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ADJECTIVE PHRASES

SUMMARY

This paper represents a cross-linguistic study of adjective phrases (APs) in a sample of thirty languages. The syntactic behavior of APs is examined only in languages which have adjectives as a separate word class. It is argued that the class of adjectives which form APs can often be specified semantically and derivationally, and that such adjectives are usually non-prototypical, i. e., that they do not express the primary qualities of age, size, color, etc. It is also established that there is an asymmetry in the attributive and predicative use of APs. If, in some language, an AP can be used attributively, then it can also be used predicatively, but not vice versa. It is argued that attributive APs should be treated as relative clauses, and represented as such in the RRG framework.

INTRODUCTION

One of the major claims advanced by RRG with respect to NP structure (Van Valin & LaPolla 1997), is that adjectives, as a non-branching category, should be represented only in the operator projection, not in the constituent projection. The distinction between branching and non-branching categories is crucial to Dryer's (1992) finding that only branching categories are involved in word-order universals. Moreover, the claim that adjectives are operators found an independent confirmation in Dryer's discovery that the relative order of adjectives and the nouns they modify is not involved in any of Greenberg's statistical word order correlations.

In this paper I shall examine RRG's claim that adjectives are a non-branching category, by looking at adjective phrases in a sample of thirty languages. Most of the languages in my sample are Indo-European, for two reasons: firstly, comparative Indo-European linguistics is my primary field of interest, and I feel more at home in analyzing examples from the languages I am familiar with. Secondly, Indo-European languages are probably the best-studied family in the world, and it is relatively easy to find comprehensive grammars of languages belonging to this family. Needless to say, some information about adjective phrases can be found only in the most comprehensive grammars, since the subject is largely neglected in the literature. On the other hand, finding data on adjective phrases in non-Indo-European languages is difficult. Even when native speakers are available, it is especially burdensome eliciting examples of adjective phrases, unless the speakers are trained linguists themselves, since differences between true adjectives, adjective-like verbs, and participles, are often not easily discerned. However, the size of the sample and its heavy Indo-European bias will necessarily make my conclusions provisory.

ADJECTIVES AND ADJECTIVE PHRASES

Adjectives have two syntactic uses:

- predicative, as predicates;
- attributive, as modifiers;

It cannot be said that either of these uses is primary with respect to the other. It has been claimed (Thompson 1989) that adjectives - or, more generally, property concept words - are most commonly used to introduce new discourse referents, and to predicate a property of an established discourse referent; thus, they share the predicating function with verbs, and the referent-introducing function with nouns. This is why adjectives share many syntactic features with verbs and nouns.

In many languages adjectives do not exist as a separate word-class; words with adjectival meaning are expressed either as verbs, or as nouns. For example, in Spoken Cambodian, adjectival meanings are expressed by a subclass of verbs (Huffman 1970: 56)¹:

(1)

sr□*y lqaa* "pretty girl"
girl (is) pretty

sr□*y nuh tw*□□*-kaa lqaa* "that girl works well"
girl that works (is) good

sr□*y nuh lqaa* "that girl is pretty"
girl that pretty

In Hausa, on the other hand, adjectival meanings are expressed by nouns (Smirnova 1982), that is, the equivalent of "great man" is something like "man with greatness".

For those languages, the problem of syntactic representation of APs simply does not arise. In a language like Hausa, the equivalent of *A glass full of beer* will be something like *A glass with the fullness of beer*, and in languages such as Cambodian, the relative phrase with the verb meaning "be full" would be used instead of an AP, so we would have roughly something like *A glass which is full of beer*. In both types of languages without adjectives, the equivalents of attributive adjective phrases are relative phrases, or NPs of a more commonly observed kind. Such languages will be of no interest to us in this paper, although we must be aware of two *caveats*:

-in some languages it is difficult to decide whether a particular word class is a subset of verbs (or nouns), or if it should be recognized as a separate class of adjectives. This is the case, e. g. in Amis (a Formosan language), described by Wu 2001.

¹ Another such language is Japanese, where words with adjectival meaning inflect for tense and mood in Japanese, just like verbs, but a small number of them, called "nominal adjectives", do not, cp. Kuno 1973: 28.

