

The Typology of Adjectival Predication



Empirical Approaches to Language Typology

17

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by

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For Ans, Thom and Max

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Nijmegen, April 1996

Harrie Wetzter

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Abbreviations

In the glosses of the sample sentences the following abbreviations have been used:

1	1st person	DIR	directional
2	2nd person	DU	dual
3	3rd person	DUR	durative
ABL	ablative	DYN	dynamic
ABS	absolutive	EMP	emphatic
ACC	accusative	ENCL	enclitic
ACTOR	actor	ERG	ergative
ACTUAL	actual	ESS	essive
ADVBLR	adverbializer	EXCL	exclusive
AG	agent	F(EM)	feminine
AN	animate	FIN	finite
AOR	aorist	FOC	focus
ART	article	FUT	future
ASP	aspect	GEN	genitive
AUG	augmentative	GERUND	gerund
AUX	auxiliary	GOAL	goal
CL (x)	noun class (nr. x)	HAB	habitual
CLASS	classifier	HON	honorific
COMPL	complement	HUM	human
COMPLET	completive	ILL	illative
CONJ	conjunctive	IMPER	imperative
CONN	connective	IMPERF	imperfect(ive)
CONT	continuative	INAL	inalienable
	continuous	INAN	inanimate
CONTMP	contemporative	INCH	inchoative
COP	copula	INCL	inclusive
DAT	dative	INDEF	indefinite
DECL	declarative	INDIC	indicative
DEF	definite	IRR	irrealis
DEM	demonstrative	INSTR	instrumental
DENMLR	denominalizer	INTR	intransitive
DER	derivational	INV	inverse
DET	determiner	LOC	locative

M(ASC)	masculine	PRET	preterite
NEG	negative	PROG	progressive
NEUT	neutral	PUNCT	punctual
NM	noun marker	QM	question marker
NMLR	nominalizer	REAL	realis
NOM	nominative	REC.PAST	recent past
NON-ACT	non-actual	REF.PART	reference particle
NONFUT	non-future	REL	relative marker
NONPAST	non-past	REM.PAST	remote past
NONRECPAST	non-recent past	SG	singular
OBJ	object case, objective	SIT	situational
OBL	oblique	STAT	stative
PART	particle	SUBJ	subject case
PARTIC	participle		subjective
PAST	past	THEM	thematic
PAT	patient	TNS	tense
PERF	perfect(ive)	TOP	topic
PERS.REF	personal reference	UND	undergoer
PL	plural	VAL	validator
PM	predicate marker	VBLR	verbalizer
POSS	possessive	VICIN	vicinity marker
PRED	predicator	VPS	verbal pronominal
PRED.CASE	predicative case		subject
PRES	present		

Part One

General background

Chapter 1

Introduction

1.1. General observations

Talmy Givón once described the class of adjectives as “a notorious swing-category in languages” (1979: 13). This characterization is quite appropriate, considering the grammatical behaviour of adjectives both from a cross-linguistic and from a language-specific point of view. Comparative studies show that adjectives do not constitute a universal category in language. While all languages seem to distinguish the major word classes Noun and Verb, many languages do not have a distinct open class of Adjectives. Unlike, for instance, the Indo-European languages, which do have this major class, other languages lack a distinct adjective class altogether (e.g. Mandarin Chinese), or only have a closed and usually rather small set of adjectives (e.g. many Bantu languages). Generally, the lack or paucity of “real” adjectives is compensated by the use of verbs or nouns expressing properties or qualities. As for languages which are described as having a distinct adjective class, it should be noted that the status of this lexical category is open to doubt. To be specific, members of the adjective class tend to share morphological and/or syntactic properties with nouns or with verbs. Thus, even if there are grammatical arguments for identifying a separate adjective class in a particular language, this class will virtually never have an independent status comparable to that of the major word classes Noun and Verb. As Locker (1951: 20) writes: “...es gelingt aber nirgends, den sekundären Charakter des Adj. gegenüber dem Nominal-Verbal-System vollständig zu überwinden und diesen beiden Systemen ein durchaus gleichwertiges Adj.-System an die Seite zu stellen.” [‘...nowhere is it possible, however, to overcome the secondary nature of the adjective system and to give it a status which equals that of the nominal and verbal system.’]

Against this general background, the present study addresses the problem of the formal encoding of “adjectival” meanings or “property concepts” in language. More specifically, it examines the cross-linguistic behaviour of adjectives and their equivalents in predicative constructions like “the man is tall” in English. For the time being, the term “property concept” will be used rather loosely to refer to qualities or properties, which are generally codified by the open linguistic category “Adjective”, if a language has such a class. Further, the notion “adjectival (word/item)” will be used as a cover term for words express-

ing property concepts, irrespective of their actual word class status. I trust that the reader will have a general understanding of what is meant by these terms, which will be specified in section 1.3.

This study must be placed in the framework of the broad survey-based typological research in the tradition of Greenberg (1963). Since the fundamental characteristic of this type of linguistic research is large-scale cross-linguistic comparison, the typologist is confronted with some specific problems of method. Methodological issues which are inherent in the cross-linguistic perspective adopted include the construction of a language sample, the selection of data sources and the problem of cross-linguistic identification, i.e. the problem of how to decide which formal expressions in the sampled languages must be considered relevant for establishing the data base of the typological investigation. In this study, the concepts and methodology of linguistic typology are largely taken for granted and will not be elaborated. Readers who are not familiar with this approach are referred to the introductory volumes on typology by Mallinson and Blake (1981), Comrie (1981a) and Croft (1990), and the introductory chapter in Stassen (1985). For this particular typological study, methodological issues like the construction of the language sample and the problem of cross-linguistic identification will be dealt with in chapter 4.

As to the selection and use of data sources, a final comment is in order. Typological research requires a large amount of data for a large number of languages. Since a typologist can hardly be expected to have a sufficient level of knowledge of all languages in his sample, he will always be dependent on the reliability of data sources. In the practice of typological investigation, descriptive grammars provide the most commonly used data sources (although data can also be obtained, for instance, by eliciting grammatical information from native speakers, or by the analysis of actually recorded texts). A problem which is inevitably associated with this method of data gathering concerns the differences in quality and scope of grammatical descriptions. For one thing, authors of grammars are not necessarily experts in linguistic analysis. Furthermore, the selection and interpretation of data is often biased by the author's commitment to a particular descriptive or theoretical (e.g. traditional, generative, tagmemic) model. Given this situation, one must always try to form an estimate of the usefulness and reliability of a grammar by looking at its internal consistency, the availability of empirical data, the coverage of various grammatical aspects, reviews of linguists who are familiar with the language described, etc. In the last resort, however, a typologist will have to rely on faith in the quality of the grammars consulted. Even though the use of descriptive grammars is not without difficulties, they still provide a major and indispensable data source for typological research, when used judiciously. For the typological investigation to be presented in this study,

most data are obtained from published grammatical descriptions which, if necessary and possible, are supplemented by consulting with specialists. In this way, most sample sentences as well as interpretations of data (that is, in so far as they are not explicitly mine) can be checked against published sources which I take to be reliable.

