

Adjectives in Bena Bena

A tour through the language with specific examples of referent descriptive constructions

Carola Emkow: Language and Culture Research Centre, James Cook University
in cooperation with Normelyn Frowein (Bena Bena Secondary School, Goroka)
and Gibson Aubona (Binatang Research Centre, Madang)

Bena Bena is a Papuan (i.e., non-Austronesian) language of the Gorokan language family belonging to the Trans-New Guinea phylum, spoken by about 34,000 people in the Eastern Highlands of Papua New Guinea. It is a largely agglutinative AOV/SV language with some fusional elements. Its verbal morphology is much more complex than its nominal morphology. Animacy and agency are important parameters in both the grammar and the lexicon.

Lexical items fall into semantic types whose division can be justified in terms of the syntactic/morphological properties of their members. Adjectives are grammatical words that specify a property (the man is tall), or refine the specification (the tall man), of the referent of a noun. Adjectival concepts are often associated with particular semantic types although languages can use other word classes to carry the description information for a referent. Languages differ with respect to the size of the adjective class ranging from just a few adjectives to several hundreds of adjectives.

(Dixon 1977, 2010) identified a number of semantic types that are typically associated with the word class of adjectives:

Core types	DIMENSION, AGE, VALUE, COLOR
Common types	PHYSICAL PROPERTY, HUMAN PROPENSITY, SPEED
Occasional types	DIFFICULTY, SIMILARITY, QUALIFICATION, QUANTIFICATION, POSITION, CARDINAL NUMBERS

Bena Bena adjectives can be divided into sub-classes roughly corresponding with the attributive and predicative use of adjectives. Members belonging to the attributive class are rather nouny whereas adjectives belonging to the predicative adjective class strongly resemble intransitive verbs. Concepts of the core semantic types as well as PHYSICAL PROPERTY are expressed by words belonging to both adjective sub-classes. Terms denoting the physical property of the referent of a noun are most commonly expressed by predicative adjectives including corporeal properties like 'dead' and 'sick'. The semantic type of HUMAN PROPENSITY includes an array of different structures ranging from medial verb constructions to intransitive verbs, including a dedicated structure to describe human characteristics. An experiencer constructions require more complex grammatical structures.

Adjective class	Word position
attributive (Class 1)	in front of the noun or a complement of a copular verb
predicative (Class 2)	as the head of an intransitive verb or as a noun phrase modifier

Now we will look at specific examples of Bena Bena descriptive strategies and the semantic types they accommodate.

Adjective classes in Bena Bena

The defining properties of an adjective class were set out as a class being distinct from both the word class of nouns and the word class of verbs whose members belonging to the prototypical semantic types may function either as intransitive predicates or as copula complements and or as modifiers of a noun within a noun phrase.

Class 1 adjectives: Attributive-copular adjectives

This class of adjectives has its unique morphological properties and complies with the syntactic criteria set out for adjectives:

- They modify the referent of a noun within a noun phrase
- They state a property of a nominal referent as a copula complement.

Members of this class belong to the four core semantic types DIMENSION, AGE, VALUE, and COLOR, which are typically associated with both large and small adjective classes as well as adjectives of the semantic type of QUANTITY, DIFFICULTY, CARDINAL NUMBERS, POSITION (see Dixon 2010: 73-74).

Within a noun phrase the adjective in its underived form precedes the noun. When juxtaposed it takes the suffix *-a* 'NMLZ'.

- | | |
|---|---|
| (1) Hetofa nose'na ni'ive.
hetofa nose'na ni'i-ve
good food COP.INANIM.3SG- DCL
'(It) is nice food.' | (2) Nose'na hetofa'a ni'ive.
nose'na hetofa-a ni'i-ve
food good-NMLZ COP.INANIM.3SG-DCL
'(It) is nice food.' |
|---|---|

In its nominalized form it may be used as a copula complement (3).

The majority of these adjectives can also take the nominalizing suffix *=na* 'NMLZ.THING (4,5)'

- | | |
|---|---|
| (3) Hetofa'a ni'ive.
hetofa-a ni'i-ve
good-NMLZ COP.INANIM.3SG-DCL
'(It) is nice.' | (4) Haklena ni'ive.
hacle=na ni'i-ve
nice-NMLZ.THING COP.INANIM.3SG
'It's a nice thing.' |
|---|---|

Adjectives can have different semantic restrictions.

The adjective *hetofa* is usually used for things, mostly food (5).

The adjective *olopa* can only be used for human referents, thus the nominalizer means 'person' (6).

- | | | | |
|-----|--|-----|--|
| (5) | Hetofana ni'ive.
hetofa=na ni'ive
good/sweet=NMLZ.THING
'good/sweet thing.' | (6) | Olopana nohive.
olopa=na no-hu-i-ve
old-NMLZ.THING PRS.MF-be.PRS.MF-3SG-DCL.3SG
'person (male or female)' |
|-----|--|-----|--|

Comparison is achieved by means of a bi-clausal construction, most frequently with the coordinative conjunction *to* 'COORD'. The parameter of comparison is set in the first clause.

- (7) Tanihi nopo lgaso'a ni'ive, to Davitihi nopo sipia niive.
 Tani=hi nohi-po lgaso=a nii-ve to Daviti=hi nopo sipi=a ni-i-ve
 Tani=GEN house-DEF small=NMLZ be.Inanim-3SG-DCL COORD house-DEF David=GEN big=NMLZ COP.INANIM-3SG
 'Tani's house is smaller than David's.'