-in some languages there is a marginal, closed class of adjectives, comprising usually just a few words, e. g. in Yimas (Papuan), where there are, according to Foley (1991: 93) only three adjectives, *yua* "good", *kpa* "big", and *ma* "other". In Igbo, there are exactly eight adjectives, and they express the prototypical adjectival meanings (Schachter 1985: 15): *ukwu* "large", *nta* "small", *ojii* "black, dark", *óca* "white, light", *óhírú* "new", *ocye* "old", *óma* "good", and *ójóó* "bad". In such languages, I gather from the literature that APs either do not exist, or are as yet undescribed. The matter would require further investigation.

Like adjectives, APs also have two uses, namely predicative and attributive; this is the difference between *A glass full of beer* and *A glass is full of beer*. In the remainder of this paper, we shall examine the differences between the attributive and predicative uses of APs, as well as their implications for RRG.

CROSS-LINGUISTIC GENERALIZATIONS

We suggest the following generalizations:

1. All languages with the separate word-class of adjectives in our sample have adjective phrases²; however, not all adjectives can form adjective phrases. The subset of adjectives with which adjective phrases are formed can often be specified semantically, derivationally, and/or morphologically.

Nearly all languages have APs formed with adjectives such as "full"³:

(2)

English: *a glass full of beer*

Croatian: *čša puna piva*
 glass full beer(Gsg.)

German: *ein Glas voll bier*

Irish: *gloine lán de bheoir*
 glass full of beer

Latin: *poculum plenum cerevisiae*

Turkish: *bira ile dolu bardak*
 beer with full glass

However, APs with prototypical adjectives, such as "new", or "big" are much rarer, in most languages (I use the term "prototypical adjectives" in the sense of Dixon 1977).

Prototypical adjectives express:

² Denis Creissels (2002: 15) claims that in several African languages having adjectives as a word class, APs do not exist; he cites Tswana as an example of such a language, where the equivalent of French *un homme fier de ses enfants* is *un homme qui se glorifie de ses enfants*, i.e. a relative phrase with a verbal form is used instead of an adjective phrase.

³ An exception in my sample is Hindi, where instead of the adjective "full", the participle of the verb "to fill" must be used; thus, Hindi *beer bharā gilās* is actually "a glass filled with beer".

- dimension: big, little, long, wide...
- Physical property: hard, heavy, smooth...
- Colour
- Human propensity - jealous, happy, clever, generous,...
- Age - new, young, old,...
- Value - good, bad, pure,...
- Speed - fast, slow, quick,...

In Croatian, prototypical adjectives as a rule do not form adjective phrases; the same seems to hold for English, and for several other languages. But there are exceptions.

(I) In most languages, the prototypical adjectives can take an argument in the dative of benefit (or the adpositional equivalent thereof):

(3) Eng. *This guy is too young for you*

(3) Croat. *On je vrlo dobar svojoj djeci* "He is very good to his children"
 he is very good his own(d.) children(d.)

(4) Hungarian *Az apa jó irántam* "Father is good to me"
 the father good to me

However, such APs are almost never used attributively⁴:

(5) **This guy too young for you*

(6) **Čovjek vrlo dobar svojoj djeci*
 man very good to his children

(II) Another set of exceptions involves equative, comparative, and superlative constructions. All languages have a way of expressing meanings such as "younger than my sister", or "lovelier than the queen", and they do so generally by forming APs. However, restrictions against the attributive use of such APs are also common⁵:

(7)

Eng. *My brother is younger than my sister* / **My younger than my sister brother* /
 **My brother younger than my sister*

(8)

Croat. *Moj brat je mlađi od moje sestre* / **Moj mlađi od moje sestre brat*
 my brother is younger than my sister

⁴In Hungarian, it is possible to use the pattern attributively: *A jó irántam apa* "Father, (who is) good to me".

⁵ Hungarian allows even the attributive use of comparative and superlative APs:

ez az összes közül leggyorsebb autó "this car (which is) fastest of all"
 this Art. all of fastest car

2. Adjective phrases regularly involve adjectives lexically derived from nouns (e. g. the Slavic possessive adjectives), or verbs. Otherwise, there are strong restrictions against their attributive use (e. g. in comparative constructions).

