

Adjectives in Bena Bena

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Word classes and the ways of defining them have been discussed since the Ancient Greek. Adjectives have been puzzling linguists as "odd creatures" as they often do not seem to have morpho-syntactic properties on their own but tend to be parasitic often disguising as verbs or nouns.

However, according to Dixon (2010) adjectives do constitute a distinct word class that only superficially bears resemblances with another word class.

According to Dixon (1977: 25) in any lexical items fall into semantic types, whose division can be justified in terms of the syntactic/morphological properties of their members. Dixon (1977, 2010) identified a number of semantic types that are typically associated with the word class of adjectives. However, It is not uncommon that not all of the semantic types are represented by adjectives nor that if there exists more than one adjective class whose members can be ascribed to particular semantic types.

In Bena Bena, a Papuan (i.e., non-Austronesian) language of the Gorokan language family spoken in the Eastern Highlands of Papua New Guinea there are two adjective classes roughly corresponding in their underived forms to 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.

In Bena Bena not all semantic types concepts are expressed by one of the adjective classes. While words belonging to the semantic types like DIMENSION, COLOUR, AGE and VALUE as well PHYSICAL PROPERTY, POSITION semantic types belonging to the realm of HUMAN PROPENSITY, in particular experiencer constructions are more complex grammatical structures. Human propensity related to human behaviour is expressed by intransitive verbs.

Typically, adjectives are property words. However, properties can be in a very different relationship with the entities they refer to. An entity can ‘have’ a property inalienably, ‘possess’ a property alienably, ‘be marked by’ a property temporarily, ‘be characterized by’ a property. The kind of relationship is essential for the way the Bena Bena language expresses properties.

1 Introduction

1.1 What adjectives are for

Primarily, adjectives specify a property of the referent of a noun. In terms of their meaning, there are four semantic types which are typically associated with the adjective class: DIMENSION, AGE, VALUE and COLOUR. Likewise, adjectives expressing PHYSICAL PROPERTY, HUMAN PROPENSITY and SPEED are commonly associated with the adjective class. Other semantic types like DIFFICULTY, SIMILARITY, QUALIFICATION, QUANTIFICATION, POSITION and CARDINAL NUMBERS do also, even though less frequently occur. Languages differ with respect to the size of the adjective class ranging from small, with just a few adjectives to large, several hundreds of adjectives.

It should be noted that languages with a small adjective class do not lack the capacity to spell out the property of the referent of a noun. They certainly have other means to do so.

All languages but in particular those with small adjective classes tend to have most if not all of their members associated with the core semantic types DIMENSION, AGE, VALUE, and COLOUR. Languages with a medium-sized adjective class expand into the semantic domains PHYSICAL PROPERTY, HUMAN PROPENSITY and SPEED. Languages with a large inventory of adjectives often include adjectives adhering to DIFFICULTY, SIMILARITY, QUALIFICATION, QUANTIFICATION, POSITION, and CARDINAL NUMBERS. Specifying a property of a noun is the major task of adjectives which can be achieved in two different ways:

- (A) modifies a noun within a noun phrase
- (B) functions either as an intransitive predicate or as copula complement

Adjectives in some but by no means in all languages may also serve as parameters of comparison or as modifiers of verbs (adverbs).

1.2 Adjectives as a discrete word class

Word classes or parts-of speech have been discussed by the Ancient Greek philosophers already. Linguists have devoted considerable attention to discussion of suitable criteria. The recognition of word classes within a language depends on morphological and syntactic criteria. (see Dixon 1977: 19)

The word class of adjectives has been questioned by linguists working on individual languages. There are languages that do not have a major open word class of adjectives as English does.

The assumption that languages do not have an adjective class is owed to the fact that in many languages adjectives seem to have "disappeared" into the word class of verbs or are on a par with nouns. Even though, adjectives often resemble either nouns or verbs or both with respect to their morphological and syntactic features, adjectives are, according to Dixon (2004, 2010) a word class on their own with distinct properties setting them apart from the word classes of nouns and verbs with which they often bear similarities with.

2 The Bena Bena language

Bena Bena is a Papuan language of the highlands spoken by about 34,000 people. The language has properties that have been ascribed to languages of the Trans-New Guinea phylum.

It is a largely agglutinative and strictly 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.

The following subsections aim at providing a brief overview of the language. It will focus on aspects of the language that are relevant in regard to the discussion of adjectives as a separate word class.

2.1 Word classes

There are the following word classes in Bena Bena. Word classes are defined here as a morpho-syntactic class. Members of a particular class share morphosyntactic properties.

Type		Word class	Phonological status
lexical:	open	Nouns	word
lexical:	closed	Verbs	word(s)
lexical:		Adjectives	word
	closed	Class 1	word
	open	Class 2	word (grammatical)
lexical:	closed	Quantifiers	word
lexical:	closed	Temporals	word
grammatical:	closed	Pronouns	word and suffixes
grammatical:	closed	Demonstratives	word
grammatical:	closed	discourse particles	word and suffixes

Table 1: Word classes in Bena Bena

There are nouns, verbs and adjectives in the language. Adjectives fall into two subgroups. Nouns and one subgroup of adjectives are open word-classes. Whilst nouns are

open with respect to loanwords, adjectives are open with respect to derivation.

Further, there are pronouns, demonstratives, quantifiers and temporals (Words that are often classified as temporal adverbs like today, tomorrow, yesterday have been classified as temporals as they have scope over the whole sentence and not only the verb.

Discourse markers are either realized as independent verbs or as suffixes.

There are no adverbs in the language. Instead, medial verbs constructions come into service.

2.2 Verbs

2.2.1 Generic verbs

Like many Papuan languages (cf. Foley 1986), Bena Bena has very few basic verbs, which have a broad meaning range and are referred to as generic verbs. The majority of these are monosyllabic.

The following list of the generic verbs in Bena Bena contains some examples. They are almost exclusively monosyllabic:

Generic verb	Meaning
hu	'be' or 'make'
i	'happen', 'make', 'bring'
fi	'put down', 'pierce'
lu	'utter'
lo	'emit warmth or light', 'burn', 'shine'
li	'take'
ko	'lie down', 'sleep'
ho	'hit', 'kill'
vu	'go'
ti	'go up'
limi	'go down'
lovo	'go across'

Table 2: Generic verbs in Bena Bena

This seeming deficiency [of few verbs] is compensated by extensive use of verb compounding or serializing and the use of adjunct nominal-plus-verb constructions. Both of these means allow the language to extend the range of events it can describe without extending its inventory of verb-stems. (Foley 1986: 127).

2.2.2 Multi-unit verbs

Here, the term 'multi-word units' has been chosen because these verbs do not constitute a homogeneous group. Some verbs may be regarded as verbalized nouns, some as serial verbs.

Serial verbs It also has a good deal of verb serialization.