- (8) Davitihi nopo sipi'a ni'ive, to Tanihi nopo lgaso'a niive.
 David=hi nohi-po sipi=a nii-ve to Tani=hi nopo lgaso=a ni-i-ve
 Tani=GEN house-DEF big=NMLZ COP.INANIM-3SG-DCL COORD house-DEF David=GEN small=NMLZ be.Inanim-3SG
 'David's house is bigger than Tani's.'

Alternatively, a medial verb construction can be used.

- (9) Davitihi nopo Tanihi nopo melgito sipi'a ni'ive.
 Daviti=hi no=po Tani=hi nop=o melgito sipi=a ni'ive
 David=GEN house=DEF Tani=GEN house=DEF SURPASS big=NMLZ COP.INANIM-3SG
 'David's house is bigger than Tani's.'

Semantic class	Preceding a noun	Following a noun (or copula complement)	Meaning	Derivation -na 'thing' or 'person'	
Dimension	sipi	sipi'a	'big'	sipina	'big thing'
	lgaso	lgaso'a	'small'	lgasona	'small thing'
	fela	fela'a	'big'	felana	'big thing'
	yatma	yatma'a	'tall', 'long'	yatmana	'tall thing'
Color	safa	safa'a, safa'i	'red'	safana	'red thing'
	gigopa	gigopa'a, gigopopa'i	'white'	'gigopana'	'white person'
	satu	satu'a, satu'i	'yellow',	satuna	'yellow thing'
	nupa	nupa'a, nupa'i	'dark', 'black'	nupana	'dark thing'
Physical property	getipa	getipa'a	'cold'	getipana	'cold thing'
	ule ale	ule ale'a	'strong'	ule alena	'strong thing'
	ekesa	ekesa'a	'spicy', 'strong taste'	ekesana	'spicy thing'
	lusi	lusi'a	'strong'	lusina	'lusi thing'
Age	geta	geta'a	'heavy'	getana	'heavy thing'
	yuhufa	yuhufa'a	'new'	yuhufana	'new thing'
	olopa	olopa'a	'elder', 'mature'	olopana	'old person'
	ikele	ikele'a	'young', 'baby'		
	gutrafa gu'i	gu'i gutrafa'a	'old bilum'		
	gluma igofa	igofa gluma'a	young banana tree		
	kala mya	mya kala'a	'sweet potato that has grown shoots'		
Value	hetofa	hetofa'a	'good'	hetofana	'good thing'
	svina	svina'a	'bad',	svinana	'bad thing'
	foipa	foipa'a	'old',	'foipana'	'bad person'
Quantity	nesi	nesi'a	'few',	nesina	'few things'
	asga	asga'a, asga'i	'all'	asgana	'all things'
	(vavu)		'many', 'a lot'		
Difficulty	amuya	amuya'a	'difficult'	amuyana	'difficult thing'
Cardinal Numbers	mone	mone'a, mone'i	'one', ('one other')	mone'na	'other thing'
	loe	loe'a	'two',	loena	'two things'
Position	gonaka	gonaka'a	'high up'		
	ifo	ifo'a	'on top'		
	afe	afeha'a	'below', 'bottom'		

Table 3: Some Attributive Adjectives

Class 2 adjectives: Predicative adjectives

There is a separate class of adjectives whose grammatical properties are similar to those of intransitive verbs.

This class of adjectives has its unique morphological properties and complies with the syntactic criteria set out for adjectives:

- They state a property of a nominal referent as a head of intransitive verbs.
- They modify the referent of a noun within a noun phrase

Class 2 adjectives (predicative adjectives) can only occur in the past tense. As intransitive predicates they are in clause final position. As modifiers to a noun they precede the noun and occur in the imperfective aspect without the auxiliary *ni'ive* that usually accompanies the verb.

(10) Ukete gefa i-ehive.
 ukete gefa i-ehi-ve
 clothes wet LV.PST.MF-PST.3SG-DCL.3SG
 'The clothes are wet.'

(11) gefa i'ehina ukete
 gefa i-ehi-na ukete
 wet LV.PST.MF-PST.3SG-DCL.3SG clothes
 'wet clothes'

The class is open by derivation. Adjectives can be derived from transitive verbs.

(12) Me'i hekini nolave.
 me'i hekini no-lo-i-ve
 ground patch PRS.MF-.PRS.MF-3SG-DCL.3SG
 'He is patching the ground.'

(13) hekni lo'ehina gu'mo.
 hekini lo-ehi-na gu'i=mo
 patch LV-PST.MF-3SG-IPFV.3SG bilum=DEF
 'patched bilum'

An adjective can be derived from the transitive verb *su ho* 'finish'.

(14) Lili'na su halive.
 lili'na su ha-l-i-ve
 work finish LV.FUT-FUT-3SG-DCL.3SG
 'He will finish his work.'

(15) Lili'na su ho'ehive.
 lili'na su ho-ehi-ve
 work finish LV.PST.MF-PST.3SG-.3SG
 'The work is finished.'

An adjective can be derived from the transitive verb *su ho* 'finish'.

(16) Myamo lo'ohuve.
 mya=mo lo-ohu-ve
 sweet.potato=DEF cook.PST.MF-PST.3SG
 'I cooked a sweet potato on the fire.'

(17) Myamo lo'ehive.
 mya=mo lo-ehi-ve
 sweet.potato=DEF cook.PST.MF-PST.3SG-.3SG
 'The sweet potato is cooked.'