Adjective phrases have much in common with participial clauses, of the kind observed in Latin:

- (9) *Danai dona ferentes* "Greeks bringing gifts"
Greeks gifts bringing

It is almost universally accepted that such participial clauses are a special kind of relative clauses with non-finite verbal forms. In many languages they share the same position with respect to the head noun with the relative clauses.

In Lithuanian, relative clauses obligatorily follow the head noun, but participial and adjective clauses precede it (Mathiassen 1996: 164):

- (10) *jis laukė kelionėn pasiruošiusio traukinio*
he waited journey(Lsg.) prepared(Gsg.) train(Gsg.)
"He waited for the train (which had) prepared for the journey"

- (11) *alaus pilna taurė* "a glass full of beer"
beer(Gsg.) full(Nsg.F) glass(Nsg.F)

This can be transformed into a kind of relative clause with omitted relative pronouns, which is then separated by a pause in speech, and a comma in the written form:

- (12) *jis laukė traukinio, pasiruošiusio kelionėn*
(13) *taurė, alaus pilna*

Adjectives can be derived from verbs not only morphologically (as participles), but also derivationally; this is the case with the adjectives such as *understandable* (from *understand*), or *abusive* (from *abuse*). Such adjectives form APs very easily, as a rule:

- (14) Eng. *understandable to all*
(15) Croat. *razumljiv svima*
(16) Lat. *intelligibilis omnibus*

Nouns are the other source of adjectives; the formal relationship between nouns and adjectives can be morphological, which is the case with the possessive adjectives in Slavic, where every animate noun has a possessive adjective form (Matasović 2000). The relationship can also be derivational (lexical). Thus, the adjective "proud" is in many languages derived from the noun "pride":

- (17) Croatian: *ponos-an otac* "proud father"
pride-adj.suff. father
(18) Turkish: *gurur-lu baba* "proud father"
pride-adj.suff. father

This is, of course, no absolute universal; in Russian, for example, the noun "pride" (*gordost'*) is actually derived from the adjective stem (*gord-*), rather than vice versa:

(19) Russian: *gordyj otec* "proud father"

Such adjectives also form adjective phrases easily:

(20) Croatian: *Otac ponosan na sina* "Father (who is) proud of his son"
father proud on son

(21) Russian: *uspexom gordyj otec* "Father (who is) proud of (his) success"
success(1sg.) proud father

However, in Turkish, the adjective *gururlu* "proud" cannot be used to form an AP; rather, the participle of the verb *duyman* "feel" must be used with the noun *gurur* "pride":

(22) Turkish *çocuğ-lu gurur duy-an baba* "Father proud of his child"
child-poss.3sg.-Abl. pride feel-part. father

It is the prototypical adjectives that are the least likely to be morphologically or derivationally derived from nouns *viz.* verbs. Precisely this class of adjectives is subject to most severe restrictions on AP formation.

3. In many languages there are restrictions against the attributive use of APs; restrictions against their predicative use are much less common⁶, or even non-existent. This suggests the following implicational universal:

If the adjective phrase AP in language L can be used attributively, then it can also be used predicatively, but not vice versa.

In English, as noted by Van Valin & LaPolla (1997) many APs cannot occur attributively, e. g. *Proud of his son father*.

In Croatian, one cannot form attributive APs with the preposition *za* + infinitive:

(23) **Težak za nositi kamen* / **Kamen težak za nositi*
heavy to carry stone stone heavy to carry

But such APs are OK when used predicatively, at least in Croatian:

⁶ There are, however, often restrictions against the predicative use of certain *simple* adjectives, adjectives that *cannot* form adjective phrases; e. g. in Croatian, adjectives formed with the suffix *-ski* are rarely used predicatively (e. g. *školski* "school's, pertaining to school", *gradski* "city's, pertaining to city"); similarly, in German, adjectives such as *medizinisch* "medicine", *städtisch* "city's", *eisern* "iron", *seiden* "silk", etc. cannot be used predicatively, except metaphorically (e. g. *sein Wille ist eisern* "he has iron will"), cp. Jung 1967: 305.

