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Degree adverbs in Mauritian

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1 Introduction¹

From a semantic point of view, degree words (*very, a lot*) can be analysed as modifying a value on a scale, which can be an intensity scale for properties (1a), or a quantity scale for objects (1b) or events (1c) (Kennedy & McNally 2005). Some degree words are specialised for a certain type of scale (e.g. an intensity scale for *extremely*) and some are underspecified (e.g. *a lot* is compatible with all scales) (1b, c, d).

- (1) a. John is very / extremely intelligent.
- b. A lot of books.
- c. John goes to the movies a lot.
- d. John likes the book a lot.

From a syntactic point of view, degree words usually differ with respect to their category or function: in English, *very, very much* are adverbs, the former modifying adjectives and adverbs (2a), the latter modifying verbs (2b); *many, much* are determiners (specifying count and mass nouns)(2c).

- (2) a. John works very hard / drives very quickly.
- b. John likes the book very much.
- c. He does not have many books / much luck.

Comparative words, *more* and *less*, which compare two values on one (or more) degree scales, seem more polymorphic and combine with all the major syntactic categories:

- (3) a. John is more intelligent/ laughs more often.
- b. John goes more to the movies/ likes the book more.
- c. He has more luck / more books.

Mauritian, a French-based Creole spoken in Mauritius, with no official status, is an understudied language (Baker 1970, Henri 2010, Allessaib 2012...) It has a very recent standardised spelling (Hookoomsing 2004), one dictionary (Carpooran 2009) and very few written corpora: some literary works of Dev Virahsawmy (www.boukiebanane.orange.mu) and the journal of a political party (www.lalitmauriti.us.org). We conducted several surveys with informants, in situ and on line; the first author is a native speaker.

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Interestingly, Mauritian degree words exhibit an extreme syntactic polymorphism: the same form *tro* ‘too’ may combine with all major categories: nouns (4a), verbs (4b), adjectives and adverbs (4c).

- (4) a. Tro liv / tro per.
 ‘Too many books, too much fear’
 b. Paul tro travay.
 ‘Paul works too much’
 c. Tro long / tro vit
 ‘Too long / too fast’

When there is more than one form (*mari* / *boukou* ‘very, a lot’), they seem to be distinguished on semantic more than syntactic criteria, *mari* requiring an intensity scale (5a,b) and *boukou* a quantity scale (5a,c).

- (5) a. Mari per / boukou liv.
 very fear / a-lot books
 ‘a lot of fear / a lot of books.’
 b. Mo mari kontan liv.
 I very like book
 ‘I like the book(s) a lot’
 c. Mo al sinema boukou.
 ‘I go to the movies a lot’

On the other hand, Mauritian has different comparative forms: *pli* / *plis* (‘more’) (6).

- (6) a. Pli vit / pli gran.
 more fast / more tall
 ‘faster / taller’
 b. Paul travay plis. / ena plis liv.
 Paul works more / has more books
 ‘Paul works more / has more books.’

We will focus on the syntax and semantics of four degree adverbs in Mauritian: *mari* (‘very’), *boukou* (‘a lot’), *pli/plis* (‘more’) and *mwin/mwins* (‘less’), considering their category (adverb? determiner?) and their syntactic function (specifier? adjunct? complement?), as well as their combination with a scalar predicate: do they select it on syntactic or semantic criteria?

2 High degree adverbs in Mauritian

2.1 High degree adverbs in French

French also has some polymorphic degree adverbs, like *trop* (‘too, too much, too many’), which may combine all major categories (7).

- (7) a. Trop grand / trop vite.
 ‘too big / too fast’

- b. Paul travaille trop.
'Paul works too much'
- c. Trop peur/ trop de livres.
'too much fear/ too many books'

(Abeillé & Godard 2003) propose that French degree adverbs have a double life: as complements when they follow the verb, and as adjuncts when they precede it or combine with other categories.

French also has a high degree adverb pair: *beaucoup* 'a lot' / *très* 'very'. (Abeillé et al. 2004) analyse *beaucoup* as an adverb combining with any verb and with non-verbal categories that have a quantity scale. *Très*² on the other hand, combines only with non-verbal categories that have an intensity scale (table 1)

with verbs		with noun		with adjectives		with adverbs	
intensity scale	quantity scale	intensity scale	quantity scale	intensity scale	quantity scale	intensity scale	comparatives
<i>Il l'aime trop</i> 'he likes it too much'	<i>Il sort trop</i> 'he goes out too much'	<i>trop peur</i> 'too much fear'	<i>trop de livres</i> 'too many books'	<i>trop grand</i> 'too big'	<i>trop absent</i> 'too absent'	<i>trop vite</i> 'too fast'	-
<i>Il l'admire beaucoup</i> 'he admires it a lot'	<i>Il sort beaucoup</i> 'he goes out a lot'	-	<i>beaucoup de livres</i> 'a lot of books'	-	<i>beaucoup absent</i> 'absent a lot'	-	<i>beaucoup mieux</i> 'a lot better'
-	-	<i>très faim</i> 'much hunger'	-	<i>très grand</i> 'very tall'	-	<i>très vite</i> 'very fast'	-

Table 1: distribution of *trop* ('too'), *beaucoup* ('a lot') and *très* ('very') in French

2.1 Boukou ('a lot') in Mauritian

In Mauritian, *boukou* ('a lot') combines with nouns and verbs, but only if they have a quantity scale (table 2). It precedes nouns and follows verbs.