Comparison is achieved through a biclausal or medial verb construction.

(18) Nani lgomo lgo vi'ehive, to gai lgomo lgo mevi'ehive.
 nani lgo=mo lgo vi-ehi-ve to gai lgo=mo lgo me-vi-ehi-ve
 POSS.1SG firewood=DEF dry --DCL.3SG COORD POSS.2.SG firewood=DEF dry NEG---DCL.3SG
 'My firewood is drier than your firewood.'

(19) Nani lgomo gai lgomo melgito lgo vi'ehive.
 nani lgo=mo gai lgo=mo melgito lgo vi-ehive.
 POSS.1SG firewood=DEF POSS.2SG firewood=DEF SURPASS dry -PST.3SG-
 'My firewood is drier than your firewood.'

Members of this class predominantly denote the PHYSICAL PROPERTY of the referent of a noun. However, the VALUE attributive (Class 1) adjectives *hetofa* 'good' and *svina* 'bad' have predicative correspondances. It can be argued that as Class 2 adjectives refer to the PHYSICAL PROPERTY of the nominal referent, i.e., the good state of a a sweet potato (not old, not rotten) rather than its VALUE.

Symantic Type	Predicative adjective		Adnominal use	
Value/Physical Property	hetofa hu'ehive	'be good'	hetofa hu'ehina nose'na	'good food'
	svina hu'ehive	'be bad'	svina hu'ehina nose'na	'bad food'
	lga hu'ehive	'be good'	lga hu'ehina vo	'good man'
	lga mehu'ehive	'not good'	lga mehu'ehina vo	'bad guy'
	vati hu'ehive	'be good'	vati hu'ehina nose'na	'good food'
	geta hu'ehive	'be heavy'	geta hu'ehina lgo	'heavy fireword'
	geta mehu'ehive	'be light'	geta mehu'ehina lgo	'light fireword'
	Physical Property	hakale hu'ehive	'be strong'	hakale hu'ehina yge
ule ale hu'ehive		'be strong'	ule ale hu'ehina gegisa	'strong/sturdy fence'
hekle lu'ehive		'be hard'	hekle lu'ehina me'i	'hard soil'
lgo vi'ehive		'dry'	vi'ehina lgo	'dry firewood', 'brittle firewood'
lgo lgi'ehive		'be lit up'	lgo lgi'ehina lgo	'fire that has lit up'
lo'ehive		'burning'	lo'ehina lgo	'burning fire'
fto tu'ehive		'sparkling'	fto tu'ehina lgo	'sparkling fire'
svo'ehive		fire dying out'	svo'ehina lgo	'dying fire'
matre hu'ehive		'smashed'	matre hu'ehina igofa	'smashed banana'
kluklu'ehive		'clean'	kluklu'ehina ukete	'clean clothes'
glo to'ehive		'dirty'	glo to'ehina ukete	'dirty clothes'
fu lu 'ehive		'straight'	fu lu'ehina gmi	'straight arrow'
fu melu 'ehive		'not straight'	fu lmeu'ehina gegisa	'crooked fence'
Difficulty	gofna hu'ehive	difficult	gofna hu'ehina lili'na	'difficult work'
	gofna mehu'ehive	not difficult	gofna mehu'ehina lili'na	easy work
Position	futri futri hu'ehive	'be scattered'	futri futri'ehina vona'i	'scattered people'
	ikni ikni hu'ehive	'be close to each other'	ikni ikni'ehina mya	'sweet potatoes'
Corporeal property	vesi'ehive	'be sick'	vesi'ehina vo	'sick man'
	fli'ehive	'be dead'	fli'ehina vo	'dead man'
	gelo mehu'ehive	not happy	gelo mehu'ehina vo	'unhappy man'

Table 4: Select Predicative adjectives

Adjectival concepts (semantic types) in Bena Bena

Dimension

Adjectives of the semantic type DIMENSION differ from all other types in that they never have correspondences as Class 2 adjectives.

Age

The adjective *yuhufa* 'new' can only refer to things, by contrast *olopa* 'old' can only refer to people. Only those can take the clitic =*na* 'NMLZ.THING'. All others are highly restricted semantically. The word *ikele* 'young' is exclusively used for animals.

Physical Property

Some adjectives of Class 1 have corresponding Class 2 adjectives.

Class 1	(meaning)	Class 2	(meaning)
hetofa	'good'	hetofa hu'ehive	'be good'
svina	'bad'	svina hu'ehive	'be bad'
ule ale	'strong'	ule ale hu'ehive	be strong
hale vole	'strong'	hale vole hu'ehive	be strong
matre	'smashed'	matre hu'ehive	'be smashed'
hosopa	'dry'	hosopa i'ehive	'be dry'
getipa	'cold'	getipa i'ehive	'be cold', 'feel cold'
fova	'fat', 'greasy'	fova i'ehive	'be fat', 'be soft'

Table 5: Class 1 adjectives and their Class 2 correspondences

Corporeal properties (subtype of Physical Property)

Corporeal properties are regarded as subtype of PHYSICAL PROPERTY by Dixon (2010), and indeed the verbs for *fli'ehive* 'dead' is a Class 2 adjective derived from the verb *fli* 'die'

(20) Fli'ehive.
 fli-ehi-ve
 die.PST.MF--DCL.3SG
 'He/She died.'

(21) Fli'ehive.
 fli-ehi-ve
 die.PST.MF--DCL.3SG
 'He/She is dead.'