1.2. Two perspectives on adjectival encoding in language

Comparative studies on part-of-speech systems generally recognize that Adjectives, as opposed to Nouns and Verbs, do not constitute a universal word class. Many languages have no adjective class at all or only have a non-productive and usually rather small class of “real” adjectives. In the past decades, considerable attention has been paid to the question of how languages without an open adjective class express concepts that are expressed through Adjectives in languages which do have this major class. Generally, these languages (i.e., languages without an open adjective class) encode property concepts by means of (sub-classes of) nouns or verbs. Thus, the cross-linguistic variation in the lexical categorization of property concepts is more or less standardly described in terms of three basic types of adjectival encoding. Property concepts are said to be encoded 1) as Adjectives, 2) as (adjectival) Nouns, or 3) as (adjectival) Verbs (see, for instance, Locker 1951; Dixon 1977; Givón 1979, 1984; Schachter 1985; Lehmann 1990; Bhat 1994). From a typological point of view, however, this tripartite division, which is based on the alleged word class status of adjectivals, is not as straightforward as it may seem. Closer examination of the actual grammatical behaviour of property concept words reveals that Adjectives, (adjectival) Nouns and (adjectival) Verbs do not represent clearly identifiable, distinct and homogeneous cross-linguistic categories.

The crucial problem associated with this approach concerns the questionable status of Adjectives as a primary independent word class alongside the major categories Noun and Verb. Although most authors seem to adhere to the conception of adjectives as a fully-fledged distinct category, the grammatical properties of adjectives, when compared to those of (adjectival) nouns and verbs, do not corroborate this view. To begin with, adjectives – defined as a separate word class – tend to display morphological and syntactic similarities with nouns or with verbs (cp. Locker 1951; Givón 1979, 1984; Thompson 1988). In this respect, they are at best gradually distinguishable from adjectivals which are classified as (a subclass of) nouns or verbs. Furthermore, while adjectives are by definition grammatically distinguishable from nouns or verbs, they are not fundamentally different from (adjectival) nouns or verbs which also tend to

display distinctive properties not shared by “core” members of their class. Summarizing, we can state that the grammatical behaviour of property concept words, irrespective of their alleged word class status, can be characterized by two opposing tendencies. Adjectivals tend to associate with the nouns or with the verbs; at the same time, they typically display grammatical properties not shared by “core” nouns or verbs.

In view of these observations, the distinction between Adjectives, (adjectival) Nouns and (adjectival) Verbs, as proposed in the standard view on adjectival encoding, does not seem to qualify as an adequate typological distinction. First, the “Adjective” type does not represent a homogeneous cluster of word classes; instead, Adjectives tend to be split up into two clearly distinguishable categories of “noun-like” and “verb-like” adjectives. Second, the boundaries between Adjectives on the one hand and (adjectival) Nouns and Verbs on the other appear to be extremely fuzzy, if they can be drawn at all. While words expressing property concepts generally display both grammatical similarities with and differences from the major word classes Noun and Verb, there appear to be no clear definitional criteria for “adjective-hood”. Cross-linguistically, property concept words are more or less arbitrarily classified as either adjectives, or (sub-classes of) nouns or verbs.

Whereas the alleged word class status of property concept words does not seem to provide a typologically significant basis for language comparison, the cross-linguistic behaviour of adjectivals as described above offers an alternative perspective on the problem of how property concepts are encoded in language. Whatever the word class status of adjectivals in a particular language, the adjectival system is typically attached to the nominal or verbal system of the language in question. For adjective-deficient languages this is straightforward, since these language use (subclasses) of nouns or verbs to express properties. Furthermore, “true” adjectives display a tendency to associate with nouns or verbs as well. In short, then, we can state that “whether or not there is a category of Adjectives, the words expressing Property Concepts tend to fall into categories which either share many properties with the class of Nouns, or many properties with the class of Verbs” (Thompson 1988: 169).

As opposed to the standardly accepted tripartite division into Adjectives, (adjectival) Nouns, and (adjectival) Verbs, this alternative perspective implies a dichotomy between two groups of adjectivals which, following Ross (1972, 1973), may be called *nouny* and *verbby* adjectivals. In this view, the former cross-linguistic category “Adjective” is split up so as to be distributed among the categories of (adjectival) Nouns and (adjectival) Verbs, respectively. Noun-like adjectives, together with (adjectival) nouns, will then constitute the category of

“nouny” adjectivals; the category of “verby” adjectivals is made up of verb-like adjectives and (adjectival) verbs.

It is this latter perspective which will be adopted in the present study. The observed nouny-verby split in the expression of property concepts will be taken as the point of departure for a typological investigation of predicative adjectival constructions, i.e. constructions which, in the languages in question, represent the functional equivalent of English expressions such as “The man is tall”.

1.3. Prototypical adjectivals

In section 1.1. the notion “adjectival (word/item)” was introduced as a cover term for words expressing property concepts, irrespective of their word class status. In this context, the term “property concept” was used rather loosely to refer to qualities or properties, which are generally codified by the open linguistic category “Adjective” in languages which have such a class (like English). Although this semantic characterization is admittedly rather vague, it should be noted that most comparative studies dealing with adjectives and their equivalents in language adopt similarly loose and intuitive semantic definitions, presumably for want of an obviously better semantic definition (e.g. Locker 1951; Schachter 1985; Lehmann 1990; Bhat 1994). While the proposed definitions of the terms “adjectival (word/item)” and “property concept” are taken to provide a sufficiently adequate basis for the general discussion in chapters 2 and 3, I have considered them to be unsatisfactory for the purpose of the typological investigation to be presented in the remainder of this book. In the present study, I have confined myself to what I will call *prototypical adjectivals*. The notion “prototypical adjectival (word/item)” is used here as a cover term for (classes of) lexical items which minimally express property concepts included in Dixon’s (1977) “semantic types” of *age*, *dimension* and *value*. These concepts will be referred to as *prototypical property concepts*. In order to clarify my reasons for limiting the scope of the investigation to these prototypical adjectivals, let me start off by summarizing the major findings of Dixon’s 1977 paper, in which he explores the question of how “adjectival” meanings are expressed in languages which lack an open adjective class.

