o ape-ets-w-e kuku
 1.child SC1 cook-appl-pass-perf 9.chicken
 'The child was cooked a chicken for'

(45) kuku e ape-ets-w-e ngwana
 9.chicken SC9 cook-appl-pass-perf 1.child
 'The chicken was cooked for the child'

Bemba, Herero and Lozi behave like asymmetric languages because the order of lexical NP objects is benefactive – theme (animacy might play a role here), but, on the other hand, like symmetric languages in that both objects can be pronominalized with the OC and both may be promoted to subject under passivisation:

(46) bo-Lungu ba-apeh-el-a ba-eñi li-tapi [Lozi]
 Mr Lungu SC2-cook-appl-fv 2-guests 10-fish
 'Mr Lungu is cooking fish for the guests'

(47) ??bo-Lungu ba-apeh-el-a li-tapi ba-eñi
 Mr Lungu SC2-cook-appl-fv 10-fish 2-guests
 Intd.: 'Mr Lungu is cooking-for the guests the fish (colloquial)'

(48) bo-Lungu ba-ba-apeh-el-a ba-eñi li-tapi
 Mr Lungu SC2-OC2-cook-appl-fv 2-guests 10-fish
 'Mr Lungu is cooking fish for the guests'

(49) bo-Lungu ba-li-apeh-el-a ba-eñi li-tapi
 Mr Lungu SC2-OC10-cook-appl-fv 2-guests 10-fish
 'Mr Lungu is cooking fish for the guests'

(50) li-tapi zi-apeh-el-w-a ba-eñi ki bo-Lungu
 10-fish SC10-cook-appl-pass-fv 2-guests by 2-Lungu
 'the fish were cooked for the guests by Mr Lungu'

(51) ba-eñi ba-apeh-el-w-a li-tapi ki bo-Lungu
 2-guests SC10-cook-appl-pass-fv 10-fish by 2-Lungu
 'the guests were cooked fish for by Mr Lungu'

(52) mávé tjàng-ér-é òvâ-nâtjé òm-bàpírà [Herero]
 PRESSCD2 write-APPL-FV NCP2-children NCP9-letter
 'They are writing the children a letter'

(53) *mave tjang-er-e om-bapira ova-natje
 PRESSCD2 write-APPL-FV NCP9-letter NCP2-children
 Intended: 'They are writing the children a letter'

(54) mávé vè tjàng-ér-é òm-bàpírà
 PRESSCD2 OCD2 write-APPL-FV NCP9-letter
 'They are writing them a letter'

(55) mávé ì tjàng-ér-é òvâ-nâtjé
 PRESSCD2 OCD9 write-APPL-FV NCP2-children
 'They are writing the children it'

(56) òvâ-nâtjé mávé tjàngér-w-á òm-bàpírà
 NCP2-children PRESSCD2 write-APPL-PASS-FV NCP9-letter
 'The children are being written a letter'

(57) òm-bàpírà máí tjàngér-w-á òvâ-nâtjé
 NCP9-letter PRESSCD9 write-APPL-PASS-FV NCP2-children
 'The letter is being written for the children'

3.5. Parameter 5: Overt anaphoric relative marking

yes	Relative markers are overtly anaphoric to the head	Swahili, Bemba, Chewa, Nsenga, Tswana, Sotho, Herero
no	Relative markers are not overtly anaphoric to the head	Swati*

Relatives are always marked anaphorically to the head:

(58) ki-tabu amba-cho Juma a-li-soma [Swahili]
 7-book REL-7 Juma SC1-past-read
 'the book which Juma read ...'

(59) ki-tabu a-li-cho-ki-soma Juma
 7-book SC1-past-REL7-OC7-read Juma
 'the book which Juma read ...'

Relatives are not marked anaphorically to the head:

(60) in-doda aba-fazi a-ba-yi-bon-ile-yo [Xhosa]
 9-man 2-woman RELSC2-OC9-see-PERF-REL
 'the man whom the boys saw ...'