Corporeal properties have a semantic overlap with words attributed to the semantic type of HUMAN PROPENSITY under which human feelings emotions fall. Feelings and emotions are corporeal to some good extent. The adjective 'sick' is a Class 2 adjective but also codes the experiencer by the possessive/direct object prefix.

(22) Nvesi'ehive.
 n-vesi-ehi-ve
 1SG-sick.PST.MF-PST.3SG-DCL.3SG
 'I am sick.'

Bena Bena has dedicated experiencer constructions whereby the experiencer is never coded as the subject.

(23) SINGULAR

a. Gau'na nonhave.
 gau'na no-na-ha-ve
 hunger PRS.MF-1SG-hit.PRS.3SG-DCL
 'Hunger is hitting me.' ('I am hungry.')

b. Gau'na noghafi.
 gau'na no-ga-ha-fi
 hunger PRS.MF-2SG-hit.PRS.3SG-INT
 'Is hunger hitting you?' ('Are you hungry?')

c. Gau'na nohave.
 gau'na no-ø-ha-ve
 hunger PRS.MF-3SG-hit.PRS.3SG-DCL
 'Hunger is hitting him/her.' ('He/She is hungry.')

(24) PLURAL

a. Gau'na nolhave.
 gau'na no-la-ha-ve
 hunger PRS.MF-1PL-hit.PRS.3SG-DCL
 'Hunger is hitting us.' ('We are hungry.')

b. Gau'na no'ethafi?
 gau'na no-eta-ha-fi?
 hunger PRS.MF-2DL-hit.PRS.3SG-INT
 'Is hunger hitting you two?' ('Are you two hungry?')

c. Gau'na no'enhave.
 gau'na no-ena-ha-ve
 hunger PRS.MF-3PL-hit.PRS.3SG-DCL
 'Hunger is hitting them.' ('They are hungry.')

- (25) DUAL
- a. Gau'na nole'ahave.
 gau'na no-le'a-ha-ve
 hunger PRS.MF-1DL-hit.PRS.3SG-DCL
 'Hunger is hitting us two.' ('We two are hungry.')
- b. Gau'na nolethafi?
 gau'na no-leta-ha-fi
 hunger PRS.MF-2DL-hit.PRS.3SG-INT
 'Is hunger hitting you two?' ('Are you two hungry?')
- c. Gau'na nolenhave.
 gau'na no-lena-ha-ve
 hunger PRS.MF-3DL-hit.PRS.3SG-DCL
 'Hunger is hitting them two.' ('They two are hungry.')

Many constructions of experiences employ on the verb 'hit' (Table 6) but some, such as tiredness or shame, use the copula verb for animates.

Corporeal property

I feel cold	Yasi nonhave. yasi no-na-ha-ve wind/cold PRS.MF-1sg.DO-hit.Prs.3SG-DCL 'Wind/Cold is hitting me.
I feel hot	Mukho nonhave. hot no-na-ha-ve wind/cold PRS.MF-1sg.DO-hit.Prs.3SG-DCL 'Heat is hitting me.
I feel tired	Gosre'ni nonhave. gosre-ni no-na-ha-ve tiredness-Poss.1Sg PRS.MF-1sg.DO-hit.Prs.3SG-DCL 'My tiredness is hitting me.

Table 6: Be hit experiences

Corporeal property

I feel ashamed	Nvuya nohive. nu-vuya no-hu-i-ve Poss.1Sg-shame PRS.MF-be.PRS.MF-3SG-DCL 'My shame is.'
I am/feel exhausted	Nyapito nohive. na-yapito no-hu-i-ve Poss.1Sg-shame PRS.MF-be.PRS.MF-3SG-DCL 'My exhaustedness is.'
I am/feel scared	Nlesa'ni nolive. ne-lesa'ni no-lu-i-ve Poss.1Sg-fear PRS.MF-LV.PRS.MF-3SG-DCL 'I am scared'

Table 7: Corporeal and Human Propensity properties

Similarly but not the same, the verb meaning 'pleased' is *fokehi lu*. The generic verb *lu* means 'speak' but might better be considered a light verb in the combination with *fokehi*. Like Class 2 adjectives it always appears in the 3rd person singular past tense.

- (28) a. Nfokehi lu'ehive.
 no-fokehi lu-ehi-ve
 POSS.1SG-pity LV.PRS.MF-PST.3SG-DCL.3SG
 'I am pleased'

The term used for 'happy' codes the experiencer with the possessive or object prefix, the verb *vu* 'go' does inflect for the first person singular. Interestingly, the motion verb *vu* 'go' comes into service. Motion verbs have been shown to be used metaphorically for expressing emotional states, as English *go crazy*, *go mad*. However, while English makes use of the motion verb refer to extraordinary and extravagant emotional states like *crazy* and *mad* Bena Bena uses the term for describing the emotional state of happiness as 'ongoing'.

- (29) Ngelo novuve.
 ne-gelo no-vu-u-ve
 POSS.1SG-happiness PRS.MF-go-1SG-DCL
 'My happiness is going.' ('I am happy.')

Even more interesting, the emotional state is expressed by the verb *hu* 'be' taking past tense inflection in the first person.

- (30) Ngelo mehu'ohu
 ne-gelo me-hu-ohu
 POSS.1SG-happiness NEG-be.PST.MF-PST.1
 'I am not happy.' ('I feel sad.')

Current states of being as they occurs at a particular point in time is often expressed by a medial verb construction.