² *Très* ('very') also combines with participles – a mixed category with adjectival properties – with an intensity scale: *Ça m'a très étonné* ('This has a-lot surprised me').

With nouns

Boukou combines both with count (8a) and mass nouns (8b), but is infelicitous with predicative nouns (8c).³

- (8) a. Mo ena boukou liv.
‘I have a lot of books’
b. Peyna boukou letan reste. (Virahsawmy 1991, *Toufann*)
Not-have a-lot time left
‘There is not much time left.’
c. ??Mo gagn boukou per/ fin.
I get-SF a-lot fear/ hunger
(Intended meaning) ‘I am very afraid / hungry.’

In Mauritian, all nouns can be used bare (9a). Bare nouns may combine with a possessive (9b) or a demonstrative determiner (9c).

- (9) a. Mo’nn vann liv.
I PERF sell-SF book
‘I sold a book /books.’
b. Mo’nn vann mo liv.
I PERF sell-SF POSS.1sg book
‘I sold my book(s).’
c. Mo’nn vann sa liv la.
I PERF sell-SF DEM book DEF
‘I sold this book / these books.’

A plural marker – *bann* combines with bare nouns (10a) and with possessive (10b) and demonstrative (10c) determiners (Alleesaib 2012). However, degree words are not compatible with *bann* (10d). We therefore analyse *tro*, *boukou* as optional adverbs and not as determiners.

- (10) a. Mo’nn vann bann liv.
I PERF sell-SF PLU book
‘I sold the books.’
b. Mo’nn vann mo bann liv.
I PERF sell-SF POSS.1SG book
‘I sold my books.’
c. Mo’nn vann sa bann liv la.
I PERF sell-SF DEM PLU book DEF
‘I sold these books.’
d. *tro bann liv / *boukou bann liv.
too PLU book / a-lot PLU liv

³ We gloss the TAM markers as PAST (past), PERF (perfective), PROG (progressive), FUT (future). SF stands for short verbal form and LF long verbal form.

With verbs

Boukou modifies verbs with a quantity scale, object-quantity (11a) or event-quantity (11b). In (11c), the meaning is ambiguous, as with verbs with an incremental theme, since *boukou* may modify the quantity of events (of writing) or the quantity of written objects. It is usually judged infelicitous with verbs associated with an intensity scale (11d), but there is variation among speakers – probably due to the influence of French *beaucoup* which is not so constrained (table 1).

- (11) a. Mo manz boukou.
‘I eat a lot’
b. Mo al sinema boukou.
‘I go to the movies a lot’
c. Dev finn ekri**r** boukou lor Kreol Morisien. (Virahsawmy 1991, *Toufann*)
Dev PERF write a-lot on Creole Mauritian
‘Dev has written a lot on Mauritian Creole’
d. %Mo admirli boukou.
‘I admire him/her a lot’

Interestingly, Mauritian verbs have a conjugation with a short form (SF) and a long form (LF)⁴, the choice of form being determined by syntactic and discourse factors: the verb is in SF when followed by a non-clausal complement and not focalised (12b); the LF is used otherwise (12a,c) (Henri & Abeillé (2008) and Henri (2010)).

- (12) a. Paul inn manze. / *manz.
Paul PERF eat-LF / *eat-SF
‘Paul has eaten’
b. Paul inn manz pom.
Paul PERF eat-SF apple
‘Paul has eaten apples.’
c. Mo’nn danse. /*dans.
I PERF dance-LF/*dance-SF
‘I danced.’

The verb is usually in LF when followed by an adverb (13a) or another adjunct (13b)

- (13) a. *Paul inn danse yer / *dans yer.
Paul PERF danse- LF yesterday
‘Paul has danced yesterday.’

⁴ Baker (1972) shows that 70% of the verbal lexicon in Mauritian have two forms, the others being syncretic, like *travay* (work), *ena* (have), *vo* (be worth), *ekri* (write).

- b. Paul inn manze gramatin. / *manz gramatin.
 ‘Paul has eaten-LF in the morning.’

Interestingly, with *boukou* the verb is in SF, and the adverb thus behaves as a complement.

- (14) a. Mo’nn manz boukou.
 I PERF eat-SF boukou
 ‘I have eaten a-lot.’
 b. Mo’nn dans boukou.
 I PERF dance-SF a-lot
 ‘I have danced a lot.’

With other categories

Boukou modifies adjectives with an event quantity scale (15a), but not adjectives with an intensity scale (15b).