- (1) Ho ko'ohuve.
 ho ko-ohu-ve
 hit lie.PST.MF-1-DCL.1SG
 'I tripped over.'

2.2.3 Copula verbs

There are two main copula verbs in the language, one for animate entities and one for inanimate entities. Whilst the one for animate entities *hu* which as a transitive verb means 'make' inflects for all persons and number (singular, dual and plural) the verb for inanimate entities only exists in the third person singular.

- (2) a. Nani Napamogona pa'i nohuve.
 nani Napamogona pa'i no-hu-u-ve
 1SG Napamogona girl PRS.MF-be.PRS.MF-1-DCL.1SG
 'I am a girl from Napamogona.'
- b. Gibsoni Megaga vo nohive.
 Gibsoni Megaga vo no-hu-i-ve
 Gibson Megabo man PRS.MF-be.PRS.MF-3SG-DCL.3SG
 'Gibson is a man from Megabo.'
- (3) Myamo melugu ni'ive.
 mya=mo me'i-gu ni'i-ve
 sweet.potato=DEF ground=LOC be.INANIM
 'The sweet potatoes are in the ground.'

2.2.4 Verbal inflection and classes

Verbs fall into three classes which display different stem alternations in the past tense and future paradigm. The following tables illustrate the point. Class 1 verbs have no stem alternation between three vowels, Class 2 verbs have a stem alternation between two vowels, class 3 verbs between three vowels.

	Class 1	Class 2	Class 3
1 SG	li	bu	ho
2 SG			
3 SG			
1 Non-SG			
2 Non-SG	li	bi	he
3 Non-SG	li	bi	he

Table 3: Verb stems in the past tense

	Class 1	Class 2	Class 3
1 SG	li	bi	ha
2 SG			
3 SG			
1 Non-SG			
2 Non-SG	li	bi	ha
3 Non-SG			

Table 4: Verb stems in the future tense

The following table presents the paradigm of the verb *bu* 'go' in the future tense.

2.2.5 Tense, Aspect and Modality

There are three tenses in the language: Past, Present and Future.

The finite verb in Bena Bena always inflects for Person and Number of the subject. Three numbers, singular, dual and plural. There is a three person distinction in the singular, In the dual and plural second and third person are not distinguished in the verbal inflection (but in pronouns). Thus, the second and third person non-singular are identical in form.

The agglutinative character of the language can best be seen in the future tense paradigm.

	Class 2	<i>vu</i>	'go'
1SG	viluve	vi-l-u-ve go.FUT-FUT-1-DCL.1SG	I will go
2SG	vilane	vi-l-a-ne go.FUT-FUT-2-DCL.2SG	You will go.
3SG	vilive	vi-l-i-ve go.FUT-FUT-3SG-DCL.3SG	He/She will go.
1DL	vilu'ive	vi-l-u-i-ve go.FUT-FUT-1-DL-DCL.1DL	The two of us will go.
1PL	vilune	vi-l-u-ne go.FUT-FUT-1-DCL.1PL	We will go.
2/3DL	vila'ive	vi-l-a-i-ve go.FUT-FUT-2/3N-SG-DCL.2/3DL	You two/They two will go.
2/3PL	vilave	vi-l-a-ve go.FUT-FUT-2/3N-SG-DCL.2/3N-SG	You/They will go.

Table 5: Verb conjugation of *vu* 'go' in the future tense

In the past tense paradigm verbs of verb class 2 and verb class 3 undergo stem alteration.

	Class 2	vu	'go'
1SG	vu'ohuve	vu-ohu-ve go.PST.MF-PST.1-DCL.1SG	I went
2SG	vu'ahane	vu-aha-ne go.PST.MF-PST.2-DCL.2SG	You went.
3SG	vu'ehive	vu-ehi-ve go.PST.MF-PST.3SG-DCL.3SG	He/She went.
1DL	vu'ohu'ive	vu-ohu-i-ve go.PST.MF-PST.1-DL-DCL.1DL	The two of us went.
1PL	vu'ohune	vu-ohu-ne go.PST.MF-PST.1-DCL.1PL	We went.
2/3DL	vi'aha'ive	vi-aha-i-ve go.PST.PF-PST-2/3N-SG-DL-DCL.2/3DL	You two/They went.
2/3PL	vi'ahave	vi-aha-ve go.PST.PF-FUT-2/3N-SG-DCL.2/3N-SG	You/They went.

Table 6: Verb conjugation of *vu* 'go' in the past tense

The present tense paradigm is marked by the prefix *no-* PRS.MF or *ne-* PRS.PF. The forms of the present tense have undergone some degree of fusion.

	Class 2	vu	'go'
1SG	Novuve	vu-vu-u-ve PRS.MF-go.PRS.MF-1-DCL.1SG	I am going
2SG	Novane	no-vu-a-ne PRS.MF-go.PRS.MF-2-DCL.2SG	You are going.
3SG	Novive	no-vu-i-ve PRS.MF-go.PRS.MF-3SG-DCL.3SG	He/She is going.
1DL	Novu'ive	no-vu-u-i-ve PRS.MF-go.PRS.MF-DL-DCL.1DL	The two of us are going.
1PL	Novune	no-vu-u-ne PRS.MF-go.PRS.MF-1-DCL.1PL	We are going.
2/3DL	Neva'ive	Ne-vi-a-i-ve PRS.PF-go.PRS.PF-PST-2/3N-SG-DL-DCL.2/3DL	You two/They are going.
2/3PL	Nevave	ne-vi-a-ve PRS.PF-go.PRS.PF-2/3N-SG-DCL.2/3N-SG	You/They went.

Table 7: Verb conjugation of *vu* 'go' in the past tense

Further, there are a number of aspectual distinctions made which involve morphological marking on the verb and auxiliary verbs. The one to mentioned here, is the imperfective aspect.

	Class 2	vu	'go'
1SG	Ko'ohuna ni'ive	ko-ohu-na ni'ive sleep.PST.MF-PST.1-IPFV.1SG AUX	I was sleeping
2SG	Ko'ahata ni'ive	ko-aha-ta ni'ive sleep.PST.MF-PST.2-IPFV.2SG AUX	You were sleeping.
3SG	Ko'ehina ni'ive	ko-ehi-na ni'ive sleep.PST.MF-3SG-IPFV.3SG AUX	He/She was sleeping.
1DL	Ko'ohu'ina ni'ive	ko-ohu-i-na ni'ive sleep.PST.MF-PST.1-DL-IPFV.1DL AUX	The two of us were sleep
1PL	Ko'ohuta ni'ive	ko-ohu-ta ni'ive sleep.PST.MF-PST.1-IPFV.1PL AUX	We were sleeping.
2/3DL	Ke'aha'ina ni'ive	ke-aha-i-na ni'ive sleep.PST.PF-PST-2/3N-SG-DL-IPFV.2/3DL	You two/They two were
2/3 Pl	Ke'ahana ni'ive	ke-aha-na ni'ive sleep.PST.PF-2/3N-SG-IPFV.2/3N-SG AUX	You/They were sleeping

Table 8: Verb conjugation of *ko* 'sleep' in the past imperfective

2.2.6 Argument structure of verbs

Bena Bena has both transitive and intransitive verbs. The verb *lo* 'burn' can be used as intransitive and transitive verb.