(31) Koloto nohuve.
 ko-lo-to no-hu-u-ve
 sleep.-ANT-SS.MF PRS.MF-be.PRS.MF-1-DCL
 'I am awake.' (Lit.: 'I have slept and am.')

(32) Noloto nohuve.
 no-lo-to no-hu-u-ve
 eat.-ANT-SS.MF PRS.MF-be.PRS.MF-1-DCL
 'I am not hungry.' (Lit.: 'I have eaten and am.')

'I am fine.' is a medial verb construction in Bena Bena.

(33) Vati huto nohuve.
 vati hu-to no-hu-u-ve
 good be.MV.MF-SS.mf PRS.MF-be.PRS.MF-1-DCL
 'I am fine.'

(34) Vati huto mehu.
 vati hu-to mehu-u
 good be.MV.MF-SS.mf NEG-be.PRS.MF-1
 'I am not fine.'

A careful person is referred to by means of a medial verb construction.

(35) Lgeso huto nohive.
 lgeso hu-to no-hu-i-ve
 quiet MV.MF-MV.MF.SS PRS.MF-be.PRS.MF-3SG-DCL
 'He/She is quiet.' (careful)

(36) Lgeso huto huvo!
 lgeso hu-to hu-vo
 quiet MV.MF-MV.MF.SS make.MF-IMP.SG
 'Do it carefully!'

(37) Lgeso huvo.
 lgeso hu-vo
 quiet be.PRS.MF-IMP.SG
 'Be quiet!'

Human characteristics Describing people as thieves, liars or as being ignorant or prosperous is a special construction whereby the preceding modifying noun takes the locative case clitic =*lo* 'LOC' This case clitic roughly translates as 'on' indicating attachment.

Human characteristics: people's habits and way of way of being			
thief, shoplifter	guminalo vo gumina= <i>lo</i> vo steal= <i>Loc</i> 'stealing-attached man'	wealthy man	fenlo vo fenohi= <i>lo</i> vo household.goods= <i>Loc</i> man 'goods-attached man'
liar	fgalo vo fga= <i>lo</i> vo lie= <i>Loc</i> 'lie-attached man'	wife	gufa'alo a'i gufa'a= <i>lo</i> a'i body= <i>LOC</i> woman 'his-body attached woman'
'warrior'	uvalo vo luva= <i>lo</i> vo fight= <i>Loc</i> man 'fight-attached man'	man of adjectives	hena huse ni'ina ga= <i>lo</i> vo hena hu-se ni'i-na vo what/how be-REL word= <i>LOC</i> man 'adjective-attached man'
ignorant man	mukfalo vo mukfa= <i>lo</i> vo ignorance= <i>Loc</i> 'ignorance-attached man'		

Table 8: People's habits

Character traits There are various linguistic structures employed to refer to people's character traits.

- (38) hosopa vo
hosopa vo
dry man
'man who does not smile and talk to other people'

A relativizer is used in the expression of 'talkative woman' or 'talkative man'

- (39) a. gaga luse a'i
gaga lu-se a'i
word speak-REL woman
'talkative woman'
- b. gaga luse vo
gaga lu-se vo
word speak-REL man
'talkative man'

By contrast, a person who does not speak a lot is expressed by:

- (40) a. gaga melina a'i
gaga me-lu-i-na a'i
word NEG-speak-3SG-IPFV woman
'woman who does not talk a lot'
- b. gaga melina vo
gaga me-lu-i-na vo
word NEG-speak-3SG-IPFV woman
'man who does not talk a lot'

Speed

Verbs related to SPEED can be regarded as a manner adverb. Manner adverbials are expressed by means of medial verb constructions.

Intransitive verb	Meaning
meme huto	'fast, 'quickly'
flu flu huto	'slow', 'slowly'
fna fna huto	'slow', 'slowly'
haglu haglu tito	'hasty', 'hastily'

Table 9: Verbs referring to speed

Speed is usually associated with motion. Therefore the medial speed verb is usually associated with verbs of motion like *vu* 'go' or *o* 'come'.

- (41) Gale meme huto noave.
 gale meme hu-to noave.
 car fast be-MV.SS come.
 'The car is coming fast.'

- (42) Gale meme huto novive.
 gale meme hu-to no-vu-i-ve.
 car fast be-MV.SS PRS-go.PRS.MF-3SG-DCL
 'The car is going fast.'

In the imperative the verb may or may not occur in its medial form.

- (43) a. Meme huto ovo!
 meme hu-to o-vo
 fast be.MV.MF-SS.MF come.PRS.MF-IMP.SG
 'Come quickly!' (Hurry up!)
- b. Flu flu huto ovo!
 flu flu hu-to o-vo
 slow RDPL be.MV.MF-SS.MF come.PRS.MF-IMP.SG
 'Come slowly!' (Easy, easy! Slow down!)

- (44) a. Meme huvo!
 meme hu-vo
 fast be.PRS.MF-IMP.SG
 'Go fast!' (Hurry up!)
- b. Flu flu huvo!
 flu flu huvo
 slow RDPL make.MF-IMP.SG
 'Be slow!' (Easy, easy! Slow down!)

Similarity

Similarity is a concept derived from sameness. In Bena Bena it is expressed by means of medial verbs.