Dixon (1977: 31) classifies the “basic members” of the English adjective class into seven universal “semantic types”. These seven types which make up the word class Adjective are the following:

1. DIMENSION – big, large, little, small, long, short,...
2. PHYSICAL PROPERTY – hard, soft, heavy, light, hot, cold,...
3. COLOUR – black, white, red,...
4. HUMAN PROPENSITY – jealous, happy, kind, clever, generous, proud, cruel,...
5. AGE – new, young, old,...
6. VALUE – good, bad, delicious, excellent,...
7. SPEED – fast, quick, slow,...

Dixon then goes on to investigate the word class affiliation of these semantic types in “adjective-deficient” languages. The major results of his investigation are summarized below:

1. If a language has a class of adjectives, identified on language-internal morphosyntactic grounds, this class is likely to include at least members of the semantic types *age*, *dimension*, *value* and *colour*, however small it may be. In languages without a distinct adjective class, these four types generally belong to a single part-of-speech, i.e., either (adjectival) verbs or (adjectival) nouns. In that case, the actual word class membership of these types cannot be predicted.
2. The other three semantic types in Dixon’s list, i.e. *physical property*, *human propensity* and *speed*, may be included in the same class which covers the four types mentioned in 1. This appears to be the normal situation in languages with an open adjective class, and in languages which lack a distinct adjective class altogether. In other words, in these languages all seven semantic types are predominantly associated with the same part of speech. However, in languages with a relatively small closed class of adjectives these three remaining types are not always included in the class which expresses age, dimension, value and colour. Physical properties tend to be encoded as verbs, while human propensity concepts are typically associated with the category noun. The categorization of the speed type largely depends upon the treatment of physical property concepts. If the physical property type is predominantly included in the adjective class, the same goes for the speed type. If, however, physical properties are encoded as verbs, speed concepts will be associated with the adverb class.

According to Dixon, the seven semantic types listed above are predominantly associated with one and the same lexical class in languages with an open class of adjectivals (which may be a separate class of adjectives, (adjectival) nouns or (adjectival) verbs). Accordingly, one might suggest taking these seven semantic types as definitional for the notion of “adjectival concept” or “property concept”, so that words which express one of these types will be called “adjectivals” or “adjectival words/items”, and will be taken into account in the typology to be presented (cp. Thompson 1988). However, Dixon’s observations also suggest that

the set of seven "adjectival" types is not really homogeneous and that some semantic types are more typically "adjectival" than others. To be specific, the semantic types of *physical property*, *human propensity* and *speed* seem to be less central than the other four semantic types of *age*, *dimension*, *value* and *colour*.

With regard to these findings, some additional observations are in order. First, while Dixon (1977) primarily focuses on languages with a closed adjective class, his observations concerning the less central "adjectival" types seem to be (at least partly) extendable to languages with an open class of adjectivals. Contrary to Dixon's statement that all seven semantic types are generally included in the open class of adjectivals, my data suggest that even in these languages the physical property and human propensity types are more peripheral, in that concepts belonging to these types are regularly lexicalized in a different way than the age, dimension, value and colour types are (unfortunately, my data about the speed type are not reliable enough to make valid generalizations).

A second point concerns the observed tendencies of the three less central semantic types to associate with particular word classes (that is, if concepts belonging to these types are not included in the class which covers the age, dimension, value and colour types). While I have no reason to doubt the correctness of Dixon's generalizations concerning the physical property type and the speed type (which seem to be preferably affiliated with the verbs and the adverbs, respectively), my own observations, as well as those in Givón (1984) and Pustet (1989), indicate that the alleged association of the human propensity type with the nouns is far less straightforward. In fact, this semantic type appears to be too heterogeneous to make reliable predictions about the word class affiliation of the concepts involved. Although I have not systematically investigated the ways in which human propensity concepts are lexicalized cross-linguistically, the data suggest that this semantic type requires further subclassification and that predictions become at least somewhat more reliable when the semantic factor of time-stability (Givón 1979, 1984) is introduced. Within the human propensity type, a distinction can be made between relatively stable mental and bodily human characteristics (e.g. wise, stupid, proud, stubborn, blind, deaf, mute, hunchbacked) on the one hand, and more temporary unstable properties or states like mental or bodily affections (e.g. angry, happy, afraid, sad, sick, hungry, thirsty) on the other. To the extent that human propensity concepts are not treated on a par with the age, dimension, value and colour types, members of the first group of relatively stable concepts are typically associated with the noun class (in accordance with Dixon's generalizations about the human propensity type as a whole). With regard to the second group of more temporary properties or states, the cross-linguistic pattern is less transparent. There appears to be a tendency for languages to express mental and bodily states as verbs, more partic-

ularly as experiential verbs, the experiencer being encoded as a non-controlling (i.e. dative, patient) participant. In addition to this (apparently preferred) verbal encoding strategy, alternative expression types are found as well. One regularly encountered option involves the use of an abstract noun denoting the property or state which may appear in a variety of syntactic constructions such as "I feel / do / have hunger / fear", "hunger / fear makes / takes / hurts me", "hunger / fear is on me", etc. Other, rather idiomatic, means to express mental and bodily states involve different types of periphrastic constructions. Examples are verb complexes like "want to drink / eat" for "be thirsty / hungry", and expressions in which body parts play an important role, like "my heart is good / bad" for "I am happy / sad". These observations clearly demonstrate that relatively unstable human propensity concepts like mental and bodily states are not adequately captured by Dixon's generalizations and definitely call for further systematic investigation. However, this does not alter the fact that the human propensity type, just as physical property and speed, must be considered less typically "adjectival" compared to the other semantic types.