(61) um-fati tin-tfombi la-iti-m-elekelela-ko [Swati]
 1-woman 10-girl REL-SC10-OC1-help-REL
 'the woman whom the girls help ...'

(62) um-fati lo-be-ka-natsa tjwala
 1-woman REL-TnsSC1-drink alcohol
 'the woman who drank alcohol ...'

(63) um-fati le-ba-mu-mun-ile
1-woman REL-SC2-OC1-see-perf
'the woman whom they saw ...'

(64) e-khaya la-pho ngi-hlala khona
LOC-home REL-16 SC1sg.-live there
'At home where I live ...'

Languages with pronominal and tonal strategies:

(65) ùmù-ánàkàshì á-mwééné Mùtàlè [Bemba]
1-girl SC1-see.perf Mutale
'the girl who Mutale saw ...'

(66) ùmù-ánàkàshì ùó á-mwèèné Mùtàlè
1-girl REL1 SC1-see.perf Mutale
'the girl who Mutale saw ...'

(67) chí-mánga á-ná-dy-á aná [Chewa]
7-maize SC2-pst-eat-FV 2children
'the maize which the children ate ...'

(68) chi-manga chi-mene ana a-na-dy-a
7-maize 7-REL 2children SC1-past-eat-FV
'the maize which the children ate ...'

3.6. Parameter 6: Resumptive OCs in (object) relatives

yes	Resumptive OCs are possible	Swahili, Ha, Chewa, Nsenga, Tswana, Sotho, Swati
no	Resumptive OCs are not possible	Bemba, Herero

Languages without resumptive pronominal elements:

(69) ìcí-pùná ícò ùmù-ánàkàshì á-mwèèné ... [Bemba]
7-chair REL7 1-girl SC1-see.perf
'The chair which the girl saw ...'

(70) *ìci-puna ico umu-anakashi a-ci-mweene ...
7-chair REL7 1-girl SC1-OC7-see.perf
Intd.: 'The chair which the girl saw ...'

(71) ò-mítùrì Jèkùrà ndjí mà mùnù [Herero]
NCP9-teacher Jekura RCD9 PRES.SC1 see
'The teacher who Jekura is seeing ...'

(72) buka ye-ne-ba-bon-i ba-nana fa-tafule kiyetuna [Lozi]
9.book 9.Rel-Tns-SC2-see-Tns 2-children 16-table is big
'the book which the children saw is big'

(73) *buka ye-ne-ba-ye-bon-i ba-nana fa-tafule kiyetuna
9.book 9.Rel-Tns-SC2-OC9-see-Tns 2-children 16-table is big
Intd.: 'the book which the children saw it is big'

Languages with obligatory resumptive pronouns:

(74) njovu zi-méné anyaní á-kú-zí-páts-á [Chewa]
10.elephants 10-REL 2.baboons SC2-pres-OC10-give-fv
mikanda beads
'The elephants that the baboons are giving the beads ...'

(75) ??njovu zi-méné anyaní á-kú-páts-á mikánda
10.elephants 10-REL 2.baboons SC2-pres-give-fv beads
Intd.: 'The elephants that the baboons are giving the beads ...'

(76) dikwelo tse ke di bone-ng [Tswana]
NP10-books REL10 SC1sg.past OC10 see-REL
'The books which I saw ...'

(77) *dikwelo tse ke bone-ng
NP10-books REL10 SC1sg.past see-REL
Intd.: 'The books which I saw ...'

(78) dikwelo tse ke bone-ng ts-one
NP10-books REL10 SC1sg.past see-REL 10-dem
'The books which I saw those ...'

Languages with optional resumptive pronouns:

(79) ki-tabu amba-cho ni-li-ki-soma [Swahili]
8-book REL-8 SM1sg-PAST-OC8-read
'The book which I read (it) ...'

(80) ki-tabu amba-cho ni-li-soma
8-book REL-8 SM1sg-PAST-read
'The book which I read ...'