(24) *Ovaj kamen je težak za nositi* "the stone is heavy to carry"
this stone is heavy to carry

In Irish, the impossibility of attributive use of comparative and superlative phrases was even extended to comparatives and superlatives without complement (Thurneysen 1946, Mac Eoin 1993).

(25) *In fer as siniu oldaas m' athir* "The man older than my father"
art. man who-is older than-is my father
Lit. "The man who is older than my father is"

(26) *In fer as siniu* "The older man"

Thus, in Old Irish, as well as in the modern language, comparatives and superlatives can be used only predicatively. To say, e. g., "The oldest man" in Old Irish, you have to use the relative clause, thus "The man who is oldest", *in fer as sinem*, where *as* is the relative form of the verb "to be", and *sinem* is the superlative of *sen* "old"; **in fer sinem* is strictly ungrammatical.

RESTRICTIONS ON THE USE OF ATTRIBUTIVE APs

I have found two types of restrictions on the use of attributive APs in the languages in my sample.

A) Attributive APs cannot be formed at all:

(27) Albanian *ai është krenar për punën e vet* "he is proud of his (own) work", but:
he is proud of work his own

(28) **babai krenar për punën e vet* "father (who is) proud of his work"
(father)

In order to form the equivalents of attributive APs in Albanian, adverbs instead of adjectives have to be used:

(29) *kazan i plotë* "full cauldron"
cauldron full

(30) *një kazan plot me dukate* "a cauldron full of gold coins"
a cauldron full(adv.) with coins

(31) **kazan i plotë me dukate*

Similarly, in Estonian, attributive APs cannot be formed as a rule, but there are predicative APs:

(32) *Isa on uhke pois-iga* "Father is proud of (his) son"
father is proud son-Instr.

(33) **Uhke pois-iga isa* "Proud of his son father"

In German, adjectives must be replaced with adverbs if used with the complement consisting of *zu* "to" + infinitive, and such constructions can be used only predicatively, never attributively:

(34) *Ein schwerer Stein* "a heavy (m.) stone (m.)"

(35) *Eine schwere Lampe* "a heavy(f.)lamp(f.)"

(36) *Dieser Stein ist schwer zu tragen* **Der schwer zu tragen Stein*
This(m.) stone(m.) is heavy to carry

(37) *Diese Lampe ist schwer zu tragen* **Diese Lampe ist schwere zu tragen*
This(f.) lamp(f.) is heavy to carry

To this category also belong the comparative, superlative, and equative constructions discussed above. In many languages, restrictions on the formation of attributive APs are lexically determined, i. e., for some adjectives such phrases cannot be formed, while they are regularly formed with other adjectives. The important thing is, however, that such restrictions are found only with respect to the formation of attributive APs, never with respect to the formation of predicative APs. Thus, for example, in Polish, the adjective *dumny* "proud" can be used with a complement predicatively, but not attributively:

(38) *Ojciec jest dumny ze swojego syna* "Father is proud of his son",
Father is proud of his.own son

but it is impossible (or, according to my informant, "unnatural") to say:

(39) **Ojciec dumny ze swojego syna* "Father (who is) proud of his son".

In (Lybian Spoken) Arabic, relative clauses are often used instead of attributive APs; thus, while it is possible to say:

(40) *Al-nahro maliei be-al-hot* "The river is rich in fish"
art.-river(m.) rich(m.) in-art.-fish(m.)

the equivalent of "The river rich in fish" is:

(41) *al-nahro althe maliei al-hoto*
art.-river(m.) which(m.) rich(m.) art.-fish

B) Attributive APs can be formed, but have to be realigned with respect to the head noun, and placed on the same side of the head noun as the relative clause:

English:

(42) *A valley rich in springs / *Rich in springs valley*

(43) *People angry with politicians / *Angry with politicians people*

Croatian:

(44) *Dolina bogata izvorima / *Bogata izvorima dolina*

valley rich springs(Instr.)