A final observation concerns the alleged "central" status of Dixon's semantic type of colour. My own observations suggest that the colour type is not as prototypical as the age, dimension and value types; contrary to Dixon's findings, colour terms do not always occur in the adjectival class which covers the other three "central" semantic types. In that case, colour concepts are typically expressed by nominal items. This situation obtains, for instance, in Nuer and in Chemehuevi. In the Nilotic language *Nuer* (Crazzolara 1933), property concepts are generally encoded as verbs. Except for the three basic colours black, white and red, which can be expressed as verbs and as nouns (by different lexical items), colour terms are conspicuously absent in the open class of verb-like adjectivals: "Names of colours seem all to be nouns. They are treated throughout as such." (Crazzolara 1933: 47) In *Chemehuevi* (Uto-Aztecan, Southern California and Arizona), adjectival concepts are predominantly lexicalized as verbs, i.e. "Adjectives are all verbs in Chemehuevi" (Press 1975: 203). For colour terms, however, a rather deviant pattern is found:

By and large adjectives are equivalent to verbs in Chemehuevi, i.e. their stems take normal tense-aspect suffixes. The subclass of adjective stems comprising color terms is somewhat of an exception in that they must be first suffixed either with *-tu ʔa* 'become' or a special stative suffix *-ka*, used only with this class apparently. When augmented in this manner the resulting stem behaves like any other verb with respect to tense-aspect markers. (Press 1975: 117-118)

Thus, the non-verbal nature of colour roots is indicated by the fact that they cannot be used predicatively without further measures being taken, unlike other adjectivals and verbs. Either they require the stative suffix *-ka*, as in:

- (1.1) Chemehuevi
pavi-a-n naro lo-ong angka-ga-j
 brother-OBL-my shirt-his red-STAT-PRES
 'My brother's shirt is red.' (Press 1975: 113)

Or they take the quasi-compound suffix or bound verb *-tu la* 'become', which is normally used with nouns, the result being a verbal form with the meaning 'to become/turn N', as in:¹

- (1.2) Chemehuevi
wa larovi-cu la-
 horse-become-
 'become a horse' (Press 1975: 117)

As a tentative explanation for the nominal affiliation of the colour type (that is, in so far as colour is not treated on a par with the age, dimension and value types), it may be assumed that these terms are the result of semantic bleaching of nouns which originally referred to objects characterized by a specific colour. This assumption is supported by the observation that in many languages the colour terminology is extended by nominal items which are used to refer to objects and materials as well as to their characteristic colours such as orange (fruit) > orange; ashes > grey; coal > black; unripe melon > dark green; gold > yellow; blue cotton yarn > blue, etc.

Within the context of the nouny-verbby split in the encoding of property concepts, Dixon's findings, supplemented by my own observations, can be interpreted as follows. Irrespective of whether a language has a closed class of "adjectives" or an open class of adjectivals (which may constitute a distinct class of (noun-like or verb-like) adjectives or a subclass of (adjectival) nouns or verbs), this class will at least include members of the three "prototypical" semantic types *dimension*, *value* and *age*. No predictions can be made as to whether these semantic types will be encoded as nouny or verbby adjectivals. For the other four semantic types, i.e. *physical property*, *human propensity*, *speed* and *colour*, things are different. The extent to which these four semantic types are treated on a par with age, dimension and value concepts may vary considerably from one language to another. While Dixon states that the first three types tend to be excluded when the adjective class is closed, members of these types as well as

colour terms may also be excluded if adjectivals constitute an open class. If concepts belonging to these four types fall into the same lexical class (or classes) covering the age, dimension and value types, the nouny or verby orientation of the adjectivals involved is equally unpredictable. However, to the extent that these concepts do *not* cluster with the three “prototypical” semantic types, there are good reasons for assuming that their lexical categorization as “nouny” or “verby” adjectivals depends upon semantic factors, even though the semantic principles underlying their typical word class affiliation are not (yet) fully understood and must await further study.²

For the purpose of the typological investigation to be presented in this study, I have decided to concentrate on those (classes of) adjectivals whose nouny or verby orientation seems to be largely independent of their semantic content, and to exclude adjectivals whose nouny or verby affiliation is likely to be motivated on semantic grounds. In view of the discussion presented above, then, the scope of the investigation will be restricted to *prototypical adjectivals*, i.e., those (classes of) adjectival items which minimally express property concepts belonging to the semantic types of *age*, *dimension* and *value*.

1.4. Outline of the following chapters

This book is divided into three sections. In the remainder of Part One the two cross-linguistic perspectives on adjectival encoding which were introduced in section 1.2. are dealt with in more detail. Chapter 2 discusses and criticizes the standardly accepted word-class oriented approach according to which the cross-linguistic variation in the expression of property concepts is described in terms of a tripartite division into Adjectives, (adjectival) Nouns and (adjectival) Verbs. Chapter 3 introduces the alternative perspective which basically implies a dichotomy between nouny and verby adjectivals. In addition, this chapter discusses some explanatory questions for further research.

In Part Two (chapters 4 to 7) the nouny-verby split in the linguistic categorization of property concepts is taken as the point of departure for a typological investigation of the ways in which the concept of adjectival predication is encoded in language. While the actual typology of predicative adjectival constructions is presented in chapters 5 to 7, chapter 4 is concerned with some preliminary methodological issues involved in the set up of the typology.

Part Three (chapter 8) addresses the problem of a possible language-internal explanation for the distribution of languages over the two types of nouny and verby adjectival encoding. The attested correlation between adjectival encoding and tense marking results in the formulation of the Tensedness Universals. Next,

the Tense Hypothesis is introduced as a possible explanatory framework for the descriptive research results. Basically, the Tense Hypothesis suggests that the selection of nouny or verby adjectivals can be explained by reference to the presence or absence of morphologically bound tense marking on verbs.

Chapter 2

Adjectival encoding in language: The standard approach

2.1. Introduction

In writing the grammar of any language, a linguist will classify the lexicon of the language into a number of word classes or “parts-of-speech”. While word class distinctions are found in every language, it is a well-known fact that there is a considerable variation across languages with regard to the number of distinctions made and the places in the lexicon where the dividing lines between word classes are drawn (see Schachter 1985).

Within this range of variation, however, there is at least one part-of-speech distinction that is attested in all languages, namely the distinction between the major word classes Noun and Verb. The question of the universality of the noun-verb distinction has long been subject of debate. Maybe the best-known alleged counter-examples to the universal character of this distinction are the Amerindian languages of the Northwest, i.e. the Wakashan, Salishan and Chimakuan language families. The most frequently cited language on this subject is the Nootka language, a member of the Nootkan family which constitutes the southern branch of the Wakashan family. Jacobsen (1979) has shown, in particular for the Nootkan languages, that a noun-verb distinction, though less obvious than in many other languages, must be maintained on grammatical grounds. Most linguists now adhere to the view that every language distinguishes the two basic parts-of-speech Noun and Verb, although the boundaries between these word classes are not equally clear in all languages.¹

As opposed to the major word classes Noun and Verb, Adjectives do not constitute a universal linguistic category. While in Indo-European languages, for instance, a distinction can be made between nouns, verbs, and a third open class of adjectives, this is by no means the case for all languages. In many languages there appears to be no consistent grammatical basis for distinguishing a separate adjective class. Other languages have to get along with only a small closed set of adjectives.