Transitive verbs are defined here as verbs that take one object regardless of how it is marked. Object marking always refers to animates. Inanimate objects cannot be expressed pronominally.

Transitive verbs fall into three subgroups

- Verbs that take direct object prefixes
- Verbs that do not permit to take the object prefix directly but instead require an indirect object prefix attached to the auxiliary *to* 'Aux'.
- Verbs that take free accusative pronouns

Direct object prefixes The number of verbs taking direct object prefixes is fairly small, particularly in comparison with verbs taking direct free pronouns and indirect object prefixes attached to the argument related auxiliary to Aux. The experiencer of physical sensations is generally not the subject of a clause (cf. (21)). The undergoer of an action might be coded either by means of a direct object prefix or an indirect object prefix attached to the auxiliary to Aux.

- (4) Direct object prefixes
- a. Nhalave.
na-ha-l-a-ve
1SG.DO-kill.FUT-FUT-3PL-DCL.3PL

- 'They will kill me.'
- b. Halave.
 ø-ha-l-a-ve
 3SG.DO-kill.FUT-FUT-3PL-DCL.3PL
 'They will kill me.'

Indirect object prefixes

- (5) Indirect object prefixes on auxiliary
- a. Heni neto'ehive.
 heni ne-to-ehi-ve
 bite 1SG.IO-AUX.ARG.PST.MF-PST.3SG-DCL.3SG
 'He bit me.'
- b. Heni eto'ohuve
 heni e-to-ohu-ve
 bite 1SG.IO-AUX.ARG.PST.MF-PST.1-DCL.1SG
 'I bit him.'

The argument-related auxiliary *to* 'Aux.Arg' also serves to augment an intransitive verb by one argument bearing a benefactive meaning. Thus, when taking a pronominal object the verb *lga hu* 'cut' has two readings

- (6) Indirect object prefixes on auxiliary
- a. Lga hu neto'ehive.
 laga hu ne-to'ehi-ve
 cut LV.MF 1SG.IO-AUX.ARG.PST.MF-PST.3SG-DCL.3SG
 'He cut me. (with a bushknife)'
- b. Lga hu neto'ehive.
 laga hu ne-to-ehi-ve
 cut LV.MF 1SG.IO-AUX.ARG.PST.MF-PST.3SG-DCL.3SG
 'He cut (it) for me.'

Direct object pronouns

- (7) Direct object pronouns
- a. Gai'i ghe i'ohuve.
 gai-i gehe i-ohu-ve
 2SG-ACC call LV.PST.MF-PST.1-DCL.1SG
 'I called you.'
- b. Nani'i ghe i'ehi-ve.
 nani-i gehe i-ehi-ve
 1SG-ACC call LV.PST.MF-PST.3SG-DCL.3SG
 'He called me.'

2.3 Nouns

2.3.1 Noun classification

Almost all languages have some grammatical means for the linguistic categorization of nouns and nominals. The linguistic classification of nouns is a reflection of human mind and culture. Aikhenvald (2004) employs the term classifiers as an umbrella label for the wide range of noun categorization devices found in the world's languages. Classifiers come in different guises.

Nouns may be organized into noun classes, classifying nouns for semantic characteristics such as sex, animacy, humanness.

Languages may have special morphemes appearing next to numerals or quantifiers categorizing the referent of a noun in terms of animacy, shape and other inherent properties.

Nouns may be categorized through verbs they are associated with (positional verbs for instance).

Nouns in Bena Bena can be classified in four different co-occurring ways. Noun classes and possessive marking show up overtly, noun classification by humanness and posture is a covert noun classification.

Noun classes Nouns can be organized into noun classes on morphological grounds.

- **Unmarked underived nouns** The majority of nouns are unmarked nouns such as *gapo* 'road', *kfi* 'bush'
- **Derived nouns.** The suffix *-na* derives nouns from adjectives and demonstratives. It is quite productive. Examples: *sipina* 'big thing', *lagasona* 'small thing'
- **Compound nouns** Compounding is a common process to derive nouns. Example: *go yege* 'rain sun'
- **Relational nouns** Relational nouns must occur with a possessive suffix. Quite a number of these denote body parts, but also nouns denoting a part-whole relationships in general. Locational nouns are also relational nouns. Examples: *lataha'a* 'head', *megesa'a* 'back', *ifo'a* 'top', *afeha'a* 'bottom'
- **-i nouns** Nouns ending in *i* behave like ordinary nouns except for the attachment of the definite marker. When the topic marker attaches the last syllable *i* (which may be interpreted as an indefinite or generic marker) is dropped. Examples: *gupa'i* 'ginger', *gu'i* 'bilum', *go'i* 'rain'
- **-hi nouns** Nouns ending in *hi* differ from other nouns in their taking possessive suffixes or the topic marker. When possessive suffixes are attached, the final *hi* is replaced by *ha*. When the definite marker is adjoined the final syllable *hi* is dropped.

Noun classification by humanness A basic distinction is drawn in terms of humanness. The locational verb *hu* be can only be used for human referents or referents having human properties. The locational verb *nii* be is used for non-human and inanimate nouns.

- (8) Ygamo foyagu nohive.
yaga=mo foya=gu no-hu-i-ve
pig=DEF garden=LOC PRS-be.ANIM.MF-3SG-DCL.3SG
'The pig is in the garden.'
- (9) Yafamo ni'ive.
yafa ni-i-ve
tree be.INANIM.3SG-DCL.gxe3sg
'The tree is (standing there).'

Thus, any inanimate noun, whether count or mass noun occurs with the singular form. As inanimate nouns do not inflect for number, (9) could also refer to more than one tree.

Noun classification by posture Nouns may be classified according to their posture as either vertical, 'standing', or horizontal, 'lying'.

- (10) Yafamo ni'ive.
yafa=mo ni-i-ve
tree=DEF stand.PST.MF-PST.3SG-DCL.3SG
'The tree is standing.'
- (11) Osifa'i ko'ehive..
osifa'i ko-ehi-ve
snake lie.PST.MF-PST.3SG-DCL.
'The snake is lying.'

Noun classification by possessive marking There are ways to mark possession:

- **Prefixes:** *nu-bu* 'my eye', *nu-gufa* 'my outer body, my skin'
- **Suffixes** *lataha-ni* 'my head'
- **Prefixes & suffixes** *ni-gi-ni* 'my name'
- **Free pronouns** *nani lape'i* 'my plate', *nani gegisa* 'my fence'

Possessive prefixes are identical in form with the personal pronouns.