- (15) a. Paul absan boukou.
 ‘Paul is absent a lot.’
 b. *Rita so zip boukou long.

Boukou does not combine with adverbs (16a), except with inequality comparatives (16b).

- (16) a. *boukou vit / *boukou souvan
 a-lot fast/ a-lot often
 b. Vre lamitie vo boukou plis ki lor.
 True friendship be-worth a-lot more than gold
 ‘True friendship is worth much more than gold.’ (Virahsawmy, *Tizistwarlasinn*)

with verbs		with nouns		with adjectives		with adverbs	
intensity scale	quantity scale	intensity scale	quantity scale	intensity scale	quantity scale	intensity scale	comparatives
<i>Mo tro admir li</i>	<i>Mo al sinema tro</i>	tro per	<i>tro liv</i>	tro long	<i>tro absan</i>	tro vit	
% <i>Mo admir li boukou</i> ‘I admire him a lot’	<i>Mo al sinema boukou</i> ‘I go to the movies a lot’	* <i>boukou per</i>	<i>boukou liv</i> ‘a lot of books’	* <i>boukou long</i>	<i>absan boukou</i> ‘absent a lot’	* <i>boukou vit</i>	<i>boukou pli vit</i> ‘a lot faster’
<i>Mo mari admir li</i> ‘I admire him very much’	* <i>Mo mari al sinema</i>	<i>mari per</i> ‘very scared’	* <i>mari liv</i>	<i>mari long</i> ‘very long’	* <i>mari absan</i>	<i>mari vit</i> ‘very fast’	* <i>mari pli vit</i>

Table 2: *tro* (‘too’), *boukou* (‘a lot’) and *mari* (‘very’) in Mauritian

2.2 *Mari* ('very') in Mauritian

Mauritian has developed another form *mari*⁵ ('very'), which also combines with nouns and verbs, but selects predicates with an intensity scale, and always precedes them. *Boukou* and *mari* are thus in complementary distribution (table 2).

With nouns

With nouns, *mari* is optional and modifies predicative nouns with an intensity scale (17a), not count or mass nouns (17b).

- (17) a. Konntou ti pe gagn mari traka.
 Konntou PAST PROG have-SF very worry
 'Konntou was very worried.' (Virahsawmy, *Proz Literer*)
 b. *mari liv / *mari lafarinn
 very books / very flour

With verbs

Mari combines with verbs associated with an intensity scale (18a) but not with count event ones (18b).

- (18) a. Li mari amerd li. (Lalit 2012, *Magazine 104*)
 '(S)he annoys him/her a lot'
 b. *Paul mari al sinema.
 Paul very go-SF movies

Unlike *boukou*, *mari* always precedes the verb and never triggers the SF (19). It thus behaves as an adjunct.

- (19) a. Mo soulie pe mari briye / *briy.
 POSS1SG shoes PROG very shine-LF/ shine-SF
 'My shoes are shining a lot.'
 b. *Mo soulie pe briye / briy mari.
 POSS1SG shoes PROG shine-LF/ shine-SF very

Certain verbs can be associated with both types of scales. For example *plore* ('to cry') can have a quantity scale (object scale: quantity of tears or event-scale: frequency) or an intensity scale. The two degree adverbs thus trigger a different meaning, and a different verb form: the SF appears with *boukou* (20b), LF with *mari* (20a).

⁵ *Mari* belongs to an informal register, and comes from the French noun *mari* ('husband'), which also gave an adjective ('superior') in Mauritian. Mauritian has not retained French *très*. *Extra*, with the same distribution as *mari*, is also an innovation (French *extra*, from Latin, is a prefix or an adjective).

- (20) a. Rita inn mari plore.
 Rita PERF very cry-LF
 ‘Rita cried a lot (intensively).’
 b. Rita plor boukou.
 Rita cry-SF a lot
 ‘Rita cries a lot (often or a lot of tears).’

With other categories

Mari combines with adjectives associated with an intensity scale (21a) but not with count event adjectives (21b).

- (21) a. Tifi la pa ti zoli me li mari riss.
 Girl DEF NEG PAST pretty but she very rich
 ‘The girl is not pretty but she is very rich.’ (Virahsawmy, *Proz Literer*)
 b. *Rita mari absan.
 Rita very absent

Some adjectives, like *malad* (sick), may have both scales: *mari* triggers an intensive reading (22a) whereas *boukou* a count-event or frequency interpretation (22b).

- (22) a. Paul mari malad.
 ‘Paul is very sick.’
 b. Paul malad boukou.
 Paul sick a lot
 ‘Paul is sick a lot (often).’

Unlike *boukou*, *mari* combines with adverbs (23a) but not with comparatives (23b).