In the past decades linguists have paid considerable attention to the question of how languages without an open adjective class encode concepts that are expressed through adjectives in languages like English, which do have this major class. As to the ways in which adjectival meanings are encoded in language, Schachter (1985) distinguishes three groups of languages:

1. Languages with a distinct open adjective class²

This group of languages represents a rather familiar pattern of adjectival encoding, since it includes all languages of the Indo-European family. The semantic content of the adjective classes is fairly constant from language to language; exceptions are found, however, in the expression of less "prototypical" adjectival concepts. Transitory states (like "ill", "tired", "hungry", "angry", "afraid"), for instance, may be encoded as verbs instead of being included in the adjective class, or they may have alternative expressions in the same language, e.g. as adjectives and as verbs (see Dixon 1977: 20; Givón 1984: 55; Pustet 1989).

2. Languages with a small closed set of adjectives

The languages in this group have a distinct class of adjectives which, however, is closed and rather small. The number of lexical items constituting the adjective class generally ranges from about seven to fifty-odd. A case in point is provided by *Nkore-Kiga*, a Bantu language spoken in South-Western Uganda, which has a restricted set of less than twenty "true" adjectives listed in (2.1) below (Taylor 1985: 174):

(2.1) *Nkore-Kiga*

-hango	'large'	-sya	'new'	-yonjo	'clean'
-kye	'small'	-sha	'empty'	-rofa	'dirty'
-raingwa	'tall'	-bisi	'raw'	-shaija	'male'
-gufu	'short'	-rungi	'good'	-kazi	'female'
-kuru	'old'	-bi	'bad, ugly'	-zima	'real'
-to	'young'	-ingi	'many, much'		

In languages with a closed set of adjectives, property concepts which are not included in the adjective class are generally encoded as verbs and/or as nouns. In *Nkore-Kiga*, for example, "the vast majority of adjective-like forms in use are really stative verbs" (Taylor 1985: 175). The Chadic language *Hausa* has a closed adjective class containing about a dozen adjectival items. In this language the paucity of "real" adjectives is largely compensated by the use of abstract nouns like *fad'i* 'width', *kyau* 'goodness', *girma* 'largeness' etc., while some property concepts are expressed by verbs (Abraham 1941; Kraft-Kirk-Greene 1973).

Thus, contrary to the situation found in languages with an open adjective class, property concept items in languages of this second group do not fall under one and the same lexical category, but are distributed across two or more different word classes; while some property concepts are encoded as adjectives, others are

expressed through nouns and/or verbs. The research results presented in Dixon (1977) suggest that the division of adjectival concepts among different classes is – at least to a large extent – based on semantic grounds. Dixon noted a remarkable cross-linguistic consistency in the range of adjectival meanings included in the closed adjective class. In addition, he observed some cross-linguistic tendencies for specific types of properties to be encoded as verbs, and other specific types to be encoded as nouns (see section 1.3.).

3. Languages without a distinct class of adjectives

In many languages there appears to be no consistent basis for distinguishing a separate class of adjectives. As to the ways in which property concepts are formally encoded, these languages can be divided into two groups, i.e. *adjectival-noun* languages and *adjectival-verb* languages. In *adjectival-noun* languages property concepts are primarily expressed through (a subclass of) nouns. An example of an *adjectival-noun* language is *Imbabura Quechua* (northern Ecuador). According to Cole (1982: 186) “there does not appear to be a category “adjective” which is formally distinct from the category “noun””. *Mandarin Chinese* is an instance of an *adjectival-verb* language. Words expressing adjectival meanings generally belong to the category of (stative) verbs (see Li-Thompson 1981). Thus, *adjectival-noun* and *adjectival-verb* languages, which together constitute the third group in Schachter’s classification, can be set off from languages of the first and second group because they lack a distinct adjective class altogether. On the other hand, certain correspondences can be recognized between the languages in group 3 and the languages in group 1 and group 2. Languages with a closed set of adjectives, for instance, are at least partly comparable to *adjectival-noun* and *adjectival-verb* languages, since they also use verbs or nouns for the expression of property concepts. Furthermore, a common characteristic of the languages in group 1 and 3 is that adjectival concepts generally belong to one single open word class (i.e., either adjectives (group 1) or nouns or verbs (group 3)), instead of being distributed across several parts-of-speech (as in group 2).

Schachter’s classification as presented above is fairly representative for the way the problem of adjectival encoding in language is generally dealt with in the literature (for a similar view, see Locker 1951; Dixon 1977; Givón 1979, 1984; Lehmann 1990; Bhat 1994). The cross-linguistic variation in the expression of property concepts is primarily described in terms of the part-of-speech status of adjectival words. Basically, three major types of lexical categorization are distinguished: adjectival concepts are formally encoded 1) as Adjectives, 2) as (adjectival) Nouns, or 3) as (adjectival) Verbs. In addition to the word class

status of adjectivals, a second parameter concerns the open vs. closed character of the adjective class (if present). This parameter is relevant in the sense that languages with a closed and usually small class of "true" adjectives are necessarily characterized by minimally two types of lexical categorization; property concepts that do not belong to the restricted adjective class are generally subsumed under the categories noun and/or verb.

Schachter's classification, which reflects the standard view on adjectival encoding in language, can be thought of as a typology of how property concepts are expressed cross-linguistically. This typology, then, generates two explanatory questions for further research (see Stassen 1985: 6). The first question concerns the *occurrence* of the attested types of lexical categorization: why should it be the case that adjectival concepts are found to be distributed across the three lexical categories Adjective, Noun and Verb in the world's languages? The second question concerns the *distribution* of languages over these three types of adjectival encoding: why does a language select a particular strategy in the expression of property concepts? Why, for instance, do Indo-European languages have a distinct class of adjectives? Why are adjectival concepts in Imbabura Quechua expressed through nouns, while adjectivals in Mandarin Chinese cluster with the verbs?

Obviously, these questions are based on the assumption that a description in terms of the three parts-of-speech Adjective, Noun and Verb is linguistically significant and adequately captures the cross-linguistic variation in the expression of adjectival concepts. In this context it is worth noting that the typology at issue here is not the direct result of a comprehensive comparative study of the grammatical behaviour of adjectival words. At least as far as I know, a systematic large-scale investigation of this kind has never been conducted. In fact, this typology is constructed on the basis of secondary sources, i.e., the various linguistic analyses of adjectivals as presented in the descriptive grammars of individual languages. As such, the set-up of this typology contains a potential flaw: even though the word class distinctions made for each individual language may be perfectly adequate for the purpose of describing the grammatical structure of the language in question, there is no a priori reason to assume that they are equally valid for cross-linguistic comparison as well. Thus, if we should intend to use this typology as a basis for further research, along the lines indicated by the questions formulated above, we should at least make sure that the three "types" of lexical categorization are worthy of explanation at all, i.e., that Adjectives, (adjectival) Nouns and (adjectival) Verbs actually represent clearly identifiable, distinct and homogeneous cross-linguistic categories.