"A valley rich in springs"

(45) *Ljudi bijesni na političare / *Bijesni na političare ljudi*

people angry on politicians

"People angry with politicians"

Latin

(46) *tuas litteras plenissimas suavitatis / ?*tuas plenissimas suavitatis litteras*

your letters full of sweetness (Cicero, *Ep. ad Fam.* 9 18 1)⁷

In some languages no realignment takes place with any of the APs, e. g. in Hindi:

(47) *beṭe par garvit pitā* "father proud of (his) son"

son of proud father

However, Hindi also has preposed relative clauses:

(48) *jis ādmī ne yah patr likhā, vah bhārtīy hogā*

"The man who wrote this letter is probably an Indian", lit. "Which man wrote this letter, he is probably an Indian" (McGregor 1986: 83)⁸.

It is clear from the preceding discussion that the attributive use of APs is disfavored cross-linguistically. The question is - why this should be so, if the attributive and predicative use of simple adjectives are both equally important, and equally proper to the category of adjectives.

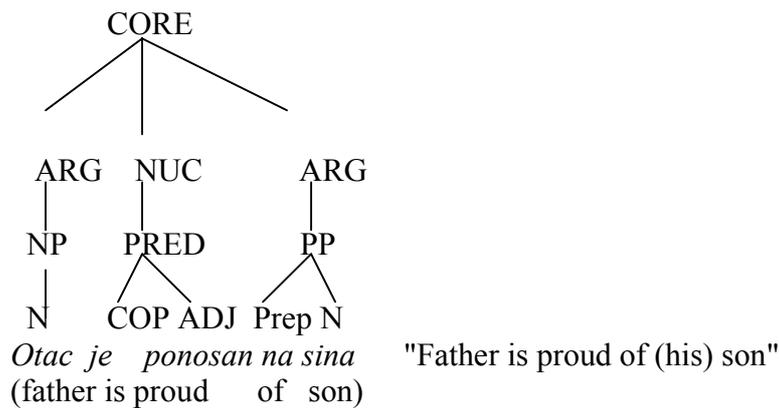
CONSEQUENCES FOR RRG

Mismatches between morphological properties of linguistic units and their syntactic behavior do not represent a difficulty to RRG; the fact that a word is morphologically an adjective does not imply that it has to be represented as an operator. Predicative adjectives in copular constructions are analyzed as nuclei, just as verbs are. Predicative adjective phrases can accordingly be treated similarly as transitive verbs and their objects (VPs in the generative framework):

⁷ Except in poetry, where word order is very free, attributive APs in prenominal position are disfavored in Latin; at least, this is my opinion reached after spending many hours browsing through electronic editions of Latin texts on the Internet; examples of such a construction can be found mostly in the artificial rhetorical language of Cicero and Tacitus, e. g. Cicero, *Ver.* 4. 126 *Cerres ornamentis fanorum atque oppidorum habeat plenam domum*, Tacitus *Dial.* 16. 1 *Magnam et dignam tractatu quaestionem movisti*.

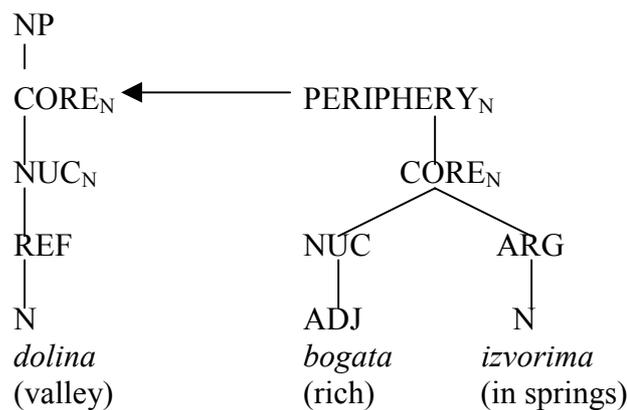
⁸ Cp. also the Hungarian examples in footnotes 3 and 4. Hungarian has both preposed and postposed relative clauses.