- (23) a. Me mari vit sitiasion ti sanze.
 But very fast situation PAST change-LF
 ‘But very fast the situation changed.’ (Virahsawmy, *Proz Literer*)
 b. *Mari pli vit.
 very more fast ‘a lot faster’

In Mauritian, both *boukou* and *mari* are adverbs with a complementary distribution. Syntactically, *boukou* follows the verb and triggers the verbal short form, as a complement, while *mari* precedes it as an adjunct. With non-verbal categories, both are adjuncts. Semantically, *boukou* modifies predicates with a quantity scale while *mari* modifies predicates with an intensity scale.

3 The inequality comparative adverbs in Mauritian

Mauritian has two forms: *pli* and *plis* for the superior comparative adverb ('more') and *mwin* and *mwins* for the inferior comparative adverb ('less').

3.1 *Pli / plis* ('more') in Mauritian

The two forms *pli / plis*⁶, coming from French *plus* ('more')⁷, are in complementary distribution (table 3), *plis* being the default form (used in isolation).

The distribution between the two forms is not phonologically determined since both forms can be followed by a vowel or a consonant (24).

- (24) a. Paul *pli* intelizan / *pli* gran.
 'Paul is more intelligent / more tall.'
- b. Paul *plis* admir li. / *plis* travay.
 'Paul admires her/him more / works more.'

with verbs		with nouns		with adjectives		with adverbs
intensity scale	quantity scale	intensity scale	quantity scale	intensity scale	quantity scale	
* <i>Mo admir li pli</i>	* <i>Mo al sinema pli</i>	<i>pli per</i> 'more scared'	* <i>pli liv</i>	<i>pli gran</i> 'more tall'	* <i>pli absan</i>	<i>pli vit</i> 'more fast'
<i>Mo admir li plis</i> 'I admire her more'	<i>Paul al sinema plis</i> 'I go to the movies more'	* <i>plis per</i>	<i>plis liv</i> 'more books'	* <i>plis gran</i>	<i>plis absan</i> 'more absent'	* <i>plis vit</i>

Table 3: Distribution of *pli* and *plis* 'more' in Mauritian

With nouns

With nouns, *pli* only combines with predicative gradable nouns (25a) and *plis* is used with count and mass nouns (25b,c)

⁶ Carpooran (2009)'s dictionary codes *plis* as a conjunction (because of the additive use: 2 plis 2 = 4) and *pli* as an adverb which may affect quantity or quality.

⁷ French has one form of the superior comparative *plus* ('more') and some synthetic comparatives: *meilleur* ('better'), *pire* ('worse'). Spoken French has three forms for *plus*: /ply/, /plys/ and /plyz/ before vowel for the liaison form. A precise study of the distribution of ply/plys in French still has to be done. French also has a negative homonym *plus* ('no longer') which in Mauritian has become *nepli*.

- (25) a. Paul inn gagn pli / %plis per (ki Rita).
 Paul PERF have-SF more fear (than Rita).
 ‘Paul is more scared (than Rita).’
- b. Paul ena *pli / plis liv / lafarinn.
 Paul have more book / flour.
- c. Vedir dimunn pe manz buku plis legim.
 Means people PROG eat-SF a lot more vegetables
 ‘It means people are eating much more vegetables.’
 (Lalit 2010, *Magazine 107*)

With verbs

With verbs, only *plis* is possible, whether they have an intensity scale (26a) or a quantity scale (26b).

- (26) a. Paul admir li plis/*pli (ki Rita).
 ‘Paul admires him/her more than Rita.’
- b. Paul al sinema plis/*pli (ki Rita).
 ‘Paul goes to the movies more than Rita.’

Plis can either precede (27a) or follow (27b) the verb. When it follows, it triggers the short verbal form and thus behaves as a complement (27b). It can also appear after a complement (27c).

- (27) a. To soulie pe plis briye /*briy (ki pou mwa).
 POSS.2SG shoes PROG more shine-LF / *shine-SF than POSS.1SG
 b. To soulie pe briy plis (ki pou mwa).
 POSS.2SG shoes PROG shine-SF more than POSS.1SG
 ‘Your shoes are shining more than mine.’
- c. Finn ler pu develop mobilizasyon plis.
 finish time to develop-SF mobilization more
 ‘It is time to develop mobilization more.’
 (Lalit 2012, *Magazine 107*)

When it precedes the verb, it occurs between the TAM markers and the verb, and can only be modified by a degree adverb (28a), not by a *ki* (‘than’) argument (28b), which must be postverbal.

- (28) a. To soulie pe [boukou plis] briye.
 ‘Your shoes are shining a lot more’
- b. *To soulie pe [plis ki pou mwa] briye.
 ‘Your shoes are shining more than mine.’

With other categories

With adjectives, both comparatives are possible, but *pli* selects adjectives with an intensity scale (29a) while *plis* combines with event count adjectives (29b).

- (29) a. Paul pli / *plis gran (ki Rita).
'Paul is taller (than Rita).'
- b. Paul inn plis/*pli absan ki Rita sa lane la.
Paul PERF more absent than Rita DEM year DEF
'Paul has been more often absent than Rita this year.'