- (45) Nani gu'ni gai guka supo huto ni'i.
 nani gu'i-ni gai gu'i-ka supo hu-to ni'i
 POSS.1SG bilum-POSS.1SG POSS.2SG bilum-POSS.2SG same be.PRS.MF-MV.SS be.ANIM
 'My bilum is the same as your bilum.'
- (46) Gibsonihiti Gilbertihiti moneko supo huto neha'i.
 Gibsoni-hiti Gilberti-hiti moneko supo hu-to neh-a-i
 Gibson-AND Gilbert-AND one same be.MV.MF-SS.mf PRS.PF-be.PRS.PF-2N-SG-DL
 'Gibson and Gilbert are the same.'
- (47) Pana'i loe moneko vaveyafa hite neha'ive.
 pana'i loe moneko vaveyafa hi-te ne-hi-a-i-ve
 boy two same.one not.much be.MV.pf-MV.MF.SS.pf PRS.PF-be.PRS.PF-2N-SG-DL-DCL
 'The boys are not that much the same.'

The construction for likeness is copula-like.

- (48) a. osifa tre gi naga.
 osifa tre gi-i naga
 snake be.like-3Sg rope
 'The snake is like a rope.'
- b. osifa naga tre gi .
 osifa naga tre gi-i
 snake rope be.like-3Sg
 'The snake is like a rope.'
- c. naga tre gi osifa.
 naga tre gi-i osifa
 rope be.like-3Sg snake
 'The rope is like a snake.'

Similarity/Difference

While SIMILARITY expressed by medial verb constructions, its opposite DIFFERENCE is expressed by means of an adjective.

- (49) fato fato vona'i neha.
fato fato vona'i ne-hi-a
different RDPL people PRS.PF-be.PRS.PF-2/3Pl
'They are very different people (from us).'
- (50) Bena Bena vonahiti Alekano vonahiti moneko supo hite meneha.
Bena Bena vona-hiti Alekano vona-hiti moneko supo hite me-ne-ha
Bena Bena people-AND Alekano people-AND one same be.MV.pf-MV.MF.SS.pf Neg-PRS.PF-be.PRS.PF
'The Bena Bena and the Alekano people are not the same, ie, they are different.'

Quantification & Cardinal Numbers

Bena bena has only two mono-lexemic cardinal numbers, *mone* 'one' (also meaning 'other') and *loe* 'two'. They both belong to Class 1. The universal quantifier *asga* 'all' (also meaning 'whole') as well as the quantifier *nesi* 'few' belong to this group. The word for *vavu* 'many' can only occur in its underived form. The quantity of 'many' is also referred to by *vavu lu'ehive* 'be many' or used in its medial verb form.

- (51) Vavu yga nehave.
vavu yga ne-hi-a-ve
many pig PRS.PF-be.-3Pl-
'There are many pigs.
- (52) Yga vavu li-te nehave.
yga vavu li-te ne-hi-a-ve
pig many -SS.PF PRS.PF-be.-3Pl-
'There are many pigs.
- (53) Vavu lu'ehive.
vavu lu-ehi-ve
a.lot -PST.3SG-DCL.3SG
'It's a lot.'

Position

Terms for 'high', 'low', 'left', 'right' and 'far' are Class 1 adjectives. When they take the suffix *-a* the words function as adverbials.

Cardinal directions are descriptive in that they specify the position of the sun.

East yge tina'amo
yge ti-i-na-a=mo
sun go.up-3Sg-Nmlz=DEF
'rising sun'

West yge lvina'amo
yge lvi-i-na-a=mo
sun go.down-3Sg-Nmlz=DEF
'setting sun'

North and South yge tina lvina sopa sopa'amo
yge tina lvi-i-na sopa sopa-a=mo
sun ti-i-na go.down-3Sg side side-Nmlz=DEF
'the two other sides of sunrise (East) and sunset(sunset)'

A note on lexical semantics

Opposites

It has been said that we tend to think in dichotomies we talk of good/bad, fat/thin, hot/cold, happy/sad, or dry/wet

Adjectival concept		Opposite	
vati hu'ehive	'good'	vati mehu'ehive	'not good'
ule ale hu'ehive	'hard', 'strong'	ule ale mehu'ehive	'not hard', 'not strong'
hakale hu'ehive	'hard', 'strong'	hakale mehu'ehive	'not hard', 'not strong'
fulu hu'ehive	'straight'	fulu mehu'ehive	'not straight'
lo'ehive	'cooked'	melo'ehive	'not cooked'
vai to'ehive	'full'	vai meto'ehive	'not full'
geta hu'ehive	'heavy'	geta mehu'ehive	'not heavy'

Meaning extensions

A number of adjectives have extended meanings and in these meanings often belong to a different semantic type.

Primary meaning	Extended meaning
hetofa 'good'	→ 'sweet'
hakle 'strong'	→ 'nice'
geta 'heavy'	→ 'hard' (problem)
lusi 'strong'	→ 'dangerous'
lgaso 'small'	→ 'young'
hosopa 'dry'	→ 'not talkative', 'hardly ever smiling', 'stubborn'

Collocational symbiosis

The referent of the noun

However, such an either/or framework does no justice to the complexity of realities that we may be referring to when stating that something has a certain property.

In its function of denoting a property of the referent of a noun adjectives are in an intimate relationship with them. In Bena Bena, in particular verb-like adjectives usually have a meaning with respect to a particular kind of nominal referent. For instance, there is no one word for English *dry*.

(54) yafamo lgo vi'ehive.
yafa=mo lgo vi-ehi-ve.
post=DEF dry LV.PST.MF-PST.3SG-DCL.3SG
'The firewood is dry.'

(56) Me'i sepo i'ehive.
me'i sepo i-ehi-ve
soil dry LV.PST.MF-PST.3SG-DCL.3SG
'The soil is dry.'