In the remainder of this chapter I will argue that the proposed typology, based on the word class status of adjectivals, does not comply with this requirement and is therefore unsatisfactory as a basis for further investigation.

2.2. Adjectives, adjectival Nouns and adjectival Verbs: Some observations

2.2.1. *Adjectives*

If we take a closer look at the grammatical properties of Adjectives, defined as a distinct word class, we arrive at the following conclusion:

If in a language a separate class of adjectives is distinguished, members of this class tend to show morphological and/or syntactic similarities with nouns or with verbs as well. To different degrees, depending on the language, adjectives display a tendency to associate with one of these two major classes.

Let us consider some of the sorts of evidence that lead to this conclusion.

The Bantu language *Nkore-Kiga* (Taylor 1985) has a restricted set of about twenty “true” adjectives (see section 2.1.). Adjectives may function as modifiers in a noun phrase and are not subcategorized for inherent gender; unlike nouns, they can take any noun class prefix in concord with the noun they qualify. Cp.:

- (2.2) *Nkore-Kiga*
- a. *omu-ntu omu-rungi*
 CL1-person CL1-good
 ‘The kind person.’ (Taylor 1985: 49)
 - b. *eki-shushani eki-rungi*
 CL7-picture CL7-good
 ‘The beautiful picture.’ (Taylor 1985: 49)

However, even though there are sound grammatical arguments for distinguishing an adjective class in *Nkore-Kiga*, Taylor (1985: 85) rightly notices that “the true adjective has a form and function similar to that of a noun”. Adjectives take the same set of class prefixes as nouns do (see example (2.2)). Further, adjectives occur in the same predicative constructions as nouns. Consider the following examples of predicate adjectives and nouns with the copula *-ba* ‘to be’:

- (2.3) Nkore-Kiga
- a. *m-ba omu-raingwa*
 1SG-COP CL -tall
 'I am tall.' (Taylor 1985: 176)
 - b. *m-ba omu-fumu*
 1SG-COP CL -doctor
 'I am a doctor.' (Taylor 1985: 38)

Finally, adjectives can be used as nouns in Nkore-Kiga. *Omu-raingwa* (CL1-tall) in (2.3a), for instance, may function as a head noun, meaning 'the tall one' (Taylor 1985: 90).

A second instance of a language with "noun-like" adjectives is *Cairene Egyptian Colloquial Arabic* (CECA, Gary-Gamal-Eldin 1982). Adjectives in Egyptian Arabic are clearly distinguishable from nouns in several respects. They have a morphologically marked comparative form and can be modified by intensifiers like *yaalis* 'very'. They show agreement in number and gender with the nouns they qualify as modifiers in a noun phrase or as predicates. When used attributively they also agree in definiteness with the modified noun (Gary-Gamal-Eldin 1982: 106–109). While both adjectives and nouns take portmanteau suffixes indicating number and gender, they do not display the same number/gender paradigm. Nouns, for instance, are marked to indicate singular, dual and plural number. Adjectives, on the other hand, only have singular and plural forms. Dual nouns are modified by adjectives taking plural endings. With regard to gender marking we find the rather common distinction between nouns and adjectives, the former having inherent (masculine or feminine) gender, and the latter agreeing in gender with the nouns they modify. Further, adjectives can be set apart from nouns because the gender distinction on adjectives is manifested in the singular only. Plural adjectival forms are both masculine and feminine.

However, in addition to the observed differences between adjectives and nouns, there are also obvious morphological and syntactic similarities between the two word classes. First, while adjectives have a more restricted number/gender system than nouns have, the actual adjectival endings (i.e. masculine singular ϕ , feminine singular *-a*, and plural *-iin*) are identical in form to those of nouns.³ Cp.:

(2.4)	Arabic (Cairene Egyptian)	
	Nouns	Adjectives
	(Gary–Gamal-Eldin 1982: 72)	(Gary–Gamal-Eldin 1982: 107)
Masc.Sg	<i>mudarris-φ</i> ‘(male) teacher’	<i>faatir-φ</i> ‘smart’
Fem.Sg	<i>mudarris-a</i> ‘(female) teacher’	<i>fatr-a</i> ‘smart’
Masc.Du	<i>mudarris-een</i>	*
Fem.Du	<i>mudarris-teen</i>	*
Masc.Pl	<i>mudarris-iin</i>	<i>fatr-iin</i>
Fem.Pl	<i>mudarris-aat</i>	<i>fatr-iin</i>

Second, attributive adjectives agree in definiteness with the nouns they modify. Adjectives, like common nouns, can be preceded by the definite article *ʔl* ‘the’ (or any of its variants). Consider the following examples of an attributive adjective in an indefinite (2.5a) and a definite (2.5b) noun phrase:

- (2.5) Arabic (Cairene Egyptian)
- a. *walad faatir*
boyMASC.SG smartMASC.SG
‘A smart boy.’ (Gary–Gamal-Eldin 1982: 107)
- b. *ʔl-walad ʔf faatir*
the-boyMASC.SG the-smartMASC.SG
‘The smart boy.’ (Gary–Gamal-Eldin 1982: 107)

Third, definite adjectives can be used as noun phrases in a sentence. In the following examples definite adjectives function as a direct object (2.6a) and as a subject (2.6b):

- (2.6) Arabic (Cairene Egyptian)
- a. *idii-ni ʔk-kibira*
give-me the-bigFEM.SG
‘Give me the big one.’ (Gary–Gamal-Eldin 1982: 57)
- b. *ʔf faatriin haja ydu gajza*
the-cleverPL FUT-take prize
‘The clever (ones) shall take a prize.’ (Gary–Gamal-Eldin 1982: 116)

Finally, adjectives in CECA are treated on a par with nouns when used as predicates. In present tense constructions no overt copula is used; predicate adjectives and nouns are linked to their subject by juxtaposition:

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(2.7) Arabic (Cairene Egyptian)

- a. *hijja ḥilwa*
she prettyFEM.SG
'She is pretty.' (Gary-Gamal-Eldin 1982: 61)
- b. *hijja mudarrisa*
she teacherFEM.SG
'She is a teacher.' (Gary-Gamal-Eldin 1982: 23)