Certain adjectives (*malad*, 'sick') can have both scales, *pli* triggering an intensity reading (30a) and *plis* a frequency reading (30b).

- (30) a. Paul pli malad ki Rita. 'Paul is sicker than Rita.'
b. Paul malad plis ki Rita. 'Paul is sick more often than Rita.'

Adverbs, on the other hand, only combine with *pli*.

- (31) a. Pli / *plis vit ; pli / *plis boukou.
More fast ; more a-lot
'Faster' 'much more'
- b. (...) e nu amen li pli lwin. (Lalit 2012, *Magazine 107*)
(...) and 1PL bring-SF 3SG more far
'(...) and we bring it further'

In other contexts

In short answers (32a) and in elliptical clauses (32b), *plis* is always used.

- (32) a. Spkr 1: – Paul pli gran ou mwin gran?
Paul more tall or less tall
'Is Paul taller or shorter?'
- Spkr 2: – Plis. / *Pli 'More'
- b. Rita inn kontan fim la enn tigit me Paul plis/ *pli.
Rita PERF like movie DEM a little but Paul more
'Rita liked the movie a little, but Paul more.'

In metacomparison contexts, when the adverb modifies not a degree scale but the truth value of the proposition, *plis* is also always used.

- (33) a. Paul plis / *pli kamarad ki papa ar so bann zenfan.
Paul more friend than father with POSS.3sg PLU kids
'Paul is more of a friend than a father to his kids.'

- b. Sa latab la plis / *pli kare ki rektang.
 DEM table DEF more square than rectangle
 ‘This table is more of a square than a rectangle.’

3.2 *Mwin / Mwins (less) in Mauritian*

Mwin and *mwins*⁸ (‘less’) come from French *moins*⁹, and have the same distribution as *pli* and *plis* respectively: they are in complementary distribution (table 4), *mwins* being the default form (used in isolation).

The distribution of the two forms is not phonologically determined since both can be followed by a vowel or a consonant (34).

- (34) a. Paul *mwin* intelizan / *mwin* gran
 Paul less intelligent / less tall
 ‘Paul is less intelligent / less tall’
 b. Paul *mwins* admir li / *mwins* travay
 Paul less admires3SG / less works
 ‘Paul admires her/him less / works less’

with verbs		with nouns		with adjectives		with adverbs
intensity scale	quantity scale	intensity scale	quantity scale	intensity scale	quantity scale	
<i>*Mo admir li mwin</i>	<i>*Mo al sinema mwin</i>	<i>mwin per</i> ‘less scared’	<i>*mwin liv</i>	<i>mwin gran</i> ‘less tall’	<i>*mwin absan</i>	<i>mwin vit</i> ‘less fast’
<i>Mo admir li mwins</i> ‘I admire her less’	<i>Mo al sinema mwins</i> ‘I go to the movies less’	<i>*mwins per</i>	<i>mwins liv</i> ‘less books’	<i>*mwins gran</i>	<i>mwins absan</i> ‘less absent’	<i>*mwin vit</i>

Table 4: distribution of *mwin* and *mwins* (‘less’) in Mauritian

With nouns

With nouns, *mwin* only combines with predicative gradable nouns (35a) and *mwins* is preferred with count and mass nouns (35b).

⁸ Only *mwins* is recorded in Carpooran (2011)’s dictionary, and is coded as an adjective affecting quantity.

⁹ French has one form for the inferior comparative *moins* (‘less’) which is pronounced /mwẽ/, and /mwẽz/ in liaison contexts. A non standard realization /mwẽs/ may appear in the South West of France, in conditions to be determined, but it is unlikely that it could have influenced Mauritian creole.

- (35) a. Paul inn gagn mwin/ %mwinper (ki Rita).
 Paul PERF have-SF less fear (than Rita)
 ‘Paul is less scared (than Rita).’
 b. Paul ena mwins/ *mwin liv / lafarinn.
 Paul have less book / flour
 ‘Paul has less books / flour.’

With verbs

With verbs, only *mwins* is allowed, whether they have an intensity (36a) or a quantity scale (36b).

- (36) a. Paul admir li mwins/ *mwin (ki Rita).
 Paul admire 3SG less (than Rita)
 ‘Paul admires him/her less than Rita.’
 b. Paul al sinema mwins/ *mwin (ki Rita).
 Paul go-SF cinema less (than Rita)
 ‘Paul goes to the movies less than Rita.’

Mwins can either precede (37a) or follow (37b) the verb. When it follows, it triggers the SF and is thus a complement.

- (37) a. To soulie pe mwins briye /*briy.
 POSS.2sg shoes PROG less shine-LF/ *shine-SF
 b. To soulie pe briy mwins.
 POSS.2sg shoes PROG shine-SF less
 ‘Your shoes are shining less.’

With other categories

With adjectives, both comparatives are possible: *pli* selects adjectives with an intensity scale (38a)(38b) and *mwins* event count adjectives (38c).