(55) Yafa haya'a hosopa i'ehive.
yafa haya=a hosopa i-ehi-ve
tree leaf-POSS.3SG dry LV.PST.MF-PST.3SG-DCL.3SG
'The leaves of the tree are dry.'

(57) Ukete lo'ehive.
ukete loehive
tree leaf-POSS.3SG
'The clothes are dry.'

Collocation in Class 1 and Class 2 adverbs

Adjective		Referent		Notes
lo'ehive	'dry'	<i>lo'ehina ukete</i>	'dry clothes'	<i>lo</i> 'burn'
lo'ehive	'cook'	<i>lo'ehina mya</i>	'cooked sweet potato'	<i>lo</i> 'burn'
lo'ehive	'burnt'	<i>lo'ehina lgo</i>	'burnt firwood'	
lo'ehive	'burnt', 'dry'	<i>lo'ehina kfi</i>	'burnt grass', 'dry grass'	
patra si'ehive	'rotten'	<i>patra si'ehina nose'na</i>	'rotten food'	
flupa i'ehive	'rotten'	<i>flupa i'ehina yafa</i>	'rotten post'	
tguma vi'ehive	'rotten'			

Table 12: Adjectives of Class 2 and their collocations

Similarly, adjectives of Class 1, in particular of the semantic type AGE are oftentimes highly collocational. These adjectives do not have a =*na* derivation.

Expression	Note
gutrafa gu'i 'old bilum'	also used with <i>a'i</i> 'woman'
sigapa mya 'old sweet potato'	also used with <i>a'i</i> 'woman'
galupa mya 'old sweet potato'	also used for LGO 'firewood' something that has been lying around for a long time
gluma igofa 'young banana tree'	exclusively used for a banana tree

Culturally relevant referents of nouns

mya 'sweet potato' Sweet potatoes are the staple food of the people.

Expression

gosalo mya	mountain sweet potato, i.e., grown on hills
gosva mya	freshly harvested (uncooked) sweet potato
ipi gi'ehina mya	stored sweet potato (edible)
emigina mya	mumu sweet potato
smo fi'ehina mya	boiled sweet potato
lgolo mya	sweet potato cooked on fire
sigapa mya	old no longer edible sweet potato
galupa mya	old no longer edible sweet potato
kala mya/mya kala'a	sweet potato that has grown shoots (for planting)
me'ihiti ehina mya	sweet potato still with soil on it
hesi'ehina mya	peeled sweet potato
lga hu'ehina mya	sweet potato cut into pieces
lo'ehina mya	cooked sweet potato
tvo lo'ehina mya	burnt sweet potato
mya gluma'a	sweet potato that is not yet ready for harvesting
tguma vi'ehina mya	rotten sweet potato

igofa 'banana' Bananas are a staple food of the Bena Bena, in particular during the dry season when other resources like sweet potatoes have come to an end.

Expression

hetofa igofa	good banana
lga hu'ehina igofa	good banana
ho i'ehina igofa	mashed banana
matre igofa	smashed banana
lo'ehina igofa	ripe or cooked banana
melo'ehina igofa	unripe or uncooked banana
hakle igofa	"strong" banana (hard to bite)
gosva igofa	"new" banana that is not ripe yet
sigifa no'ehina igofa	banana partly eaten by worms

lgo 'fire' In the villages fire is used for cooking on a daily basis. Making fire is an arts.

Expression

hakale lgo	strong fire or flames
i klu ti'ehina lgo	'lit-up fire'
fto tu'ehina lgo	'sparkling fire'
lo'ehina lgo	'burning fire'
svo'ehina lgo	'dying out fire'
fli'ehina lgo	'dead fire'

me'i 'soil' The Bena Bena have always been self-subsistent farmers. The soil is part of their daily life.

Expression

hakale me'i	hard soil
hekle lu'ehina me'i	hard soil
fulu lu'ehina me'i	soft ground
gefa me'i	wet soil
gefa mehu'ehina me'i	dry soil
hetofa me'i	good, fertile soil
hetofa mehu'ehina me'i	poor soil
nupa me'i	black soil
safa me'i	red soil
gholi me'i	white soil

yga 'pig' Pigs are of vital importance for the people in Papua New Guinea. They play a crucial role in everyday life and exchanges. Pigs are raised with great care. They are given names. They are fed boiled sweet potatoes and taro, they are "mowing" the garden. Unfortunately they often go astray and destroy other people's gardens. When they are killed people cry over the loss.

Expression

lgaso yga	' little pig' / 'young pig'
fova yga	'fat pig' / 'old pig'
vo yga	'male pig'
a yga	'female pig'
ikele yga/ yga ikele'a	'piglet'
memesi yga	'tamed pig'

Metaphors

Culturally motivated metaphors

Bena Bena is a very metaphoric language. For instance, *gutrafa gu'i* refers to a bilum in which many babies have been carried. Hence *gutrafa a'i* refers to a woman who has carried many babies in a bilum. Having carried many babies implies an advanced age.

A *sigapa mya* denotes an old sweet potato that has been lying around, in the ground or in the house, for too long and is no longer edible. Metaphorically, the term refers also to an old woman.

Original meaning		Metaphoric use	
gutrafa gu'i	'old bilum' (used many times)	gutrafa'a'i	'old woman who has had many children'
sigapa mya	'old sweet potato'	sigapa a'i	'old woman'
hosopa kfi	'dry grass'	hosopa vo	'a man that never smiles and talks nice to people'

Entities of the daily environment often come into service in the description of people.