	Singular	Dual	Plural
1	-'ni	-ti'a	-ti
2	-ga/-ka	-titi	-tini
3	-'a	-atiti	-'ani

Table 9: Bena Bena possessive suffixes

Possessive prefixes are identical in form with direct object prefixes that a limited number of verbs take.

	Singular	Dual	Plural
1	na-, ne-, ni-, no-, nu	le'a-, le'e-, le'i-, le'o-, le'u-	la- , le-, li- , lo-, lu-
2	ga-,ge-, gi-, go-, gu-	leta-, lete-, leti-, leto-, letu-	lena-, lene-, leni-, leno-, lenu-
3		eta-. ete-, eti- ,eto-, etu-	ena-, ene-, eni-, eno-, enu-

Table 10: Bena Bena possessive/direct object prefixes

2.3.2 Adnominal specification

There are various ways a head noun can be specified within the noun phrase.

Adjectives to be discussed in 3 are one possibility.

Prenominal relativization A relativizing suffix exists

- (12) a. ygise naga'i
 ygi-se naga'i
 twist-REL rope
 'twisted rope'
- b. li fise yafa
 li fi-se yafa
 ACT set-REL post
 'a post set into the ground'

Preceding verb phrase Tensed verb phrases in the imperfective aspect - but without the auxiliary verb are also common. In an English translation they are best translated as relative clauses.

- (13) a. Nani gumo vati huto nohuna
 nani [gu'i-mo vati hu-to no-hu-u-na
 1SG [bilum-DEF good be.MF-SS.MF PRS.MF-make.PRS.MF-1-.1SG
 pa'i nohuve.
 pa'i]_{Noun Phrase} no-hu-u-ve
 girl]_{Noun Phrase} PRS.MF-make.PRS.MF-1-DCL.1SG
 'I am a girl who is making good bilums.'
- b. Gai gumo vati huto nohata
 nani [gu'i-mo vati hu-to no-hu-a-ta
 2SG [bilum-DEF good be.MV.MF-SS.MF PRS.MF-make.PRS.MF--.2SG
 pa'i nohane.
 pa'i]_{Noun Phrase} no-hu-a-ne
 girl]_{Noun Phrase} PRS.MF-make.PRS.MF--DCL.1SG
 'You are a girl who is making good bilums.'

- (14) a. Nvita nohina pa'i
 [ni-vita no-hu-i-na pa'i]_{Noun Phrase}
 [1SG-like PRS.MF-be.PRS.MF-3SG-.3SG girl]_{Noun Phrase}
 nohive.
 no-hu-i-ve
 PRS.MF-be.PRS.MF-1-DCL.
 'She is the girl I like best.'
- b. Gai nvita nohina vo
 [gai ni-vita no-hu-i-na pa'i]_{Noun Phrase}
 [2SG 1SG-like PRS.MF-be.PRS.MF-3SG-.3SG girl]_{Noun Phrase}
 nohane.
 no-hu-a-ne
 PRS.MF-be.--DCL.2sg
 'You are the man I like.'

Postverbal relativization Postverbal relativization is achieved by the clitic =*a* which is a nominalizer and may function as a relativizer.

- (15) a. Ai pa'i nvita nohina'amo
 ai [pa'i ni-vita no-hu-i-na=a=mo]_{Noun phrase}
 3SG [girl 1SG-like PRS.MF-be.PRS.MF-3SG-=REL=DEF]_{Noun phrase}
 nohive.
 no-hu-i-ve
 PRS.MF-be.PRS.MF-3SG-DCL
 'She is the girl I like.'
- b. Gai vo nvita nohina'amo
 gai [pa'i ni-vita no-hu-i-na=a=mo]_{Noun phrase}
 2SG [man 1SG-like PRS.MF-be.PRS.MF-3SG-=REL=DEF]_{Noun phrase}
 nohane.
 no-hu-a-ne
 PRS.MF-be.PRS.MF--DCL
 'You are the man I like.'

2.4 Grammatical relations

Bena Bena is case-marking language. Bena bena has two case systems, a syntactic one for pronouns and a semantic one for nouns. Case markers are suffixes attached to the head. In its pronominal system the language is nominative accusative in its pronominal system, the accusative marker being *-i* 'Acc'. The comitative/instrumental suffix takes the accusative pronoun.

2.4.1 Accusative-nominative case system in pronouns

- (16) Ai nopo gi'ehive
ai nohi-po gi-ehi-ve
3SG house-DEF build.PST.MF-PST.3SG-DCL.3SG
'He built a house.'
- (17) Gai'i gehe i'ohuve
gai-i gehe i-ohu-ve
2SG-ACC call LV.PST.MF-PST.1-DCL.1SG
'I called you.'
- (18) Nani gai'ihiti Megabo hepa'moga vuohuve.
Nani gai-i-hiti Megabo hepa'i=mo=ga vu-ohu-ve.
1SG 2SG-ACC-COMIT Megabo village=DEF= go.PST.MF-PST.1-DCL.1SG
'I went to Megabo with you.'

2.4.2 Agentive case system in nouns

The nominal case system is semantic whereby the subject if perceived as in control of his or her action is marked by means of the clitic =*uva* 'Agt'.

- (19) Panamouva yagamo ho'ehive.
Pana=mo=uva yaga=mo ho-ehi-ve
boy=DEF=AGT pig=DEF kill.PST-PST.3SG-DCL.3SG
'The boy killed the pig.'
- (20) Panamo'uva holulu lu'ehive
pana=mo=uva holulu lu-ehi-ve
boy=DEF-AGT run LV.PST-PST.3SG-DCL.3SG
'The boy ran.'

The subjects of the following clauses are considered to be not in control of the action denoted by the predicate, they are rather undergoers of the actions

- (21) Panamo limi i'ehive
pana=mo limi i-ehi-ve
boy=DEF fall LV.PST-PST.3SG-DCL.3SG
'The boy fell down.'
- (22) Panamo fii'ehive
pana=mo fili-ehi-ve
boy=DEF die.PST-PST.3SG-DCL.3SG
'The boy died.'

Inanimate entities are hardly perceived as entities being in control. A house that burns and steam coming up are not perceived as agents and are therefore zero-marked.

- (23) Nopo nolave.
 nohi=mo no-la-ve
 house=DEF PRS-burn.PRS.3SG-DCL.3SG
 'The house burnt.'

However, some inanimate entities may be perceived and case-marked as agent in particular when associated with a verb of high transitivity.

- (24) Efauva nigigusa tala ho'ehive
 efahi=uva ni-nigusa tala ho-ehi-ve
 stone=AGT 1SG.POSS-leg crush LV.PST-PST.3SG-DCL.3SG
 'The stone crushed my leg.'

- (25) Ygemouva hakale nolave.
 yge=mo=uva hakale no-la-ve
 sun=DEF=AGT hot PRS.MF-shine.PRS.3SG-DCL.3SG
 'The sun is shining hot.'