- (38) a. Paul mwin / *mwins gran (ki Rita).
 Paul less tall (than Rita)
 ‘Paul is less tall (than Rita).’
 b. (...) li kapav mwin ot. (Lalit 2012, *Magazine 107*)
 (...) 3SG can lesshigh
 ‘(...) it can be less high.’
 c. Paul inn mwins/*mwin absan ki Rita sa lane la.
 Paul PERF less absent than Rita DEM year DEF
 ‘Paul has been less often absent than Rita this year.’

With adjectives that can have both scales, *mwin* triggers an intensity reading (39a) and *mwins* a frequency one (39b).

- (39) a. Paul mwin malad ki Rita.
 Paul less sick than Rita
 ‘Paul is less sick than Rita (intensively more sick).’
 b. Paul malad mwins ki Rita.
 Paul sick less than Rita
 ‘Paul falls sick less often than Rita.’

Adverbs, on the other hand, only combine with *mwin*.

- (40) a. Paul roul mwin / *mwins vit ki Rita.
 Paul drive-SF less fast than Rita
 ‘Paul drives less fast than Rita.’
 b. Paul ena mwin / *mwins boukou.
 Paul have less a lot
 ‘Paul has less many.’

In other contexts

In short answers (41a) and in elliptical clauses (41b), *mwins* is always used.

- (41) a. Spkr 1: – Paul pli gran ou mwin gran?
 Paul more tall or less tall
 ‘Is Paul taller or shorter?’
 Spkr 2: – Mwins. / * Mwin
 Less ‘less tall’
 b. Rita al sinema boukou me Paul mwins/ *mwin.
 Rita goes-SF movies a-lot but Paul less
 ‘Rita goes to the movies a lot, but Paul less.’

In metacomparison contexts, when what are compared are the truth values of two propositions, *mwins* is always used.

- (42) a. Paul mwins/ *mwin papa ki kamarad ar so bann zenfan.
 ‘Paul is less of a father than a friend to his kids.’
 b. Sa latab la mwins/*mwin kare ki rektang.
 DEM table DEF less square than rectangle
 ‘This table is less of a square than a rectangle.’

The inequality comparatives *pli*, *plis*, *mwin* and *mwins* are all adverbs. In the non-verbal domain, they are adjuncts, preceding the category they modify. On the semantic level, *pli* and *mwin* only combine with predicates that have an intensity scale and *plis* and *mwins* with predicates that have a quantity scale.

In the verbal domain, only *plis* and *mwins* are possible, and they have a double life : they can precede the verb, as adjuncts, but may also follow it, as complements, triggering the short verbal form.

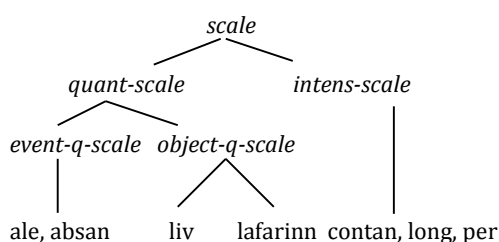
4 An HPSG analysis of Mauritian degree adverbs

In HPSG, degree adverbs have been analysed as specifiers (Pollard and Sag 1994), adjuncts or complements (Abeillé and Godard 2003) or as functors (Van Eynde 2007). Semantically, they have been analysed as modifiers (Abeillé and Godard 2003) or quantifiers (Kay and Sag 2012). We follow (Kennedy and McNally 2005) in analysing them as modifiers of scalar predicates and not as quantifiers.

4.1 Degree adverbs as polymorphic adjuncts

Lexical entries for degree adverbs

In Mauritian, *tro* ('too') can combine with any scalar predicate whereas *boukou* ('a lot') and *mari* ('very') specify a subtype of scale. We rely on the following hierarchy for types of scales, ignoring the possible distinction between open and closed scales (intensity scales are always open).



Syntactically, they may underspecify the category they combine with (Abeillé and Godard 2003)¹⁰.

<p><i>tro</i></p> $\left[\begin{array}{l} \text{SYN} \left[\text{HEAD} \left[\begin{array}{l} \text{adv} \\ \text{MOD SEM} \left[\begin{array}{l} \text{SCALE } s \\ \text{VALUE } d \end{array} \right] \end{array} \right] \right] \\ \text{SEM} \left[\begin{array}{l} \text{excess} - \text{val} - \text{rel} \\ \text{ARG } d \end{array} \right] \end{array} \right]$	<p><i>boukou</i></p> $\left[\begin{array}{l} \text{SYN} \left[\text{HEAD} \left[\begin{array}{l} \text{adv} \\ \text{MOD SEM} \left[\begin{array}{l} \text{SCALE } \text{quant} - s \\ \text{VALUE } d \end{array} \right] \end{array} \right] \right] \\ \text{LEX} - \\ \text{SEM} \left[\begin{array}{l} \text{high} - \text{deg} - \text{rel} \\ \text{ARG } d \end{array} \right] \end{array} \right]$
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¹⁰ In SBCG, Kay and Sag 2012 analysed them as functors (Van Eynde 2007), with a SEL feature instead of a MOD feature, triggering a MARKING value *deg*. As far as we can see, nothing would be changed if we adopt this analysis, as long as they may also be complements in the verbal domain.