(81) vi-sime v-ati ti-ka-mang-e vi-ka-w-e vi-mene [Nsenga]
8-wells8-rel SC1pl-fut-build-fv SC8-fut-be-fv 8-beautiful
'The wells which we are going to build will be beautiful'

(82) vi-sime v-ati ti-ka-vi-mang-e vi-ka-w-e vi-mene
8-wells8-rel SC1pl-fut-OC8-build-fv SC8-fut-be-fv 8-beautiful
'The wells which we are going to build will be beautiful'

3.7. Parameter 7: Locative inversion

yes	Locative inversion	Swahili, Chaga, Ha, Bemba, Chewa, Nsenga, Herero, Tswana?, Sotho?,
no	No locative inversion	Swati?

- (83) è-rúngá rá hití m-ón-djúwó [Herero]
 NCP5-thief PASTSCD5 enter NCP18-NCP9-house
 'The thief entered the house'
- (84) m-òn-djúwó mwá hití é-rúngá
 NCP18-NCP9-house PASTSCD18 enter NCP5-thief
 'The thief entered the house'
- (85) li-njoko za-opel-a mwa-kota [Lozi]
 monkeys SC10-sing-FV 18-tree
 'the monkeys are singing in the tree'
- (86) mwa-kota ku-opel-a li-njoko
 18-tree SC17-sing-FV 10-monkeys
 'the monkeys are singing in the tree'

Subject-object inversion:

- (87) ivyo bitabo bi-á-somye Yohani [Kirundi]
 those books 3P-PST-read:PERF John
 'John read those books.'

3.8. Parameter 8: Aspectual restrictions in locative inversion

yes	Locative inversion only with stative (unaccusative) verbs	Chewa ?
no	Locative inversion with any verb	Swahili, Chaga, Ha, Bemba, Nsenga, Herero

The majority of languages in our sample allow locative inversion with a range of predicates:

- (88) pa-tebulo pa-li ma-buku
 16-9.table SC16-be 6-books
 'On the table are books'
- (89) pa-ukwati p-è-íw-íw-à vi-kwámá vi-nyínji [Nsenga]
 16-wedding SC16-past-steal-pass-fv 8-bags 8-many
 'At the wedding many bags were stolen'

- (90) m-nándà mù-wéléngél-à Kátishà [Nsenga]
 18-9.house SC18-read-FV Katisha
 'In the house Katisha is reading'

In contrast, in Chichewa (Bresnan and Kanerva 1989) and (maybe?) Tswana (Demuth and Mmusi 1997), locative inversion is restricted to stative (or unaccusative) predicates including motional verbs, postural verbs, verbs of existence and availability, and some passivized transitives (Bresnan and Kanerva 1989), for example, 'live', 'stay', 'be', 'sleep':

- (91) *m-mi-têngo mu-kú-imb-á a-nyāni [Chichewa]
 NCP18-NCP4-tree SCD4-PROGR-sing-FV NCP2-baboons
 Intd.: 'In the trees are singing baboons'
 (Bresnan and Kanerva 1989)

In contrast, other languages have no such restriction:

- (92) m-vi-mi-ti mu-imb-a a-kolwe [Nsenga]
 NP17-NP8-NP4-tree SC17-sing-fv 2-monkey
 'In the trees are singing monkeys'
- (93) ko-mu-ti kwa-imbur-a ozon-djima [Herero]
 NP17-NP3-tree SC17.past-sing-fv NP10-baboons
 'In the tree sang the baboons'

3.9. Parameter 9: Restricted locative subject agreement (only class 17)

yes	Only class 17 locative SCs	Tswana, Sotho, Swati, Zulu
no	Class 16-18 locative SCs	Swahili, Chaga, Ha, Bemba, Chewa, Nsenga, Swati, Herero

Most languages: locative NPs take a corresponding SC:

- (94) p-on-djuwo pa-rar-a erunga [Herero]
 NP16-NP9-house SC16.rec.past-sleep-fv thief
 'At the house slept the thief'
- (95) k-omu-ti kwa-pos-e ozondjima
 NP17-NP3-tree SC17-make_noise-fv baboons
 'In the trees the baboons made noise'
- (96) m-on-dundu mwa-vaz-ew-a omwatje
 NP18-NP9-mountain SC18-arrive-pass-fv child
 'On the mountain was found the child'

Lozi and Tswana; for all locative NPs, the corresponding SC is of class 17 (examples from Demuth and Mmusi 1997):

- (97) fa-tafule ku-ins-i li-tapi [Lozi]
 16-table SC17-be/sit-Tns 5-fish
 ‘on the table there is fish’
- (98) mwa-ndu ne-ku-ken-i ma-sholi
 18-house Tns-SC17-enter-Tns 6-thieves
 ‘the house entered the thieves’
- (99) mwa-kota ku-opel-a li-njoko
 18-tree SC17-sing-FV 10-monkeys
 ‘the monkeys are singing in the tree’
- (100) fá-se-tlharé-ng gó-émé ba-símané [Tswana]
 NP16-NP7-tree-LOC SC17-stand/PRF 2-boys
 ‘By the tree stand the boys’
 (Demuth and Mmusi 1997)
- (101) kó-Maúng gó-tlá-ya roná maríga
 NP17-Maung SC17-FUT-go 1pDM winter
 ‘To Maung we shall go in winter’
 (Demuth and Mmusi 1997)
- (102) mó-le-fátshé-ng gó-fúla di-kgomo
 NP18-NP5-country-LOC SC17-graze 10-cattle
 ‘In the country are grazing the cattle’
 (Demuth and Mmusi 1997)

3.10. Parameter 10: Agreement with conjoined NPs

yes	Partial agreement possible	Swahili, Nsenga, (Luguru)
no	Only default agreement	Chaga, Ha, Bemba, Chewa, Tswana, Sotho, Swati, Herero

Bemba and Southern Bantu (and others) show default agreement, i.e. the use of a specific noun class for agreement with conjoined NPs, often class 2 for a conjunction of animate NPs, and class 8 or class 10 for non-animates:

- (103) ici-puna ne tebulo na-fi-pon-a [Bemba]
 7-chair and 9.table past-SC8-fall-fv
 ‘The chair and the table fell down’

In other languages, like Swahili and Luguru, agreement may be default agreement like in the first group, or there may be partial agreement, where the relevant SC or OC is cross-referenced to only one of the conjuncts of the conjoined NP

- (104) Katisha na w̄-ana w̄ake w̄a-ly-a ntochi [Nsenga]
 Katisha and NP2-children NP2-her SC2-eat-fv 9.bananas
 ‘Katisha and her children have eaten the bananas’

- (105) wa-ly-a Katisha na w̄-ana ntochi
 SC2-eat-fv Katisha and NP2-children 9.bananas
 ‘Katisha and her children have eaten the bananas’

- (106) w̄a-ly-a w̄-ana na Katisha ntochi
 SC2-eat-fv NP2-children and Katisha 9.bananas
 ‘Katisha and her children have eaten the bananas’

- (107) chi-ti na ghumu-biki chi-ghul-iw-a [Luguru]
 7-chair and 3-tree SC7-buy-pass-fv
 ‘The chair and the tree were bought’

- (108) chi-ti na ghumu-biki u-ghul-iw-a
 7-chair and 3-tree SC3-buy-pass-fv
 ‘The chair and the tree were bought’

- (109) wanzehe wa-li-ghul-a li-banzi na ma-bwe
 elders SC2-OC5-buy-fv 5-wood and 6-stone
 ‘The elders bought a wooden board and stones’

4. Conclusions

Further research:

- More data from more languages
- Extending the parameters
- A formal analysis of the systems found
- Comparison with other typologies and classifications (esp. lexically based ones)

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