2.5 Medial verb constructions

A major peculiarity of Papuan languages of the Gorokan family, as well as of hundreds of other Papuan languages is clause chaining. Medial verbs, apart from marking a clause as non-final, indicate whether the subjects of the conjoined clauses are coreferential or not. Medial verbs specifying the proposition of the main verb (e.g. *gi* MV,conseq) do not show switch reference oppositions. Medial verbs in Bena Bena also indicate to varying degrees the subject, tense, simultaneity, sequentiality or anteriority. There are more distinctions made in medial verb indicating different subject than in medial verbs indicating same subjects despite the fact that there is only one suffix used for switch reference *go* DS whereas there are two suffixes for marking same subjects. In medial verb forms indicating different subject more distinctions in the paradigm are made by means of the person-number suffixes following

	SINGULAR	DUAL	PLURAL
1	-to	-to	-to
2	-to	-te	-te
3	-to	-te	-te

Table 11: Medial verb suffixes for same subjects

	SINGULAR	DUAL	PLURAL
1	-go	-go	-go
2	-go	-go	-go
3	-go	-go	-go

Table 12: Medial verb suffixes for different subjects

Medial verb construction fulfill three main functions.

- They express a coordinative connection between events.

- They modify the proposition of the main clause.
- They, together with the finite verb describe two aspects or dimensions of only one event.

An example of a medial verb construction describing two aspects of of only one event are given in the following. In the next example associated motion is expressed by it.

(26) Gu'mo logito novive.
 gu'i=mo logi-to no-vu-i-ve
 bilum=DEF carry.on.head.MV.MF-SS.MF PRS.MF-go.PRS.MF-3SG-DCL
 'She is going and carrying a bilum on her head.'

(27) Nani i pegisa hoto novuve.
 nani i pegisa ho-to no-vu-u-ve
 1SG avoid LV.MV.MF-SS.MF PRS.MF-go-1SG-DCL
 'I am going avoiding (the dogs).'

There are hardly any manner adverbs in the language. Predominantly, Manner is coded by means of a same subject medial verb construction. These medial verbs never occur in finite (non-medial forms).

(28) Galepi ikni ikni huto kfo'ehive.
 galepi ikni ikni hu-to kfo-ehi-ve
 galepi dense RDPL LV.MV.MF-SS.MF plant.PST.MF-PST.3SG-DCL.3SG
 'She planted the peanuts densely.'

(29) Nose'na haglu haglu tito nonave.
 nose'na haglu haglu ti-to no-na-ve
 food hasty RDPL LV.MV.MF-SS.MF PRS.MF-PRS3SG-DCL
 'He is eating the food hastily.'

Satellite manner medial verbs describe manner of motion

(30) Fiyeke fiyeke huto vuto hovo!
 fiyeke fiyeke hu-to vu-to ho-vo
 tiptoe RDPL make.MV.MF-SS.MF go.MV.MF-SS.MF kill.PRS.MF-IMP.SG
 'Go on tiptoes and kill (it)!'

3 Adjective classes in Bena Bena

The defining properties of an adjective class were sets 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.

It is possible for there to be two classes of words that satisfy these criteria and legitimately being called an adjective class.

In Bena Bena, a Papuan, i.e., non-Austronesian language spoken in the Eastern Highlands of Papua New Guinea there are indeed two adjective classes defined by their unique morpho-syntactic properties and their prototypically adjectival semantic content.

Attributive-copular adjectives are used as modifiers to nouns within a noun phrase or as copula complements.

Predicative adjectives are the heads of intransitive predicates and may, by means of a dedicated grammatical structure be used as modifiers to nouns.

3.1 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 COLOUR, which are typically associated with both large and small adjective class as well as adjectives of the semantic type of QUANTITY and CARDINAL NUMBERS(see Dixon 2010: 73-74).

Adjectives Preceding a noun	Following a noun or copula complement	Meaning	Derivation -na 'thing' or 'person'
DIMENSION			
sipi	sipi'a	'big'	sipina
fela	fela'a	'big'	felana
napa	napa'a	'big'	napana
lgaso	lgaso'a	'small'	lgasona
yatma	yatma'a	'tall', 'long'	yatmana
COLOUR			
safa	safa'a, safa'i	'red'	safana
satu	satu'a, satu'i	'yellow'	satuna
nupa	nupa'a, nupa'i	'dark', 'black'	nupana
gigopa	gigopa'a, gigopopa'i	'white'	'gigopana'
gholi	gholi'a	'white'	gholina
kfigolarlago	kfigolargo'a	'green'	kfigolargo'na
PHYSICAL PROPERTY			
getipa	getipa'a	'cold'	getipana
matre	matre'a	'smashed'	'matrena
mukho	mukho'a	'hot'	mukhona
hakle	hakle'a	'strong'	haklena
ule ale	ule ale'a	'strong'	ule alena
hale vole	hale vole'a	'strong'	hale volena
ekesa	ekesa'a	'spicy', 'strong taste'	ekesana
geta	geta'a	'heavy'	getana
flupa	flupa'a	'bad, gone bad'	
PHYSICAL PROPERTY			
AGE			
			highly collocational

galupa mya galupa lgo	mya galupa'a logo galupa'a	'old' sweet potato old firewood (unusable, smoke producing)		
gutrafa gu'i guguta kfi sigapa mya kala gluma igofa AGE	gu'i gutrafa'a kfi guguta'a mya sigapa'a kala'a igofa gluma'a	'old bilum' 'dry grass' old, non-edible sweet potato 'has grown shoots' young banana tree		
yuhufa gosva olopa goyapa	yuhufa'a gosva'a olopa'a goyapa'a	'new' 'new' 'elder', 'mature' 'old', 'longstanding'	yuhufana gosvana olopana goyapana highly collocational	'new thing' 'old person' 'old person'
gakola vo yafa a'i umahiti vo ikele	vo gakola'a a'i yafa'a vo umahiti'a ikele'a nma gapa'a gla nala'a balehi nala'a yga nala'a osifa'nala'a	'young boy' 'young girl' boy (6-11yrs) 'young' (pig) young bird puppie baby bandicoot baby pig baby snake		
VALUE				
hetofa svina foipa	hetofa'a svina'a foipa'a	'good' 'bad', 'old',	hetofana svinana 'foipana'	'good thing' 'bad thing' 'bad person'
QUANTITY	PRONOMINAL USE			
asga nesi (vavu)	asga'a, asga'i nesi'a	'all' 'few', 'many', 'a lot'	asgana nesina	'all things', 'few things'
CARDINAL NUMBERS	PRONOMINAL USE			
mone loe	mone'a, mone'i loe'a	'one', ('one other') 'two',	mone'na loena	'other thing' 'two things'
POSITION	ADVERBIAL USE			
gonaka ifo afe	gonaka'a ifo'a afeha'a	'high up' 'on top' 'below', 'bottom'		

Table 13: Attributive Adjectives

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

- (31) a. Hetofa nose'na ni'ive.
 hetofa nose'na ni'i-ve
 good food COP.INANIM.3SG- DCL
 '(It) is nice food.'
- b. 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.