mari

$$\left[\begin{array}{l} \text{SYN} \left[\begin{array}{l} \text{HEAD} \left[\begin{array}{l} \text{adv} \\ \text{MOD SEM} \left[\begin{array}{l} \text{SCALE intens - s} \\ \text{VALUE d} \end{array} \right] \end{array} \right] \\ \text{LEX +} \\ \text{SEM} \left[\begin{array}{l} \text{high - deg - rel} \\ \text{ARG d} \end{array} \right] \end{array} \right] \end{array} \right]$$

pli

$$\left[\begin{array}{l} \text{SYN} \left[\begin{array}{l} \text{HEAD} \left[\begin{array}{l} \text{adv} \\ \text{MOD} \left[\begin{array}{l} \text{SYN} \left[\begin{array}{l} \text{HEAD non - verbal} \\ \text{EXTRA L} \end{array} \right] \\ \text{SEM} \left[\begin{array}{l} \text{SCALE intens - s} \\ \text{VALUE d1} \end{array} \right] \end{array} \right] \end{array} \right] \\ \text{EXTRA L + } \left\langle \left[\begin{array}{l} \text{SYN} [\text{MARKING ki}] \\ \text{SEM} [\text{VALUE d2}] \end{array} \right] \right\rangle \\ \text{SEM} \left[\begin{array}{l} \text{super - rel} \\ \text{ARG1 d1} \\ \text{ARG2 d2} \end{array} \right] \end{array} \right]$$

Comparative adverbs

The comparative adverbs have two arguments: the degree of the predicate they modify and the degree of their *ki* ('than') marked dependent (using Kay and Sag's 2012's EXTRA feature). They also exhibit a double selection – both syntactic and semantic, where *pli* ('more') and *mwin* ('less') combine with non-verbal categories associated with an intensity scale, whereas *plis* and *mwins* combine with verbs, and non-verbal categories associated with a quantity scale.

plis

$$\left[\begin{array}{l} \text{SYN} \left[\begin{array}{l} \text{HEAD} \left[\begin{array}{l} \text{adv} \\ \text{MOD} \left[\begin{array}{l} \text{SYN} \left[\begin{array}{l} \text{HEAD verb} \\ \text{EXTRA L} \end{array} \right] \\ \text{SEM} \left[\begin{array}{l} \text{SCALE s} \\ \text{VALUE d1} \end{array} \right] \end{array} \right] \end{array} \right] \end{array} \right] \text{V} \left[\begin{array}{l} \text{SYN} [\text{EXTRA L}] \\ \text{SEM} [\text{SCALE quant - s}] \\ \text{VALUE d1} \end{array} \right] \end{array} \right] \\ \text{EXTRA L + } \left\langle \left[\begin{array}{l} \text{SYN} [\text{MARKING ki}] \\ \text{SEM} [\text{VALUE d2}] \end{array} \right] \right\rangle \\ \text{SEM} \left[\begin{array}{l} \text{super - rel} \\ \text{ARG1 d1} \\ \text{ARG2 d2} \end{array} \right] \end{array} \right]$$

4.2 Degree adverbs in the non verbal domain

In Mauritian, count and mass nouns can be used as bare NPs and are associated with a quantity scale. With nouns and other non verbal categories, we analyse degree adverbs as optional adjuncts, and not specifiers, as they do not have the same distribution as possessive or demonstrative determiners.

- (43) a. Mo'nn aste lafarinn pou fer gato
 'I bought flour to make a cake/ cakes'
 b. boukou dilo 'a lot of water'
 c. mwins rob 'less dresses'
 d. plis lafarinn 'more flour'

Adverbial adjuncts precede nouns and non verbal categories (*pli vit* ‘more quickly’, *tro gran* ‘too big’, *mari long* ‘very long’, *boukou liv* ‘a lot of books’):

Adjunct < Head [HEAD non-verbal]

4.3 Degree adverbs in the verbal domain

Mari precedes the verb, *boukou* follows it, and *plis* and *mwins* either precede or follow it. We use the feature LEX (Arnold and Sadler 1994) as for the English adjectives to distinguish *mari* from the others. Most degree adverbs are unspecified for LEX, while *mari* is [LEX +] and *boukou* [LEX -].