(FIGURE 1)



There is a bigger problem with attributive APs, however. It is hard to see how they should be analysed if adjectives are to be represented as non-branching categories only in the operator projection. In case of languages where attributive APs are obligatorily realigned with respect to the head noun, it could be argued that they should be analyzed as relative clauses (Matasović 2000: 108):

(FIGURE 2)



In all of the surveyed languages in which realignment is obligatory, or preferred, the AP is placed on the same side of the head noun as the relative clause⁹. Moreover, in Croatian, there is another piece of evidence that attributive APs are really relative clauses:

- (49) *Čovjek ponosan na svoj posao* "Man (who is) proud of his (own) work"
 Man proud of his.own work

In this example the possessive reflexive pronoun *svoj* is used, not the 3sg. possessive pronoun *njegov*. Now *svoj* is always coreferent with the subject of a clause:

- (50) *Vidim svoju knjigu* "I see my book"
 I see my.own book

⁹ Languages that can have relative clauses on both sides of the head noun, such as Latin and Hungarian, seem to allow APs in both pre-and postnominal position.

(51) *Ivan gleda svoju sliku* "Ivan is looking at his picture"
 I. is.looking.at his.own picture

However, in the example above it is difficult to see what is the possessive reflexive pronoun *svoj* coreferent with. If we assume that the AP is actually a relative clause with unexpressed relative pronoun *koji*, then the possessive reflexive pronoun *svoj* can be coreferent with that pronoun, which is the subject of the relative clause:

(52) *Čovjek (koi, je) ponosan na svoj posao*
 man who_i is proud of his.own_i work

Thus, there is evidence that at least *some* attributive APs in *some* languages should be treated as relative clauses. But problems remain:

I. In some languages, no realignment is necessary: attributive APs remain on the same side of the head noun as the simple adjectives, and on the opposite side of the head noun than relative clauses, e. g. in Russian:

(53) *ryboj bogataja reka* "a river rich in fish"
 fish (I sg.) rich (N sg. f) river (N sg. f.)

Since Russian does not use the copula in predicative constructions, postposing the AP would give us the meaning "The river is rich in fish".

Similarly, in German:

(54) *Der auf seinen Sohn stolze Vater* "Father, (who is) proud of his son"

II. In Lithuanian, there is the actual contrast between the real attributive APs and APs used as relative clauses with omitted relative pronouns (cp. above):

Adjective phrase:

(55) *alaus pilna taurė* "a glass full of beer"
 beer(Gsg.) full(Nsg.F) glass(Nsg.F)

Relative clause:

(56) *taurė, alaus pilna*

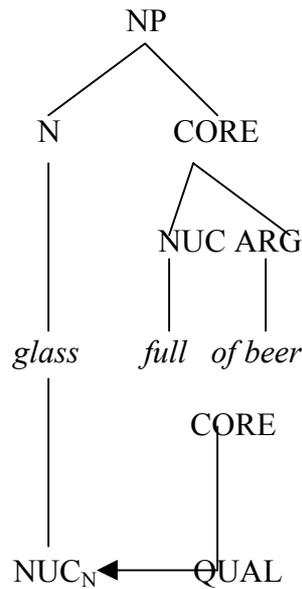
In such languages, however, APs are placed on the same side of the NP they modify as participles are. In German, Russian, and Lithuanian, participles must precede the head noun, and the reverse order is ungrammatical:

(57) *der arbeitende Junge* / **der Junge arbeitende*

(58) *rabotajuščij mal'čik* / **mal'čik rabotajuščij*

(59) *dirbantis berniukas* / **berniukas dirbantis*

(FIGURE 4)



However, two arguments make this a less desirable analysis. Firstly, the structure of the complex NP above is stipulated *ad hoc*; in terms of the Layered Structure of the NP, what is the relation of N (*glass*) with respect to the CORE (*full of beer*)? The fact that the formalism of the theory allows us to draw a constituent tree for a syntactic structure does not mean that any representation will do, or that it is intuitively plausible. Secondly, and more importantly, such a representation would require of us to reject one of the major empirical claims of RRG, namely, that all linguistic units are represented in one syntactic projection, and one projection only. Yet in the simplified representation above, the AP *full of beer* is represented in both the operator and the constituent projections simultaneously.

CONCLUSION

One of the most original claims of RRG with respect to other syntactic theories is that linguistic units are organized in two projections, neither of which is primary (or underlying) with respect to the other. The distinction between the constituent and operator projection is crucial to RRG's conception of grammar. It has also important consequences for the way grammar is implemented in the human cognitive system: if the distinction between the constituent and operator projection is "real", and not just a convenient way of organizing linguistic data invented by linguists, then perhaps they correspond to two different ways of cognitive processing of syntactic structures. If this is so, we would expect that linguistic units sharing some features with operators, but also having a branching structure, will be difficult to process, and thus disfavored cross-linguistically. Attributive adjective phrases are indeed such units.

In this paper, we have found evidence that attributive adjective phrases are strongly disfavored in several languages. Although their exact syntactic representation remains a problem for linguistic theory, their syntactic behavior just confirms that the distinction between the operator and the constituent projection is well founded.

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SAMPLE OF LANGUAGES

Albanian, Arabic (Lybian Spoken Arabic), Breton, Cambodian, Croatian, English, Estonian, Fijian (Boumaa), French, German, Greek (Ancient), Hebrew (Ancient), Hindi, Hungarian, Indonesian, Irish, Italian, Japanese, Korean, Latin, Lithuanian, Polish, Russian, Slovenian, Spanish, Tamazight (Berber), Turkish, Tzutujil, Welsh, Yimas

REFERENCES

- Creissels, D. 2002 "Adjectifs et adverbes dans les langues subsahariennes", paper presented to Colloque "Théories linguistiques et langues subsahariennes", Université de Paris VIII, February 6-8 2002.
- Dixon, R. M. W. 1977 "Where have all the adjectives gone?" *Studies in Language* 1: 19-80.
- Dixon, R. M. W. 1988 A Grammar of Boumaa Fijian, Chicago: The University of Chicago Press.
- Dryer, M. S. 1992 "The Greenbergian Word Order Correlations", *Language* 68: 81-138.
- Everett, D. 2001 "Asymmetrical Clause Linkage in Wari' and the Theory of Phrase Structure", MS (available for download from the RRG website)
- Foley, W. A. 1991 The Yimas Language of New Guinea, Stanford: Stanford University Press.
- Givón, T. 2001 Syntax, Vol. 1, Amsterdam: Benjamins.
- Huffman, F. E. 1970 Modern Spoken Cambodian, Ithaca: Cornell University Press.
- Jung, W. 1967 Grammatik der deutschen Sprache, Leipzig: VEB Bibliographisches Institut.
- Kuno, S. 1973 The Structure of the Japanese Language, Cambridge MA: The MIT Press.
- Lieber, R. 1992 Deconstructing Morphology: Word Formation in Syntactic Theory, Chicago: The University of Chicago Press.
- Mac Eoin, G. 1993 "Irish", in: M. J. Ball (ed.) The Celtic Languages, London: Routledge: 101-144.
- Matasović, R. 2000 "The Adjective and Possessive Phrases in Croatian", *Suvremena lingvistika* 49/50 2000 (2002): 99-110.
- Matasović, R. 2001 Uvod u poredbenu lingvistiku (Introduction to Comparative Linguistics), Zagreb: Matica hrvatska.

- Mathiassen, T. 1996 A Short Grammar of Lithuanian, Slavica Publishers: Columbus.
- McGregor, R. S. 1986 Outline of Hindi Grammar, Oxford: Clarendon Press.
- Schachter, P. 1985 "Parts-of-Speech Systems" in: T. Shopen (ed.) Language Typology and Syntactic Description, Cambridge: Cambridge University Press: 3-61.
- Smirnova, M. A. 1982 The Hausa Language, London: Routledge.
- Stephens, J. 1993 "Breton", in: M. J. Ball (ed.) The Celtic Languages, London: Routledge: 349-409.
- Thompson, S. A. 1989 "A Discourse Approach to the Cross-Linguistic Category 'Adjective'", in: R. Corrigan *et alii* (eds.) Linguistic Categorization, Amsterdam: Benjamins: 245-265.
- Thurneysen, R. 1946 A Grammar of Old Irish, DIAS: Dublin.
- Van Valin Jr, Robert D. and LaPolla, R 1997 Syntax. Structure, meaning and function, Cambridge: Cambridge University Press.
- Wu, J. "Clausal Modifiers in Amis", in: 2001 International Workshop and Conference on Role and Reference Grammar, July 29-29 2001, at the University of California, Santa Barbara: 70-79.