In past and future tenses, both adjectives and nouns are obligatorily accompanied by the overt copula *kaan* 'to be':

(2.8) Arabic (Cairene Egyptian)

- a. *hijja kaan-it ḥilwa*
she COPwas-3FEM.SG prettyFEM.SG
'She was pretty.' (Gary-Gamal-Eldin 1982: 61)
- b. *hijja kaan-it mudarrisa*
she COPwas-3FEM.SG teacherFEM.SG
'She was a teacher.' (Gary-Gamal-Eldin 1982: 23)

Nkore-Kiga and Egyptian Arabic are instances of languages in which adjectives share grammatical properties with the nouns. In other languages like, for example, Tigak and Japanese, the opposite affiliation has taken place and adjectives have verbal characteristics. In *Tigak*, an Austronesian language spoken in New Ireland, adjectives are classified as a distinct word class, although correspondences between adjectives and verbs can be recognized as well:

In defining the basic word classes, reference frequently has to be made to characteristics of other classes. For example, intransitive verbs are separated from adjectives because they cannot be used as modifiers in a Noun Phrase as adjectives can. Use in Verb Phrases does not indicate the difference. (Beaumont 1980: 85)

When used predicatively, adjectives are treated on a par with intransitive verbs. Like verbs they are obligatorily marked for subject by means of preposed subject pronouns, two sets of which occur, i.e., present tense forms and past tense forms. In addition to these obligatory subject pronouns, a subject expressed by a noun or an independent pronoun may optionally be added. Consider the following examples of adjectival and verbal predicates with the third person singular subject pronouns *gi* (present tense, examples (2.9a-b)) and *ga* (past tense, examples (2.9c-d)):

- (2.9) Tigak
- a. *gi lavu*
3SG.PRES big
'It is big.' (Beaumont 1980: 72)
 - b. *gi ima*
3SG.PRES come
'He is coming.' (Beaumont 1980: 74)
 - c. *tang iai ga lavu*
ART tree 3SG.PAST big
'The tree is/was big.'⁴ (Beaumont 1980: 40)
 - d. *na Gamsa ga ima*
ART Gamsa 3SG.PAST come
'Gamsa came.' (Beaumont 1980: 58)

Thus, adjectives and verbs are indistinguishable when used as predicates. The defining characteristic of adjectives in Tigak is their function as modifier in a noun phrase. When used as modifiers, adjectives directly follow the noun they qualify, whereas verbs are obligatorily accompanied by the preposed subject pronouns as in main predicates. Compare the attributive use of the adjective *lavu* 'big' and the verb *tara* 'see' in the following examples:

- (2.10) Tigak
- a. *tang lui lavu*
ART house big
'The big house.' (Beaumont 1980: 41)
 - b. *(naga po etok suna)*
1SG.PAST PERF talk to
tang lakeak ga tara-i tang muata
ART child 3SG.PAST see-it ART snake
'(I spoke to) the boy who saw the snake.' (Beaumont 1980: 51)

Japanese has a class of "verb-like" adjectivals, which is commonly viewed as an independent adjective class (cp. Backhouse 1984; Dixon 1977; Kuno 1973, 1978; Martin 1968). These adjectives are inflected in a manner similar to verbs, both classes sharing a fair degree of overlap of inflectional categories. Just as verbs, the inflected adjectives may occur as predicates without being accompanied by a copula. In addition, adjectives and verbs directly function as adnominal modifiers; when used attributively they occur in a relative clause which directly precedes the head noun, without the use of a relative pronoun. Compare the follow-

ing examples of Japanese inflected adjectives (2.11) and verbs (2.12) in predicative (a) and adnominal (b) constructions:

- (2.11) Japanese
- a. *kono rombun-wa naga-i*
this article-TOP long-PRES
'This article is long.' (Backhouse 1984: 170)
 - b. *naga-i rombun*
long-PRES article
'A long article.' (Backhouse 1984: 170)
- (2.12) Japanese
- a. *Suzuki-kun-wa tabete-iru*
Suzuki-Mr.-TOP eatGERUND-AUX
'Mr. Suzuki is eating.' (Backhouse 1984: 170)
 - b. *tabete-iru hito*
eatGERUND-AUX person
'A person who is eating.' (Backhouse 1984: 170)

While Japanese inflected adjectives share grammatical properties with verbs, clear differences between these two classes can be observed as well. Adjectives and verbs, for instance, exhibit differences in both the form and the number of inflectional endings. Present tense endings are *-i* and *-ru* for adjectives and verbs respectively. Also, adjectives require the insertion of *kar* or *ker* (a relic of an auxiliary verb, preceded by the adverbial ending *-ku*) between the lexical stem and an ending beginning with a consonant. Further, adjectives lack imperative and hortative forms, as well as regular morphological passive, causative and potential expressions. Other distinctive adjectival characteristics include the absence of a formal-polite conjugation – instead, the formal-polite present copula is put after the inflected form of the adjective – and the lack of auxiliary constructions. Syntactically, adjectives do not combine with auxiliary verbs such as *iru*, *shimau*, and *kureru* to form expressions conveying distinctions of aspect, benefaction, etc. (as in *tabete-iru* 'be eating' in example (2.12), *tabete-shimau* 'eat completely', *tabete-kureru* 'eat for me').

In this section I presented some examples of languages in which "adjectives", defined as a separate word class, have grammatical properties in common with the nouns (Nkore-Kiga and Cairene Egyptian Arabic) or with the verbs (Tigak and Japanese). Similar observations can be made for many other languages which are considered to have a distinct adjective class, although the degree to which adjectives resemble nouns or verbs may vary a great deal from one language to another. Thus, a cross-linguistic pattern appears to exist, according to

which adjective classes tend to fall into two major groups, i.e. “noun-like” adjectives and “verb-like” adjectives.

2.2.2. *Adjectival Nouns and adjectival Verbs*

Many languages are described as lacking a distinct adjective class. In these languages, the role of adjectives is generally taken over by nouns or verbs expressing property concepts (see section 2.1.). Closer examination of the actual grammatical properties of adjectival nouns and verbs leads to the following conclusion:

If in a language no separate adjective class is distinguished, adjectival concepts are generally said to be expressed by nouns or by verbs. Typically, however, adjectival nouns and verbs exhibit at least some distinctive grammatical properties not shared by “core” nouns or verbs.

In this section I will elucidate this conclusion by presenting some observations concerning the grammatical behaviour of adjectivals in typical adjectival-noun and adjectival-verb languages.