- (32) Hetofa'a ni'ive.
 hetofa-a ni'i-ve
 good-NMLZ COP.INANIM.3SG-DCL
 '(It) is nice.'

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.

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

3.2 Predicative adjectives

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

Members of this class predominantly denote the PHYSICAL PROPERTY of the referent of a noun.

However, the VALUE attributive adjectives *hetofa* 'good' and *svina* 'bad' have predicative correspondances. It can be argued that as Class 2 adjectives they rather refer to the physical property of the nominal referent, i.e., the good state of a sweet potato (not old, not rotten).

Predicative adjectives referring to these semantic types can only occur in the third person, and do so in the past tense.

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	'strong sun'
hale vole hu'ehive	'be strong'	hale vole hu'ehina yafi'i	'strong sugarcane'
ule ale hu'ehive	'be strong'	ule ale hu'ehina gegisa	'strong/sturdy fence'
lapa vi'ehive	'be hard'	lapa vi'ehina gile'i	'dried sweetcorn'
hekle lu'ehive	'be hard'	hekle lu'ehina me'i	'hard soil'
lo'ehive	'be dry'	lo'ehina ukete	'dry clothes'
sepa i'ehive	'be dry'	sepa i'ehina ukete	'dry clothes'
guguta hu'ehive	'be dry'	guguta hu'ehina nmemesa	'dry kunai grass'
hosopa i'ehive	'be dry'	hosopa i'ehina guya	'dry greens'
lgo vi'ehive	'be dry'	lgo vi'ehina lgo	'dry/brittle firewood'
lgo vi'ehive	vi'ehina lgo	'dry', 'brittle'	
lgo lgi'ehive	'be lit up'	lgo lgi'ehina lgo	'fire that has lit up'
i klu ti'ehive	'be lit up'	klu ti'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
lvo to'ehive	'be burnt'	lvo to'ehina mya	'burnt sweet potato'
mya gosva hu'ehive	gosva hu'ehina mya	freshly harvested sweet potato	
mya ipi ki'ehive	'soft (afterstoring)'	ipi kina mya 'soft sweet potato'	
		sweet potato has been stored before	
flu hu'ehive	'soft'	flu hu'ehina nose'na	'soft food'
matre hu'ehive	'smashed'	matre hu'ehina igofa	'smashed banana'

mya melo'ehive	melo'ehina mya	'old' not edible'	
mya sigapa lo'ehive	sigapa lo'ehina mya	old bilum	
gu'i gutrafa lo'ehive	gutrafa lo'ehina gu'i	gefa hu'ehina ukete	'wet clothes'
gefa hu'ehive	'wet'	tguma vi'ehina mya	rotten sweet potato'
tguma vi'ehive	'gone bad'	deterioted house	
flupa i/hu'ehive	flupa hu'ehina nopo	patra si'ehina ukete	rotten clothes
patra si'ehive	'rotten'	fu lu'ehina gmi	'straight arrow'
fu lu'ehive	'straight'	fu lmeu'ehina gegisa	'non-straight fence'
fu melu'ehive	'not straight'	piu hu'ehina gmi	
piu hu'ehive	'not straight'	kluklu'ehina ukete	'clean clothes'
kluklu'ehive	'clean'	glo to'ehina ukete	'dirty clothes'
glo to'ehive	'dirty'		
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 planted close to each other'
CORPORAL 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 14: Predicative adjectives

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

- (35) Mei hekini nolave.
me'i hekini no-lo-i-ve
ground hole PRS.MF-patch.PRS.MF-3SG-DCL.3SG
'He is patching the ground.'
- (36) hekni lo'ehina hoklo.
hekini lo-ehi-na hoklo
patch LV.PST.MF-3SG-.3SG hole
'patched hole'

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

- (37) Lili'na su halive.
lili'na su ha-l-i-ve
work finish .--3SG-DCL.3SG
'He will finish his work.'
- (38) Su ho'ehive.
su ho-ehi-ve
finish LV.Pst.mf-Pst.3SG-.3SG
'It's finished.'

4 Adjectival concepts (semantic types) in Bena Bena

4.1 Dimension

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

4.2 Age

4.3 Physical Property

Some adjectives of Class 1 have corresponding Class 2 adjectives.

Class 1		Class 2	
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 15: Class 1 adjectives and their Class 2 correspondences

4.4 Corporeal properties

(39) 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-∅-ha-ve
hunger PRS.MF-3SG-hit.PRS.3SG-DCL
'Hunger is hitting him/her.' ('He/She is hungry.')

(40) DUAL

- a. Gau'na nole'ahave.
gau'na no-le'a-ha-ve
hunger PRS.MF-1PL-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-2PL-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-3PL-hit.PRS.3SG-DCL
 'Hunger is hitting them two.' ('They two are hungry.')
- (41) 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-2PL-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.')

Corporeal property

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

Table 16: be hit

Other experiences such as tiredness or shame do not hit the person, but exist. Interestingly, the copula verb for animatees is used.

Corporeal property

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

4.5 Human Propensity

A propensity is a natural tendency to behave or feel in a certain way. All living creatures have propensities. Dogs have a propensity to bark, and quite a few people have a propensity for getting annoyed by it.

Dixon uses the term as a semantic type typically associated with adjectives. As a label for a semantic type HUMAN PROPENSITY the term is used for qualities typically associated with humans including terms for emotions and character traits. It should be noted that many of these terms have a culturally specific meaning in an individual language, and therefore if to be translated into another language 'these will be amongst the least happy translation equivalents between the two languages.' (Dixon 1977: 67)

By definition, members of a semantic type share some morpho-syntactic properties identifying it as such. In Bena Bena, the 'general region of semantic space' that HUMAN PROPENSITY terms cover cannot be ascribed to one single group with a single linguistic structure. Rather they fall into subtypes.

The analysis of the semantic domain of HUMAN PROPENSITY is difficult as it requires a thorough understanding of cultural conceptualization of human mental states and attitudes. 'HUMAN PROPENSITY would certainly be the most difficult semantic type to investigate in depth and to make detailed generalisations about but it would also be one of the most revealing.' (Dixon 1977: 67). In what follows is a preliminary description.

Emotions are experiences that people undergo, they do not have an active take on it. They are temporal holding at a particular point in time.

The experiencer in Bena Bena is never coded as the subject of the clause as the subject role is reserved for the semantic role of the 'doer'.

The intransitive verb *giniga fi* means 'feel sorry' and also takes the possessive or direct object prefix. The verb *fi* literally means 'set' but functions here rather as a light verb. It always appears in the third person singular which suggests that *giniga* is the subject.