- (58) yga gufa'ahiti vo
 yga gufa-a-hiti vo
 pig body-POSS.3SG-COMIT man
 'man with a pig's body' ('well-built man')

Body metaphors

There are many terms in Bena Bena semantically belonging to the semantic types CORPOREAL PROPERTY and HUMAN PROPENSITY that are metaphoric in nature and involve body parts.

In the Bena Bena language, the word *ipa'a* refers to all inner organs involved in food processing. It may thus mean 'stomach', as well as 'intestines'. *ipa'a* is understood as the seat of EMOTION and INNERVOICE It is the organ that FEELS.

- (59) Nani nipa'ni sivina hu'ehive
 nani ni-ipa-'ni sivina hu-ehi-ve
 POSS.1SG POSS.1SG-intestines-POSS.1SG bad DO.PST.MF-PST.3SG-DCL3SG
 'I feel hurt.' (Lit.: 'My intestines hurt.')

Conclusions

There two adjective classes in Bena Bena. Adjectives are defined by their possibility to modify a noun within a noun phrase (attributive use) or state a certain property either as a copular complement or as an intransitive verb (predicative use). Adjectives of both classes have their own morpho-syntactic properties.

In Bena Bena, Class 1 adjectives in their underived form are used attributively and in this function precede the head noun. Alternatively, they can follow the head noun, then taking the nominalizing clitic =*a* 'NMLZ'. In their nominalized forms they are also used as copula complements, with the copula verbs specifying animacy. Further, Most of these adjectives, those with a broader meaning can take the nominalizing clitic =*na* 'NMLZ.THING'

Class 1 adjectives cover a wide range of semantic types including all core semantic types. In fact, all semantic types are covered except for SPEED and *Similarity*, i.e., DIMENSION, PHYSICAL PROPERTY, COLOR VALUE, AGE, DIFFICULTY, QUANTITY and CARDINAL NUMBERS as well as POSITION and DIFFICULTY

Class 2 adjectives are verb-like resembling intransitive verbs. They are heads of the verb phrase. What differentiates them from intransitive verbs is that they always occur in the third person, and if their referents are inanimate in the singular. They are always marked by past tense inflection.

Class 2 adjectives demonstrates the importance of both, semantic and syntactic factors in the organization of parts-of-speech systems in a given language. Even though syntactic and morpho-syntactic criteria are the ultimate defining properties of word-classes, the semantics of words play a crucial role in constraining their syntactic behaviour. Adjectives of Class 2 predominantly specify the referent of a noun with respect to PHYSICAL PROPERTY. Naturally, the referent is third person. Class 2 adjectives can be modifiers within the noun phrase, only in their in the imperfective aspect form of the past tense (without the auxiliary).

Except for HUMAN PROPENSITY all semantic types correlate with particular morpho-syntactic properties. The semantic type of HUMAN PROPENSITY includes an array of different structures ranging from medial verb constructions, a dedicated structure to describe human characteristics to intransitive verbs. This category seems to be an over-flow category in need of further subcategorization.

The fact that HUMAN PROPENSITY is not covered by adjectives is possibly owed to the fact that physical properties usually refer to third person entities whereas one may refer to human propensities in other persons.

Many human propensities are experiences like corporeal properties, the two categories certainly overlap. Feeling, hungry or sick are certainly corporeal experience. Likewise, feeling angry or ashamed are experiences are felt by the body to some extent. CORPOREAL PROPERTIES as well as EMOTIONS are expressed by dedicated grammatical structures both coding the experiencer as a non-subject of the clause.

Not all semantic types are expressed by adjectives. Words referring to SPEED and SIMILARITY ARE NOT. SPEED is expressed by means of medial verb constructions, SIMILARITY by means of a copula verb.

References

- Aikhenvald, A. Y. (2015). *The art of writing a grammar*. Oxford: Oxford University Press.
- Beck, D. The syntax, semantics, and typology of adjectives in upper necaxa totonac. *Linguistic Typology* 4(2), 213–250.
- Bhat, D. N. S. (1994). *The adjectival category: Criteria for differentiation and identification*. Amsterdam: John Benjamins.
- Dixon, R. M. W. *Where have all the adjectives gone?* Berlin: Mouton.
- Dixon, R. M. W. (1977). Where have all the adjectives gone? *Studies in language* 1(1), 19–80.
- Dixon, R. M. W. (2004). Adjective classes in typological perspective. In R. M. W. Dixon and A. Y. Aikhenvald (Eds.), *Adjective classes: a cross-linguistic typology*, Explorations in linguistic typology, Chapter 1-49. Oxford: Oxford University Press.
- Dixon, R. M. W. (2010). *Basic Linguistic Theory*. Oxford University Press.
- Hajek, J. (2004). Adjective classes: What can we conclude? In R. M. W. Dixon and A. Y. Aikhenvald (Eds.), *Adjective classes: a cross-linguistic typology*, Explorations in linguistic typology, Chapter 15, pp. 348–362. Oxford University Press.
- Schachter, P. Parts-of-speech-systems. In *Language typology and syntactic description*, Volume 1 Clause Structure, pp. 3–61. Cambridge: Cambridge University Press.
- Wetzer, H. (1992). 'nouny' and 'verby' adjectivals: a typology of predicative adjectival constructions. In M. Kefer and J. van der Auwera (Eds.), *Meaning and grammar: crosslinguistic perspectives*, pp. 223–262. Mouton de Gruyter.