Degree adverbs as complements of verbs

The short verbal form implies the presence of a (non clausal) complement.¹¹

Lexical constraint on Mauritian verbs (Henri 2010):

verb

[HEAD [VFORM short]] => [VAL [COMPS non-empty-list]]

We have seen that a postverbal degree adverb is enough to trigger the short verbal form, and we thus analyse it as a complement. As shown by Henri 2010, manner adverbs have the same property:

- (44) a. Paul manz bien.
 Paul eat-SF well ‘Paul eats well’
 b. Paul roul vit.
 Paul drive-SF fast ‘Paul drives fast’

Degree and manner adverbs can thus optionally be added to the COMPS list of verbs (Abeillé & Godard 2003), except *pli* (‘more’), *mwins* (‘less’), which cannot modify verbs, and *mari*, which is [LEX +].¹²

Lexical rule for Mauritian verbs

$$\left[\begin{array}{l} \textit{verb} \\ \textit{SYN} \left[\begin{array}{l} \textit{HEAD} [0] \\ \textit{VAL} | \textit{COMPS} L \end{array} \right] \\ \textit{SEM} [1] \end{array} \right] \Rightarrow \left[\textit{SYN} | \textit{VAL} | \textit{COMPS} L + \left\langle \left[\begin{array}{l} \textit{deg} - \textit{man} - \textit{adv} \\ \textit{MOD} \left[\begin{array}{l} \textit{SYN} | \textit{HEAD} [0] \\ \textit{SEM} [1] \end{array} \right] \right] \right\rangle \right]$$

¹¹ Henri 2010 analyses clausal complements as extraposed.

¹² Degree adverbs can also head a verbless copular clause (Henri & Abeillé 2007) : *3000 roupis, li boukou* (‘3000 roupies, it is a lot’), *Sa liv la plis* (‘This book is more’). A lexical construction can be used to provide them with a SUBJ feature (Müller 2009).

As complements, they follow the verb and trigger the short verbal form:
 HEAD < COMPS

As oblique complements, they follow the direct complements (45a) and may permute with other oblique complements (45b)

- (45) a. Paul *zwenn so frer boukou*.
 Paul meet-SF POSS.3sg a-lot
 ‘Paul meets his brother a lot.’
- b. Paul *koz [ar so frer] boukou / boukou [ar so frer]*.
 Paul speak-SF with POSS.3sg brother a-lot/ a-lot with POSS.3sg brother
 ‘Paul speaks with his brother a lot / a lot with his brother.’

Degree adverbs as adjuncts

They are adjuncts when they precede the verb. Like two manner adverbs (*bien* ‘well’, *mal* ‘badly’), and a few other adverbs (*nek* ‘only’, *fek* ‘just’), they occur between the TAM marker (*pe, inn, pou...*) and the lexical verb (Henri & Kihm forthcoming).

- (46) a. Paul *inn mal / mari travay*.
 Paul PERF badly/ very work
 ‘Paul has worked badly / a lot’
- b. Paul *pe nek plore*.
 Paul PROG only cry-SF
 ‘Paul is only crying’

In preverbal position, we consider them as [LEX+] (Arnold & Sadler 1994): they can be premodified (*boukou plis* ‘a lot more’) but cannot head a full adverbial phrase (**plis ki pou twa* ‘more than yours’) (28). They adjoin to the lexical verb, except *pli* (‘more’), *mwin* (‘less’), which cannot modify verbs, and *boukou* (‘a lot’), which is [LEX -]:

Adjunct [LEX +] < Head $\left[\begin{array}{c} verb \\ LEX + \end{array} \right]$

Other adverbs adjoin to VP (follow the verb and its complements) or S (are sentence initial or sentence final), like *vit* (‘quickly’), *yer* (‘yesterday’).

- (47) a. *Paul *inn vit / yer travay*.
 Paul PERF fast/ yesterday work
- b. Paul *inn travay so prezantasion vit*.
 Paul PERF travay POSS.3sg presentation fast
 ‘Paul worked fast on his presentation.’

- c. Yer Paul inn travay / Paul inn travay yer.
 ‘Yesterday Paul worked / Paul worked yesterday’

5 Conclusion

In Mauritian, an understudied French-based creole, degree words like *tro* (‘too’) should be analysed as polymorphic adverbs, combining with all the major categories. From a syntactic point of view, they are complements after the verb and adjuncts when they precede it. With other categories, they are always adjuncts.

Mauritian also has a pair of high degree adverbs (*boukou* - *mari*) in complementary distribution: while *boukou* follows the verb as a complement, *mari* precedes it as an adjunct. From a semantic point of view, *boukou* selects predicates with a quantity scale, and *mari* predicates with an intensity scale.

Comparatives also come in pairs (*pli*, *plis*, ‘more’; *mwin*, *mwins*, ‘less’) in a complementary distribution: *plis*, *mwins* select verbs with any scale and predicates with a quantity scale while *pli*, *mwin* combine with non verbal predicates with an intensity scale. Like *tro*, *plis*, *mwins* are complements after the verb and adjuncts when they precede it.

We have provided new arguments for the adverb as complement analysis proposed in HPSG by Bouma et al. 2001, Kim and Sag 2003, and the polymorphic analysis proposed for French adverbs by Abeillé & Godard 2003, using HPSG underspecification.

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