- (42) a. Nginiga nofive.
ni-giniga no-fi-i-ve
POSS.1SG-pity PRS.MF-LV.PRS.MF-3SG-DCL
'I feel pity.'
- b. Nani nginiga fi emi'ohuve.
nani ni-giniga no-fi emi-ohu-ve
POSS.1SG-pity LV.PRS.MF 3SG.IO-give.PRS.MF-1-DCL
'I feel pity for him/her.'
- (43) Gvuyaka mehifihe?
gu-vuya-ka me-hu-i-fihe
POSS.2SG-shame-POSS.2SG NEG-be.PRS.MF-3SG-INT.3SG
'Don't you feel ashamed?'

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.

- (44) 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'.

- (45) Ngelo novuve.
ne-gelo no-vu-u-ve
POSS.1SG-happiness PRS.MF-go.PRS.MF-1-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.

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

(47)

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

- (48) 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.'

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

- (49) 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)

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

- (51) 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

guminalo vo	'thief', shoplifter'
gumina=lo vo	
steal=Loc	
'stealing-attached man'	
fgalo vo	'liar'
fga=lo vo	
lie=Loc	
'lie-attached man'	
luvalo vo	'warrior'
luva=lo vo	
fight=Loc man	
'fight-attached man'	
mukfalo vo	'ignorant man'
mukfa=lo vo	
ignorance=Loc	
'ignorance-attached man'	
fenlo vo	wealthy man
fenohi=lo vo	
household.goods=Loc man	'goods-attached man'

Table 17: People's habits

Character traits There is no one linguistic structure that is employed to refer to people's character traits.

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

- (52) gaga luse a'i
gaga lu-se a'i
word speak-Rel woman
'talkative woman'
- (52) 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:

- (53) a. gaga melina a'i
gaga me-lu-i-na a'i
word Neg-speak-3Sg-Ipfv woman
'man who does not talk a lot'

- b. gaga melina vo
 gaga me-lu-i-na vo
 word Neg-speak-3Sg-Ipfv man
 'man who does not talk a lot'
- (54) hosopa vo
 hosopa vo
 dry man
 'man who does not smile and talk to other people'

4.6 Speed

The semantic type SPEED is expressed through intransitive verbs.

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

Table 18: Verbs referring to speed

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

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

- (55) Gale meme huto noave.
 gale meme hu-to noave.
 car fast be-MV.SS come.PRS.3SG
 'The car is coming fast.'
- (56) Gale meme huto novive.
 gale meme hu-to no-vu-i-ve.
 car fast be-MV.SS PRS-goPRS.MF-3SG-DCL
 'The car is going fast.'
- (57) 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 slowly!' (Easy, easy! Slow down!)

Only in the imperative the verb may not occur in its medial form.

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

4.7 Similarity

Similarity is a concept derived from sameness.

In Bena Bena it is expressed by means of medial verbs.

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

The term for like alikeness seems to be copula-like.

- (62) 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.'

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

- (63) 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).'
- (64) Bena Bena vonahiti Alekano vonahiti moneko supo
 Bena Bena vona-hiti Alekano vona-hiti moneko supo
 Bena Bena people-AND Alekano people-AND one same
 hite meneha.
 hite me-ne-ha
 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.'

4.8 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 directiona are descriptive in that they specify the position of the sun.

Cardinal directions	
yge tina'amo	'East'
yge ti-i-na-a=mo	
sun go.up-3Sg-Nmlz=DEF	
'rising sun'	
yge lvina'amo	'West'
yge lvi-i-na-a=mo	
sun go.down-3Sg-Nmlz=DEF	
'setting sun'	
yge tina lvina sopa sopa'amo	'North' and 'South'
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)'	

Table 19: Cardinal directions

5 A note on lexical semantics

5.1 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'

5.2 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'

5.3 Collocational symbiosis

5.3.1 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*.

- (65) yafamo lgo vi'ehive.
 yafa=mo lgo vi-ehi-ve.
 post=DEF dry LV.PST.MF-PST.3SG-DCL.3SG
 'The firewood is dry.'
- (66) 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.'
- (67) Me'i sepo i'ehive.
 me'i sepo i-ehi-ve
 soil dry LV.PST.MF-PST.3SG-DCL.3SG
 'The soil is dry.'
- (68) Ukete lo'ehive.
 ukete loehive
 tree leaf-POSS.3SG
 'The clothes are dry.'

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 20: 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

5.3.2 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

	Expression	
lgo 'firewood'	vi'ehina lgo	dry firewood
	gefa lgo	wet firewood
	lgo	firewood

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'

5.3.3 Animacy

Animacy and Agency is a salient parameter in the grammar of the language. Copula verb make this distinction. The copula verb for inanimate entities always is morphologically singular.

In regard to adjectives it is not unusual to have a distinction between animates and non-animates.

5.4 Metaphors

5.4.1 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'

5.4.2 Body metaphors

There are many terms in Bena Bena semantically belonging to the semantic types CORPORAL 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.

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

6 Conclusions

This case study 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, that is 'the syntactic properties of a syntactic item can largely be predicted from its semantic description.' (Dixon 1977: 24).

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 morphosyntactic 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, COLOUR VALUE, AGE, DIFFICULTY, QUANTITY and CARDINAL NUMBERS as well as POSITION.