An example of what Schachter (1985) calls an “adjectival-noun” language is *Imbabura Quechua*, spoken in the Province of Imbabura, northern Ecuador. In *Imbabura Quechua*, property concepts are primarily expressed by nouns, i.e. “there does not appear to be a category “adjective” which is formally distinct from the category “noun”” (Cole 1982: 186). Cole’s (1982: 99) definition of nouns as “elements which can be the object of a postposition” also applies to adjectivals. Adjectivals, for example, may be marked by the accusative postposition *-ta*, and so function as the direct object in a sentence, just as (other) nouns:

- (2.13) *Imbabura Quechua*
- a. *Juzi jatun-ta-mi chari-n*
 José big-ACC-VAL⁵ have-PRES3
 ‘José has a big one.’ (Cole 1982: 97)
 - b. *pay-paj tayta-ka chay wambra-ta-mi wajta-rka*
 he-of father-TOP that child-ACC-VAL hit-PAST3
 ‘His father hit that child.’ (Cole 1982: 69)

Further, adjectivals appear in the same predicative constructions as nouns do. Predicate nouns and adjectivals occur as the complement of the copula verb *ka-*

‘be’, which is obligatory, except when the verb is third person in the present tense (in which case the copula is normally omitted). Compare:

- (2.14) Imbabura Quechua
- a. *ñuka wasi-ka yuraj-mi ka-rka*
my house-TOP white-VAL COP-PAST3
‘My house was white.’ (Cole 1982: 67)
 - b. *Juan-ka mayistru-mi ka-rka*
Juan-TOP teacher-VAL COP-PAST3
‘Juan was a teacher.’ (Cole 1982: 67)

Finally, both adjectivals and (other) nouns can serve as noun modifiers. Cp.:

- (2.15) Imbabura Quechua
- a. *jatun runa*
big man
‘A big man.’ (Cole 1982: 73)
 - b. *rumi wasi*
stone house
‘A stone house.’ (Cole 1982: 120)

The examples given above clearly show that adjectivals in Quechua pattern very much like nouns. However, adjectival nouns do not resemble (other) nouns in all respects. First, unlike (other) nouns, adjectivals can be modified by adverbs such as *yapa* ‘too’, *maymi* ‘very’, *asha(lla)* ‘slightly’, etc. The sentence in (2.16b), for instance, is ungrammatical:

- (2.16) Imbabura Quechua
- a. *chay warmi maymi sumaj-mi*
that woman very pretty-VAL
‘That woman is very pretty.’ (Cole 1982: 99)
 - b. **chay warmi maymi duktur-mi*
that woman very doctor-VAL
(‘That woman is very a doctor.’) (Cole 1982: 100)

Second, the use of the derivational suffix *-sha* which “suggests that the basic meaning of the word is pleasant” (Cole 1982: 186) is restricted to adjectival nouns:

- (2.17) Imbabura Quechua
kushi-sha-mi ka-ni
happy-‘nice’-VAL be-PRES1
‘I am nice and happy.’ (Cole 1982: 186)

Third, the suffix *-ta* is used to derive manner adverbs from nouns. The distribution of this suffix, at least in its function as adverbializer⁶, is limited to nouns expressing adjectival meanings. Compare:

- (2.18) Imbabura Quechua
tayta-ka sumaj-ta trabaja-rka
father-TOP beautiful-ADVBLR work-PAST3
‘Father worked well.’ (Cole 1982: 186)

Finally, inchoative verbs are derived from nouns by means of the suffix *-ya*. Again, however, *-ya* is largely restricted to adjectival nouns; example (2.19b) is grammatically unacceptable:

- (2.19) Imbabura Quechua
a. *jatun-ya-rka*
big-‘become’-PAST3
‘He became big.’ (Cole 1982: 179)
b. * *libru-ya-rka*
book-‘become’-PAST3
(‘It became a book.’) (Cole 1982: 179)

Although adjectivals in Quechua obviously display distinctive properties not shared by (other) nouns (e.g. adverbial modification, several derivational processes), these differences do not lead to the recognition of a separate class of adjectives. Cole rightly notices, however, that the restricted applicability of the suffixes *-sha*, *-ta*, and *-ya* constitutes a problem for the claim that Imbabura Quechua has no category “adjective” which is formally distinct from the category “noun”. He then proceeds:

The most likely explanation for the existence of a suffix with the distributional limitations of *-sha* in the absence of a category “adjective” is that the meaning of *-sha* limits its use to certain classes of meanings (e.g., qualities rather than objects), and that the appropriate meaning classes correspond roughly to the category “adjective” in those languages having such a category. (The same approach would be taken with *-ya ...* and the adverbializer *-ta ...*). (Cole 1982: 186)

Thus, the obvious similarities between nouns and adjectivals in Imbabura Quechua are considered by the author to be more salient than the observed grammatical differences. As a result, adjectivals are classified as – a clearly distinguishable subclass of – nouns.

In Imbabura Quechua distinctive grammatical properties apply to the subclass of adjectival nouns as a whole. In other languages, only a restricted subgroup of adjectival nouns is characterized by different formal behaviour compared to other nouns. The Bantu language *Lonkundo* (Hulstaert 1938) is a case in point. *Lonkundo* is described as a language without a separate adjective class; property concepts are largely encoded as abstract nouns, such as *bɔ́ɔ́si* ‘goodness’, *wɔ́ɔ́* ‘whiteness’, *búwé* ‘shortness’, etc. Adjectivals have their own noun class membership, just as other nouns (with different nominal prefixes indicating singular and plural number). When used predicatively or attributively they optionally agree in number, but they do not agree in nominal class with the noun they qualify.⁷

In predicative constructions, adjectivals are accompanied by an overt copula, like other nouns. Compare the following examples with the present tense copula *-le* ‘be’:

- (2.20) Lonkundo
- | | | | |
|----|---|-------------|-----------------|
| a. | <i>e-tóo</i> | <i>e-le</i> | <i>w-ɔ́ɔ́</i> |
| | CL3SG-garment | CL3SG-COP | CL2SG-whiteness |
| | ‘The garment is white.’ (Hulstaert 1938: 25) | | |
| b. | <i>bo-kungú</i> | <i>a-le</i> | <i>bo-támbá</i> |
| | CL1SG-Bokungu | CL1SG-COP | CL2SG-tree |
| | ‘The ‘bokungu’ is a tree.’ (Hulstaert 1938: 19) | | |

To express attribution, adjectival nouns appear in a construction which is generally used to indicate possession; adjectivals follow the head noun and are preceded by the possessive marker *-a* which is in concord with the head noun: