Adjective Classes

A Cross-Linguistic Typology

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Adjective Classes in Typological Perspective

R. M. W. Dixon

This chapter is concerned with adjectives in the narrow sense—that is, descriptive adjectives such as ‘red’, ‘heavy’, and ‘loyal’—leaving aside other types of noun modifier, demonstratives, and interrogatives. I suggest that a distinct word class ‘adjectives’ can be recognized for every human language. In some languages, adjectives have similar grammatical properties to nouns, in some to verbs, in some to both nouns and verbs, and in some to neither. I suggest that there are always some grammatical criteria—sometimes rather subtle—for distinguishing the adjective class from other word classes.

In the present chapter, §1 discusses the three major word classes and their typical semantic content; §2 outlines basic clause types and core arguments, with a warning of the importance of using the term ‘predicate’ with a narrow meaning. After a mention of criteria for distinguishing between noun and verb, in §3, there is a profile of the adjective class, in §4, and then, in §5, comment on Eurocentric attitudes towards the label ‘adjective’. Subsequently, §6 deals with the four types of adjective—similar to verbs in their grammatical properties (with criteria for distinguishing between the classes), similar to nouns (again, with relevant distinguishing criteria), similar to both verbs and nouns, and different from both classes. In §7 there is a brief discussion of languages whose adjectives have restricted functional possibilities, and in §8 of languages with two adjective classes. A correlation between types of adjective class and head/dependent marking is explored in §9. Semantic overlap between the three major word classes, and how the overlaps differ between languages, are discussed in §10. The following chapters in the volume are introduced in §11. Finally, a set of conclusions is given in §12.

1. Word classes

The main function of a language is to communicate meaning from speaker to addressee. Basic concepts are encoded as words, which are related together within the grammar. Three word classes are, I maintain, implicit in the structure of each
human language: nouns, verbs, and adjectives. Each has (a) a prototypical conceptual basis; and (b) prototypical grammatical function(s).

The recognition of word classes in a language must be on the basis of internal grammatical criteria for that language. Certain types of criteria recur, but the exact justification for a class is particular to each language. For example, in Latin a noun inflects for number and case (and has an inherent gender, shown by the case/number allomorphs that it takes). In English there are no morphological processes which apply for all nouns (only some nouns take plural marking); here a defining criterion is syntactic—a noun may immediately follow an article and need not be followed by any other item (this is to distinguish nouns from adjectives).

A given concept may relate to different word classes in different languages. For example, the idea of ‘needing to eat’, is expressed

(a) by the adjective *nymir* in Dyirbal;
(b) by the noun *hunger* in English, and by the noun *faim* in French;
(c) by the verb *ēsūrio* in Latin, and by the verb -*fimi*- in Jarawara.

(If the basic form is a noun or a verb, there may be a commonly-used derived adjective, such as *hungry* in English and *ēsūriens* in Latin. French has a derived adjective with rather specialized meaning, *famélique*, ‘starving, famished’. However, there is no adjectival derivation from -*fimi*- in Jarawara.)

Throughout this chapter I am looking at the organization of underlying lexical roots into word classes. In every language there are some morphological processes deriving stems of one word class from roots of another class (for example, verb *lengthen* from noun *length* which in turn comes from adjective root *long* in English). In some languages an adjective class may have a limited number of monomorphemic forms, but can be extended almost indefinitely by derivations based on nouns and verbs. I am, for the most part, concerned just with morphologically simple roots, not with derived stems.

Further examples of a given concept being coded into varying word classes include:

(a) kin terms such as ‘mother’ and ‘father’ are nouns in most languages but verbs (‘be mother of’ and ‘be father of’) in others (including the Yuman languages of southern California);
(b) the number ‘two’ is an adjective in many languages but a verb in others (for example, -*fama*- in Jarawara);
(c) the concept ‘beauty’ is a noun in some languages (including English) but a verb in others (for example *totoka* in Fijian).

It will be seen that a lexical root cannot be assigned to a word class on the basis of its meaning. If this were so, then ‘hunger/(be) hungry’, ‘(be) mother (of)’, ‘(be) two’, and ‘beauty/(be) beautiful’ would relate to the same class in every language, which they do not.
Word classes can be identified between languages (and assigned the same names) on two criteria—similarity of syntactic function and similarity of meaning. In terms of syntactic function, a noun may always function as head of a noun phrase that can be a predicate argument, and a verb can always be head of a predicate. In terms of semantic content, the noun class always includes words with concrete reference such as ‘dog’, ‘stone’, and ‘axe’, while the verb class always includes words referring to actions, such as ‘cut’, ‘talk’, and ‘give’. On this basis, the class whose members inflect for case and number (and each have a fixed gender) in Latin is identified with the class whose members follow an article and need not be followed by anything in English; they are both termed the noun class. The noun classes in Latin and in English do not have exactly the same semantic content, but they share a common semantic core; they do not have exactly the same syntactic function, but they share a common syntactic core.

There is further discussion of the prototypical and extensional syntactic functions of nouns, verbs, and adjectives in §§3–4. Before moving on to this, we can usefully discuss the typical semantic content of the three major word classes.

1.1. SEMANTIC CONTENT

The lexical roots in every language can be arranged in a number of semantic types. Certain types have prototypical association with a given word class, while others vary in their word class associations (see Dixon 1991a).

Semantic types with concrete reference are always linked to the noun class—these include HUMANS (e.g. ‘boy’), body and other PARTS (e.g. ‘eye’, ‘leg’), FLORA (e.g. ‘tree’, ‘leaf’), FAUNA (e.g. ‘rat’, ‘fly’), CELESTIAL (e.g. ‘sun’), ENVIRONMENT (e.g. ‘water’, ‘forest’), and ARTEFACTS (e.g. ‘gun’, ‘house’).

In English, the class of nouns also includes—among others—terms referring to mental states (e.g. ‘joy’, ‘ability’), physical states (e.g. ‘ache’), activities (e.g. ‘war’, ‘game’), and speech acts (e.g. ‘speech’, ‘answer’). However, in other languages some or all of these concepts are coded by verbs or adjectives.

Semantic types always associated with the verb class include MOTION (e.g. ‘run’, ‘take’, ‘throw’), REST (e.g. ‘sit’, ‘put’, ‘hold’), AFFECT (e.g. ‘hit’, ‘burn’, ‘build’), GIVING (e.g. ‘give’, ‘trade’), ATTENTION (e.g. ‘see’, ‘hear’), and SPEAKING (e.g. ‘tell’, ‘shout’, ‘ask’).

In English the class of verbs also includes—among others—items referring to weather (e.g. ‘rain’), liking (e.g. ‘love’, ‘prefer’, ‘hate’), annoying etc. (e.g. ‘annoy’, ‘amuse’, ‘inspire’), and comparing (e.g. ‘resemble’, ‘differ’). However, in other languages some or all of these concepts are coded through nouns or adjectives.

We are here particularly concerned with the semantic types typically associated with the word class adjective:

(a) There are four core semantic types, which are typically associated with both large and small adjective classes.

2. AGE—‘new’, ‘young’, ‘old’, etc.

4. **Colour**—‘black’, ‘white’, ‘red’, etc.

(b) A number of peripheral semantic types are typically associated with medium-sized and large adjective classes.


7. **Speed**—‘fast’, ‘quick’, ‘slow’, etc.

In ‘Where have all the adjectives gone?’ (1977a, revised 1982), I illustrated small adjective classes such as that in Igbo, which consists of an antonymic pair from each of the four core semantic types (Welmers and Welmers 1968, 1969; Welmers 1973):

<table>
<thead>
<tr>
<th>Dimension</th>
<th>ūkwu ‘large’</th>
<th>ñtà ‘small’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>ìbùrù ‘new’</td>
<td>òcyè ‘old’</td>
</tr>
<tr>
<td>Value</td>
<td>òma ‘good’</td>
<td>òjọ ‘bad’</td>
</tr>
<tr>
<td>Colour</td>
<td>oji ‘black,dark’</td>
<td>òca ‘white,light’</td>
</tr>
</tbody>
</table>

A slightly larger class (say, 12–20 members) is likely to include more words from the four core types (for example, ‘long’, ‘short’, ‘red’) and also some physical property items (for example, ‘raw, green, unripe’, ‘heavy’, ‘light’, ‘sharp’, ‘hot’). Only when an adjective class is much bigger (with at least a few score members) is it likely to include terms referring to human propensities (for example, ‘happy’, ‘jealous’, ‘clever’).

Not every small adjective class is as symmetrical as that in Igbo. Indeed, the main members of a semantic type may belong to different word classes. In Yoruba, for instance, there are three adjectives with a meaning similar to ‘good’ but only a verb ‘be bad’ (Madugu 1976). In Jarawara there is an adjective ‘bad’ but only a verb ‘be good’. (Each of these languages has a small class of about fifteen adjectives.)

It is interesting to enquire how, in languages with just a small adjective class, the other typical adjectival concepts are coded. The following tendencies have been noted:

(a) **Physical Property** terms, if not in the adjective class, are generally in the verb class;

(b) **Human Propensity** terms, if not in the adjective class, may be in either the noun class or the verb class;

(c) **Speed** terms tend to be in the adjective class if **Physical Property** terms are in this class, and in the adverb class if **Physical Property** terms are in the verb class.

In languages with large adjective classes there may be differences of various kinds
between the core and peripheral types. For example, Blackwell (2000) studied how children acquire syntactic functions for adjectives from seven semantic types in English, and found that terms from the dimension, age, value, colour, and speed types tend to be used first in modifier function, while those from the physical property and human propensity types tend to be used first in copula complement function.

Discussing the Austronesian language Tamambo, Jauncey (1997, 2000) shows how each of the semantic types 1–6 has slightly different values for ten grammatical parameters; for example, only dimension terms have a morphologically marked plural, and only human propensity terms (and one value term) can be nominalized. Dixon (1982: 15–34) provides a survey of the varying properties of semantic types 1–7 in English.

Some languages allow a given adjective to either precede or follow the head noun, with a difference in meaning. For example, in French un curieux homme is ‘a curious/strange man’ while un homme curieux is ‘a curious/inquisitive man’ (in English the adjective curious is ambiguous between the ‘strange’ and ‘inquisitive’ senses). See Jespersen (1924: 168–9) on English, and Waugh (1977: 182–3) on French.

A number of other semantic types are associated with large adjective classes in some languages. These include:

13. Cardinal numbers. (In some languages these constitute a separate word class.) And ‘first’, ‘last’ (together with other ordinal numbers).

2. Basic clause types and core arguments

There are two major clause types found in human languages, transitive clauses and intransitive clauses. In addition, many languages have a further clause type, copula clauses. The make-up of the three clause types is shown in Table 1.

There may also be verbless clauses, which simply include two NPs in apposition. Languages which lack a copula verb typically translate copula clauses from other languages with verbless clauses, e.g. ‘[John] [a doctor]’ for ‘[John] [is] [a doctor]’.

Now the nucleus of a transitive clause will prototypically have a transitive verb as head (in most languages the head can only be a transitive verb). Languages show more variation with respect to the predicate head in an intransitive clause. In some languages only an intransitive verb can fill this slot; in other languages the head of
R. M. W. Dixon

Table 1. Basic clause types

<table>
<thead>
<tr>
<th>Clause type</th>
<th>Nucleus</th>
<th>Core arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive clause</td>
<td>Transitive predicate</td>
<td>Transitive subject (A) and transitive object (O)</td>
</tr>
<tr>
<td>Intransitive clause</td>
<td>Intransitive predicate</td>
<td>Intransitive subject (S)</td>
</tr>
<tr>
<td>Copula clause</td>
<td>Copula predicate (copula verb)</td>
<td>Copula subject (CS) and copula complement (CC)</td>
</tr>
</tbody>
</table>

an intransitive predicate may be a verb or an adjective or a noun or a pronoun or even an NP. For example, in Boumaa Fijian one can say (Dixon 1988):

(1) 

\[
\text{[e [tagane balavu]_{HEAD}\text{PREDICATE} [a tama-qu]_{S}}
\]

\[
3\text{sg}\text{S man tall ARTICLE father-1sg.POSSESSOR}
\]

'my father is a tall man'

(1) is an intransitive clause with \textit{a tama-qu} as the S argument. The predicate head here is an NP consisting of noun \textit{tagane} 'man' and adjective \textit{balavu} 'tall'. It is preceded within the predicate by the 3sg subject pronoun \textit{e}, just as a verb in this slot would be. Although the idiomatic translation is 'My father is a tall man', in fact \textit{tagane balavu} functions as predicate head (like a verb), literally: 'My father tall-man-\textit{s}.'

It is important to distinguish between an intransitive clause like (1)—where a non-verbal element functions as predicate head—and a copula clause—where the same element might function as a core argument in copula complement function. We can compare the two clause types in Tariana, a language from the Arawak family (data from Alexandra Aikhenvald; and see the fuller discussion in Chapter 4):

(2) (a) 

\[
\text{n\text{amu}(-ne)_{S}} \text{hanu-ite-pidana_{INTRANSITIVE.PREDICATE}}
\]

\[
\text{evil.spirit(-FOCUSED.A/s/cs) big-NCl:animate-REMOTE.PAST:REPORTED}
\]

'the evil spirit was said to be big'

(b) 

\[
\text{n\text{amu}(-ne)_{CS}} \text{hanu-ite_{CC}}
\]

\[
\text{evil.spirit(-FOCUSED.A/s/cs) big-NCl:animate}
\]

\[
\text{di-dia-pidana_{COPULA.PREDICATE}}
\]

\[
3\text{sg.non.femCS-become-REMOTE.PAST:REPORTED}
\]

'the evil spirit was said to become big'

In (2a), the adjective \textit{hanu} 'big' is head of the intransitive predicate, and takes a tense-evidentiality suffix (just as a verb would do in this slot). In (2b), \textit{hanu} is the copula complement, an argument outside the predicate of the clause; the predicate is here copula verb -\textit{dia} 'become' and it is this which carries the tense-evidentiality marker, \textit{-pidana}. (In all its occurrences here, \textit{hanu} carries the animate noun class suffix, \textit{-ite}.)

The possibilities for case marking on arguments in Tariana are:
A, S, CS focus marker -ne (optional)
O, non-core arguments — topical non-subject marker -nuku
CC —

That is, both S in the intransitive clause (2a) and copula subject (CS) in the copula clause (2b) may take suffix -ne, if that NP is in focus. The adjective hanu in (2b) is in copula complement (CC) function and may take neither suffix -ne nor suffix -nuku. Note that it is not possible to treat (2b) as a type of extended intransitive clause, with ńamu ‘evil spirit’ as S argument and hanu as an oblique argument; if this were a valid analysis then hanu should be able to take topical non-subject marker -nuku, which in fact it cannot do.

In Fijian, an NP functioning as head of an intransitive predicate can take all the modifiers available for a verb in this slot. In Tariana, a non-verb as head of an intransitive predicate takes tense-evidentiality, mood, aspect, and most other suffixes that would be available for a verb in the slot. Different types of clause nucleus have varying properties with respect to prefixes; in brief, pronominal prefixes are used with transitive and with active intransitive (S\textsubscript{a}) verbs and with the copula verb -dia- ‘become’, but not with stative intransitive (S\textsubscript{o}) verbs nor with non-verbs as head of an intransitive predicate.

2.1. THE TERM ‘PREDICATE’

The term ‘predicate’ was originally used, in Greek logic, for everything in a clause besides the subject. The prototypical use of ‘predicate’ in modern linguistics is for transitive or intransitive verb, plus modifiers, but not including any NP.\(^1\) In the approach followed here, the CC is a core argument—similar to A, O, S, and CS—so that it would be unhelpful and misleading to refer to it as the predicate or as part of the predicate (as has sometimes been done). In view of this, when the term predicate is used in connection with a copula clause it must be taken just to refer to the copula verb.

Careful use of the term ‘predicate’ is particularly important when discussing the properties of adjectives. Compare (3) in English with (4) in Fijian.

(3) [my father]\textsubscript{CS} [is]\textsubscript{COPULA PREDICATE} [tall]\textsubscript{CC}
(4) [e balavu]\textsubscript{INTRANSITIVE PREDICATE} [a tama-qu]\textsubscript{3sgS tall} \textsubscript{ARTICLE father-1sg.POSSESSOR}

‘my father is tall’

\(^1\) Members of the post-Bloomfieldian school and their successors (including Chomsky and his followers) like to employ binary divisions in linguistic analysis. A clause is said to consist of an NP and a ‘VP’, where the ‘VP’ may include an object NP (in an accusative language). The label ‘predicate’ is sometimes applied to the ‘VP’. This is a different use of ‘predicate’ from that employed here (which follows the majority practice of linguistics from outside this school).
People who talk of the copula complement being (all or part of) the predicate of a copula clause would say that \( \text{is} \) tall is the predicate of (3). And they should also say that \( e \) balavu is the predicate of (4). This obscures the fundamental difference between (3) and (4), a difference that will be vital to our discussion below of varieties of adjective classes. Example (4) is an intransitive clause with one core argument in S function \( (\text{a tama-qu} \ '\text{my father}') \) and an intransitive predicate whose head is the adjective balavu ‘long, tall’. A range of modifiers could be included in this (as in any other) predicate, in addition to the bound subject pronoun, 3sg \( e \).

In contrast, (3) is a copula clause with two core arguments—the NP my father as copula subject, and the adjective tall as copula complement. The predicate in (3) is the copula verb, be, and this is marked for tense, combined with specification of number and person of the copula subject (3sg.CS:present form \( \text{is} \)).

Tariana is a language which combines the possibilities shown in (3) and in (4). If the label ‘predicate’ were used for both \( \text{is} \) tall in (3) and for \( e \) balavu in (4), then it should be used for both hanu-ite-pidana in (2a) and hanu-ite in (2b); this would totally obscure the critical distinction between hanu-ite-pidana functioning as intransitive predicate, in (2a), and hanu-ite functioning as copula complement, in (2b).

In summary, although when the term ‘predicate’ is used in its logical sense (the Oxford English Dictionary: ‘assert something about the subject of a proposition’) both \( \text{is} \) tall in (3) and \( e \) balavu in (4) are predicates; when the term is used in its most normal technical linguistic sense, these two elements are classified quite differently. In the majority linguistic usage of the term, a predicate does not include any NP (the O argument for an accusative language, or the A argument for an ergative language); it should not be taken to include a copula complement. Thus balavu ‘tall’ is predicate head in (4), but tall is copula complement (quite distinct from the predicate) in (3).

3. Distinguishing noun and verb

In most languages it is an easy matter to distinguish noun and verb classes, in terms of syntactic function and morphological possibilities. But in a few languages this can be a rather subtle matter.

A noun always has primary function as head of an NP that can be a core argument (in A, O, S, CS, or CC function) in a clause. In some languages a noun may also function as head of a phrase that functions as predicate in an intransitive clause. A verb always has primary function as head of a predicate; in some languages it may also fill a core argument slot. There are languages in which both of these extensions apply. For example, in Nootka (Wakashan family; Swadesh 1938:78) we find:

\[
(5) \quad \left[ \text{ʔi:ḥ}-\text{ma:} \right]_{\text{INTRANSITIVE PREDICATE}} \quad \left[ qo:\text{ʔas-ʔi} \right]_{\text{3SG:INDICATIVE}} \quad \text{be.large-3SG:INDICATIVE} \quad \text{man-SUBJECT.MARKER}
\]

‘the man is large’
In (5) we find the usual correspondence between word class and functional slot, with the noun ‘man’ being head of the NP in S function and the verb ‘be large’ being head of the intransitive predicate. In (6) these functions are reversed. Because of this, Swadesh insisted that ‘normal words do not fall into classes like noun, verb, adjective, preposition, but all sorts of ideas find their expression in the same general type of word, which is predicative or non-predicative according to its paradigmatic ending.’ However, when one reads a little further on in Swadesh’s paper, criteria for distinguishing between word classes are clearly described. On pp. 98–9 he sets out seven sets of ‘special reference stems’ such that each lexeme selects just one set (each set includes a pronominal-like ‘indirect reference stem’, a ‘relative stem’, and an ‘interrogative stem’). He then mentions that ‘the seven sets of special reference stems suggest a semantic classification of lexemes, which also has significance in the internal syntax, since different implicit derivations and other syntactic peculiarities are limited to combinations of lexemes of given categories of meaning, some of which correspond to these’. Of the seven classes Swadesh recognizes, four are closed ones (Location, Time, Quantity, and Indication, i.e. demonstratives) while three are open (Entity, Action, and State). Of the three open classes, ‘entity’—including ‘a considerable number of stems referring to species of flora and fauna and supernatural beings, age and other classes of people and other beings, body parts, a group of classes of objects according to shape, and other entities’—could be aptly labelled ‘noun’. ‘Action’—expressing ‘movement and various other activities’—appears to correspond to what is called ‘verb’ in other languages. And ‘state’—expressing ‘quality, condition, colour, size, position, mental state or attitude, conditions of the weather, and other notions’—is clearly to be identified as an adjective class.

In summary, although both noun and verb may function as predicate or as predicate argument, there are still clearly criteria for recognising them as separate clauses. (And one assumes, although Swadesh does not deal with this, that nouns occur more frequently as predicate arguments than as predicates, while for verbs the preference would be reversed.)

### 4. The adjective class

I here put forward the idea that, just as all languages have distinguishable classes of noun and verb, so all languages have a distinguishable adjective class. However, the adjective class differs from noun and verb classes in varying ways in different languages, which can make it a more difficult class to recognize, and a more difficult class to put forward generalizations about.

First, as mentioned above, whereas noun and verb classes are almost always large and open, the adjective class shows considerable variation in size. Many
languages have an open class of adjectives (although this is always considerably smaller than the noun class, and generally also much smaller than the verb class), but others have a small, closed class. The smallest classes may have just three or four members. Typically, there may be 10–20 monomorphemic adjectives. Other languages have larger classes—with several score or even several hundred members—but they are closed; that is, no new lexemes, in the form of loans, may be added to them.

Whatever the size of an adjective class (in terms of its monomorphemic members), there are generally derivational processes which form adjective stems from nouns and/or from verbs. Typically, a higher proportion of adjectives than of nouns and verbs will be derived forms (see Givón 1970: 816).

The second difference relates to functional possibilities. Whereas a noun class will always relate to the predicate argument slots in clause structure, and a verb class to the predicate slot, the functional expectations for an adjective class are both more complex and more varied.

Adjectives typically fill two roles in the grammar of a language:

(a) In a statement that something has a certain property. There are two syntactic techniques for coding this: (a–i), the adjective functions as intransitive predicate, as in (4); or (a–ii), the adjective functions as copula complement, as in (3).

(b) As a specification that helps focus on the referent of the head noun in an NP that relates to a predicate argument. This is shown by the adjective functioning as a modifier within an NP, as in (7) from English and (8) from Fijian. In each example, the modifying adjective is underlined.

(7) \[the tall man\]s [laughed]\text{INTRANSITIVE.PREDICATE}

(8) \[e aa dredo\]\text{INTRANSITIVE.PREDICATE} [a \underline{tagane balavu}]\text{S}

\[3sgS \text{PAST laugh} \quad \text{ARTICLE man} \quad \text{tall}\]

‘the tall man laughed’

However, the ways in which an adjective may be used to modify a noun vary; they are outlined in §§6.1–2 below.²

In most languages all adjectives have functions (a) and (b). In some, just a few adjectives may be confined to one of these functions. (For examples and discussion of adjectives in English which can occur only as modifier or only as copula

² In some languages a noun may be modified by more than one adjective. There is generally a preferred order in which the semantic types will occur. In English, where adjectives precede the noun, the unmarked order is VALUE, DIMENSION, PHYSICAL PROPERTY, SPEED, HUMAN PROPENSITY, AGE, COLOUR (Dixon 1982: 24–5). In languages where adjectives follow the noun, the ordering is roughly the reverse of this. That is, a term referring to COLOUR, a fairly fixed property, tends to occur nearest to the head noun and one referring to VALUE, which is a subjective judgement, tends to appear furthest out. A full cross-linguistic study of adjective ordering lies outside the scope of the present chapter. (There is discussion of adjective order for Qiang in Chapter 13.)
complement, see Bolinger 1967.) There are also languages in which the entire class of adjectives only has function (b); and there may well be others where it only has function (a). These cases are discussed in §7 below.

(c) Some—but by no means all—languages have a comparative construction. Adjectives may always function as the ‘parameter of comparison’ (and sometimes they are the only words which may function as the parameter). Illustration can again be provided from English, in (9), and from Fijian, in (10).

(9) [Suva]$_S$ [is]$_C$ [more beautiful]$_{CC}$ [than Nandi]$_{COMPAR}$

(10) [e toto'a ca'è]$_{INTP}$ [o Suva]$_S$ [mai Nandi]$_{COMPAR}$

‘Suva is more beautiful than Nandi’

In each language the comparative construction is an extension from the type (a) adjective function for the language. The adjective—in the CC in (9) and in the intransitive predicate in (10)—bears a mark of comparison; this is more in English and ca'è (which also has the meaning ‘high’) in Fijian. And an additional argument is added to the clause, the comparand; the function of the comparand NP is marked by than in English and by preposition mai (which also has the meaning ‘from’) in Fijian. (The comparand is marked in a variety of ways in individual languages.)

(d) In some languages adjectives may also modify verbs, either in plain form or via a derivational process. The two possibilities can be illustrated from colloquial American English—for example, *He speaks (real) bad*—and British English—*He speaks (really) badly*. There may also be more limited possibilities for adverbs to modify adjectives (for example, *openly hostile* in English).

There may, of course, be further syntactic patterns available to adjectives in individual languages. A comprehensive study of the syntactic possibilities open to adjectives in English will be found in Ferris (1993).

Adjectives vary widely in their grammatical properties when compared to those of nouns and verbs. Where an adjective can occur as intransitive predicate, it may take some or all of the morphological processes available to verbs in this slot (tense, aspect, mood, etc.). In some languages a modifying adjective within an NP will take some or all of the same morphological marking as nouns (number, case, etc.). There are a number of languages in which adjectives combine these possibilities, inflecting like nouns within an NP and like verbs when functioning as predicate. In a further set of languages, adjectives share no morphological properties with nouns or with verbs.

Just as in most languages it is an easy matter to give criteria for distinguishing nouns from verbs, so in many languages it is an easy matter to distinguish adjectives as a separate word class. I mentioned that there are just a few languages
in which, at first blush, nouns and verbs appear to function alike; however, in every instance, a careful and detailed examination of the grammar reveals a number of fairly subtle but absolutely robust criteria for distinguishing two word classes. In a rather larger number of languages, there appears, on superficial examination, to be no grammatical difference between adjective and verb, or none between adjective and noun. But, in every instance, when the situation is investigated in depth, it transpires that there are some—often rather subtle—criteria to distinguish adjective as a separate word class.

5. Attitudes towards adjectives

It has sometimes been suggested that having an adjective class is not a universal property of human languages. In an earlier study (Dixon 1977a: 20; 1982: 2), I opined that ‘some languages have no adjective class at all’. The present chapter—building on a further quarter-century of research—puts forward the hypothesis that an adjective class can be recognized for every language, although sometimes the criteria for distinguishing adjectives from nouns, or adjectives from verbs, are rather subtle.

Adjectives had been said to be absent from Totonac languages but, applying the principles outlined in this chapter, Levy (Chapter 6) provides a wealth of criteria for distinguishing adjectives as a separate class. In her Ph.D. dissertation on Semelai, Kruspe (1999) did not mention adjectives; applying the criteria from this chapter, she now (Chapter 12) recognizes adjectives as a well-defined sub-class of verbs. Some reputable scholars have stated that adjectives cannot be distinguished from verbs in Korean; the indisputable status of an adjective class in this language is demonstrated by Sohn, in Chapter 9. There had been a tradition of saying that Chinese has no adjective class; as mentioned below, clear and unequivocal criteria are now apparent for the recognition of ‘adjective’ as a major word class in Mandarin.

Both the ancient grammar of Sanskrit by Pāṇini and the early grammars of Greek and Latin—which began the western tradition—failed to make any distinction between noun and adjective. It was only at about 1300 CE, in the scholastic grammar of Thomas of Erfurt, that the criterion of gender was invoked—each noun has one inherent gender, whereas an adjective has no gender in itself but may show any of the genders, by agreement with the noun it relates to. On the basis of the European languages they knew, it became the accepted doctrine among linguists that adjectives are a class with similar morphology to nouns, differing from nouns in terms of gender possibilities. Indeed, it appears that Jespersen (1924: 72) considered this to be the only criterion. Since Finnish has no genders, he inferred that in this language adjectives could not be distinguished from nouns. There are, in fact, a fair number of other relevant criteria in Finnish—only nouns (not adjectives) take possessive suffixes, and only adjectives (not nouns) take comparative and superlative suffixes.
Australian languages are like the languages of Europe in that adjectives have very similar morphological possibilities to nouns. Some languages have noun classes (similar to genders) and this is accepted as a viable criterion. But for languages without this aid, it is often said that there is no separate class of adjectives (see, among others, Eades 1979 on Gumbaynggir). It is instructive to consider the implications of this position. If a language has a category of gender, then it will have a class of adjectives. If it loses gender, then presumably it loses adjectives as a separate word class. If it then redevelops gender marking, it will regain an adjective class. Such a scenario is surely unacceptable.

In a classic study, Alpher (1991: 22–6) investigates the basis for recognising a class of adjectives in Yir-Yoront, an Australian language which lacks noun classes/genders. There is no obvious clear-cut criterion to distinguish adjectives from nouns, the two types of word having virtually the same morphological and syntactic properties. Alpher is, however, able to suggest five fairly subtle properties in which nouns and adjectives differ. One he labels ‘grading’: ‘Both “nouns” and “adjectives” occur with postposed morr “real, actual, very”. With common nouns, morr has the sense “actual present-day”, as in kay murr “the present-day (steel) axe”, or “real and not imaginary”, as in warriwu murr “a real woman (not one in a dream)”. With “adjectives” susceptible of grading, however, murr means “very”: karntl murr “very big”, wil murr “very bitter”. Such adjectives, moreover, can be quantified with adpositions like mangl “a little”, as in mangl-karntl “a little bit big”, wil+mangl “a little bit bitter”; common nouns lack this possibility.’

The modern discipline of linguistics has been centred on the study of European languages, and is generally undertaken by speakers of European languages. There has, as a consequence, arisen the idea that if a language has an adjective class, then it should be similar to the adjective class in European languages; that is, functioning directly as the modifier of a noun in an NP, acting as copula complement, and showing morphological categories similar to those of nouns (number, case, etc.), quite different from the categories applying to verbs (tense, aspect, mood, etc.).

This has undoubtedly played a role in the failure to recognize an adjective class for languages in which adjectives show a rather different profile, functioning as head of an intransitive predicate (rather than as copula complement), and having some of the same morphological properties as verbs. There is an oft-repeated tradition of saying that in Chinese ‘all adjectives are verbs’ (see, among many others, Hockett 1958: 223, Lyons 1968: 324–5, Li and Thompson 1981: 141, Schachter 1985: 18). This lacks insight. In an important study, Xu (1988) demonstrates a range of criteria for recognizing adjectives to be a separate word class in Chinese. For example, adjectives and verbs show different syntax when modifying a noun within an NP, have different aspectual possibilities when functioning as intransitive predicate, take different derivational possibilities. In addition, reduplication has different semantic implications for the two word classes; see (14–15) in §6.1.

Even when a linguist does provide criteria for distinguishing adjectives from verbs (in a language where adjectives can function as intransitive predicate), there
is often an unwillingness to use the label 'adjectives', simply because these adjectives are so different in grammatical properties from the familiar kind of adjective occurring in European languages. A term like 'descriptive verb' may be used instead (for example, Seki 1990, 2000 on Kamaiurá, Tupí-Guaraní branch of Tupí family). The authors of Chapters 10–14 below do employ the term 'adjective' (although some did not use this term in earlier work on their language) but, continuing the tendency just noted, they are reluctant to recognize them as a major word class, preferring instead to treat adjectives as a sub-class of verbs. (This is discussed further in §11.)

Oceanic languages typically have an adjective class similar in grammatical properties to the verb class. Buse (1965), writing on Rarotongan, called them 'statives' and this label (or 'stative verbs') has become institutionalized in Oceanic linguistics (see, for example, Chapter 11 below).

In Chapter 3, Genetti and Hildebrandt provide an excellent discussion of the two adjective classes in Manange. They refer to them as 'verb-like adjectives' and 'adjectives'. The 'adjective' class has properties in common with nouns and could well have been labelled 'noun-like adjectives'; the simple label 'adjectives' may have been preferred because this class, in its noun-like properties, is similar to adjective classes in the familiar languages of Europe.

It should be noted that some instances of what I call an 'adjective class' are not accorded this label in the grammars from which I take the data. Nevertheless, they should each be labelled 'adjective class' according to the criteria used in this study—a word class distinct from noun and verb, including words from the prototypical adjective semantic types, and (a) functioning either as intransitive predicate or as copula complement; and/or (b) modifying a noun in an NP.

6. Criteria for recognizing an adjective class

Adjective classes can be categorized in terms of their grammatical properties. The primary division is between adjectives that can fill an intransitive predicate slot, as in (4), and those that fill a copula complement slot, as in (3):

(I) Adjectives which can function as intransitive predicate. These take some or all of the morphological processes and/or syntactic modifiers which can apply to a verb when it functions as intransitive predicate. They can be called 'verb-like adjectives'.

(II) Adjectives which may fill the copula complement slot. They can be called 'non-verb-like adjectives'.

Note that there are a few languages in which a plain, underived adjective can fill both intransitive predicate and copula complement slots. This was illustrated in (2a/b), for Tariana. Other examples are mentioned in §6.3, which deals with adjectives that share the grammatical properties of verbs and of nouns. And there are
some languages whose adjectives have neither of these functions, being confined to a modifying role within an NP—see §7.

The second parameter of grammatical variation is rather different. Members of very nearly all adjective classes—whether of type I or type II—may in some way modify a noun within an NP. In some languages this involves just apposition of adjective and noun, in others a relative clause (or similar) marker may be required. In a fair number of languages an adjective has the possibility of making up an entire NP, without any stated noun (although a head noun may be implicit, and ellipsed under certain discourse conditions). Adjectives can roughly be categorized into two further classes in respect of their morphological possibilities when they occur within an NP:

(A) When it functions within an NP, an adjective may take some or all of the morphological processes that apply to a noun. They can be called ‘noun-like adjectives’.

(B) In a language where nouns show a number of morphological processes, none of these apply to adjectives. They can be called ‘non-noun-like adjectives’.

In languages with an isolating profile, there may be no morphological processes applying to nouns, so that the (A/B) parameter is not relevant.

There is a degree of correlation between the parameters. We find:

• A large number of languages whose adjectives are (I) verb-like, and (B) non-noun-like.
• A large number whose adjectives are (II) non-verb-like, and (A) noun-like.
• Some languages whose adjectives are both (I) verb-like and (A) noun-like.
• Some languages whose adjectives are (II) non-verb-like and (B) non-noun-like.

We can now examine, in turn, languages of type (I) and of type (A). §6.1 deals with languages in which adjectives can fill the intransitive predicate slot and have similar properties to verbs; it surveys the criteria which may serve to distinguish adjectives from verbs in these languages. Then §6.2 examines languages in which adjectives have a similar morphological and syntactic profile to nouns, surveying criteria that can be found to distinguish the class of adjectives from the class of nouns. After this, §6.3 discusses languages whose adjectives combine verb-like and noun-like properties; and §6.4 looks at languages whose adjectives have grammatical properties different from those of nouns or verbs.

6.1. DISTINGUISHING ‘VERB-LIKE’ ADJECTIVES FROM VERBS

Where both adjectives and verbs can fill the intransitive predicate slot, criteria for distinguishing the two word classes include: (1) different possibilities within the predicate slot; (2) different transitivity possibilities; (3) different possibilities as modifiers within an NP; (4) different possibilities in comparative constructions; (5) different possibilities for forming adverbs (that is, modifiers to verbs). We can discuss these one at a time.
6.1.1 Different possibilities within the predicate slot

In some languages exactly the same morphological processes and syntactic modifiers may apply to a verb and an adjective within a predicate. However, in many languages the possibilities vary.

Most typically, an adjective is far more restricted than a verb when it occurs as predicate head. For example, in the Iroquoian language Cherokee (Feeling 1975), a verb as predicate head allows three types of prefix and two varieties of suffix. In contrast, an adjective as predicate head allows only pronominal prefixes:

(11) Predicate structure in Cherokee

<table>
<thead>
<tr>
<th></th>
<th>adjective</th>
<th></th>
<th>adjective</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>±initial</td>
<td>+pronom-</td>
<td>±reflexive</td>
<td>+verb/</td>
<td>±non-final</td>
</tr>
<tr>
<td>prefixes</td>
<td>inal prefix</td>
<td></td>
<td>adjective root</td>
<td>suffixes</td>
</tr>
<tr>
<td>8 orders,</td>
<td></td>
<td></td>
<td>13 orders,</td>
<td></td>
</tr>
<tr>
<td>including</td>
<td></td>
<td></td>
<td>including</td>
<td></td>
</tr>
<tr>
<td>negative,</td>
<td></td>
<td></td>
<td>reverse</td>
<td></td>
</tr>
<tr>
<td>‘again’, ‘since’</td>
<td></td>
<td></td>
<td>repetitive</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>completed,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>tense/aspect,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>interrogative</td>
<td></td>
</tr>
</tbody>
</table>

Note that only those positions which are obligatory for verbs are found with adjectives.

Another language in which adjectives have more limited possibilities than verbs is Temiar (Aslian branch of Austroasiatic; Benjamin 1976: 184); only verbs (not adjectives) may take the modal affix -m- and form causatives.

In other languages, verbs allow some modifiers which adjectives lack, and adjectives permit some which verbs lack. For example:

- In Vietnamese (Nguyen 1987: 791), only adjectives can be preceded by rát ‘very’ and khát ‘rather’, and only verbs can occur with the exhortative particle hãy.
- In Chamorro (Austronesian; Topping 1973: 231), only verbs can take a modifier of manner, and only adjectives may take an intensifier.
- In Kamaiurá (Tupí-Guarani branch of Tupí family; Seki 2000: 64), adjectives differ from verbs in that (a) verbs but not adjectives can occur in the circumstantial mode; (b) in indicative, exhortative, and imperative moods, adjectives take pronominal proclitics while verbs take pronominal prefixes; (c) the gerund is marked by -ram on a verb but by -m on an adjective.
- In Warekena (Aikhenvald 1998), verbs take a pronominal prefix whereas adjectives take a pronominal suffix, in each case relating to the S argument.
- In Korean (Chapter 9), adjectives and verbs show essentially the same categories, but have different allomorphs for indicative within predicate slot and for indicative within a relative clause.
Adjectives may have wider possibilities than verbs. For example, in Fijian the pre-head predicate modifier *rui* 'more than a usual amount' is allowed when the predicate head is an adjective, as in (12) with *levu* 'big', but not when it is a verb, as in (13) with *pûû* 'be angry' (Dixon 1988: 95).

(12) [e rui levu]_{INTRANSITIVE PREDICATE}  
3sgS LOTS big  
'he/she is too big'

(13) *[e rui pûû]_{INTRANSITIVE PREDICATE}  
3sgS LOTS be.angry  
'he/she is too angry'

However, when a predicate with verb as head includes an adverbal modifier (which involves prefix *va’a*- added to an adjective), then it may also include modifier *rui*, as in:

(13’) [e rui pûû va’a-levu]_{INTRANSITIVE PREDICATE}  
3sgS LOTS be.angry ADVERBAL.DERIVATION-big  
'he/she is very angry (more than is appropriate)'

In summary, *rui* may only be used in a predicate which includes an adjective. The adjective may either be predicate head, as in (12), or the nucleus of an adverbal modifier, as in *va’a-levu* 'greatly' (based on *levu* 'big') in (13').

Another recurrent criterion concerns reduplication possibilities. In Chinese (Xu 1988), a verb when reduplicated carries the meaning ‘do a little bit’, for example:

(14) dòng ‘to move’  
dông dòng ‘to move a little’

In contrast, when an adjective is reduplicated, the semantic effect is ‘intensification of the quality’, as in:

(15) hông ‘red’  
hûng hông ‘vividly red’

In Qiang (see Chapter 13), reduplication usually signifies reciprocity for verbs but either plurality or intensification or both for adjectives (depending on the formal nature of the reduplication). In Mupun (Chadic; Frayzynger 1993: 63–73), both verbs and adjectives may reduplicate, which serves as a process of nominalization. But whereas a reduplicated verb just forms an abstract noun (e.g. rán ‘write’, rânrân ‘writing’), when an adjective is reduplicated it adds a sense of intensity (e.g. mõol ‘thick’, mõmõol ‘great thickness’). (And see the note on methodology concerning the semantics of reduplication, in §6.2.2.)

Adjectives may also differ from verbs in possibilities for derivation. In Qiang, for instance, nominalization by the definite marker is almost restricted to adjectives. In Mandarin Chinese (Xu 1988), different sets of derivational suffixes apply to verbs (e.g. agentive nominalizer *-jiã*) and to adjectives (e.g. verbalizer *-hûã*).
6.1.2. Different possibilities for transitivity

In Fijian, almost every verb can be used either intransitively (then not bearing a suffix) or transitively (with a transitive suffix). For some verbs the intransitive subject (S) relates to the transitive subject (A), and for others S relates to the transitive object (O). For example (full details are in Dixon 1988: 200–19):

\[
\begin{array}{c|c|c}
\text{Intransitive} & \text{Transitive} \\
\hline
\text{type S = A} & \text{la'o 'go'} & \text{la'o-va 'go for'} \\
& \text{dredre 'laugh'} & \text{dredre-va'ina 'laugh at'} \\
\text{type S = O} & \text{cori 'be tied'} & \text{cori-ta 'tie'} \\
& \text{rogo 'be audible'} & \text{rogo-ca 'hear'}
\end{array}
\]

Unlike verbs, adjectives do not take a transitive suffix; that is, adjectives only occur in intransitive—not in transitive—predicates. (There are a few verbs which are only used intransitively, including gaadee 'stroll' and bona 'stink'. These are distinguished from adjectives by other tests, for example the co-occurrence with rui 'more than a usual amount', illustrated above.)

It is interesting to study the allocation of adjectival concepts into word classes in Fijian. Words from the dimension, age, value, colour, physical property, and speed types are adjectives, but human propensity items are placed in the verb class. It is not hard to see why this should be so.

Most adjectives in English just describe a property of some thing (for example, 'big', 'new', 'heavy', 'sharp'). However, human propensity adjectives describe an attitude on the part of one participant towards someone or something else. When they function as copula complement, this second argument may be shown by an optional prepositional phrase; for example 'happy (about)', 'clever (at)', 'jealous (of)', 'afraid (of)', 'brave (at)', 'angry (at/about)'.

These ideas are coded in Fijian by verbs, each of which can be used intransitively (with no suffix) or transitively (with a suffix); they are all of type $S = A$. The O of the transitive verbs corresponds to the prepositional argument in English. For example:

\[
\begin{array}{c|c|c}
\text{Intransitive} & \text{Transitive} \\
\hline
\text{maarau 'be happy'} & \text{maarau-ta'ina 'be happy about'} \\
\text{vu'u 'be clever'} & \text{vu'u-ta'ina 'be clever at'} \\
\text{vuuvuuvu 'be jealous'} & \text{vuuvuuvu-ta'ina 'be jealous of'} \\
\text{rere 'be afraid'} & \text{rere-va'ina 'be afraid of'} \\
\text{dou 'be brave'} & \text{dou-va'ina 'be brave at'}
\end{array}
\]

Now some verbs in Fijian may choose between two transitive suffixes, which bring different participants into the second core argument slot. For example:

\[
\begin{array}{c|c|c}
\text{Intransitive} & \text{Transitive}_1 & \text{Transitive}_2 \\
\hline
\text{dabe 'sit'} & \text{dabe-ca 'sit on'} & \text{dabe-va 'sit (waiting) for'} \\
\text{vana 'shoot'} & \text{vana-a 'shoot at'} & \text{vana-ta'ina 'shoot with (e.g. a gun)'}
\end{array}
\]
A few of the verbs relating to the human propensity semantic type can also make a choice of transitive suffix, effectively corresponding to a choice of preposition in English. For example:

\[(19) \quad \text{Intransitive} \quad \text{Transitive}_1 \quad \text{Transitive}_2\]

\[
\begin{aligned}
\text{pu'u 'be angry'} & \quad \text{pu'u-ca 'be angry at (e.g. child)'} & \quad \text{pu'u-ca'ina 'be angry about (e.g. child's behaviour)'}
\end{aligned}
\]

6.1.3. Different possibilities as modifier within an NP

There are a number of ways in which adjectives may differ from verbs in the modification of a head noun within an NP. The most straightforward difference is that only an adjective can directly modify a noun, not a verb. This appears in Kamaiurá (Seki 2000: 70, 117), in Tigak (Austronesian; Beaumont 1980: 85), and in Papantla Totonac (see Chapter 6).

In some languages with a verb-like adjective class, both verb and adjective can modify a noun through a process of nominalization, but there may be differences of detail. In Chinese, for example, a verb must take nominalizer -de when functioning as modifier within an NP, whereas for most adjectives -de is optional. (Xu 1988 states that only some human propensity adjectives, such as yúchūn 'stupid' or jǐzào 'impatient', have to be followed by -de).

In some languages, adjectives and verbs modify a noun through a relative clause construction. In Mojave (Yuman; Schachter 1985: 19), a relativizing particle is obligatory with a verb, when modifying a noun, but optional with an adjective. In Edo (Kwa group within Niger-Congo; Òmoruyi 1986), both adjective and verb require a relative marker when in modifying function, but there is phonological reduction of the relative marker only in the case of adjectives.

In some languages, a noun may modify a noun in two ways—either with no marker or within a relative clause—with a difference of meaning. Hagège (1974: 130) describes how in Tupuri (Adamawa-East, spoken in Chad), an NP consisting just of noun and adjective has an indefinite meaning, as in (20a), while an NP in which the adjective is in a relative clause has a definite meaning, as in (20b).

\[(20) \quad \begin{aligned}
(a) & \quad \text{child little} & \quad \text{child REL little} \\
& \quad \text{‘a little child’} & \quad \text{‘the little child’}
\end{aligned}\]

In Igbo there is a verb corresponding to each of the eight adjectives; for example adjective ọjọ́ 'bad', verb njọ́ 'be bad'. A noun can be modified either directly by an adjective or indirectly through a relative clause introduced by relative marker di and including the corresponding verb. There is in each case a difference in meaning, the adjectival modification generally referring to a more-or-less permanent state and the verb-via-relative-clause modification referring to a more transient state (Wêlmers and Wêlmers 1968: 181–2). For example:
(21) óbi ójo ‘hard-heartedness, meanness’ as an inherent character trait
    (literally ‘heart bad’)

(22) úzó dí njó ‘road which is bad’, which can, after all, be repaired

There may be other kinds of restriction on a verb in modifying function, which do
not apply to an adjective. In Chemehuevi (Uto-Aztecan; Press 1979: 58), verbs must
coop-occur with a demonstrative when modifying a noun; adjectives need not. In
Tukang Besi (Donohue 1999: 144, 303–7), adjectives can modify a noun directly but
verbs require a subject focus marker. In Mupun (Frajzyngier 1993: 69), both adjec-
tives and verbs may only modify a noun together with the relative clause marker
dé; but whereas verbs require a subject to be stated within the relative clause (this
is underlined in (23a)), adjectives do not, as in (23b).

(23) (a) n-dem ngwe [dé wu cii]
       1sg-like man   REL 3m refuse
    ‘I like a man who refuses’

(b) n-dem ngwe [dé cí]
    1sg-like man   REL different
    ‘I like a different man’

In some languages, both verb and adjective can be head of an NP, but with
slightly different properties. Fijian has one type of complement clause which has
the form of an NP (I term it a ‘clausal NP’). The underlying predicate (which can
be a noun or adjective) becomes head of the NP, while the underlying subject
becomes a possessive element. Thus, the clause in (24a) corresponds to the NP
in (24b).

(24) (a) e la’o
       3sgS go
    ‘he/she goes’

(b) a o-na la’o
    ARTICLE CLASSIFIER-3sg go
    ‘his/her going’

Verb and adjective differ in the classifier that can occur in the possessive element
(Dixon 1988: 138). When an adjective is head of a clausal NP there is a choice be-
tween classifier o- (possessor has some control over the quality) and e- (an inher-ent quality, over which the possessor has no control). (25a) is an intransitive clause
with an adjective as predicate head. Corresponding to this, there are two clausal
NPs, shown in (25b) and (25c).

(25) (a) e kaukaua
       ‘he/she is powerful; he/she/it is strong’

(b) a o-na kaukaua
    ‘his/her (acquired) power’

(c) a e-na kaukaua
    ‘his/her/its (inherent) strength’

However, when a verb is head of a clausal NP, the possessor can only take classi-
fier o-, as in (24b).
6.1.4. Different possibilities in comparative constructions

Not all languages have a comparative construction (types of comparative construction were illustrated in (9–10) above). In some of the languages that do, the ‘parameter of comparison’ can only be an adjective, but in others there are wider possibilities. In Edo, for example, both adjectives and verbs may occur in comparative constructions (Omoruyi 1986). However, in some languages only adjectives can be compared, and this furnishes a criterion for distinguishing between adjective and verb classes; such a property applies to Toba-Batak (Nababan 1981: 71–2), Korean, North-East Ambae, Qiang, and Lao (Chapters 9, 11, 13, and 14 below). In Semelai (Chapter 12), only the sub-class of dimension adjectives have a morphological comparative (other forms enter into a periphrastic comparative construction, borrowed from Malay).

6.1.5. Different possibilities for forming adverbs

In Fijian, for example, adverbs can be formed from adjectives (but generally not from verbs) by means of the prefix va'a-; for example, va'a-levu ‘greatly’ from levu ‘big’—as in (13′)—and va'a-dodonu ‘correctly’ from donu ‘correct’. In Japanese, too, it is mainly adjectives which may function as adverbs, this being one of the properties which links the two adjective classes into one macro-class.

There are other properties which recur. For example, adjectives typically behave in a special way within Serial Verb Constructions; this is illustrated—in Chapters 4, 11, 12, and 13—for Tariana, North-East Ambae, Semelai, and Qiang.

The discussion in this sub-section has been of languages where adjectives function as intransitive predicate, rather than as copula complement. Not all languages have a copula construction. One might expect a correlation: languages in which adjectives can be intransitive predicate might be thought likely to lack a copula construction, with languages for which adjectives cannot function as intransitive predicate being likely to have a copula construction. From examination of a range of languages, it appears that there is in fact no correlation. That is, whether or not a language has a copula construction is quite independent of whether or not adjectives can be intransitive predicates.

Languages with verb-like adjectives differ with respect to the possibilities for using an adjective in the copula complement slot. In Mupun (Frajzyngier 1993), a copula complement can only be an NP (e.g. ‘this man is the chief’), not an adjective. In Chinese (Xu 1988), an adjective can occur as copula complement only when in nominalized form, as in (26a).

³ This has a rather different meaning from a clause in which the adjective is intransitive predicate, as in (26b).

³ The nominalizer can be omitted from a sentence like (26a) in marked circumstances, when it is in emphatic or contrastive function.
6.2. DISTINGUISHING ‘NOUN-LIKE’ ADJECTIVES FROM NOUNS

There are a number of kinds of criteria for distinguishing adjectives from nouns, where these share grammatical properties: (1) the internal syntax of NPs; (2) morphological possibilities; (3) the comparative construction; and (4) adverbal use. These will be discussed one at a time.

6.2.1. The internal syntax of NPs

The prototypical NP has a noun as head and one (or, sometimes, several) adjectives as modifiers. Where this scheme is closely adhered to there is no difficulty in distinguishing between nouns and adjectives; this applies in English, in Hua (Papuan region, Haiman 1980: 268–9), in Basque (Saltarelli 1988: 144), in Upper Necaxa Totonac (Beck 2000), and in Papantla Totonac (Chapter 6 below).

However, there are some languages in which a noun may also function as modifier. Generally, the possibilities for noun modifiers are rather limited. It may be that an NP can include no more than one noun modifier, but several adjective modifiers. And whereas every, or almost every, adjective is likely to function as modifier within an NP, only a limited set of nouns may have this function. For example, in Jarawara the only nouns used as modifiers are those referring to material (such as jati ‘stone’, awa ‘wood’) and sex (fana ‘woman, female’ and maki ‘man, male’); in Tariana just human nouns may function as modifier.

In some languages a noun can be modifier only under particular grammatical conditions. In Bilin (Cushitic; Palmer 1967: 206), for example, a modifying noun must be in genitive form. In Igbo, when a noun is modified by another noun or by a number, these form an ‘associative construction’ (with tone change); this does not
apply when a noun is modified by an adjective (Welmers and Welmers 1969).

The other variation on the prototypical pattern is for an adjective to make up a complete NP. In some languages this can be described as the adjective becoming head of the NP, but in most instances it is better treated as an NP whose head noun has been omitted (under certain discourse conditions), which consists just of a modifier. In languages with gender, the ellipsed noun is likely to determine the gender of the modifier adjective. The possibilities for ellipsis can depend on some characteristic of the head noun; for example, in Modern Standard Arabic, only a noun with human reference can be omitted.

Generally, when an adjective occurs without a noun in an NP, it may not receive any syntactic modification. That is, an NP may consist of a noun plus one or more adjectives; or it may just consist of an adjective; this applies, for example, in Amele (Papuan region; Roberts 1987:55).

A further criterion, in some languages, lies in the existence of a pre-modifier ‘very’, which can apply to adjectives but not to nouns. This applies in Burjat (Poppe 1960) and in Quechua (Cole 1982:99), among many other languages.

6.2.2. Morphological possibilities

One of the most useful criteria for distinguishing between nouns and adjectives is gender or noun classes. In Latin, for instance, each noun belongs to just one of the three genders, while an adjective can be in any gender, agreeing with the noun it is modifying. A similar criterion is given by Sokolov (1967: 43) for Avestan and by Fortune (1942: 55–6) for the Papuan language Arapesh; and see the discussion of Russian in Chapter 8.

However, this criterion is not always watertight. In Dyirbal a noun is generally accompanied by a noun marker, a determiner-like element which indicates location/visibility, agrees with the noun in case, and marks the noun class of the noun (this is not shown on the noun itself). Most nouns relate to just one noun class, while most adjectives can occur with a noun marker of any class. Compare (noting that in fact the words in an NP can occur in any order):

<table>
<thead>
<tr>
<th>(27)</th>
<th>(a) bayi yara</th>
<th>(28)</th>
<th>(a) bayi (yara) midi</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>‘man’</td>
<td>(b)</td>
<td>‘small (man)’</td>
</tr>
<tr>
<td>(b)</td>
<td>balan yibi</td>
<td>(b)</td>
<td>‘small (woman)’</td>
</tr>
<tr>
<td>(b)</td>
<td>‘woman’</td>
<td>(c)</td>
<td>‘small (black bean)’</td>
</tr>
<tr>
<td>(c)</td>
<td>‘black bean’</td>
<td>(d)</td>
<td>‘small (stone)’</td>
</tr>
<tr>
<td>(d)</td>
<td>‘stone’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The noun marker ‘there’ (shown by initial ba-), in absolutive case, has four forms, masculine bayi, feminine balan, edible balam, and neuter bala (see Dixon 1972 for full details). Now a head noun can be omitted from an NP (under discourse
Thus, while the noun *yara* ‘man’ can only occur with *bayi, yibi* ‘woman’ only with *balan*, etc., an adjective such as *midi* ‘small’ can occur with all four noun markers, as in (28a–d).

However, there is a handful of ‘hybrid’ nouns that can take either masculine or feminine markers; these include *bayi/balan jaja* ‘male/female baby’ and *bayi/balan bimu* ‘father’s older brother/sister’. And while adjectives such as *midi* ‘small’ can modify any noun, there are adjectives which—by virtue of their meaning—may only modify a noun which has human reference; for example, *wugija* ‘generous, always sharing things’ and *jilbay* ‘experienced/expert at some task’. There are thus a few nouns which can occur with either masculine or feminine noun marker, and a few adjectives which are restricted to masculine and feminine markers. That is, while noun class co-occurrence is a pretty good criterion for distinguishing nouns and adjectives in Dyirbal, it is not perfect. Other criteria need to be brought in to deal with words like *jaja, bimu, wugija*, and *jilbay*.

In some languages only some adjectives may take gender or noun class marking. This applies in Swahili, where the adjective class has two sub-classes. One sub-class consists of about fifty native roots which take the concordial prefix of the noun they modify; the other sub-class involves a score or so of borrowed adjectives (mostly from Arabic) which do not take the prefixes. However, the sub-classes are linked by all their members sharing other grammatical properties.

In Jarawara, some inalienably possessed nouns and some adjectives show a gender distinction. However, the rules for gender agreement within an NP are different for the two word classes. Following a non-singular 1st or 2nd person pronoun as head of an NP, plus a possessed noun, a further possessed noun will be in masculine form while an adjective shows feminine form—see (34–6) in Chapter 7.

The gender/noun class distinction spans morphology and syntax. A similar criterion is provided by classifiers; generally, an adjective may occur with a larger set of classifiers than may a noun (potentially, an adjective may occur with all classifiers, while a noun may be limited to one, or to just a few). (See Dixon 1977b: 122 on the Australian language Yidiɲ.)

A survey of the literature shows a number of different kinds of morphological differences between nouns and adjectives. Only a noun may take possessive affixes, in Finnish and in Hungarian, and also in the Papuan language Alamblak (Bruce 1984: 74 provides a most useful table of the various morphological differences between adjectives and the other word classes in Alamblak).

Typically, adjectives will accept only a subset of the affixes available to nouns. Arnott (1970: 78–130) states that in Fula (Atlantic/Niger-Congo) an adjective takes all noun class suffixes but a noun will only take some, whereas nouns take all the remaining nominal suffixes, while adjectives just accept a selection of them (for example, singular *-wo* and plural *-ße* are confined to nouns).

In Maasai (Tucker and Mpaayei 1955: 3–13), a noun—as head of an NP—inflects for gender and number, while an adjective—as modifier—inflects only for number. But if the head noun is omitted, so that the NP consists just of an adjective, then
that inflects for gender and number, like a noun. The principle appears to be that number marking goes on every word in an NP, but gender marking just onto one word (a head noun, if present, otherwise an adjective).

Another distinguishing feature is when a given grammatical form has different allomorphs when used with nouns and with adjectives. For example:

- In Awa Pit (Barbacoan family, Ecuador/Colombia; Curnow 1997: 91) the ‘collective action’ suffix has allomorph -tupza with a noun, and -tuz on an adjective which makes up a full NP.
- In Venda (Bantu; Poulos 1990: 121), both adjectives and nouns take noun class prefixes but with some differences of form; for example, class 15 is shown by hu- on an adjective but by u- on a noun.

In some languages a given suffix may be used on both noun and adjective, but with a difference of meaning. For the Australian language Bandjalang, Crowley (1978: 30) describes how the suffix -bu means ‘still’ with an adjective (for example mirin-bu ‘still alive’) but ‘along’ with a noun (for example balun-bu ‘along the river’).

Reduplication is another grammatical process which may have different semantic effect with nouns and with adjectives. In the Australian language Emmi (Ford 1998: 140), reduplication of a noun indicates plurality (for example, perre ‘grub’, per-reperre ‘grubs’) while reduplication of an adjective indicates intensity (for example, duk ‘big’, dukduk ‘very big’).

A note on methodology is in order here. It might be suggested that the semantic effect of reduplication is a consequence of the semantic nature of a lexeme, not of its grammatical word class. On this principle, lexemes referring to ‘properties’ would be marked for intensity, and not for plurality, whatever word class they belonged to. That this is untrue is shown by comparing the semantic effect of reduplicating nouns and adjectives in Emmi and in Dyirbal:

<table>
<thead>
<tr>
<th></th>
<th>Reduplication of noun</th>
<th>Reduplication of adjective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emmi</td>
<td>plural, e.g. perreperre ‘grubs’</td>
<td>intensity, e.g. dukduk ‘very big’</td>
</tr>
<tr>
<td>Dyirbal</td>
<td>plural, e.g. jambunjambun ‘grubs’</td>
<td>plural, e.g. bulganbulgan ‘many big (things)’</td>
</tr>
</tbody>
</table>

This shows that the semantic effect of reduplication does not here operate on the basis of the semantics of the lexeme involved, but rather upon its word class, with different languages having varying specifications for their word classes.

The placement of case marking seldom provides a criterion for distinguishing adjectives from nouns. Case indicates the function of an NP in its clause. Each language has its own rule for the assignment of case to the words within an NP—it may go onto every word, or just the last word, or just the first word, or just the head. Whether or not an adjective bears case will depend on these rules, and on the position of the adjective in the NP. For example, in Bilin, case goes onto the last word in an NP. If there is an adjective modifier (which follows the head noun), this will
take case; only if there is no modifier to a noun will case attach to the noun (Palm-
er 1967). However, in Buriat, case goes onto the head word. If an adjective func-
tions as modifier, it takes no case affix; if an adjective makes up a whole NP, then it
does take case (Poppe 1960: 76).

Note, though, that the case system for adjectives may differ in size from that for
nouns. Nichols (1994: 95–9) states that in Ingush (North-east Caucasian) nouns
may select from eight cases but adjectives just from two—nominative (corres-
ponding to nominative on nouns) and oblique (corresponding to genitive, dative,
ergative, instrumental, locative, comparative, and allative on nouns). Estonian is
similar to Ingush in this feature.

6.2.3. **Comparative construction**

In some languages (for example, Russian and Papantla Totonac, in Chapters 6 and
8 below, and also Finnish and Hungarian) only an adjective can occur as the par-
parameter of comparison in a comparative construction, and this serves to distin-
guish adjectives from nouns. However, in other languages nouns and adjectives
share this property and it is thus not a relevant criterion; this applies for Portu-
guese, for Sanskrit (Bhat 1994: 181–2), and also for Dyirbal (Dixon 1972: 226–8).

6.2.4. **Use as adverbs**

In Tariana, in Mandarin Chinese, and in Buriat (Poppe 1960), only adjectives—not
nouns—also have adverbal function.

6.3. **Adjectives grammatically similar to both verbs and nouns**

The last two sections have discussed languages in which adjectives have similar
grammatical possibilities to verbs, and languages in which they have similar pos-
sibilities to nouns. What is more natural than for a language to combine these fea-
tures—for an adjective to inflect like a noun when occurring in an NP, and to in-
fect like a verb when functioning as predicate head? In fact, a rather small number
of languages appear to be of this type. Three well-documented examples can be
provided.

(1) In languages from the Berber sub-group of Afroasiatic, adjectives—like other
lexemes—have triconsonantal roots, e.g. \( m - l - l ' \)white'. An adjective will inflect
for gender and number, like a noun, when in an NP and as copula complement. It
will inflect for tense and for person and number of the subject, like a verb, when
functioning as head of an intransitive predicate. (See, for example, Aspinion 1953,
Sadiqi 1986.)

(2) In the Australian language Nunggubuyu (Heath 1984: 152), an adjective can
function as modifier in an NP; it then takes a noun class prefix and case and
number suffixes, like a noun. An adjective may also take an intransitive subject
prefix, just like a verb; it must then be functioning as an intransitive predicate. But
note that, as in many languages—see §6.1.1—an adjective has more limited mor-
phological possibilities than a verb in this slot; it can only take tense and aspect suffixes if the inchoative derivation suffix is first added. It is likely that in Nunggubuyu adjectives are just beginning to take on grammatical properties similar to those of verbs; see §9 below.

(3) In Tariana, an adjective can modify a noun and then agrees with it in number and classifier. It may also function as predicate head and may then take tense/evidentiality, aspect, mood, and most other suffixes that are available for a verb. This was illustrated by (2a/b) in §2; see also Chapter 4 below.

There is an explanation for the rich syntactic possibilities available to adjectives in Tariana. Their functioning as intransitive predicate is an inherited property, shared with other Arawak languages. Their functioning as copula complement is a property which has been borrowed from East Tucanoan languages, as one aspect of the large-scale diffusion of grammatical patterns that characterizes the Vaupés linguistic area (to which Tariana and East Tucanoan languages belong). See Aikhenvald (2002: 153–74).

There are hints in the literature of further languages of this type, but insufficient information to check them out in detail. For instance, Swadesh (1946: 320–1) says of Chitimacha (an isolate, previously spoken in Louisiana): ‘very much like certain kinds of verbs is the adjective, part of whose inflection coincides with that of the verb, but which has two additional forms called the substantival singular and plural. Moreover, it is precisely the substantival forms which are the most commonly used.’

In other languages, adjectives may be most similar to one of nouns and verbs, but have some properties in common with the other. In Upper Necaxa Totonac, adjectives have grammatical properties similar to those of nouns. However, an adjective as copula complement may be modified by tunká ‘very’; nouns do not take tunká, but intransitive state verbs (e.g. ‘be ashamed’) do (Beck 2000: 233–4). In the Australian language Emmi (Ford 1998: 139–40), adjectives inflect like nouns but are negated, like verbs, by the particle way (nouns, in contrast, are negated by the negative copula piya).

6.4. ADJECTIVES GRAMMATICALLY DIFFERENT FROM BOTH VERBS AND NOUNS

In a further set of languages, the morphological and syntactic properties of adjectives differ from those of verbs and of nouns. I will mention just three examples of this.

(1) English. Only nouns may take a plural suffix; only verbs may take tense–aspect suffixes; only adjectives may take comparative and superlative marking, shown either by affixes (-er, -est) or by pre-modifiers (more, most). An adjective cannot occur as head of an NP⁴ (while a noun can), nor as predicate (while a verb can).

⁴ There are a limited number of adjectives which are an exception to this statement, particularly colour terms; for example, I like a good full-bodied red (sc. wine).
Only an adjective can occur alone as copula complement, as in *John is tall*; a noun requires an article or other determiner in this slot, as in *John is a doctor/my son*.

(2) Teribe (Chibchan family; Quesada 2000). Verbs take aspect, modality, and mood suffixes, and nouns take plural marking; none of these is available to adjectives. An adjective may modify a noun in an NP, may occur in a comparative constriction, and may be complement in a verbless (copula-type) construction.

(3) Mam (Mayan family). Although adjectives (and also nouns) can function as intransitive predicate, they take none of the TAM suffixes available to verbs; adjectives share no significant properties with nouns. Nora England provides a full and insightful account in Chapter 5 below.

### 7. Languages with restricted functional possibilities for adjectives

As described in §3, in the great majority of languages adjectives have two canonical functions:

(a) in a statement that something has a certain property, coded through the adjective functioning either as intransitive predicate or as copula complement;

(b) as a specification that helps focus on the referent of the head noun in an NP, the adjective functioning as modifier to the head.

In a fair number of languages, adjectives can have one or both of two further properties:

(c) as the parameter of comparison in a comparative construction;

(d) as modifier to a verb, in adverbal function.

There are some languages whose adjectives do not have both (a) and (b) functions. They can be divided into three sets.

Set (1), adjectives which just function as modifier within an NP, and lack function (a). This applies to Malayalam (Dravidian; Asher and Kumari 1997: 339–55; Variar 1979: 24–36); to Hua (Papuan region; Haiman 1980: 268–9); to Yoruba (Kwa/Niger-Congo; Madugu 1976); and to Dagbani (Gur/Niger-Congo; Olawsky 1999 and p.c.). In Yoruba, for example, one simply cannot say ‘Olu is good’ or ‘Ibadan is large’; a copula complement must be an NP, including a head noun, as in ‘Olu is a good girl,’Ibadan is a large city’ (Madugu 1976: 93).

Set (2), adjectives which just function as copula complement, and lack function (b). A number of languages from the northern branch of the Carib family are of this type, including Hixkaryana (Derbyshire 1979: 81, 1985: 10–15, 27–8) and Tiriyó (Meira 1999: 334–6). These languages have a word class whose members may:

- function as copula complement (like nouns, and unlike verbs);
- have adverbal function, as modifier to a verb.
They cannot directly modify a head noun in an NP but must first be nominalized (just as a verb must be).

It was remarked in §5 that, as a consequence of the Eurocentricism of much linguistic work, there is sometimes a reluctance to use the term ‘adjective’ for a class of words which does not have similar grammatical properties to nouns (as adjectives do in European languages). From this viewpoint, words which cannot function as modifier within an NP (except in nominalized form) may appear un-adjective-like. As a consequence, Derbyshire (1979, 1985) prefers not to use the label ‘adjective’ for the class of words just described, in Hixkaryana and other north Carib languages. However, Derbyshire’s preferred label, ‘adverbs’, is scarcely appropriate; an adverb cannot normally occur as copula complement. This word class in Carib languages is certainly not a typical adjective class, since it does not have function (b), but it is no more untypical than those languages—in set (1)—whose adjectives only occur as nominal modifier and lack function (a).

The semantic content of the non-prototypical adjective classes in languages of sets (1) and (2) do accord with the scheme outlined in §1.1. Malayalam and Yoruba each have about fifteen members in their adjective classes, Hua has four, and Dagbani has about seventy. They are:

- Malayalam: four dimension, three age, one value, plus ‘humble’ and ‘various’, ‘few’, ‘any’, ‘other’, ‘this particular’.
- Hua: two dimension (‘big’, ‘little’), two physical property (‘raw, false’, ‘wild, not tame’).
- Yoruba: two dimension, two age, three value, three physical property, five human propensity.
- Dagbani: five or more in each of dimension, age, value, colour; about twenty in physical property, etc.

For set (2), about thirty adjectives are reported for Hixkaryana and about forty-four for Tiriyó. These include terms from dimension, value, physical property, human propensity, and speed (age terms are nouns while colour are derived adjectives). But the adjective class in north Carib languages also includes terms for qualification (‘all’) and number (‘one’, ‘two’) together with items relating to place (‘hither’, ‘thither’, ‘beyond’, ‘this side of’) and time (‘later’, ‘soon’, ‘now’, ‘yesterday’).

It is perhaps not surprising that the Carib adjective class, which functions only as copula complement and as adverb, should include words of place and time which are typically coded as adverbs in other languages.

Set (3), adjectives which only function as intransitive predicates, and lack function (b). In some of the languages with verb-like adjectives that can function as intransitive predicate, both adjectives and verbs may modify a noun through a relative clause construction. As mentioned in §6.1.3, it is often the case that a relative clause marker is obligatory with a verb but optional with an adjective; adjectives could thus be said to have function (b), modifying a noun directly; these would
thus be prototypical adjective classes in terms of their syntactic functions.

Edo might be a candidate for set (3), since a relative marker is required with adjectives as well as with verbs. However, as pointed out in §6.3, there is phonological reduction of the relative marker only in the case of adjectives.

8. Languages with two adjective classes

At the end of §5, the criteria for recognizing an adjective class were set out as: a word class distinct from noun and verb, including words from the prototypical adjective semantic types, and (a) functioning either as intransitive predicate or as copula complement; and/or (b) modifying a noun in an NP. It is possible for there to be two word classes which satisfy these criteria; that is, a language might have two adjective classes. I will mention three well-documented instances of this.

(1) Macushi (information from Abbott 1991 and p.c.) has an adjective class similar to that described in §7 for the related north Carib languages Hixkaryana and Tiriyó. Unlike its relatives, Macushi has a second small class, adjective₂, whose members may modify a noun in an NP (or make up a full NP, with the head noun ellipsed). They may not function as modifiers to the verb (that is, as adverbs), and can only be copula complement when the denominalizer pe is included. In summary:

<table>
<thead>
<tr>
<th></th>
<th>Adjective, class</th>
<th>Adjective₂ class</th>
</tr>
</thead>
<tbody>
<tr>
<td>can modify noun</td>
<td>only with nominalizer ✔</td>
<td></td>
</tr>
<tr>
<td>can make up whole NP</td>
<td>—</td>
<td>✔</td>
</tr>
<tr>
<td>can be copula complement</td>
<td>✔</td>
<td>only with denominalizer</td>
</tr>
<tr>
<td>can function as adverb</td>
<td>✔</td>
<td>—</td>
</tr>
</tbody>
</table>

According to Abbott (1991: 88, 129–30), each class is rather small. The reported members are:

<table>
<thead>
<tr>
<th></th>
<th>Adjective, class</th>
<th>Adjective₂ class</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSION</td>
<td>’big’, ’deep’</td>
<td>’long’, ’fat’</td>
</tr>
<tr>
<td>VALUE</td>
<td>’good’, ’bad’</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL PROPERTY</td>
<td>’hard’, ’well’</td>
<td>’hot’, ’cold’</td>
</tr>
<tr>
<td>SPEED</td>
<td></td>
<td>’fast’</td>
</tr>
<tr>
<td>QUANTIFICATION</td>
<td>’all’, ’few’, ’many’</td>
<td></td>
</tr>
<tr>
<td>NUMBER</td>
<td>’two’</td>
<td></td>
</tr>
<tr>
<td>PLACE</td>
<td>’here’, ’there’</td>
<td></td>
</tr>
<tr>
<td>TIME</td>
<td>’today’, ’yesterday’, ’long ago’, ’later’, ’regularly’, ’afternoon’</td>
<td></td>
</tr>
</tbody>
</table>

It will be seen that two of the recurrent semantic types for adjective classes, DIMENSION and PHYSICAL PROPERTY, have members in both classes.
Japanese has two adjective classes, each of which is quite large. Their grammatical properties can be summarized as follows (following Backhouse 1984 and Chapter 2 below; and Takeuchi 1999: 81–2).

- What are called inflected adjectives may function as intransitive predicates, like verbs. They take most of the inflections available to verbs, although with allomorph -i for present tense as against -ru on verbs. Adjectives differ from verbs in not taking imperative and hortative suffixes, and in not combining with auxiliaries to mark aspect, benefaction, etc. Like verbs, they may modify nouns.

- The class of uninflected adjectives is like nouns in not taking any inflections, and in functioning as copula complement. These adjectives cannot function as intransitive predicate (without a verbalizing suffix being added), and they may only modify a noun if the marker na or no is also included.

The properties just listed indicate the differences between the two adjective classes. They do, however, share important syntactic properties, for example, members of both classes may be modified by an intensifier, and they may also function as adverbs. Some of their major grammatical properties can be tabulated:

<table>
<thead>
<tr>
<th></th>
<th>Inflected adjectives (verb-like)</th>
<th>Uninflected adjectives (noun-like)</th>
</tr>
</thead>
<tbody>
<tr>
<td>can be intransitive predicate</td>
<td>✔</td>
<td>only with derivational suffix</td>
</tr>
<tr>
<td>can be complement of copula da</td>
<td>—</td>
<td>✔</td>
</tr>
<tr>
<td>can modify noun</td>
<td>✔</td>
<td>needs na or no</td>
</tr>
<tr>
<td>can be modified by intensifiers</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>can function as adverb</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>may accept verbalizing suffix -sugiru ‘too’</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

Looking now at semantic types, AGE, COLOUR, and SPEED terms are all inflected adjectives. Most DIMENSION and PHYSICAL PROPERTY terms are also inflected adjectives, although some belong to the uninflected class, while VALUE terms are divided between the two classes. HUMAN PROPENSITY terms are predominantly in the uninflected class, although inflected items are not uncommon.

In terms of size and composition, the inflected adjective class has about 700 members (some lexically complex); all the lexically simple members are native roots. The uninflected adjective class has more than three times as many members, some native forms and some loans from Chinese and from European languages; new forms can be added to this class (but not to the inflected class). In Chapter 2, Backhouse provides a full and informed discussion of the two adjective classes in Japanese.
(3) Manange (Tibeto-Burman; see Chapter 3 below) also has two adjective classes. What Genetti and Hildebrandt call ‘verb-like adjectives’ (a class with about fifty-seven monomorphemic members) may function as intransitive predicate but lack most of the morphological processes available to verbs. Their ‘adjectives’ (a class with about thirty members, which could be referred to as ‘noun-like adjectives’) may occur as copula complement, like a noun, but cannot be NP head and have distinct phonotactics. The two adjective classes share properties; for example, both may directly modify a preceding noun in an NP.

The COLOUR, SPEED, and QUANTIFICATION semantic types consist only of (noun-like) adjectives, HUMAN PROPENSITY and DIFFICULTY involve only verb-like adjectives, while DIMENSION, AGE, VALUE, PHYSICAL PROPERTY, and POSITION include members from both classes. In Chapter 3, Genetti and Hildebrandt provide a detailed and instructive account of adjectives in Manange.

9. Correlations with other grammatical parameters

It is interesting to enquire whether there is any correlation between the type of adjective class found in a language and other grammatical parameters.

One suggestion is reported in Wetzer (1992, 1996) and Stassen (1997). These authors distinguish between two kinds of languages which they describe, colloquially, as having ‘nouny adjectivals’ and ‘verby adjectivals’. The ‘verby’ type covers languages in which adjectival concepts are considered to be expressed by verbs, and also those with a separate class of adjectives which share grammatical properties with verbs; similarly, mutatis mutandis, for ‘nouny adjectivals’. They suggest that languages with ‘nouny adjectivals’ tend to show a tense system, while languages with ‘verby adjectivals’ tend to lack such a system (where tense is defined as, minimally, a distinction between past and non-past). They offer an explanation for this. The referents of verbs are said to be time-varying, while those of adjectives are not. If adjectives are grouped together with nouns rather than with verbs, then verbs can show tense, but if adjectives are grouped with verbs, then there will be no tense specification for this combined class.

There appears to be a degree of statistical support for this generalization, although there are a considerable number of exceptions. A much more fine-grained study is needed, with greater attention to the varying grammatical properties of adjective classes in individual languages.

One recurrent pattern (not mentioned by Wetzer and Stassen) is that if a language has verbs derived from adjectives, then the adjective is preferred for describing a fairly permanent property and the verb for referring to a more transient state. This was illustrated for Igbo by (21–2) in §6.1.

I have observed a quite different correlation—between types of adjective class and mechanisms for marking the syntactic function of core arguments within a clause. Following Nichols (1986), we can recognize the following types of languages:
• H(ead-marking), where the syntactic functions of core constituents are shown mainly by obligatory pronominal marking in the predicate.
• D(ependent-marking), where the syntactic functions of core constituents are shown mainly by case marking and/or adpositions/particles associated with core NPs.
• Mixed H/D, where there is both pronominal marking within the predicate, and marking on core NPs.
• Neither H nor D; here syntactic function may basically be shown by the order of phrase constituents within a clause.

The primary types of adjective classes can be repeated from §6:

(I) Adjectives can function as intransitive predicate; these are called ‘verb-like’.
(II) Adjectives can function as copula complement; these are called ‘non-verb-like’.

This is a broad, general classification. It was mentioned in §6 that in a small number of languages adjectives can function both as intransitive predicate and as copula complement. We also mentioned a correlation (not a coincidence) between being ‘non-verb-like’ and being ‘noun-like’ (taking some or all of the grammatical processes that may apply to a noun).

Surveying the languages of the world, there is a striking quantitative correlation:

(33) Adjective classes of type II (non-verb-like) tend to be found in languages of type D (dependency-marking at clause level).
     Adjective classes of type I (verb-like) tend to be found in languages of type H (head-marking), and in languages with neither H nor D marking.

Tentative examples of this correlation include:

II and basically D:

• Most of the languages of Europe, north Africa, north and west Asia, and north India (Indo-European, Basque, Uralic, Turkic, North-east Caucasian, Afroasiatic, Burushaski).
• Most of the languages of Australia.
• Most of the languages of the Philippines.
• Some languages from North America (including Yokuts, Sahaptin, Sierra Miwok, Tarascan).
• Some languages from South America (including Quechua).

5 Locker (1951), working in terms of a speculative scheme of historical development, appears to suggest a correlation which is almost the reverse of that reported here: ‘in languages which do not mark the category of person on verbs, adjectivals form part of the verb class’ (quote from Wetzer 1996: 272; and see Wetzer’s discussion of Locker’s ideas on pp. 63–8, 272–3).
I and basically H:

- Many of the languages of North America (including most languages in Na-déné, Algonquian-Ritwan, Salish, Siouan, Iroquoian, Muskogean, Tsimshian, Zuni).
- Some languages from South America (including the Arawak family)
- Most Austronesian languages (excluding those in the Philippines).
- Ainu.

I and neither H nor D

- Most languages from south-east and east Asia (including Sinitic, Tibeto-Burman, Tai-Kadai, and some Austroasiatic).

It should be emphasized that this is very much a first-run-through of the data. Detailed study of the adjective classes in individual languages is required. There may, indeed, be languages of more than one type within a single genetic or areal grouping. Surveying Nilo-Saharan languages, Dimmendaal (2000: 218–19) notes that—in accordance with (33)—‘adjectives tend to pattern with nouns in dependent-marking languages and with verbs in head-marking languages’.

There are a number of exceptions to the generalization in (33), some of these being of particular interest.

(1) It is clear that, at an earlier stage, Australian languages were entirely dependent marking; in keeping with this, adjective classes are almost all ‘non-verb-like’ and also ‘noun-like’. (In fact, fairly subtle criteria have to be applied, in most languages, to distinguish between adjectives and nouns; see the discussion of Alpher’s criteria in §5.)

In recent times, bound pronouns have evolved over a good deal of the continent. In most of the languages in which they occur, these are clitics attached to the verb or a verbal auxiliary, and they are not always obligatory. However, languages over a continuous area in the central north have developed obligatory pronominal prefixes to verbs, a clear head-marking strategy. As a consequence they have lost or are in the process of losing dependent marking from NPs (see Dixon 2002 for full details).

Interestingly, a couple of these head-marking languages appear to be assigning more verb-like properties to their adjective class. It was mentioned, in §6.3, that in Emmi adjectives are negated like verbs, differently from nouns. And that in Nunggubuyu an adjective may take subject pronominal prefixes, like an intransitive verb, showing that it is functioning as head of an intransitive predicate.

The shift of a language from a dependent-marking to a head-marking profile is well-attested. Bound pronouns develop from what were free forms, and are obligatorily included in each predicate, with the old dependent marking on NPs dropping out of use. It may be that the shift from a ‘non-verb-like’ to a ‘verb-like’ adjective class—in order to re-establish the correlation in (33)—tends to follow the shift from dependent to head marking, but operating at a slower pace.
Japanese is a dependent-marking language; as discussed in §8, there are two adjective classes, one verb-like and one noun-like. This suggests a rather speculative historical scenario:

- **Stage One.** Japanese lacked dependent marking. It probably also lacked head marking, showing syntactic function by the ordering of phrasal constituents within a clause. There was a single class of adjectives (the present inflected class), similar to verbs in their grammatical behaviour. Japanese thus conformed with the correlation in (33).

- **Stage Two.** The language developed dependent marking. In association with this, it developed a second class of adjectives (the present uninflected class), which are ‘non-verb-like’.

The following points can be adduced to support this scenario:

- The marking of the function of NPs in a clause is by syntactic particles, rather than by case suffixes. This is a little surprising, since Japanese is a fairly synthetic language with verbs taking a variety of suffixes. It is consistent with dependent marking having been introduced rather recently. Indeed, Shibatani (1990: 333–57) states that although the topic-marking particle *wa* is present in the earliest records (from about the eighth century CE), the particles *ga*, marking subject, and *o*, marking object, developed fairly recently from other grammatical elements (the object marker evolving before the subject marker).

- The verb-like inflected adjective class appears to be archaic, being restricted to native lexemes; although large, it does not accept loans. It includes all *age*, *colour*, and *speed* items, and most from the *dimension* and *physical property* types (the types that are typically associated with an adjective class).

- The noun-like uninflected class is now bigger than the inflected class and is growing; it accepts all kinds of loans. This class includes some *dimension* and *physical property* terms, and most of the *human propensity* adjectives.

This scenario is speculative but not implausible. It suggests that, as with the Australian languages Emmi and Nunggubuyu, once a language shifts its profile with respect to head and dependent marking, then there will be a tendency to reorientate the grammatical properties of adjectives in accordance with the correlation in (33). In Nunggubuyu, the adjective class has had its grammatical possibilities extended so that it may now accept subject pronominal prefixes, like an intransitive verb (it does not yet directly accept tense and other verbal suffixes; this would be the next step). In Japanese, a new adjective class has been established, which is steadily increasing in size.

Korean is a clear exception to the correlation in (33), being dependent-marking and having just one adjective class, which is ‘verb-like’. The speculative scenario just suggested for Japanese could be extended to Korean—supposing that the language originally lacked both head and dependent marking, and had a class of ‘verb-like’
adjectives, but then developed dependent markers. Syntactic function is, as in Japanese, shown by particles following an NP, and some of these are thought to have developed recently. (For example, Sohn 1999: 30 mentions that the subject particle \textit{ka}—which is now a conditioned allomorph of the earlier subject marker \textit{i}—first appeared in the literature in 1572 CE and may possibly have been a borrowing from the Japanese subject particle \textit{ga}.)

I feel that extending the Japanese scenario to also apply to Korean may be transcending speculation in the direction of fantasy. Like other results in linguistic typology, (33) is a statistical correlation, not a hard-and-fast rule. There are exceptions to it. Besides Korean, these include Southern Paiute (Uto-Aztecan; Sapir 1930–1), which is also dependent-marking and shows ‘verb-like’ adjectives. It is, of course, worthwhile according detailed examination to these and other exceptions, to see whether there is an explanation (along historical or other lines). But it is unlikely that every exception will be provided with an explanation, and it is an error to try forcibly to provide one. Some languages just do have a typologically unusual combination of properties in some area of the grammar.

10. Semantic overlapping between word classes

I mentioned in §1.1 that while each word class has a similar semantic core between languages, there are a number of non-core concepts whose word class membership varies between languages; for example ‘hunger/hungry/be hungry’ can be a noun, an adjective, or a verb.

As discussed at several places above, some languages have small adjective classes whose members are typically taken from the core adjectival types, \textit{dimension}, \textit{age}, \textit{value}, and \textit{colour}; languages that have an adjective class with more than about ten members tend to include in it some \textit{physical property} terms. However, most languages have a large, open adjective class; it is interesting to compare the semantic membership of these classes.

In §6.1.2, I outlined the membership of the open adjective class in Fijian—it includes all \textit{dimension}, \textit{age}, \textit{colour}, \textit{physical property}, and \textit{speed} terms. But in Fijian \textit{human propensity} terms are verbs. This is explainable in terms of the grammatical organization of Fijian; adjectives may function just as intransitive predicates, while verbs may be either intransitive or transitive. Coding \textit{human propensity} terms as verbs allows them to take an object argument, corresponding to the optional prepositional phrase in English, as in \textit{happy (about)}, \textit{clever (at)}, \textit{jealous (about)}.

During the remainder of this section, I want to focus on the adjective class in the Australian language Dyirbal, and compare it with English. The adjective class in Dyirbal is large and open, and it is like the noun class in its grammatical properties (very similar to European languages). The semantic contents of the adjective classes in Dyirbal and English are similar; that is, most adjectives in Dyirbal correspond to adjectives in English, and vice versa.
However, there are a number of small semantic fields for which Dyirbal has adjectives while English has verbs. Some of these are exemplified in (34).

(34) Verb in English | Adjective in Dyirbal | Verb in English | Adjective in Dyirbal
(a) divide | nyarri ‘divided up’ | gather | balmbu ‘gathered together’
(b) split | yagi ‘split’ | heap | gurrun ‘heaped up’
(c) crack | gajala ‘cracked’ | must | guwurr ‘mustered’
(d) smash | muni ‘smashed up’ | lean | yulgarra ‘leaning’
(e) tear | gini ‘torn’ | marry | julbun ‘married’
(f) fold | wujun ‘folded’

It will be seen that the terms in (a) deal with related concepts, to do with changing the form of an object; those in (b) have to do with getting together several things. Note that, just as adjectives can be derived from verbs in English (cracked, torn, leaning, etc.), so can verbs be derived from adjectives in Dyirbal—adding -bi-l to form an intransitive and -ma-l to form a transitive stem (for example, yagi-bi-l ‘be split’, balmbu-ma-l ‘gather together’).

There are thus some differences in the ways in which languages divide up semantic space into word classes. Corresponding to adjectives happy, clever, and jealous in English, Fijian has verbs maarau(-ta’ina) ‘be happy (about)’, vu’u(-ta’ina) ‘be clever (at)’, and vuuvuuvu(-ta’ina) ‘be jealous (of)’. Corresponding to verbs divide and marry in English, Dyirbal has adjectives nyarri ‘divided up’ and julbun ‘married’.

It is now relevant to ask whether there is any semantic overlap between word classes in individual languages, and—if so—whether different languages show similar or different overlaps. That is, we can enquire whether a given concept may be coded (1) by both verb and noun; (2) by both adjective and noun; and (3) by both verb and adjective.

Looking at English, there are many instances of (1) and (2), but few of (3). Some examples of verb/noun and of adjective/noun overlap are given in (35).

(35) Verb Noun | Adjective | Noun
(a) hit blow | big, small | size
go journey | new, young, old | age
happen event | fast, slow | speed
(b) arrive arrival | long, short | length
think thought | accurate | accuracy
announce announcement | happy | happiness

The pairs in (a) are non-cognate between word classes. Those in (b) are some of the many examples of nouns derived from verbs and from adjectives (a different form of derivation appears in each example).
There are very few instances, in English, of verb and adjective with similar meanings (where the forms are not related through a productive derivation). One example consists of fear and afraid,⁶ as in:

(36) (a) I fear having to enter the lion’s cage
(b) I was afraid when I entered the lion’s cage

The adjective afraid is generally used to refer to the feeling one gets when one is actually in contact with something scary, while the verb fear tends to be used for a general feeling in connection with something that might happen.

In fact, this particular verb/adjective overlap recurs in a number of languages. For instance, the Australian language Yidiɲ has a transitive verb yarŋa-n and an adjective munu with very similar meanings to fear and afraid in English (Dixon 1991b: 240, 272). However, not all languages have such an overlap. Describing the Oceanic language Mokilese, Harrison (1976: 150) mentions that there is just one lexeme, mijik, corresponding to both ‘fear’ and ‘afraid’ in English. (Following the Oceanic tradition—see §5—Harrison says that this belongs to the class of stative verbs; however, applying the criteria set forth in the present study, the label ‘adjective’ is appropriate.)

English thus has considerable semantic overlap between the verb and noun classes, and between the adjective and noun classes, but very little between verb and adjective classes. Turning now to Dyirbal, we find exactly the opposite situation. There is here no overlap at all between verb and noun classes, or between adjective and noun classes. Basically, Dyirbal does not have abstract nouns such as ‘journey’, ‘event’, ‘thought’, ‘size’, ‘happiness’, or ‘colour’. One simply has to use the appropriate verb or adjective.

However, Dyirbal does have considerable semantic overlap between the classes of verb and adjective. A sample of these is set out in (37).

(37) | Verb             | Adjective        |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) nyaju-l ‘cook’</td>
<td>nyamu ‘cooked’</td>
</tr>
<tr>
<td>(ii) dadi-l ‘cover’</td>
<td>njulguny ‘covered’</td>
</tr>
<tr>
<td>(iii) gulba-l ‘block’</td>
<td>gumun ‘blocked’</td>
</tr>
<tr>
<td>(iv) wanda-l ‘hang’</td>
<td>burrgaligan ‘hanging’</td>
</tr>
<tr>
<td>(v) baŋganda-y ‘be sick’</td>
<td>wulmba ‘sick’</td>
</tr>
</tbody>
</table>

There is in fact a clear difference of meaning in each case, with the verb referring to an action, or getting into a state, or being in a state that varies with time, and the non-cognate adjective referring to either a state that is the result of an activity, or a state that is semi-permanent. There is a slightly different semantic contrast for each verb/adjective pair. Taking them one at a time:

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⁶ Interestingly, the best example I can find of semantic overlap between the verb and adjective class in English involves afraid, one of the set of adjectives that can only occur in copula complement function (not as a modifier).
(i) The transitive verb *nyaju-l* refers to the act of cooking; its participle *nyajuŋu* can describe something being cooked a bit or a lot, not enough or too much. In contrast, the non-cognate adjective *nyamu* means ‘cooked to perfection, ready to eat’.

(ii) The transitive verb *dadi-l* refers to any sort of act of covering; its participle *dadiŋu* can describe a blanket over just half a sleeping person. In contrast, the adjective *ŋulguny* means ‘properly covered, covered all over’.

(iii) The transitive verb *gulba-l* can refer to any kind of blocking; its participle *gulbaŋu* can be used to describe a temporary obstruction across a path. In contrast, the non-cognate adjective *gumun* means ‘something permanently blocked; for example, a road that has been closed off for good, or a road that simply stops at a certain place, never having been constructed any further.

(iv) The transitive verb *wanda-l* is used to describe hanging something up; the participle *wandaŋu* can be used of a basket or bucket which has been hung from a hook. The adjective *burrgaligan* refers to something hanging down; for example, long hair on a person or bark hanging off a tree (it can also be used to describe something that has been hung up).

(v) The intransitive verb *baŋganda-y* is used to describe feeling sick or ill (or just weary); the participle *baŋgandaŋu* refers to someone who is under the weather at present, but it is expected to get better. In contrast, the adjective *wulmba* refers to someone who is truly sick and is expected to die. (Death is believed to be caused by sorcery, so that using *wulmba* of a person is saying that a sorcerer has done something to them which will result in their death.)

The kind of overlap between these three major word classes in English and in Dyirbal can be shown diagrammatically (Fig. 1).

![Diagram of word class overlap](image)

It appears that most of the languages of Europe are basically of type (a), like English. It is interesting to enquire what other languages are of type (b), like Dyirbal. Data are hard to come by, since very few linguists provide a detailed description of the semantic characteristics of word classes, let alone investigate the possibility of semantic overlap between classes. There are just a few hints available. For Zuni (isolate, spoken in New Mexico), Newman (1968: 66) provides the following examples of overlapping between the verb class and what should probably be recognized as the adjective class:
In Chapter 9, Sohn offers some illuminating remarks on the semantic overlap between word classes in Korean. He shows that there is overlap between verb and adjective classes involving just native lexemes, whereas noun/verb and noun/adjective overlaps often involve one native and one loan item (the latter from the Sino-Korean stratum of vocabulary).

Overall, one would expect semantic overlap between word classes to be found most commonly in languages which maintain a strict correspondence between word class and functional slot. Dyirbal is of this type—a noun can only function as head of an NP (in predicate argument function) and a verb only as head of a predicate. A language with more fluid class-slot correspondences (such as Nootka, briefly discussed in §3 above) would be less likely to feature semantic overlap between its word classes.

11. The individual studies in this volume

The thirteen chapters which follow each provides a full and insightful characterization of the class of adjectives in a language which is of particular interest from this point of view. Chapters 2–3 describe languages which have two adjective classes, differing in some properties but sharing enough features for them each to be recognized as an adjective class. The adjective class in Chapter 4 shares properties with both nouns and verbs, while that in Chapter 5 is not particularly close to either nouns or verbs in its grammatical properties. Chapters 6–8 discuss adjective classes which are grammatically rather similar to nouns. Then, in Chapters 9–14, there are descriptions of adjective classes which have grammatical properties in common with verbs.

Anthony E. Backhouse, in 'Inflected and uninflected adjectives in Japanese' (Chapter 2) and Carol Genetti and Kristine Hildebrandt, in ‘The two adjective classes in Manange’ (Chapter 3), expand on the brief summaries provided in §8 above. Each language has a class of verb-like adjectives (called ‘inflected adjectives’ by Backhouse) and also a class of noun-like adjectives (called ‘uninflected adjectives’ by Backhouse, and just ‘adjectives’ by Genetti and Hildebrandt). For each language, the two classes can be grouped together as a bipartite adjective class on the basis of various shared properties. These authors provide fine-grained studies of the similarities and differences between grammatical properties of the two classes, and of how they divide up the adjectival semantic types between them.

‘The adjective class in Tariana’ by Alexandra Y. Aikhenvald (Chapter 4) describes how this Arawak language has a class with just twenty-nine monomorphemic members. Adjectives are like verbs in functioning as intransitive predicate (although with limited TAM possibilities) and like nouns in functioning as cop-
Adjective Classes in Typological Perspective

ula complement and as head of an NP. They are unlike nouns and verbs in being able directly to modify a noun. In Chapter 5, ‘Adjectives in Mam’, Nora C. England deals with a class which, like those in other Mayan languages, has about fifty monomorphemic members. All types of words may occur as intransitive predicate (although non-verbs have limited TAM possibilities). Properties of adjectives which distinguish them from nouns and from verbs include: taking certain derivational suffixes, forming a comparative, modifying a noun, being used adverbially, and functioning as complement of an existential predicate.

Previous writers have stated that adjectives cannot be distinguished from nouns in Totonac. Paulette Levy provides copious argumentation and exemplification—in ‘Adjectives in Papantla Totonac’ (Chapter 6)—as to why this is untrue. For example, only adjectives may modify a noun, and may enter into comparative constructions. There is here a smallish class of thirteen monomorphemic members, but—as in Manange, Tariana, and Mam—there are many derived members. Levy also includes a fascinating discussion of sound symbolism in adjectival forms. In ‘The small adjective class in Jarawara’ (Chapter 7), R. M. W. Dixon recognizes fourteen monomorphemic members, augmented by just a few derived forms. Adjectives are here very similar in their grammar to inalienably possessed nouns (which includes terms such as ‘smell’ and ‘noise’). The criteria for differentiating adjectives are subtle: position with respect to an augment modifier within an NP (adjectives can precede, possessed nouns must follow), ability to function as copula complement without an accompanying free noun, and gender agreement following a first or second person non-singular pronoun. In most Indo-European languages which retain nominal inflectional morphology, adjectives have very similar grammatical properties to nouns. Greville G. Corbett, in ‘The Russian adjective: a pervasive yet elusive category’ (Chapter 8), demonstrates the unusual character of adjectives in Russian; many have both a long form, which is morphologically similar to nouns, and a short form, which shows similarities with verbs. Five criteria for canonical adjectives are proposed, but although Russian has a very large number of adjectives, relatively few of them meet all five criteria. Corbett presents a detailed study, including examination of adjectival occurrence in different genres of text.

Korean and Wolof are like Chinese in that it has often been suggested that adjectives are indistinguishable from verbs. In ‘The adjective class in Korean’ (Chapter 9), Ho-Min Sohn demonstrates manifold differences. A member of the (large and open) adjective class functions as intransitive predicate like a verb but may not occur with certain moods, has different marking for indicative, may not take certain conjunctive suffixes, and may take the intensifier -ti. The suffix -élan/-ala has imperative meaning with a verb, but exclamatory function with an adjective. In addition, adjectives can form adverbs, and can occur in comparative and superlative, among many other criterial differences. In contrast, Fiona McLaughlin shows, in ‘Is there an adjective class in Wolof? (Atlantic family within Niger-Congo, Chapter 10), that there appear here to be just two criteria distinguishing adjectives
(of which there are several score underived forms) from verbs. When an adjective functions as intransitive predicate within a definite relative clause, the relative marker precedes the adjective and the definite marker follows; for a verb in the same functional slot, relative and definite markers are fused, and precede the verb. However, this property only applies for an adjective used alone; if a tense marker or an intensifier or a second argument is added to the adjective, then it behaves just as a verb. Secondly, if a noun is modified by both a relative clause involving an adjective and one involving a verb, that with the adjective always occurs closest to the noun.

In 'Adjectives in North-East Ambae' (Chapter 11), Catriona Hyslop describes a typical Austronesian language, in which adjectives (of which there are about 100 underived forms) pattern with verbs. Differences include: different functions of aspect-mood markers and of reduplication; only adjectives may be nominalized with -gin; and an NP marked by preposition dene indicates a comparative construction with an adjective but a 'from' relation with a verb. In Chapter 12, Nicole Kruspe discusses 'Adjectives in Semelai', from the Aslian branch of the Austroasiatic family. She identifies a class with about 300 members, including loans. There are two well-defined sub-classes: only eight dimension terms may form a morphological comparative, and the eight colour terms lack all but one of the derivational processes open to other adjectives. Adjectives as a whole lack certain derivations which are available for verbs; only adjectives occur in a periphrastic comparative construction, and in a resultative serialization construction.

Randy J. LaPolla and Chenglong Huang, in 'Adjectives in Qiang' (Chapter 13), show that this Tibeto-Burman language is unlike Manange in that it has a single class of adjectives (which is large and open) that may function as intransitive predicate. Differences from verbs include the semantic effect of reduplication, of the iterative aspect marker, and of the orientation prefixes. Only an adjective may function as an adverbial, directly modify a verb, and form a noun by addition of a definite marker. In 'Adjectives in Lao' (Chapter 14), N. J. Enfield shows that adjectives share basic properties with verbs, but also exhibit crucial differences: only adjectives may feature in comparative constructions, may take intensifiers khanaat5 'extent' and teep5 'rather', and may undergo a type of reduplication with the meaning ‘-is’. Both verbs and adjectives may be preceded by modifier jaak5; this indicates ‘want’ with verbs but may signify ‘somewhat’ with adjectives. Enfield has ‘adjective’ and ‘state verb’ as subdivisions of ‘stative verb’ which itself is a primary sub-class of ‘verb’; but note that he mentions rather more points of difference between adjectives and stative verbs—and thus between adjectives and all other verbs—than points of similarity.

It was mentioned in §5 above that since, in the familiar languages of Europe, adjectives have similar grammatical properties to nouns, there is often a reluctance to recognize—as a bona fide word class—an adjective class when it has similar grammatical properties to verbs. This stance is continued by the authors of Chapters 10–14, who each maintain that adjectives are not a major word class in their
language, but instead a sub-class of verbs. They might well have come to the same conclusion had they been describing Korean—a language for which it has been suggested that adjectives belong to the class of verbs—for which there are a fair number of distinguishing marks, as indeed there are for the languages dealt with in Chapters 11–14 (although not for Wolof, in Chapter 10). If similar principles were applied, we would have to say that adjectives are a sub-class of nouns—rather than a distinct noun class—in Papantla Totonac, in Jarawara, and perhaps also in Russian. (And either that nouns are a sub-class of verbs or that verbs are a sub-class of nouns in Nootka, described in §3, since in that language nouns and verbs have very similar morphological and syntactic properties.)

Linguistics involves the detailed description and analysis of languages in terms of a general typological framework. Each of theory and description feeds the other. New results from language study go towards refining and amplifying the typological framework; and the framework should determine the way in which the description of an individual language is cast.

Consider the general theoretical implications of the stance taken by the authors of Chapters 10–14 (but abjured by the authors of other Chapters). In §6, I outline four general types of languages: adjectives may be grammatically similar to nouns, or to verbs, or to neither, or to both. Many languages have adjectives close in properties to verbs (these include Chinese, Vietnamese, and those covered in Chapters 9–14). If we treat adjectives as a sub-class of verbs, these languages would have no major word class Adjective. There are also many languages whose adjectives have similar properties to nouns (these include Latin, Spanish, Hungarian, Igbo, Quechua, Dyirbal, and those discussed in Chapters 6–8); for consistency, we would have to say that these languages too lack a major word class Adjective, with adjectives being analysed as a sub-class of nouns.

This leaves two small sets of languages. In §6.4 we mentioned those in which adjectives have quite different grammatical properties from both verbs and nouns—such as English, Teribe (from the Chibchan family), and Mam (in Chapter 5). Here one would not want to say that adjectives are a sub-class of nouns or of verbs. These few languages would have Adjective as a major word class; having such a class would then be a rather rare feature across the languages of the world.

Now consider the last class, discussed in §6.3, where adjectives show similar inflections to verbs when functioning as intransitive predicate, and similar inflections to nouns when functioning within an NP (exemplified by Berber languages, by the Australian language Nunggubuyu, and by Tariana, described in Chapter 4). On the principles followed by the authors of Chapters 10–14, adjectives must be regarded as a sub-class of verbs, since they share crucial properties with verbs, and also as a sub-class of nouns, since they share crucial properties with nouns. This is scarcely satisfactory. But if such an analysis were followed, there would again be just two major word classes, Noun and Verb, with no distinct adjective class (adjectives would be those items with double membership of noun and verb classes).
Even greater difficulties would arise for a language with two adjective classes, such as Japanese, in Chapter 2, or Manange, in Chapter 3. These authors recognize a bipartite adjective class, all of whose members share certain properties. There are two sub-classes, one with similar (but not identical) properties to verbs, and one with similar (but not identical) properties to nouns. On the sub-class-of-verbs and sub-class-of-nouns principle, one would not be able to recognize an overall adjective class for languages of this kind.

Enough has surely be said to show that if the grammar of a language is to contribute to general typological theory, then it must be cast in terms of the universal parameters thrown up by that typological theory, while still taking care to pay full attention to the distinctive properties of that language. The approach followed in this chapter (and by the authors of Chapters 2–9) presents a maximally effective and universal characterization of the universal major word class Adjective. Every language which has been examined features such a class, although the classes differ in their sizes and in their grammatical similarity (or lack of similarity) to the other major word classes, Noun and Verb. The typological framework employed enables quick comparison of meanings covered, and of recurrent morphological and syntactic properties.

In Chapter 15, ‘Adjective classes: what can we conclude’, John Hajek draws together some of the recurrent properties of adjective classes, as discussed in earlier chapters, also paying attention to the size of classes and correlations between grammatical properties of adjective classes and head vs. dependent marking at clause level. He pays particular attention to negation, comparatives, intensifiers, reduplication, and function within the noun phrase. Hajek also suggests the Eurocentric stance—of being reluctant to recognize ‘adjectives’ as a major word class when their grammatical properties are not closely similar to those of nouns—may be beginning to wane.

12. Conclusions

I suggest that the label ‘adjective class’ be used for a word class that:

- is grammatically distinct from noun class and verb class;
- includes words from some or all of the prototypical adjective semantic types—DIMENSION, AGE, VALUE, and COLOUR;
- and (a) functions either as intransitive predicate or as copula complement and/or (b) modifies a noun in an NP.

In some languages two separate adjective classes can be recognized. Note that although the prototypical adjective class combines functions (a) and (b), in some languages the class has only one of these functions.

A broad division can be made between adjectives which may function as head of an intransitive predicate (‘verb-like adjectives’) and those which may function as copula complement (‘non-verb-like adjectives’); in just a few languages, adjec-
tives may have both functions. A separate parameter concerns whether, when an adjective occurs in an NP, it may take some or all of the morphological processes available to nouns; if it does it is ‘noun-like’, if not ‘non-noun-like’. There is a correlation—but not a coincidence—between being ‘non-verb-like’ and being ‘noun-like’. In some languages, adjective classes are both ‘verb-like’ and ‘noun-like’, and in some they are both ‘non-verb-like’ and ‘non-noun-like’.

It can sometimes be a tricky matter finding criteria to distinguish ‘verb-like’ adjectives from verbs, or ‘noun-like’ adjectives from nouns. I believe that in every language which is studied in detail, such criteria can be found. Criteria are not always of the definitive ‘yes-or-no’ variety; as Alpher (1991) shows for the Australian language Yir-Yoront (see §5), a collection of statistical tendencies can combine to provide a satisfactory grammatical characterization of the adjective class (as opposed to noun and verb classes).

As in every other aspect of linguistic criteria, the parameters and classifications are not watertight. For example, the degree to which adjectives are ‘verb-like’ or ‘noun-like’ varies from language to language. And although for most lexemes in a language their grammatical class membership can be unambiguously assigned, there are always likely to be a few fuzzy areas between classes (Dixon 1988: 239–40 illustrates this for Fijian).

In §9 a tentative correlation was established: non-verb-like adjective classes tend to be found in languages with dependent-marking at clause level, with verb-like adjective classes being typically found in languages with head-marking or with neither dependent- nor head-marking. I suggested, with some supporting exemplification, that if a language shifts its head-/dependent-marking profile, then the orientation of its adjective class is likely slowly to change, to re-establish the correlation.

Finally, §10 looked briefly at the kinds of semantic overlap between the three major word classes. We saw that English has considerable verb/noun and adjective/noun but rather little verb/adjective overlap, while Dyirbal is almost exactly the reverse, with considerable verb/adjective but no verb/noun or adjective/noun semantic overlap.

**References**


1 Adjective Classes in Typological Perspective


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