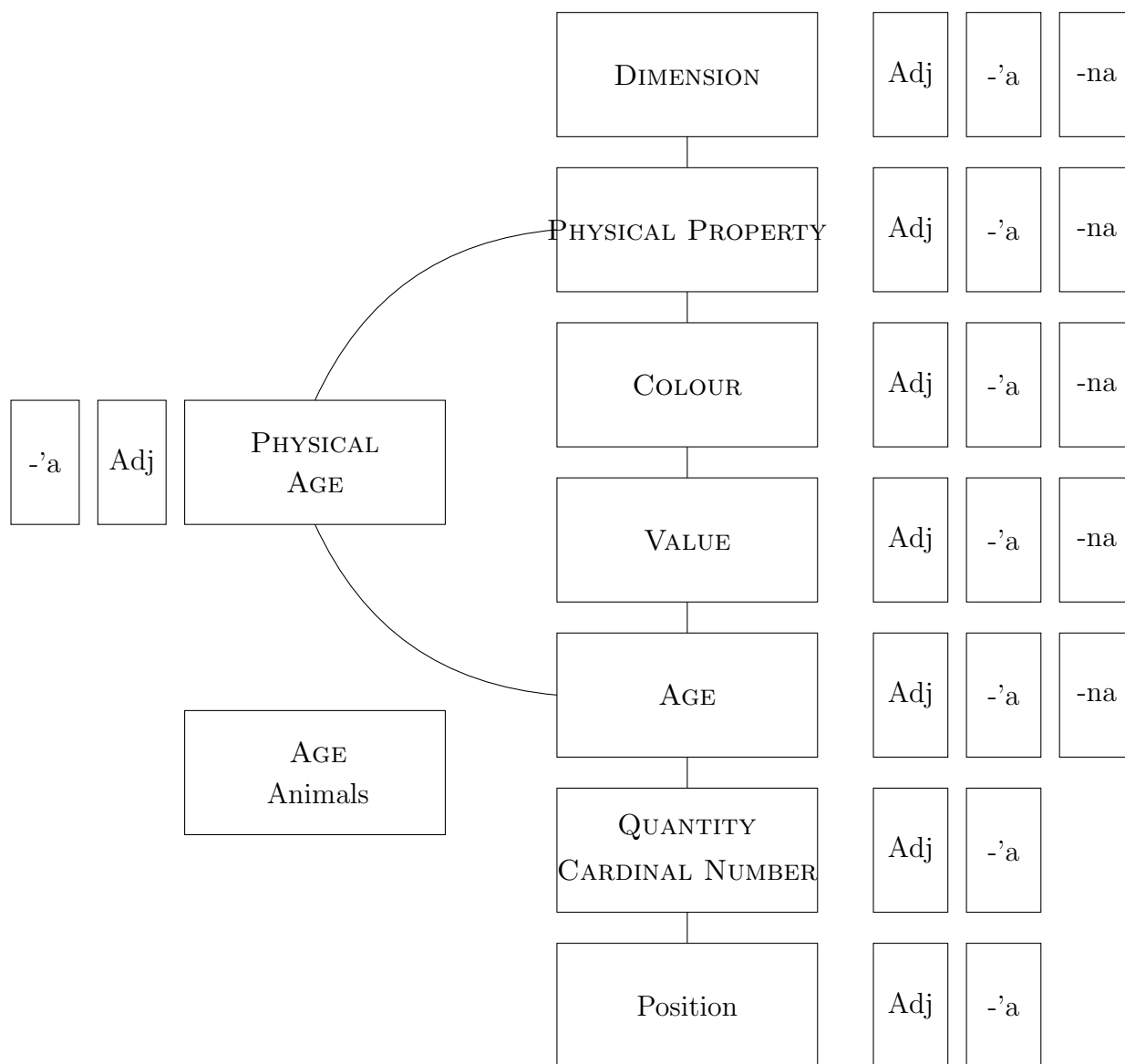


Figure 1: Class 1 adjectives: attributive-copular adjectives

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.

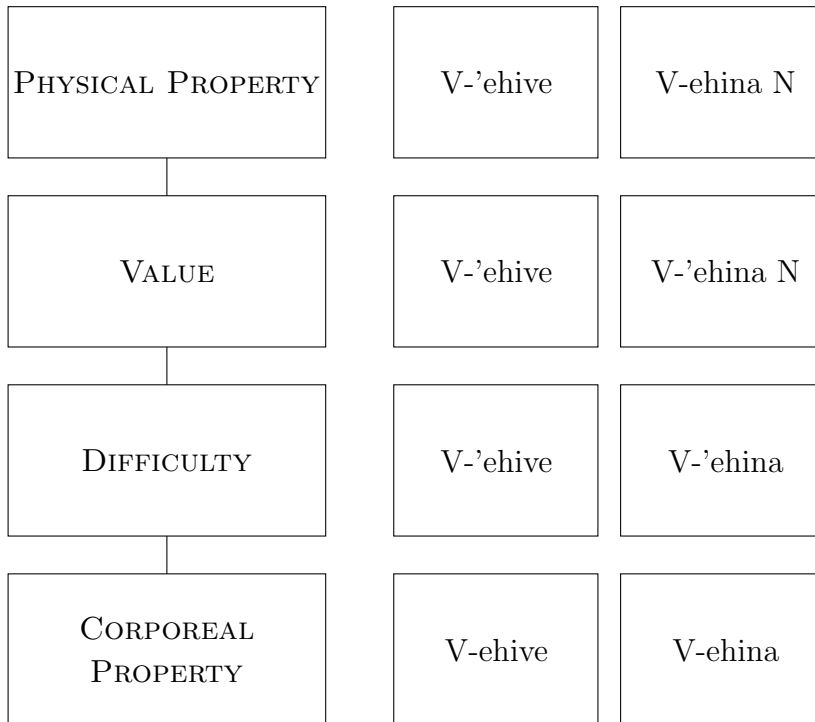


Figure 2: Class 2 adjectives

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 overflow 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.

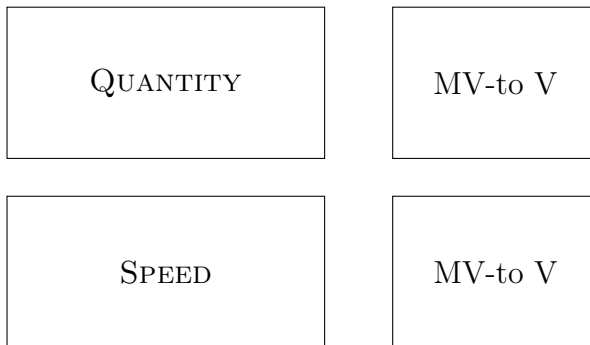


Figure 3: Class 2 adjectives

The semantic types of *Human Propensity* and *Speed* are not expressed by adjectives. The reason for this lies in what kind properties are expressed by adjectives

In Bena Bena the relationship between the property and its nominal referent matters, determining whether a noun phrase, a qualifying noun, an adjective or a verb in its medial or finite form is used.

A distinction is drawn between the property of inalienably ‘having’ (DIMENSION, COLOUR, for instance) alienably ‘possessing’ PHYSICAL PROPERTY, temporarily ‘marked by’ SPEED as well as ‘characterized by’, and ‘associatively qualified by’ is made. Only ‘having’ and ‘possessing’ properties are expressed by adjectives. More time-stable properties are on the “nouny” side’, less time-stable properties are on the “verby” side. Thus, it is the parameter of time-stability going in hand with semantic types that accounts for the structure employed.

NOUN PHRASE	=lo	Non-core	Proposed Inalienability
NOUN PHRASE	-se	Non-core	Associated Quality
COMPOUND NOUN	Mod. Noun + Noun	Non-core	Purpose specification
ADJECTIVAL MODIFICATION	Class 1 Adj + Noun	Core & Non-core	DIMENSION, COLOUR, VALUE, AGE POSITION, QUANTITY PHYSICAL PROPERTY
ADJECTIVAL MODIFICATION	Class 2 Noun + Adj	Non-core	PHYSICAL PROPERTY, VALUE
MEDIAL VERB CONSTRUCTION	Medial verb + finite verb	Non-core	HUMAN CHARACTERISTICS SPEED, QUANTITY VALUE, DIFFICULTY
FINITE VERB	Finite verb	Non-core	HUMAN BEHAVIOUR

Figure 4: Stating properties in Bena Bena

References