

Aspects of Fijian noun-phrase structure*

Determination and Modification

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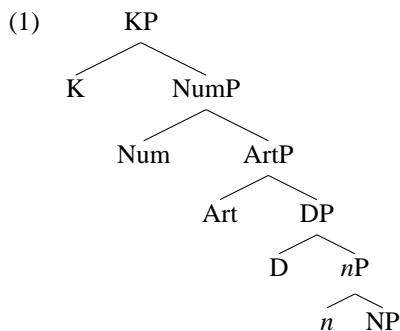
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1 Introduction

In this paper, I develop an analysis of the basic structure of the Fijian noun phrase. While I cannot provide a comprehensive description, I will focus on some central aspects, hopefully providing a starting point for future work. Thus, the goal of the paper is rather modest and limited in scope, and it should be considered a first step toward a fine-grained theory of the Fijian noun phrase.

Here and throughout the paper, I understand the term “noun phrase” in an intuitive sense: referential or quantificational expressions whose head is a noun (common or proper), and which can act as arguments of the predicate or appear in existential or copular sentences (see Alexiadou et al. (2007) for the state-of-the-art concerning research on noun phrases). Similarly, I will assume rather traditional definitions of terms like articles, demonstratives, etc., and will rely on standard theoretical notions such as head, specifier, and adjunct.

My theoretical approach will be somewhat eclectic, building on various extensions of the DP hypothesis (Abney, 1987). I will label the lowest nominal projection NP, where N might be an undifferentiated root in the sense of Marantz (1997). NP is dominated by *n*P, a shell projection similar to those assumed in the verbal domain; I will assume that it hosts possessive pronouns and provides an adjunction site for adjectives. The next layer is DP, indicating that I take it to be the locus of definiteness. With Roehrs (2006), Borer (2005), and others, I will assume that definite articles move to a position that is higher than their base position; the base position is D, while the target position is a head of a projection above DP, labeled ArtP for convenience. Building on Ritter (1991), I assume furthermore that number is realized as a separate head in Fijian, projecting a NumP; following Lyons (1995), however, I will assume that the Num-head is present only in non-singular noun phrases. Finally, I will adopt original proposals by Laughren (1989) and Travis and Lamontagne (1992) and assume that Fijian noun phrases are closed off by a K(ase)P, the head of which realizes structural case.¹ The resulting structure is then the following (abstracting away from bar-levels, specifiers):



Notice that all of the functional projections in (1) have been independently proposed and motivated. In the discussion below, I will provide evidence this particular composition of the functional structure of the Fijian noun phrase.

Let me say a few words about scope and organization of the paper. I will strictly confine myself to the internal structure of the noun phrase, largely disregarding any facts of noun-phrase external syntax (unless necessary), as well

*First and foremost, I would like to express my deepest gratitude to Tania Woodward, my Fijian informant. With endless patience and enthusiasm (!), Tania provided a wealth of data, only a fraction of which has made its way into this paper. I am also very grateful to Masha Polinsky and Peter Jenks for valuable comments and discussion. Both of them made some good suggestions which will be reflected in the better parts of this paper.

¹Bittner and Hale (1996) propose that KP is present only in “marked cases”, other noun phrases being caseless. I will here assume that all noun phrases must have structural case by the Case Filter (Chomsky, 1981), hence that all noun phrases are KPs.

as sublexical/morphological properties and word-formation processes. Likewise, I will not provide a comprehensive analysis of the pronominal system, although pronominal forms will play a role in the discussion. Possessive noun phrases and PP-modifiers will be mentioned occasionally, but not discussed extensively in this paper; I hope to return to both topics in future work. Finally, I hasten to add that the scope of this paper is restricted to *syntactic* properties of Fijian noun phrases; semantic facts will be largely set aside, so that interesting problems of interpretation (such as definiteness/specificity) will be left for future work. Although I will not develop a semantics for Fijian noun phrases, the hierarchical order of projections that I will be assuming is semantically plausible and coherent, as far as I can see.

The paper is divided into two main parts. Section 2 lumps together articles, number marking, and demonstratives under the label “determination”. Section 2.1 will discuss the Fijian article system; I will argue that only one of the noun-phrase markers found in Fijian is a genuine article, while the other is the realization of (structural) case. Section 2.2 will provide a brief outline of the number marking system. I will discuss demonstratives in section 2.3, arguing that they can be straightforwardly analyzed as adjuncts to the highest nominal projection (as also proposed by Borer (2005), among others). Section 3, “modification”, will start with numerals (section 3.1) and quantifiers (section 3.2), before proceeding to adjectives (section 3.3) and relative clauses (section 3.4). I will argue in those sections that different modifiers attach to different levels of projection (Svenonius, to appear), directly corresponding to (some of) the layers shown in (1). Section 4 concludes.

All data used in this paper were elicited from my informant; the dialect described in the grammars by Schütz (1985) and Dixon (1988) differs significantly in some respects, and their descriptions of the nominal domain is of little help for a theoretical analysis. I will use simplified glosses unless necessary, abstracting away from sublexical structure and other details, for sake of readability.

2 Determination

2.1 Articles

Fijian has two “noun-phrase markers” (Dixon, 1988), *na* and *(k)o*.² At first sight, one might classify both elements as articles, *na* being used with common nouns and *o* with proper nouns:

- (2) a. e a raica [na pusi] [o Pita]
 3SG PST see cat Peter
 ‘Peter saw the cat’

In this example, both *na* and *o* seem to be straightforward counterparts of each other; to see whether they are elements of the same type, we need to consider some further environments in which noun phrases occur. Consider first subjects of transitive verbs:

- (3) a. e a raica na pusi [o Pita]
 3SG PST see cat Peter
 ‘Peter saw the cat’
 b. [na pusi] e vakamatea na tamata
 cat 3SG kill person
 ‘The cat killed someone’

In this case, again, both elements appear to behave in the same way (*na* with common nouns, *o* with proper nouns). Next, consider derived subjects of ergative verbs. As can be seen in (7), all subjects appear with either *na* or *o*.³ As (8)

²As indicated, *o* is a reduced form of *ko*, which appears frequently in written Fijian. I will here use the form that is used in normal speech, unless the full form is preferred for phonological reasons (see, e.g., (4) in note 3).

³In a particular construction that occurs only with place names and names of temporal units, *(k)o* appears to act as a kind of linker or preposition:

- (4) na koro (k)o Roma
 city Roma
 ‘the city of Rome’
 (5) na siga ni vula o Okosita
 day LNK month August
 ‘a day in (the month of) August’

shows, passives pattern in the same way.⁴

- | | |
|---|--|
| <p>(7) a. sa waicala [na bata]
ASP melt ART butter
'The butter melted'</p> <p>b. sa waicala [*<i>(o)</i> Roma]
ASP melt ART Rome
'Rome melted'</p> <p>c. sa yaco [*<i>(o)</i> Hazel]
ASP arrive ART Hazel
'Hazel arrived'</p> | <p>(8) a. e a vakamatei [o Denis]
3SG PST kill Dennis
'Dennis was killed'</p> <p>b. e a vakamatea [na pusi]
'The cat was killed'</p> |
|---|--|

Consider now objects. In the examples in (9), *na* is obligatory present in object position, whereas *o* is omitted. The same pattern is shown by the ditransitive structures in (10): while *o* is systematically omitted in object position, *na* is retained all cases.

- | | |
|--|--|
| <p>(9) a. e a raici [(<i>*o</i>) Taila] [o Pita]
3SG PST see Taylor Peter
'Peter saw Taylor'</p> <p>b. au taletaki [(<i>*o</i>) Roma]
1SG like Rome
'I like Rome'</p> <p>c. e a raica [*<i>(na)</i> pusi] [o Pita]
3SG PST see cat Peter
'Peter saw the cat'</p> | <p>(10) a. e a solia [na ivola] vei [Meri] [o Jone]
3SG PST give book to Mary John
'John gave a book to Mary'</p> <p>b. e a soli [(<i>*o</i>) Meri] vei [Pita] [o Jone]
3SG PST give Mary to Peter
John
'John gave Mary to Peter'</p> <p>c. e a soli [(<i>*o</i>) Meri] vua [na pusi] [o Jone]
3SG PST give Mary to cat
John
'John gave Mary to the cat'</p> |
|--|--|

Similarly, when noun phrases are complements of prepositions, *o* is again omitted while *na* is retained:

- (11) a. mai [na vale]
'from the house'
- b. i [na koro]
'to the village'
- c. kei [(**o*) Pita]
'with Peter'

We have seen that both *na* and *o* are obligatory for noun phrases in non-object position, while only *na* is retained in object position. Furthermore, *o* triggers a subject interpretation regardless of structural position:⁵

However, I think that the English translation is somewhat misleading in this case, and that *o* here, too, is a subject/topic marker (see the text below). Perhaps structures like (4) are not noun phrases, but small clauses with *ko Roma* as subject. This view is supported by cases like (6), where a demonstrative appears to the left of *o Roma*; demonstratives usually mark the right edge of noun phrases (see section 2.3 below).

(6) e na vanua oqo o Roma
in place this Rome
'in this place, Rome'

I will not discuss the issue further here.

⁴I use only short passives here because the long passives are identical to the active forms. There seems to be no clear active/passive voice distinction in Fijian.

⁵Similarly, absence of *na* in object position forces the interpretation of a common noun as a name (12b). Conversely, using a name with *na* yields a common-noun reading (13).

- (14) a. e raica [o Tania] na pusi
 b. e raica na pusi [o Tania]
 ‘Tania saw the cat’ (unambiguous)

Let us now turn to non-argument noun phrases. *o* is absent in vocatives (15) but appears with proper names in non- \emptyset positions (16). By contrast, *na* is generally present in non-argument noun phrases, though sometimes optional, as in (17a).⁶

- (15) [(**o*) Pita], vakamatea na pusi!
 ‘Peter, kill the cat!’
- (16) a. [o Denis] ga [o Pita]
 Dennis EMPH Peter
 ‘Dennis is Peter/Peter is Dennis’ (symmetric)
- b. e rairai ni [o Pita] [o Denis]
 3SG possible COMP Peter Dennis
 ‘Dennis seems to be Peter’ (lit.: ‘It is possible that Dennis is Peter’)
- (17) a. e vuakata [o Jone] me [(na) gasenivuli]
 3SG want John to-be teacher
 ‘John wants to be a teacher’
- b. e tolu [na ivola]
 3SG three book
 ‘there are three books’

Generics are structurally identical to regular noun phrases; hence, in a statement like (18b), the noun phrase *ira na koli* is ambiguous between a generic reading (‘dogs in general’) and a referential reading (‘the dogs’).

- (18) a. e dau kunekune dreidrei [na daimani]
 3SG always find hard diamond
 ‘Diamonds are rare’
- b. au taletaki [ira na koli]
 1SG like PL dog
 ‘I like dogs’

The noun phrase in (18b) is a plural noun phrase; plural noun phrases are headed by *o* when in subject position, exactly parallel to proper names (see the following section). So here again, we see *o*, but not *na*, being omitted in object position.

Further evidence is provided by cases of topicalization. A topic is fronted to clause-initial position and appears with the emphatic marker *ga*. Crucially, a topicalized proper-name object appears with *o*, even if it is bare in base position (19).

- (19) a. e a vakamatei [Denis] o Pita
 ‘Peter killed Dennis’

-
- (12) a. au taletaka [**na*] pusi]
 1SG like ART cat
 ‘I like the cat’
- b. au taletaki [Pusi]
 1SG like cat
 ‘I like Pussy (person’s name)’

- (13) e a raica [o Dennis] e dua vei [iratou na Pita]
 ‘Dennis saw a Peter (one of several persons named Peter)’

⁶According to my informant, there is a slight semantic difference between the forms of (17a) with and without *na*, which was however hard to make precise. At any rate, presence of *na* was judged to be the unmarked case.

- b. [*_i(o) Denis]_i ga e vakamatea *t_i* o Pita
 ‘Dennis, Peter killed’
- (20) a. e vinakata [o Denis] me o Pita
 3SG want Dennis to-be Peter
 ‘Dennis wants to be Peter’
- b. me [*_i(o) Pita]_i ga e vinakata *t_i* o Denis
 to-be Peter EMPH 3SG want Dennis
 ‘Peter, Dennis wants to be’

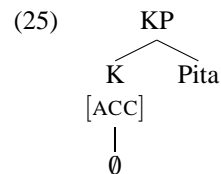
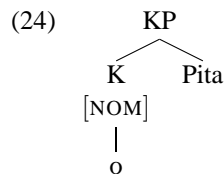
I believe that the data considered so far suggests the following conclusion. The different behavior of *na* and *o* indicates that these are not members of the same class. While *na* appears to be a genuine (presumably definite) article, *o* is more appropriately classified as a subject/topic marker; its presence seems to be tied to non-accusative positions.⁷ For this reason, I conclude that Fijian has only one article (*na*), while *o* is, in effect, the manifestation of structural nominative case, the locus of which is K (see below for my analysis of the structural position of *na*).

Notice also that there are cases that show a transparent definite/indefinite contrast, correlating with the presence/absence of *na*:

- (21) a. e vale
 in house
 ‘at home’
- b. e na vale
 in house
 ‘in the house’

The example supports my (tentative) conclusion that *na* is indeed the Fijian definite article, i.e. D.⁸

As noted in the introduction, I assume a projection K(ase)P above ArtP. As we saw above, its head K is realized as *o* if nominative (i.e., in subject position) and nonovert (\emptyset) if accusative (i.e., in object position):



While structural case is on K, *na* is merged as the D-head, which I take to be lower in the structure. If a noun phrase is the complement of a preposition (as in (11)), there is no KP, since P assigns inherent case to its complement; the minimal assumption is that complements of prepositions are DPs (in my terms):

⁷If one were to insist on calling *o* an article, it would be an expletive article in the sense of Longobardi (1994), as known from many other languages (e.g. German *der Hans* ‘the Hans’).

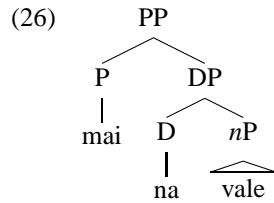
⁸Like many other languages, Fijian has no indefinite article; indefiniteness is expressed by absence of definiteness (see Lyons (1999) for discussion). Since this paper is mainly concerned with the internal structure of Fijian noun phrases, not their semantics, I’m sweeping many important questions under the rug. It seems clear, though, that *na* should not be viewed as a specific (rather than definite) article, given that expressions like (22) are systematically ambiguous between a specific or nonspecific interpretation:

- (22) au vakaqara [na gasenivuli]
 1SG looking teacher
 ‘I’m looking for a teacher’ (specific or nonspecific)

Explicit nonspecificity is expressed by means of a partitive construction (*one of the teachers*):

- (23) au vakaqara [e dua vei ira [na gasenivuli]]
 1SG looking 3SG one of PL teacher
 ‘I’m looking for a teacher’

It therefore seems to me safe to conclude that *na* is a definite article, emphasizing however that much more analysis needs to be done than the scope of this paper permits.

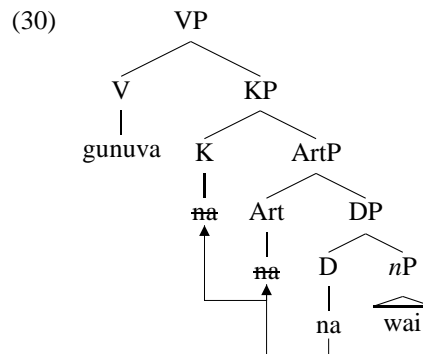
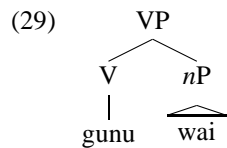


It seems plausible, then, to assume that *o* is the realization of a high head (K), while *na* originates in a lower position (D); the latter, but not the former, can be present in “reduced” noun phrases as in (26). Notice that in (26) (which illustrates example (11a)), the complement of P is definite, hence D must be present. I think that my analysis is also supported by cases in which D is absent from a noun phrase. Let us consider the relevant data.

Fijian allows objects to incorporate into predicates; this is shown in the b-examples in (27) and (28). Notice that in these cases, *na* is obligatorily absent, indicating pseudo-incorporation of the noun phrase into the verb. (See p. 29 below for some further discussion, including my reasons for classifying these cases as *pseudo-incorporation*.)

- | | |
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| <p>(27) a. Au gunuva [*<i>(na)</i> wai]
 1SG drinking ART water
 ‘I’m drinking the water’</p> <p>b. Au [gunu (*<i>na)</i> wai]
 1SG drink water
 ‘I drink water’ (lit.: ‘I water-drink’)</p> | <p>(28) a. au kania [*<i>(na)</i> co]
 1SG eat ART gras
 ‘I’m eating the gras’</p> <p>b. au [kana (*<i>na)</i> co]
 1SG eat grass
 ‘I eat grass’ (lit.: ‘I grass-eat’)</p> |
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Other than in the b-examples, the object in the a-examples is definite and *na* is obligatory. Following Baker (1988), I assume that (pseudo-) incorporation is possible only with bare noun phrases, lacking D (we will see more evidence for this view in section 3.4 below). The difference between the noun phrases in the a-examples and those in the b-examples is thus analyzed as follows:



As indicated in the tree, I take *na* to originate in D and raise to Art, and finally to K. Some copies of *na* are deleted in the phonological component; below, I propose a deletion rule that predicts realization of *na* in certain circumstances. While this head-movement analysis may appear somewhat clumsy and arbitrary at this point, my motivations for these assumptions will become clear in the discussion below.

Consider two further instances of indefinites, lacking D. The linker *ni* is used for the formation of compounds that express part-whole relations and other varieties of inalienable possession. The complement noun of *ni* must appear bare and is clearly indefinite:

- (31) a. na yaloka [ni mata]
 ART egg LNK eye
 ‘the eyeball’
- b. na vale [ni mate]
 ART house LNK sick
 ‘the hospital’

- c. na ulu ni vanua
 ART head LNK land
 ‘the mountain’

Notice that there is a difference between cases like (31) and those seen before in (11). In the latter cases, a preposition takes a DP complement; by contrast, (31) shows instances of word-formation, with largely unpredictable meanings. Other than with true prepositions, the complement of the linker *ni* is presumably a bare noun (or even a root). Notice that possessive pronouns can appear with complements of *ni*:

- (32) na mata ni noqu pusi
 ART eye LNK POSS.1SG cat
 ‘my cat’s eye (= the eye of my cat)’
- (33) na noqu mata ni pusi
 ART POSS.1SG eye LNK cat
 ‘my cat’s eye (= my eye of a cat)’

I assume that possessive pronouns merge in SPEC-*n*, so that complements of the linker *ni* must be *n*Ps (but cannot be DPs, since *na* is obligatorily absent).⁹

As with (pseudo-)incorporation, then, word-formation requires absence of D and higher functional structure; we will see further evidence for this claim in section 3.4 below. Notice that although so far, the distinction between D and Art seems superfluous, we will see evidence in the following section that both heads are present in the structure. At the same time, there will be further motivation for the movement of D, which has been vacuous in the cases considered so far.

2.2 Number

Fijian employs a four-way number system: singular, dual, paucal, and plural. Duality, paucality and plurality are expressed by overt markers, as is the case in many languages (Delfito and Schrotten, 1991; Rijkhoff, 2002). Descriptively

⁹A strong argument for these cases really being instances of word-formation comes from the Fijian residual classifier system, which only surfaces with possessive pronouns. There are three types of classifier prefixes: drinkable things, edible things, and other objects. Thus, we find *na me-qu bilo wai* ‘my cup of water’, *na ke-qu jaina* ‘my banana’, and *na no-qu ivola* ‘my book’. Consider now the following example:

- (34) a. na bilo ti
 ART cup tea
 ‘a cup of tea’
- b. na bilo ni ti
 ART cup tea
 ‘a tea cup’ (may be empty or contain a liquid other than tea)

Semantically, (34a) is headed by the content noun *ti*; it denotes a portion (cup) of tea. By contrast, the compound in (34b) appears to be ambiguous between container and content reading, to which the classifier system is sensitive:

- (35) a. na me-qu bilo ti
 ART POSS.DRINKABLE-POSS.1SG cup tea
 ‘my cup of tea’
- b. *na no-qu bilo ti
 ART POSS.OBJECT-POSS.1SG cup tea
 ‘my cup of tea’
- c. na me-qu bilo ni ti
 ART POSS.DRINKABLE-POSS.1SG cup LNK tea
 ‘my tea cup’
- d. na no-qu bilo ni ti
 ART POSS.OBJECT-POSS.1SG cup LNK tea
 ‘my tea cup’

As the judgments show, (34a) is classified as drinkable liquid, while (34b) is classified as either drinkable liquid or object. Hence, I take it that *N-ni-nP* constructions are compounds, and I will set them aside for the purposes of this paper.

speaking, the number morpheme is realized in linear adjacency to *o*; it cannot occur with *na* in the same way (36e), again showing that the two elements are different in category.

- (36) a. *na pusi*
ART cat
'a/the cat'
- b. *o rau na pusi*
NOM DUAL ART cat
'two cats'
- c. *o iratou na pusi*
NOM PAUC ART cat
'three to ten cats'
- d. *o ira na pusi*
NOM PL ART cat
'(the) cats'
- e. **na ira na pusi*
ART PL ART cat

As expected, mass nouns cannot be pluralized:

- (37) **o ira na bia* (Peter Jenks, p.c.)
NOM PL ART beer

Fijian thus exhibits the general word order **Art > Num > N**, which is typologically common (Rijkhoff, 2002).¹⁰ The *o* observed in nonsingular noun phrases (36b–36d) is again a reduced form of *ko* (see note 2) and appears to be identical to the *o*-marker discussed in section 2.1. Notice that, as seen before with generics (18b), “plural-*o*” is omitted when the noun phrase is in object position:

- (38) *e a raici [(*)ira na gone] o Pita*
3SG PST see NOM PL ART child NOM Peter
'Peter saw the children'

Hence, I take the proper-noun “article” (which I argued above to be the K-head) to be the same element as the visible head of non-singular noun phrases with both proper-noun and common-noun heads. The task now is to find a structural analysis that makes sense of this distribution.

Notice that the phrase composed of number marker and Art – N (–Dem) is a constituent that cannot be separated:

- (39) a. *e totoka [o iratou na ivola oqo]*
3SG good PAUC ART book these
- b. *o iratou na ivola oqo e totoka*
- c. *o iratou e totoka [na ivola oqo]*
'these several books are good'

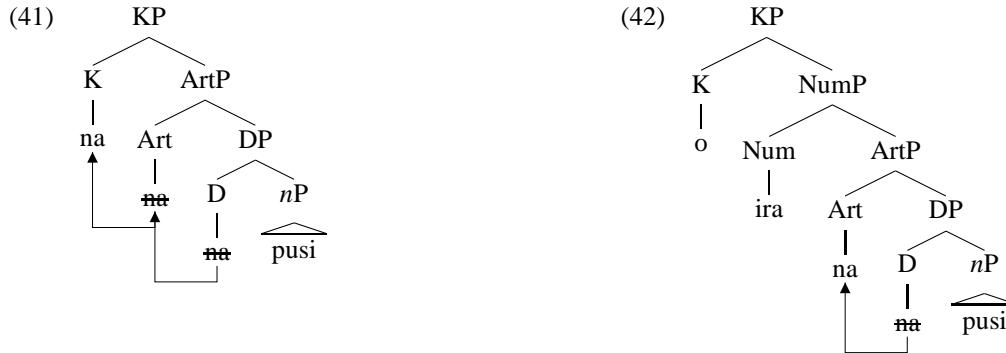
Moreover, coordination tests show that plural-marked noun phrases and simple, singular noun phrases are of the same type:

- (40) a. [*o ira na pusi*] *kei* [*ira na koli*]
NOM PL ART pusi CONJ PL ART dog
'cats and dogs'
- b. [*o ira na pusi*] *kei* [*na koli*]
NOM PL ART book CONJ ART dog
'cats and a dog' (*not*: 'cats and dogs')

¹⁰I argued in section 2.1 that *o* is in fact not an article in the strict sense. Therefore, it must be noted that the generalized schema just given is nothing but a descriptive statement without theoretical commitments, hence perfectly compatible with my claims.

I will analyze singular and non-singular noun phrases in the following way. As seen in (40b), both are KPs. In singular common-noun phrases, *na* originates in D and (string-vacuously) raises to K via Art (more evidence for this movement will be discussed below). I assume that, by pronunciation rule, K is only realized as *o* (nominative) or \emptyset (accusative) if *na* does not raise to K. It follows that the visible head of nominative and accusative singular common-noun phrases is always *na*, originating in D.

By contrast, in non-singular noun phrases, there is an additional Num-head above DP. I assume that this Num-head blocks movement of *na* to K (the *Head Movement Constraint* of Travis (1984)), so that K is realized as *o* (nominative) or \emptyset (accusative). (I leave open the question whether or not Num is a clitic-like element that cliticizes onto the K-head.) The following structures illustrate the difference:

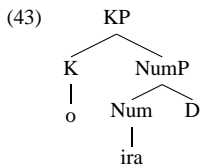


This establishes a similar structure for both kinds of noun phrases, differentiated, essentially, by presence or absence of Num(P).¹¹ A corollary of this difference is that D can raise from Art to K in (41), but not in (42), where a closer head intervenes. Proper names are inherent definites (Sturm, 2005), hence their structure does not contain a D-head; hence, in this case too, K is realized as either *o* or \emptyset , depending on structural position. Before we consider some further evidence for this analysis, let us consider the place of demonstrative modifiers.

2.3 Demonstratives

There are three demonstratives in Fijian: *oqo* ‘this/these’, *oqori* ‘that₁/those₁’, and *oya* ‘that₂/those₂’. While *oqo* implies spatiotemporal proximity, *oqori* and *oya* are distal demonstratives.¹² The difference is that while *oqori* signals distance to speaker but proximity to hearer, *oya* signals distance from both speaker and hearer. Thus, the three-way demonstrative system is identical to that in Spanish (*éste/ése/aquéel* [masc. sg.]) and other languages.¹³

¹¹Although I will not discuss the Fijian pronominal system in this paper, pronouns can be integrated into my system straightforwardly. In part following Postal (1966), I assume that Fijian pronouns are composed of D, K, and Num; a pronoun like *o ira* (3PL) can then be analyzed as an empty D-head (specified only for definiteness) combining with NumP and KP:



¹²Despite the fact that the examples I give below all express spatial proximity/distance, it should be noted that Fijian demonstratives can be used to signal temporal proximity/distance, just like their English counterparts:

- (44) a. na yabaki oqo
 ART year this
 ‘this year’
 b. na yabaki mai oqo
 ART year from this
 ‘next year’

¹³The language uses the same forms for demonstrative pronouns and demonstrative modifiers. Since this paper is concerned with internal noun-phrase structure, only demonstrative modifiers will be considered here.

- (45) a. na ivola oqo/oqori/oya
 ART book this/that₁/that₂
 ‘this/that₁/that₂ book’
 b. o iratou na ivola oqo
 NOM PAUC ART book these
 ‘these three books’

As the examples show, Fijian has the general word order **Art > N > Dem** (like, e.g., Galela and Berbice Dutch Creole: Rijkhoff (2002). Contra Svenonius (to appear), I will not assume here that this order is necessarily derived by movement of [Art–N] over the demonstrative, since I am not adopting the *Antisymmetry* framework of Kayne (1994). As will become clear in the course of the discussion, I analyze various modifiers in the Fijian noun phrase as instances of right-adjunction.

In general, demonstrative modifiers mark the right edge of the noun phrase and can co-occur with *na*. Thus, if I am right in analyzing *na* as a definite article, Fijian is one of the typologically rare languages that allow this co-occurrence.¹⁴ (46) shows that the demonstrative cannot attach to a numeral, despite the fact that numerals superficially look like appositive noun phrases (see section 3.1 below); it has to be at the very right edge of the noun phrase.

- (46) a. na ono na ivola oqo
 ART six ART book this
 ‘these six books’
 b. *na ono oqo na ivola
 ART six this ART book

Likewise, as (47) shows, adjectival modifiers (which occur to the right of the head noun: see section 3.3) must be to the left of demonstratives:

- (47) a. i. na ivola saulevu oqo
 ART book expensive this
 ii. *na ivola oqo saulevu
 ‘this expensive book’
 b. i. na vatu levu oqori
 ART stone big that
 ii. *na vatu oqori levu
 ‘that big stone’

Demonstrative modifiers can also co-occur with an adverbial intensifier modifying the noun (which I take to be inside the adjective phrase), parallel to English *this very book*, in which case again the demonstrative is at the right edge of the noun phrase:

- (48) na ivola sara ga oqo
 ART book EMPH EMPH this
 ‘this very book’

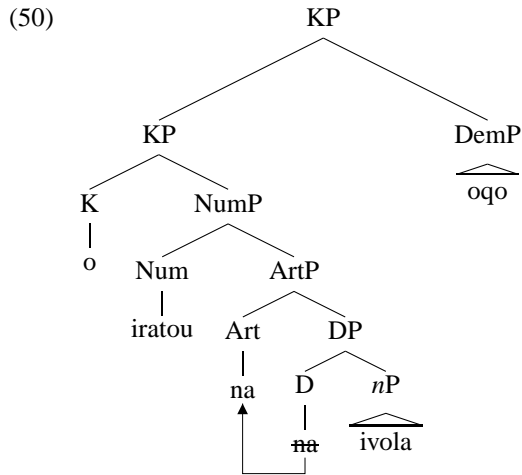
Other than adjectival modifiers, demonstratives cannot appear in relative clauses (49a). The latter can however be sandwiched between the head noun and a demonstrative modifier, as (49b) shows (see section 3.4 for a fuller discussion of relative clauses).

- (49) a. *na ivola [ka (e) oqo]
 ART book REL is this
 lit.: ‘the book that is this’

¹⁴In the sample of languages discussed by Rijkhoff (2002), only Hungarian and Berbice Dutch Creole allow definite articles and demonstratives in the same noun phrase.

- b. na ivola [ka (e) taletaki] oqo
 ART book REL is good this
 ‘this book that is interesting’

I take this to show that demonstrative modifiers directly adjoin to a high functional projection within the noun phrase. We have seen in (47) and (49b) that while all modifiers are postnominal adjuncts (see section 3 below), the adjunction site of demonstratives must be higher than that of adjectives and relative clauses. With this in mind, integrating demonstratives into the basic structure in (42) is straightforward. I will assume that demonstratives right-adjoin to KP:¹⁵



Let me mention in passing that interrogative modifiers provide further evidence for demonstratives being adjoined to the outer shell of the noun phrase. As the examples in (51) show, *wh*-words are realized within the noun phrase in different ways. *Cava* ‘what’ and *nei cei* ‘whose’ are in postnominal position, like adjectives (but notice the prenominal position of *mataqali* ‘kind of’ in (51b), discussed in section 3.3). The amount of something is questioned by means of a compound and prenominal *cava* (51c); with a count noun, *vica* ‘how many’ is realized as a predicate (51e).

- (51) a. na ivola cava
 ART book what
 ‘which book, which of the books’
 b. na mataqali ivola cava
 ART kind-of book what
 ‘what kind of book’
 c. na cava na levu ni wai
 ART what ART big LNK water
 ‘how much water, what amount of water’
 d. na ivola nei cei
 ART book POSS who
 ‘whose book’
 e. e vica na ivola
 3SG how-many ART book
 ‘how many books’ (lit.: ‘the books are how many’)

Without a significant change of meaning, demonstrative modifiers can be added to these structures, in which case they must follow any postnominal interrogative modifiers:

- (52) a. na ivola nei cei oqo
 ART book POSS who this

¹⁵The reason for assuming right-adjunction to K, not DP, is that I take DP to be the projection targeted by relative-clause modifiers; see below.

- b. * na ivola oqo nei cei
 ‘whose book’
- (53) a. na nei cei na ivola oqo
 ART POSS who ART book this
- b. * na nei cei oqo na ivola
 ‘whose book’

Assuming that demonstratives are phrasal modifiers that adjoin to KP automatically derives the fact that they are always at the outer right edge of the phrase; I will argue in the following sections that other modifiers adjoin to lower nodes.

2.4 Summary

The general noun-phrase structure developed so far is a layered structure of functional projections (54a) that yields the superficial word order in (54b):

- (54) a. KP > (NumP) > ArtP > DP > nP > N
 b. Art > (Num) > N > Dem

So far, I have argued that *o* is the realization of nominative case on the head of K(ase)P, while *na* is the definite article that originates in D position. We have seen *o* in two types of structures: in non-singular noun phrases and with proper names. By contrast, *na* marks the left edge of singular noun phrases with a common-noun head. I will argue below that *na*, originating in D, invariably raises to ArtP, from which it proceeds to K whenever possible; if *na* raises to K, it replaces the unmarked realizations of nominative/accusative in this position. These assumptions straightforwardly derive the distribution of *o* vs. *na*. In the structure of names, which I take to be inherently definite, there is no D-head that could raise to K; hence, proper-noun phrases are headed by *o* or \emptyset . In non-singular common-noun phrases a NumP is projected (Lyons, 1995), and the Num-head blocks movement of D to K. Hence these, too, are headed by *o* or \emptyset , since *na* cannot raise all the way up. In the remaining case (singular common-noun phrases), nothing blocks raising of the D-head from Art to K, hence K is realized as *na* (both nominative and accusative), by pronunciation rule. In short, my proposal predicts that a noun phrase will be headed by *na* if D is present and no head intervenes between Art and K (otherwise, movement of *na* to K will violate the Head Movement Constraint). In the following section, I will motivate and develop this analysis further, proposing a phonological rule that regulates the (non-)pronunciation of copies of *na*.

3 Modification

In this section, I will discuss numerals, quantifiers, adjectives and relative clauses as noun-phrase internal modifiers.¹⁶ The discussion will show that while numerals and quantifiers can appear in prenominal positions (in which case they are specifiers), adjectives and relative clauses are always postnominal adjuncts. The discussion of numerals will provide further evidence for movement of D to a higher position. Moreover, I will propose specific positions (“attachment sites”) for each type of modifier, resulting in a layered structure (cf. Zamparelli (1995); Svenonius (to appear), among others, for similar approaches).

3.1 Numerals

In Fijian, cardinal numerals are frequently used as predicates, in which case they are outside the nominal projection, hence not considered here. Alternatively, they can be realized as what looks like an appositive noun phrase (55a). Notice the difference between numerically quantified noun phrases, headed by *na*, and simple non-singular noun phrases, headed by *o* (in non-object position; see section 2.1):

- (55) a. na tolu na ivola
 ART three ART book
 ‘three books’

¹⁶Numerals, quantifiers, and adjectives are often used as predicates in Fijian. In this paper, however, I will only be concerned with their role within noun phrases.

- b. o iratou na ivola
 NOM PAUC ART book
 ‘several books’

Typologically, it is all but uncommon for languages to permit numerals to intervene between prenominal articles and the head noun (Dryer, 1989; Rijkhoff, 2002), as in (55a), so Fijian is not exceptional in this regard. Especially interesting for my analysis here is the “doubling effect” shown in (55a): presence of a numeral results in two occurrences of the definite article.

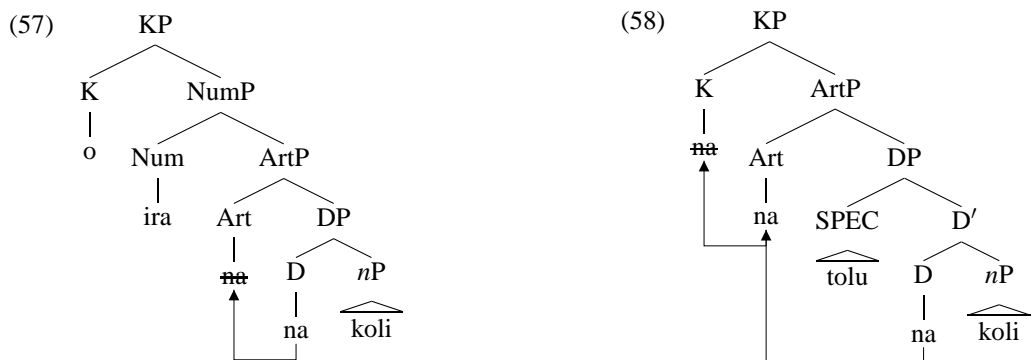
Notice that at least *prima facie*, the effect we see here with numerals is somewhat reminiscent of definiteness-spread phenomena in languages like Greek and Swedish, involving adjectives (see Julien (2005); Alexiadou et al. (2007) for discussion).

- (56) a. to kokino to vivlio (Greek)
 the red the book
 ‘the red book’
 b. det stora hus-et (Swedish)
 the big house-the
 ‘the big house’

I think that like in the Greek/Swedish cases, Fijian numerals should not be analyzed as appositive noun phrases. Recall from section 2.3 (example (46), repeated below) that numerals cannot host a demonstrative, which is unexpected if the numeral were a fully independent noun phrase on its own:

- (46) a. na ono na ivola oqo
 ART six ART book this
 ‘these six books’
 b. *na ono oqo na ivola
 ART six this ART book

Similarly, cardinals cannot be modified by adjectives or relative clauses. I do not think that data of this kind provide unambiguous evidence against the apposition hypothesis; however, I hope to show below that a uniform analysis for both kinds of structures in (55) is more desirable. My reasoning will be as follows. Notice that in (55b), but not in (55a), a NumP is projected. This blocks raising of D all the way up to K, hence K is realized as *o* (or \emptyset in non-nominative contexts). In (55a), a numeral intervenes between D and Art; since I take numerals to be phrasal specifiers of D, movement of *na* across a numeral does not violate the Head Movement Constraint. Thus, *na* can raise all the way up to K in (55a) but not in (55b) – the trees below illustrate:



As indicated in the trees, my approach entails multiple occurrences (copies) of *na* in the tree, replacing the unmarked realization of K if *na* can raise to this position, and yielding the similarity to the definiteness-spread phenomena alluded to above. Under the copy theory of movement (Chomsky, 1995), the assumption of multiple occurrences of a single element is not problematic (compare English *a such a big problem*). So far, however, deletion or pronunciation of *na* in different positions, in the manner indicated in the trees above, appears arbitrary. Why is *na* pronounced only

once in (57), and why is the lower copy pronounced? Likewise, why is *na* pronounced twice in (58), and why is the copy under K deleted, despite the fact that I claim that *na* raises to this position?

To derive the desired effect, I propose a pronunciation rule of Fijian phonology that applies to noun phrases, deleting certain occurrences of *na* but not others in a structure like (58). Informally, the rule is as follows:

(59) *Deletion rule*

The article *na* is pronounced only if it has phrasal material to its right.

This yields the deletion pattern illustrated in the trees above. The higher copy of *na* in (57) must be deleted, since there is no phrasal material to its right (D-to-Art movement is string-vacuous, since D has no specifier in this case). For the same reason, the highest copy under K is deleted in (58), while the copies in Art and D are pronounced, thanks to the “intervening” specifier to the right of Art and the *nP* complement of D. Notice that the rule (59) is less arbitrary than it may seem at first sight: essentially, it dictates that pronunciation ignore string-vacuous head movement (which, however, is perfectly reasonable from a purely syntactic point of view); perhaps, then, (59) is ultimately an economy principle of Fijian phonology.

Notice that my approach entails that singular noun phrases, non-singular noun phrases and modified noun phrases are all the same species of constituent (KP). Coordination tests confirm this prediction (notice that both structures are unambiguous):

- (60) a. [na tolu na ivola] kei [na koli]
 ART three ART book CONJ ART dog
 ‘three books and a dog’
 b. [na tolu na ivola] kei [ira na koli]
 ART three ART book CONJ PL ART dog
 ‘three books and a plurality of dogs’

(60b), in particular, shows that noun phrases with and without NumP are of the same type – KP, in my terms. An analysis that takes the first conjunct of each case in (60) to be composed of appositive noun phrases has to account for the fact that syntactically, it behaves exactly like a non-complex noun phrase. To complete our discussion of numeral modifiers, let us now briefly consider ordinals.

Ordinals are systematically composed of the article *na*, the nominalizer *i*, and a numeral, prefixed by *ka* (see Singerman (2008) for discussion and data):

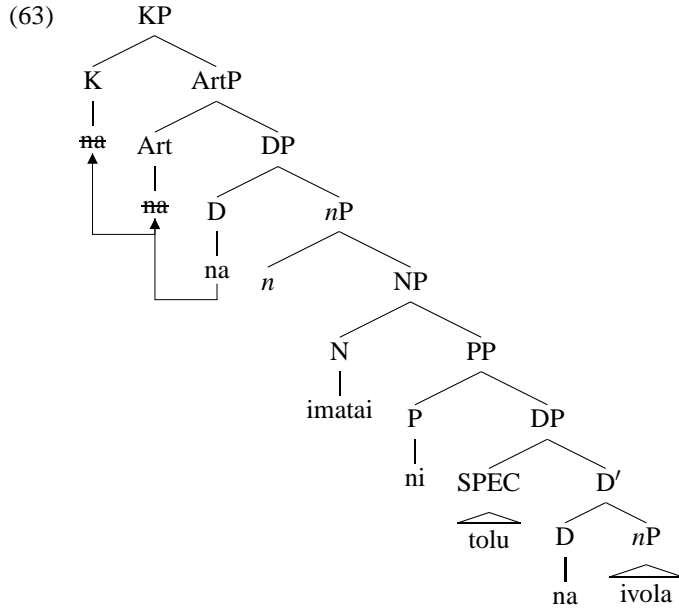
- (61) a. tolu ‘three’ ⇒ na i-ka-tolu ‘the third’
 b. lima ‘five’ ⇒ na i-ka-lima ‘the fifth’

(I will abstract away from internal composition in what follows.) Other than cardinals, ordinals involve a PP of the form [*ni*-XP] (XP either *nP* or DP); if XP itself is numerically quantified (62b), it appears to be a DP:¹⁷

- (62) a. na iratou ni ivola
 ART third P book
 ‘the third book’
 b. na imatai ni tolu na ivola
 ART first P three ART book
 ‘the first three books’

The analysis is straightforward if we assume that ordinals in Fijian are in fact nouns that take PP-complements. As mentioned in above, ordinals are composed of a nominalizer and the numeral (61), suggesting that these are not simple modifiers:

¹⁷I take the *ni* in these cases to be distinct from the linker that we saw in in connection with compounding (see p. 6 above). Recall from examples like (31) that in those cases the meanings of the resulting structures were quite unpredictable; by contrast, the compositional structure of the ordinal constructions considered here is perfectly systematic.



Notice that the analysis provides independent evidence for my assumption that numerals merge in SPEC-D and that the article *na* originates in the head of that projection. In (62b), where a numeral is present in the lower noun phrase, *na* (= D) is also present; hence, the complement of P must be a DP. In (62a), where there is no numeral modifier, there is also no *na*, indicating that *ni* is free to take *nP* complements (indefinites). Notice, moreover, that my phonological rule (59) again derives the correct result.

To conclude the discussion of numeral modifiers, let us consider a possible analysis of partitives. Partitives are formed by means of the preposition *vei* (roughly: ‘of’), which takes a NumP as its complement:¹⁸

- (65) a. *na tolu vei ira na ivola drokadroka*
 ART three of PL ART book green
 ‘three of the green books’
 b. *na tolu vei ira na tini na ivola drokadroka*
 ART three of PL ten ART book green
 ‘three of the ten green books’

I assume that partitives are composed of two noun phrases, and that *vei* denotes the part relation (Jackendoff, 1977; Ladusaw, 1982). The deleted noun divides up the plurality denoted by the complement of *vei*. The underlying structure of (65b) is as follows:

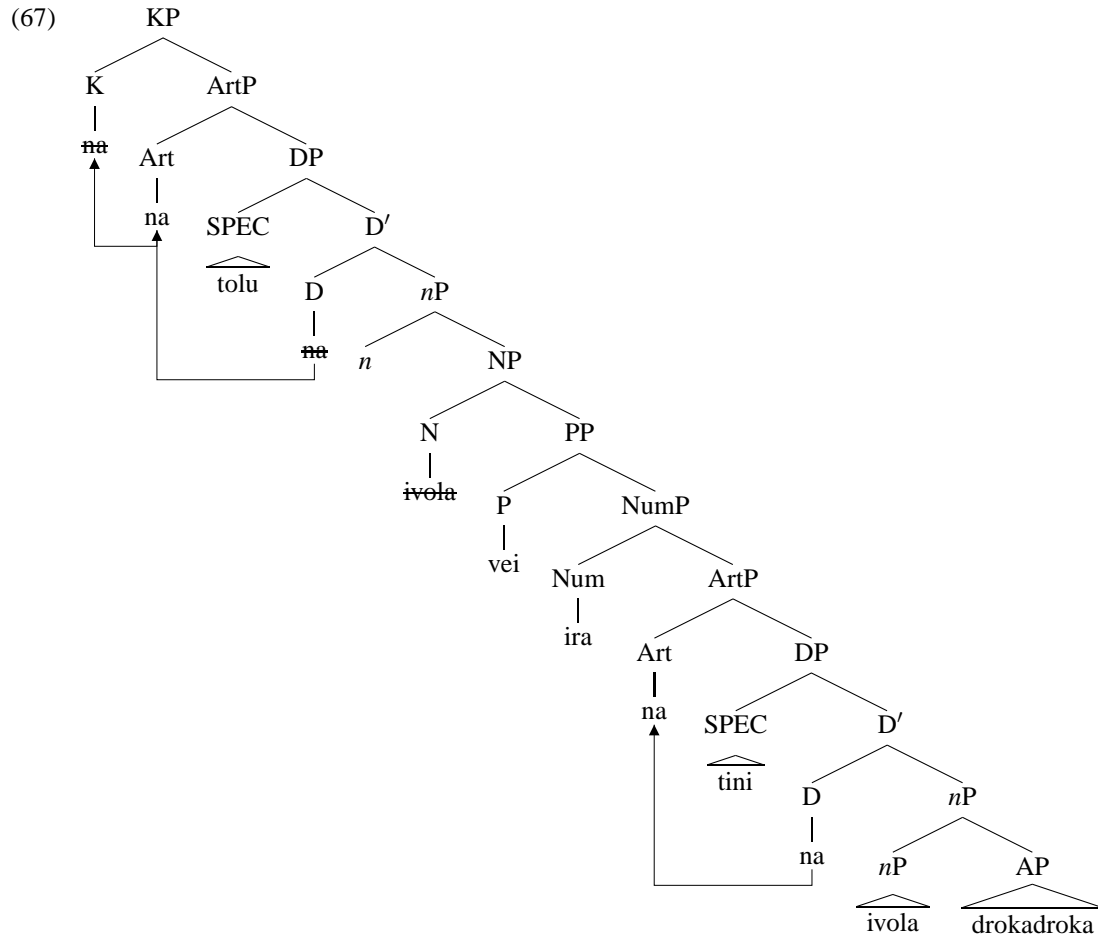
- (66) *na tolu ~~na ivola~~ vei ira na tini na ivola drokadroka*

The analysis thus captures the intuition that the interpretation of a partitive such as (65b) involves comparing the set denoted by *na tolu na ivola* to the set denoted by *na tini na ivola drokadroka*. The following tree illustrates:

¹⁸A similar interpretation can be achieved by means of the preposition *mai* ‘from’:

- (64) *na tolu na ivola drokadroka mai na tini*
 ART three ART book green from ART ten
 ‘three green books out of the group of ten books’

For reasons of space, I will not analyze this specific circumlocution.



Under this analysis, then, partitives involve a deleted noun in the higher DP, as originally proposed by Jackendoff (1977). As far as I can see, the structure in (67) gets both syntax and semantics of Fijian partitives right.¹⁹ Moreover, notice that the pronunciation rule (59) directly derives what would otherwise be a puzzling fact: the higher *na* is deleted along with the head noun. My rule says that any copy of *na* that does not have phrasal material linearly adjacent to its right will be deleted; hence, deletion of the head noun entails deletion of D. Having discussed numeral modifiers, the following section will integrate quantifiers into the picture developed so far.

3.2 Quantifiers

Let us begin the discussion of Fijian quantifiers with *taucoko*²⁰ ‘all, whole’ and *yadudua* ‘every, each’. The difference appears to correspond directly to the difference in English:

- (69) a. era lagasere taucoko na gone
 3PL sing all ART child
 ‘All the children are singing’

¹⁹In fact, the deleted noun in (66) can be made overt, resulting in a grammatical but semantically redundant structure; perfectly acceptable are cases like the following, where two different sets are compared:

- (68) na rua na koli vei ira na lima na manumanu
 ART two ART dog of PL ART five ART animal
 ‘two dogs of the five animals’

My analysis posits a directly parallel structure for cases like (65b), the only difference being that the higher noun is deleted.

²⁰The universal quantifier is alternatively expressed by *kece*. Since both lexical items appear to be perfectly interchangeable, I will stick to *taucoko* for convenience.

- b. era lagasere yadudua na gone
 3PL sing every ART child
 ‘Every child is singing’

Note first that *taucoko* can modify a predicate (70a) or appear within the noun phrase (70b); the difference is exactly parallel to that in English, as shown by the glosses:

- (70) a. era sa yaco taucoko mai na gone
 3PL ASP arrive all to-here ART children
 ‘The children have all arrived’
 b. [o ira taucoko na gone] era sa yaco mai
 NOM PL all ART children 3PL ASP arrive to-here
 ‘All the children have arrived’

We are here interested only in the use of *taucoko* as in (70b), i.e. as a noun-phrase-internal modifier. As (71) shows, *taucoko* follows the Num-head but precedes possessive pronouns:

- (71) a. o ira na pusi
 NOM PL ART cats
 ‘the cats’
 b. o ira taucoko na pusi
 NOM PL all ART cats
 ‘all the cats’
 c. o ira taucoko na noqu pusi
 NOM PL all ART POSS.1SG cats
 ‘all my cats’

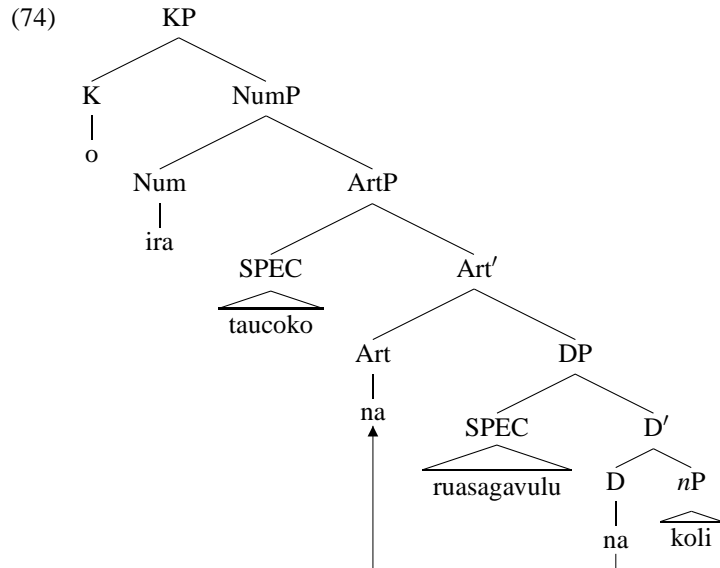
Evidently, *taucoko* and *yadudua* occupy the same structural position within the noun phrase, so I will not discuss them separately:

- (72) a. o ira taucoko na gonevuli
 NOM PL all ART student
 ‘all students’ (collective)
 b. o ira yadudua na gonevuli
 NOM PL every ART student
 ‘each student’ (individual)

The linear order might be taken to suggest that the quantifier is either adjoined to DP or a specifier of DP (as I have argued to be the case with numerals). There are two reasons to reject this analysis. First, I will argue below that adjunction in the Fijian noun phrase is invariably to the right, while specifiers are to the left of the head of a phrase. Second, the possibility of co-occurrence of a numeral and *taucoko* shows that the quantifier must be the specifier of a separate projection:

- (73) o ira taucoko na ruasagavulu na koli
 NOM PL all ART twenty ART dog
 ‘all the twenty dogs’

The quantifier is sandwiched between Num and the numeral in SPEC-D. Notice that there are two occurrences of *na* in (73), indicating that the D-head has raised to Art, across the numeral (as argued above). Given the structure developed so far, the most straightforward assumption is to analyze *taucoko* as occupying SPEC-Art. The D-head *na* raises to Art, as usual, yielding the familiar doubling effect according to the pronunciation rule (59).



It should not cause confusion that (74) posits a quantifier in the specifier of ArtP; the label of the projection is no more than convenient notation. What is relevant is that we can integrate *taucoko/yadudua* into the structure without any modifications, deriving the actual surface form. Notice that the deletion rule correctly predicts both copies of *na* to be pronounced. As argued above, we predict correctly that structures of the kind in (75) are impossible, since Num blocks raising of *na* all the way up to K:

- (75) * na ira taucoko/yadudua na ruasagavulu na koli
 ART PL all/every ART twenty ART dog

Since *taucoko/yadudua* are in SPEC-Art, we need not modify the previously assumed structure. The analysis, which treats all noun phrases as KPs, thus correctly predicts that all noun phrases are of the same type; as before, the coordination test shows this prediction to be true:

- (76) a. [o ira taucoko na koli] kei [na pusi]
 NOM PL all ART dog CONJ ART cat
 ‘all dogs and a cat’
 b. [o ira yadudua na koli] kei [na pusi]
 ‘every dog and a cat’

The parallel behavior of *taucoko* ‘all’ and *yadudua* ‘every’, and hence a parallel analysis, makes sense, since both quantifiers have been argued to be “strong quantifiers” that are higher in the structure than “weak quantifiers” – see Zamparelli (1995) for extensive discussion.²¹ Below, I will indeed analyze other quantifiers as occupying a lower position (SPEC-D, parallel to numerals).

There is a further use of *taucoko/yadudua*, which can be described as its adjectival use. I argued that noun-phrase-internally, the quantifiers are in SPEC-Art, as in (77a); in (77b), however, *taucoko* appears in postnominal position, to the right of an adjective:

- (77) a. [o ira taucoko na gone] era na gone levulevu
 NOM PL all ART child 3PL ART child fat
 ‘All the children are fat’ (lit.: ‘All the children are fat children’)
 b. o ira na gone era [na gone levulevu taucoko]
 NOM PL ART child 3PL ART child fat all
 ‘All the children are fat’ (lit.: ‘The children are all fat children’)

I propose that in cases like (77b), *taucoko* adjoins to *nP*, like an adjective (see section 3.3 below); since noun-phrase-internal adjunction is invariably to the right in Fijian, it appears in postnominal position.²² When *taucoko* adjoins to a

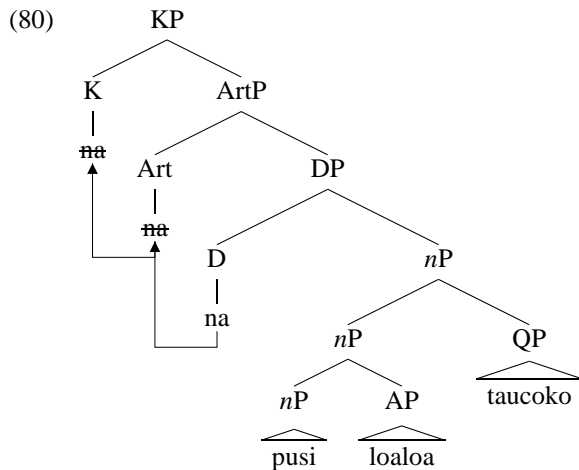
²¹I am indebted to Peter Jenks for discussion of this issue.

²²As before, *yadudua* behaves in exactly the same way, hence is not specifically discussed here:

singular noun in this way, it often has a meaning similar to English *whole*. Notice that it is preferred for postnominal *taucoko* to follow adjectival modifiers:

- (79) a. na pusi loaloa taucoko
 ART cat black all
 b. ?? na pusi taucoko loaloa
 ART cat all black
 ‘the whole black cat’

This restriction has semantic reasons that I will not attempt to analyze here (see Svenonius (to appear) for discussion); in section 3.3 below I will show that Fijian adjectives more generally exhibit ordering preferences. Taking *taucoko* in cases like (79a) to be a rightward phrasal adjunct to *nP*, we get the following structure, assuming the usual string-vacuous head movement of *na* and subsequent deletion according to (59):



Let us now turn to the remaining quantifiers. As Zamparelli (1995) and others have argued, these are generally lower than the strong quantifiers *all* and *every*; moreover, it is often assumed (see, e.g., Cheng and Sybesma (1999)) that weak quantifiers like *some* are very similar to numerals. I will argue that this is indeed the case for *so* ‘some’ and *vica* ‘few’:²³

- (82) a. e so na pusi
 3SG some ART cat
 b. na so na pusi
 ART some ART cat
 c. o iratou na so na pusi
 NOM PAUC ART some ART cat
 ‘some cats’

-
- (78) a. o ira na gonevuli yadudua
 ‘every student/each of the students’

²³I am setting aside here the (potentially strong) quantifier *most*, since Fijian expresses the meaning of *most* by means of a partitive structure.

- (81) a. e lewe levu vei ira na pusi
 3SG group big of PL ART cat
 b. *na lewe levu vei ira na pusi
 ART group big of PL ART cat
 ‘most cats’ (lit.: ‘a big group of the cats’)

As (81) shows, *lewe levu* can only act as kind of predicate, but cannot appear noun-phrase-internally. Similar remarks apply to the quantifier *sinai* ‘much’ (used with mass nouns), which cannot appear internal to noun phrases and which I will consequently also set aside here.

- (83) a. e vica na pusi
3SG few ART cat
b. na vica na pusi
ART few ART cat
c. o iratou na vica na pusi
NOM PAUC ART few ART cat
'few cats'

I take it that in the a-examples, the quantifier modifies the predicate, hence is not part of the noun phrase; (82a), for instance, is more accurately translated as 'the cats are some'. That is, like numerals, the quantifiers *so* and *vica* can be used as both predicates and noun-phrase-internal modifiers.

In Fijian, the meaning of the English quantifier *many* is expressed by means of the adjective *levu* 'big'. Notice that *levu*, in its function as a quantifier, can only appear in predicative position (84a) and not internal to noun phrases (84b,84c):

- (84) a. e levu na pusi
3SG big ART cat
b. *na levu na pusi
ART big ART cat
c. *o ira na levu na pusi
NOM PL big ART cat
'many cats'

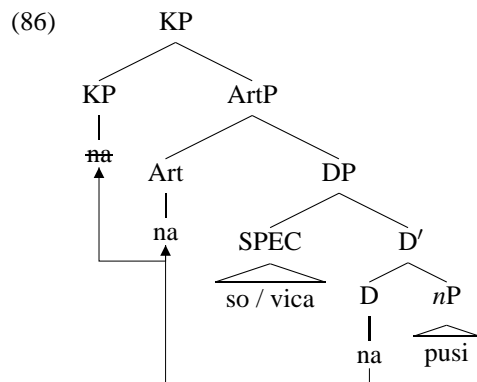
I do not know what exactly accounts for this difference between *so* 'some' and *vica* 'few' on the one hand and *levu* 'many' on the other, but I suspect that the reason is related to *levu* being an adjective that is used as a quantifier to express the meaning of English *many*.

Returning to *so* 'some' (82b,82c) and *vica* 'few' (83b,83c), it is evident that these quantifiers occupy a position that is different from that of *taucoko/yadudua*, which I analyzed as occupying SPEC-Art. Recall my remark above that such an asymmetry is not unexpected, given that *taucoko* 'all' and *yadudua* 'every' are strong quantifiers that are often taken to be structurally higher than weak quantifiers and numerals (Zamparelli, 1995). (For *most* and *much*, see note 23.)

It therefore seems plausible to analyze *so* 'some' and *vica* 'few' as numeral-like elements, occupying SPEC-D. Indeed, we find that both quantifiers cannot naturally co-occur with numerals:

- (85) a. ??na so (na) tolu na pusi
ART some ART three ART cat
b. *na vica (na) tolu na pusi
ART few ART three ART cat

I will therefore analyze the weak quantifiers *so* 'some' and *vica* 'few' as specifiers of DP, parallel to numerals (as argued in section 3.1 above). That is while the strong quantifiers *taucoko* 'all' and *yadudua* 'every' are in SPEC-Art, *so* and *vica* are lower in the structure:



This correctly predicts that, as with numerals, *na* can raise to K; since the copies in Art and D both have lexical material to their right in linear order, both are pronounced according to the pronunciation rule (59). As before, we also correctly predict that in cases like (82c) and (83c), the Num-head blocks raising of *na* to K, so that K is realized in its unmarked form (*o* if nominative, \emptyset otherwise). No additional assumptions are necessary.

Let us now turn to partitives involving quantifiers. We can set aside here the strong quantifiers *taucoko* ‘all’ and *yadudua* ‘every’, since partitives involving these quantifiers are structurally identical to the by-now familiar regular, quantificational forms:

- (87) a. o ira taucoko na pusi
 NOM PL all ART cat
 ‘all (of) the cats’
 b. o ira taucoko na noqu pusi
 NOM PL all ART POSS.1SG cat
 ‘all (of) my cats’
 c. o ira taucoko na ruasagavulu na koli
 NOM PL all ART twenty ART dog
 ‘all (of) the twenty dogs’

By contrast, the weak quantifiers *so* ‘some’ and *vica* ‘few’ can be used in “real” partitive structures. As expected given the previous discussion, the weak quantifiers behave exactly like numerals (see the discussion on p. 15 above):

- (88) a. i. na so vei ira na pusi
 ART some of PL ART cat
 ‘some of the cats’
 ii. na so vei ira na tini na pusi
 ART some of PL ART ten ART cat
 ‘some of the ten cats’
 b. i. na vica vei ira na pusi
 ART few of PL ART cat
 ‘few of the cats’
 ii. na tini vei ira na pusi lewe levu
 ART ten of PL ART cat many

Recall that in section 3.1, I analyzed partitives as involving a deleted head noun with a PP-complement headed by *vei* ‘of’. I followed Ladusaw (1982) and others in that I took the preposition *vei* to denote the part relation between the deleted noun and the plurality denoted by the complement (NumP) of *vei*. Given the parallel structures of partitives involving weak quantifiers and partitives involving numerals, I will apply the same analysis to the cases in (88):

- (89) a. na so ~~na pusi~~ vei ira na pusi
 ART some of PL the cats
 ‘some of the cats’
 b. na vica ~~na pusi~~ vei ira na pusi
 ART few of PL ART cat
 ‘few of the cats’

As before, I think this analysis gets both syntax and semantics right, and the pronunciation rule given in (59) correctly predicts the deletion of *na* along with the head noun, since it requires overt copies of the article to have material to its right. Notice that in the cases in (89), too, the deleted part can be overtly realized, yielding a grammatical albeit semantically awkward (redundant) structure.

To conclude the discussion of quantifiers, let us briefly consider the quantifier *ga* ‘only’. It is obvious from previous examples like (20b) and (48) that *ga* is an emphatic marker that can however be translated as ‘only’ in many contexts. In its adjectival use, *only* is expressed by *taudua* ‘alone’; compare (90a) and (90b).

- (90) a. na gone ga
 ART child EMPH
 ‘only the child’
 b. na gone taudua
 ART child alone
 ‘the only child’

A stronger reading is attained when *ga* and *taudua* are combined; *taudua* adjoins lower than *ga*, as (91) shows.

- (91) a. na pusi taudua ga
 ART cat alone only
 b. ?? na pusi ga taudua
 ‘ONLY the cat’

Hence, I take *taudua* to be a regular adjectival modifier, adjoining to *nP* (see section 3.3). As (91a) shows, *ga* is higher than *taudua*; example (48), repeated here, shows that it is lower than demonstratives.

- (48) na ivola sara ga oqo
 ART book EMPH EMPH this
 ‘this very book’

I tentatively conclude that *ga* adjoins to *DP*, but the evidence is inconclusive. It might adjoin to *nP*, semantic constraints forcing it to scope over adjectives. I will leave the question open here.

Whatever the correct analysis is for *ga* ‘only’, we have seen that Fijian quantifiers divide into two major groups. The strong quantifiers *taudua/yadudua* are different from other quantifiers in that they readily appear in both pre- and postnominal position. I have argued that in the former case, they are specifiers of *ArtP*, the head of which attracts the D-head *na*, resulting in two overt copies of *na* whenever *SPEC-D* is filled, according to the rule proposed in (59). If postnominal, *taudua/yadudua* are essentially adjectival modifiers, which I will argue to adjoin to *nP* in the next section.

The (weak) quantifiers *so* ‘some’ and *vica* ‘few’ were shown to be similar to numerals; hence, I analyzed them as occupying *SPEC-D*. This parallelism allowed me to straightforwardly carry over my analysis of partitives from section 3.1. Overall, the discussion revealed that quantifiers require no modifications of the noun-phrase structure initially proposed in (1): all the observed effects could be derived from a high position (*SPEC-Art*) of the strong quantifiers vs. a lower position (*SPEC-D*) of the weak quantifiers, and the application of the deletion rule (59).

In the following section, I will discuss adjectival modifiers. It will turn out that these provide further evidence for the layered **KP** > **ArtP** > **DP** > *nP* structure.

3.3 Adjectives

It is contested whether or not adjectives are a universal category in the world’s languages (see Baker (2003, sec. 4.6) and references therein for discussion); in particular, the difference between adjectives and (reduced) relative clauses is often hard to detect. I will argue that the modifiers discussed in this section are indeed different from the relative clauses discussed in section 3.4, concluding that Fijian does have a distinct category of adjectives.

Some language do not allow attributive modification by more than one adjectival modifier; further adjectives must be coordinated or realized as relative clauses (see Dixon (2004) for extensive discussion). Other languages allow multiple adjectives – Fijian, like English, is in the second group. However, Fijian adjectives (like numerals) commonly appear as predicates:

- (92) e ratou roka loloa na pusi
 3SG PAUC black ART cat
 ‘several black cats’ (lit.: ‘the black cats are several’)

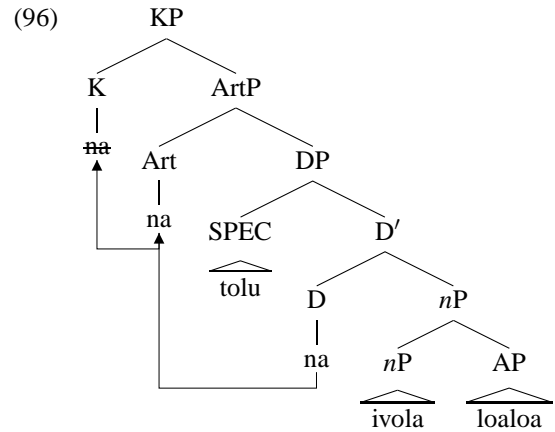
Since predicative modifiers are outside the noun phrase proper, they will not be further considered here.

Adjectival modifiers in the noun phrase are generally postnominal. The adjective can be preceded by an intensifier (93b), or the adverbial element *dau* ‘always’ (94); the latter is used to differentiate between stage-level (94a) and individual-level (94b) uses of adjectives.

- (93) a. na vatu totoka
 ART stone good
 ‘the beautiful stone’
 b. na vatu rui totoka
 ‘the very beautiful stone’
- (94) a. na tagane tauvimate
 ART man sick
 ‘a sick man’ (stage-level)
 b. na tagane dau tauvimate
 ART man always sick
 ‘a sick man’ (individual-level)

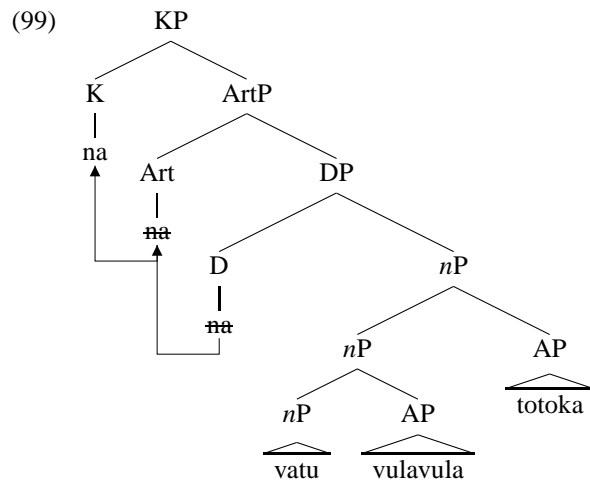
Adjectives contrast clearly with numerals in that the latter are always prenominal (see section 3.1), while the former are strictly postnominal. I assume in this paper that adjuncts in the Fijian noun phrase are invariably to the right, while specifiers are to the left; hence, I analyze adjectival modifiers as right-adjoined. For reasons that will become clear when I discuss relative clauses in section 3.4, I will assume that adjectival modifiers generally right-adjoin to *nP* (not to DP):

- (95) na tolu na ivola loaloa
 ART three ART book black
 ‘three black books’



As mentioned at the beginning of the section, Fijian allows multiple adjectives within the noun phrase; as expected, such multiple adjectives exhibit ordering restrictions. In general, the natural order of adjectives in Fijian is the opposite of the English order, as in French and Hebrew (den Dikken, 2003; Shlonsky, 2004).

- (97) a. na vatu vulavula totoka
 ART stone white good
 b. ?? na vatu totoka vulavula
 ‘the beautiful white stone’
- (98) a. na vatu vulavula levu
 ART stone white big
 b. ?? na vatu levu vulavula
 ‘the big white stone’



It is beyond the scope of this paper to attempt an explanation of these ordering restrictions; it might be that there are distinct functional heads for each adjective type involved (Scott, 2002), or that semantic restrictions account for the observed effects (Truswell, 2004). More relevant for present purposes is that we will see in section 3.4 below that these ordering preferences vanish when relative-clause modifiers are used; this provides a strong argument for Fijian having true adjectives. If all apparent adjectives were in fact reduced relatives, we would not expect ordering restrictions in one case but not the other.

Provenance is attributed by means of a PP headed by the linker *ni*; recall from section 3.1 that ordinals take [*ni*-DP] complements (cf. (62) on p. 14). Since such PP-modifiers follow other adjectival modifiers, I assume they adjoin to DP:

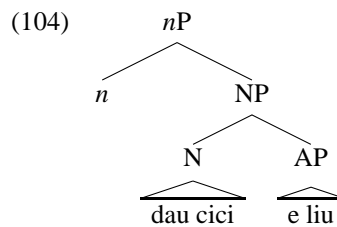
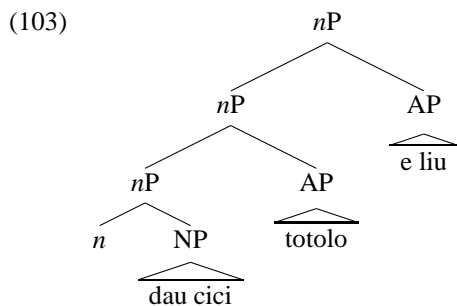
- (100) a. na motoka levu ni Merika
 ART car big LNK America
 b. ?? na motoka ni Merika levu
 ‘the big American car’

It might also be that *ni Merika* adjoins to *nP*, like regular adjectives; ordering of adjectives before PP-modifiers would then have to follow from some ordering restriction. I will leave the question open here, since my focus in this paper is on adjectives and relative clauses; I hope to come back to PP-modifiers in future work.

It is difficult to find clear examples of nonintersective adjectives in Fijian; most of the meanings expressed by nonintersective adjectives in languages like English are expressed by circumlocutions that often involve relative clauses. The clearest example of a nonintersective adjective I could find was *e liu* ‘former’. Consider the following examples:²⁴

- (102) a. na dau cici totolo e liu
 ART runner fast former
 ‘a former fast runner (a runner that formerly was fast)’
 b. na dau cici e liu totolo
 ART runner former fast
 ‘a former fast runner (a fast person that formerly was a runner)’

As the contrast between the examples in (102) shows, position of the adjective determines the scope of its modification. Thus, in (102a) *e liu* ‘former’ modifies the adjective *totolo* ‘fast’, whereas in (102b) it modifies the head noun *dau cici* ‘runner’. To account for the contrast, I propose the following. Nonintersective adjectives are free to adjoin to different projections. In (102a), *e liu* is adjoined higher than *totolo*; but notice that it only modifies *totolo*, not the head noun. To modify the head noun, as in (102b), it must adjoin below *n*, i.e. directly to N (which might be taken to be a root; cf. Marantz (1997)). To illustrate:



The final analysis of the position of non-intersective adjectives will have to await discussion of relative clauses in section 3.4; see p. 29 below.

²⁴At first sight, the obligatory presence of the subject pronoun *e* might be taken to indicate that *e liu* is actually a (reduced) relative clause. This appears not to be true, however; as (101) shows, the nonreduced form yields a different meaning:

- (101) na dau cici totolo [ka e liu]
 ‘the fast runner who came first’

Overall, the true nature of *e liu* is unclear to me, and I will set many questions aside for the purposes of this paper.

So far, we have only seen adjectival modifiers that are postnominal; I have tentatively analyzed these as adjoined to *nP*. There is, however, a modifier that is always prenominal: *mataqali* ‘kind of’. Consider the following examples:

- (105) a. na mataqali vatu totoka
 ART kind-of stone beautiful
 ‘the kind of stone that is beautiful’
 b. o ira taucoko na mataqali pusi
 NOM PL all ART kind-of cat
 ‘all kinds of cats’
 c. na tolu na noqu mataqali ivola saulevu
 ART three ART POSS.1SG kind-of book expensive
 ‘the three kinds of expensive books’

The examples give us some hints to determine the position of *mataqali*. Specifically, (105c) shows that the modifier is below the D-head, since it appears sandwiched between a lower occurrence of *na* and the head noun; it is preceded, however, by a possessive pronoun, which I analyze as occupying SPEC-*n* (notice the co-occurrence with a numeral in SPEC-D in (105c)). I will therefore assume that *mataqali* merges low, in SPEC-N. The modifier appears to be unique in this position; I have not been able to find any other modifiers whose position is between possessive pronouns and the head noun.

To recap, I have shown in this section that Fijian has postnominal adjectival modifiers, which exhibit ordering restrictions not observed with corresponding relative-clause modifiers (I will come back to this point in section 3.4 below, where I establish the difference between adjectives and relative clauses). More specifically, I have argued in this section that regular postnominal adjectives in Fijian are right-adjoined to *nP*. Some special cases (PP-modifiers attributing provenance, the nonintersective adjective *e liu*, and the unusual modifier *mataqali* ‘kind of’) were discussed inconclusively, but seem to fit fairly well into the noun-phrase structure developed so far. In the next section, I will argue that relative clauses adjoin to DP; taking this together with my claim in section 2.3 that demonstratives adjoin to KP and my assumptions concerning adjectives, the layered noun-phrase structure I am assuming here directly maps onto the order **N > Adj > Rel > Dem** that we find among modifiers in the Fijian noun phrase.

3.4 Relative clauses

In this section, we will see some more evidence for my claim that adjectival and relative-clause modifiers are distinct categories in Fijian. The most important cases to establish this claim are asymmetries observed between adjectives and relative clauses with regard to ordering restrictions and modification of incorporated nouns. The discussion of these cases will at the same time support my assumption that while adjectives adjoin to *nP*, relative clauses adjoin to DP.

Fijian relative clauses are generally introduced by the marker *ka*. In simple noun phrases, relative clauses immediately follow the noun they modify. The examples in (106) represent object relatives (106a) and subject relatives (106b,106c):

- (106) a. na tamata [ka au a sotava]
 ART person REL 1.SG PST meet
 ‘the person who I met’
 b. na tamata [ka a sotavi au]
 ART person REL PST meet 1.SG
 ‘the person who met me’
 c. na tamata [ka a sotava]
 ART person REL PST meet
 ‘the person who met someone/*me’

Thus, like demonstrative and adjectival modifiers, relative clauses can be naturally taken to be right-adjoined to a functional projection in the noun phrase.²⁵

²⁵For the purposes of this paper, I will abstract away from the internal structure of relative clauses, assuming a traditional analysis according to which an empty operator coindexed with the head noun moves from object position to SPEC-C of the relative clause (Chomsky, 1977). The tree in

Before investigating the place of relative-clause modifiers within the noun-phrase structure I am assuming here, let us consider some further properties of Fijian relative clauses. All relative clauses in Fijian are restrictive; the meaning of non-restrictive relatives in languages like English is expressed by adjectival modification (cf. section 3.3):

- (108) a. [na tamata uluvula] e sa viakana
 ART person blonde 3SG ASP hungry
 ‘The man, who is blonde, is hungry’
 b. [na tamata ka uluvula] e sa viakana
 ART person REL blonde 3SG ASP blonde
 ‘The man who is blonde is hungry’

Here already we see a difference between adjectives and relative clauses. Dropping the relative-clause marker *ka* in (108b) yields a different meaning, namely that of (108a); hence, adjectives and relative clauses appear to be distinct categories of modifiers.

Pragmatically, relative clauses can (but need not) serve the function of focussing lexical material, such as adjectives (109); such focussing usually goes along with special intonation (not indicated here), hence is not an inherent property of relativization.

- (109) a. na vatu vulavula totoka
 ART stone white good
 ‘the beautiful white stone’
 b. na vatu totoka [ka vulavula]
 ART stone good REL white
 ‘the beautiful WHITE stone’

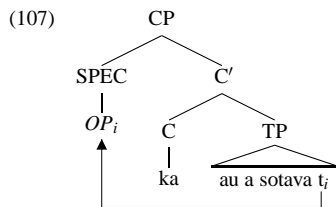
Moreover, relative clauses are frequently used to express location, in cases where languages like English employ PP-modifiers:

- (110) na ivola saulevu [ka e tiko e na dela ni teveli]
 ART book expensive REL 3SG LOC in ART top LNK table
 ‘the expensive book on the table’

Relative clauses can also undergo rightward extraposition. Consider the contrast between the examples in (111), illustrating possessive noun phrases. In (111), the relative clause unambiguously modifies the head noun *ivola*; extraposition as in (111b) does not disrupt the modification relation. By contrast, a bare adjective in the surface position of the extraposed relative clause modifies the possessor *na tamata* (112).

- (111) a. na nona ivola [ka totoka] na tamata qase
 ART POSS.3SG book REL good ART person old
 b. na nona ivola t_i na tamata qase [ka totoka] $_i$
 ‘the old man’s interesting book’
 (112) na nona ivola na tamata gase totoka
 ‘the good old man’s book’

(107) illustrates, showing only the relative clause and abstracting away from details of clause structure that need not concern us here:



As standardly assumed in the literature, movement of the empty operator turns the relative clause into a predicate, allowing it to combine with a head noun (but see Vergnaud (1974); Kayne (1994) for a different approach).

In this case again, we see that relative clauses and adjectives behave differently, indicating that they are different types of modifiers. Similarly, the contrast in (113) illustrates a case where a relative-clause modifier, but not an adjective, can resolve ambiguity:

- (113) a. na tolu na ivola ni pusi saulevu
 ART three ART book LNK cat expensive
 ‘three expensive books about cats’
 or: ‘three books about expensive cats’
 b. na tolu na ivola ni pusi [ka saulevu]
 ‘three expensive books about cats’ (unambiguous)

In (113a), an adjective modifies a compound (“cat book”); the structure is ambiguous between modification of either part of the compound. The ambiguity vanishes upon replacement of the adjective by a relative clause: the relative clause unambiguously modifies the head noun *ivola*. It seems at least plausible to assume on the basis of such examples that adjectives and relative clauses are distinct kinds of modifiers in Fijian.

Let us now consider ordering restrictions among relative-clause modifiers. In English and many other languages, relative clauses that express an individual-level property preferred in a position that is closer to the head noun than that of relative clauses attributing a stage-level property (see Alexiadou et al. (2007)). As (114) shows, this is also the case in Fijian:

- (114) a. na turaga [ka dau taletaka na pusi] [ka yaco mai e na bogi]
 ART man RC always like ART cat RC arrive to-here 3SG ART night
 b. ??/# na turaga ka yaco mai e na bogi ka dau taletaka na pusi
 ‘the man who likes cats who arrived last night’
 (cf.: #The man who arrived last night who likes cats)

As with the ordering restrictions among adjectives illustrated in section 3.3, I will not attempt to analyze the semantic restrictions that yield these effects. I will continue to assume that relative clauses invariably adjoin to DP, attributing the effect witnessed in (114) to independent factors of semantic interpretation.

Setting aside cases like (114), which clearly depend on the individual-level vs. stage-level distinction, we see an asymmetry between adjectives and relative clauses with regard to ordering restrictions. Recall from section 3.3 that Fijian adjectives obey the same ordering restrictions as those in French, Hebrew, etc. The examples in (97) and (98), repeated here, were used to illustrate the point:

- (97) a. na vatu vulavula totoka
 ART stone white good
 b. ?? na vatu totoka vulavula
 ‘the beautiful white stone’
 (98) a. na vatu vulavula levu
 ART stone white big
 b. ?? na vatu levu vulavula
 ‘the big white stone’

Let us now consider the parallel cases involving relative-clause modifiers instead of adjectives. We notice, first, that adjectives that are preferred close to the noun can follow other modifiers if realized as relative clauses; second, it seems that in cases where we replace all adjectival modifiers with relative clauses, there are also no ordering preferences at all:

- (115) a. na vatu totoka [ka vulavula]
 ART stone good REL white
 b. na vatu vulavula [ka totoka]
 ‘the beautiful white stone’

- (117) a. na vatu [ka totoka] [ka vulavula]
 ART stone REL good REL white
 b. na vatu [ka vulavula] [ka totoka]
 ‘the beautiful white stone’

- (116) a. na vatu levu [ka vulavula]
 ART stone big REL white
 b. na vatu vulavula [ka levu]
 ‘the big white stone’

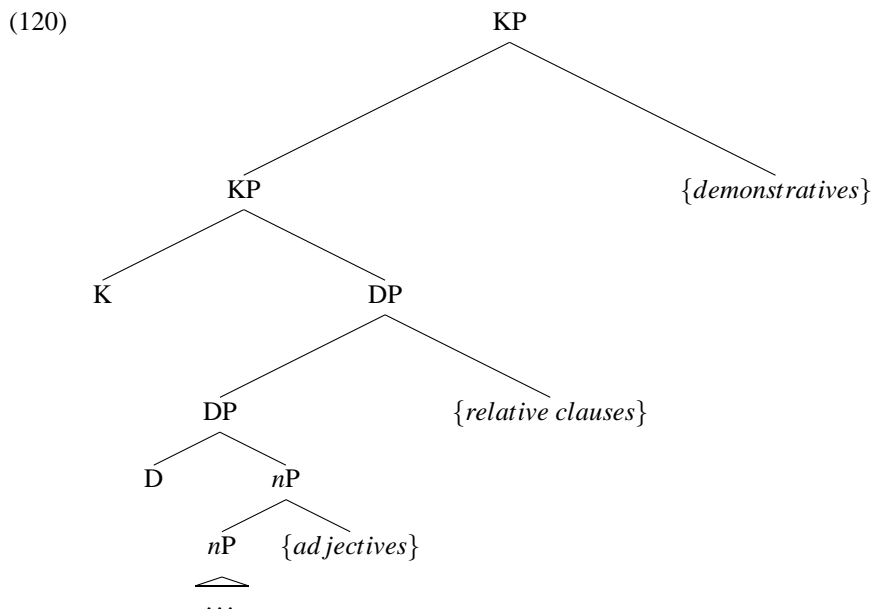
- (118) a. na vatu [ka levu] [ka vulavula]
 ART stone REL big REL white
 b. na vatu [ka vulavula] [ka levu]
 ‘the big white stone’

My informant consistently judged all cases in (115–118), as well as analogous cases, to be perfectly acceptable. This asymmetry provides a strong argument for adjectives and relative clauses being two distinct classes of modifiers in Fijian: only the former, not the latter exhibit ordering restrictions. Thus, I will not only assume that both categories represent different types of structures (CP vs. AP), but also that they adjoin to different layers of the noun phrase.

What I propose is that while adjectives adjoin to *nP* (see section 3.3), relative clauses adjoin to DP. This derives the fact that relative clauses always follow adjectival modifiers; ordering restrictions are apparently restricted to the *nP*-domain (see Svenonius (to appear) for some speculations along similar lines). Recall from examples like (49b) that demonstratives follow relative clauses; the same is shown in (119):

- (119) a. na vatu totoka ka vulavula oqo
 b. ?? na vatu vulavula oqo ka totoka
 c. * na vatu oqo vulavula ka totoka
 ‘this beautiful white stone’

So far, then, we have seen that different types of modifiers naturally occur in a certain order: adjectives are usually closest to the noun, while relative clauses and demonstratives appear to be located in outer layers of the noun phrase, demonstratives marking the outer right edge. I therefore assume *nP*, DP, and KP to be the “attachment sites” for adjectives, relative clauses, and demonstratives, respectively:



The interplay of nonintersective adjectives and relative clauses shows that the former are somewhat exceptional in that they are free to adjoin to different layers. Recall the data in (102), repeated here:

- (102) a. na dau cici totolo e liu
 ART runner fast former
 ‘a former fast runner (a runner that formerly was fast)’

- b. na dau cici e liu totolo
 ART runner former fast
 ‘a former fast runner (a fast person that formerly was a runner)’

Evidently, the relative positions of nonintersective adjective and adjectival modifier determine the scope of modification by *e liu*. Adding now relative clauses to the picture, notice that *e liu* can appear below or above any kind of additional modifier:

- (121) a. na dau cici e liu totolo [ka totoka]
 ART runner former fast REL good
 ‘the [former runner] who is fast and beautiful’
 b. na dau cici totolo e liu [ka totoka]
 ART runner fast former REL good
 ‘a [formerly fast] runner who is beautiful’
 c. na dau cici totolo [ka totoka] e liu
 ART runner fast REL good former
 ‘a [formerly fast and beautiful] runner’

As seen before in the examples in (102), here again relative height of the nonintersective adjective and the relative clause directly map onto scope: very high adjunction as in (121c) yields modification of all lower modifiers; in (121b), only the adjective is modified. As argued above, the nonintersective adjective has to adjoin below *n* to modify the root directly, as in (121a) – see (104) above. One crucial aspect of the exceptional nature of the modifier *e liu*, then, is its freedom to adjoin to any layer of the noun phrase.

As a final point in this discussion, let us consider a further piece of evidence for the distinctness of relative clauses and adjectives in Fijian. On p. 6 above, I briefly discussed cases of pseudo-incorporation of a direct object into the predicate. The reason for classifying (27) as *pseudo-incorporation* is that the incorporated noun (phrase) can be modified by adjectives (see Massam (2001) for discussion):

- (122) a. i. au gunuva na wai batabata
 1SG drink water cold
 ‘I’m drinking the cold water’
 ii. au gunu wai babata
 lit.: ‘I’m cold-water drinking’
 b. i. au kania na co drokadroka
 1SG eat ART grass green
 ‘I’m eating the green grass’
 ii. au kana co drokadroka
 lit.: ‘I’m green-grass-eating’

On the other hand, modification of a pseudo-incorporated noun phrase by a relative clause was perceived by the informant as severely degraded (123a-ii, 123b-ii):

- (123) a. i. au gunuva na wai [ka batabata]
 1SG drink water REL cold
 ‘I’m drinking the water that is cold’
 ii. * au gunu wai ka batabata
 b. i. au kania na co [ka drokadroka]
 1SG eat ART grass REL green
 ‘I’m eating the grass that is green’
 ii. * au kana co [ka drokadroka]

Recall that I argued on p. 6 above (following Baker (1988)) that in order for a noun phrase to be capable of incorporating into the verb, it must be a ‘bare’ *nP*; D and higher functional structure must be absent in these cases. This assumption now receives strong support from the data in (123a-ii, 123b-ii): the impossibility of relative-clause modification of an incorporated noun phrase directly follows from the absence of DP. By contrast, adjectives, which I have argued adjoin to *nP*, can modify even the bare, incorporated noun phrases. In this way, the general noun-phrase structure originally proposed in (1) receives indirect, but strong support: different types of modifiers correspond to different layers in the noun phrase. Overall, then, I think that there is unambiguous evidence for the existence of true adjectives (as opposed to reduced relative clauses) in Fijian, and that the observed asymmetries follow directly from the structure proposed in this paper.

3.5 Summary

Let me briefly summarize the main findings of this section. I argued for specific analyses of numerals that require no modifications of the structure originally proposed in (1). I analyzed cardinals as phrasal specifiers of D; in connection with the pronunciation rule proposed in (59), according to which a copy of *na* is pronounced whenever it has phrasal material to its right, this was shown to yield the familiar multiple-copies effect. Moreover, I argued that the same analysis can be applied to certain (weak) quantifiers. Ordinals and the strong quantifiers *taucoko/kece* ‘all’ and *yadudua* ‘every’, however, were shown to be different. The former were shown to be morphological nouns that take PP-complements; the latter I analyzed as occupying SPEC-Art, i.e. a position higher than that of numerals and weak quantifiers. Finally, I proposed a uniform analysis for partitives (involving numerals and quantifiers), according to which partitives involve a silent noun. This analysis was shown to provide further independent evidence for the pronunciation rule (59).

In the final two subsections, I discussed adjectives and relative clauses – two types of modifiers that are generally postnominal in Fijian. Adjectival modifiers are generally closest to the head noun, which led me to analyze them as adjoined to *nP*. The ordering preferences for adjectives are identical to those in French, and nonintersective adjectives modify other modifiers within their scope. Relative-clause modifiers are always postnominal, following adjectives but preceding demonstratives (which mark the right edge of KP). I argued that relative clauses are adjoined to DP; consequently, adjectives but not relative clauses can modify an incorporated noun (assuming that D is absent in cases of incorporation). Moreover, ordering restrictions that were observed with adjectives were shown to be relaxed when modifiers are relative clauses. Taking all this evidence together, I conclude that Fijian has true adjectives, distinct from relative clauses, and that the former adjoin to *nP*, while the latter adjoin to DP.

4 Conclusion

I have shown in this paper that the Fijian noun phrase shows the same general word order as observed in Hmong, Malay and Vietnamese, as described by Simpson (2005, p. 806): **Num – N – Adj – Rel – Dem**. As a search in the *World atlas of linguistic structures* (Haspelmath et al., 2005) reveals, this order is not uncommon. Some other observed properties, such as co-occurrence of demonstratives and the (definite) article (see note 14), are found somewhat less frequent, but as far as I can see, none of my claims about the Fijian noun-phrase structure is outlandish from a typological perspective. Likewise, I think that none of my proposals is radical from a syntactic or semantic point of view.

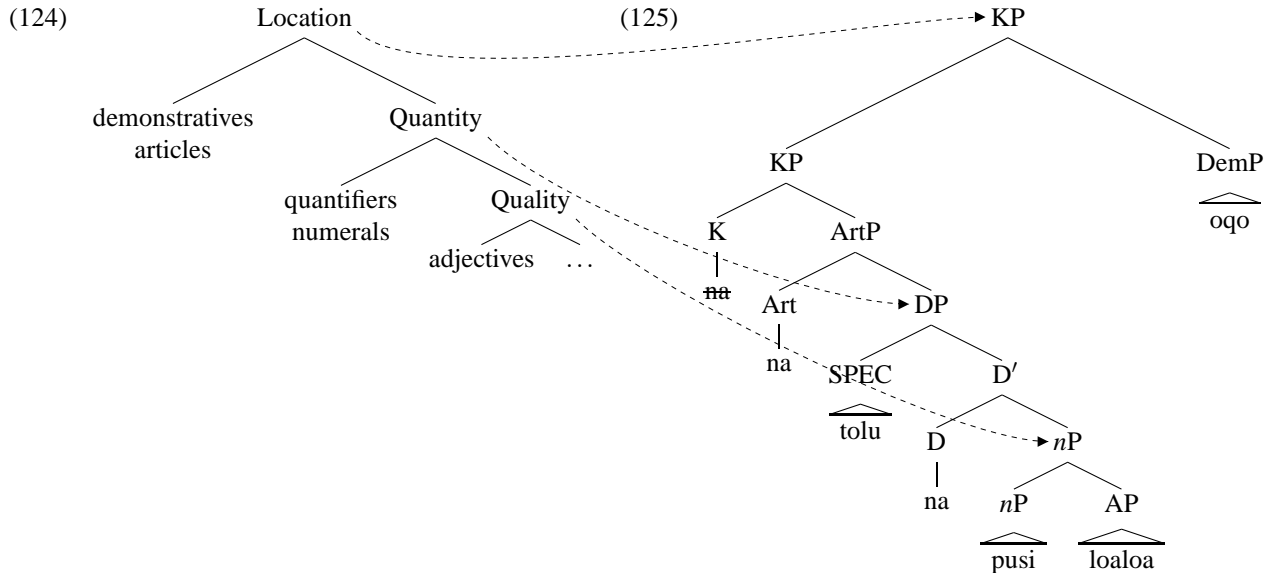
More specifically, I have made two major theoretical claims about the composition of the Fijian noun phrase.

First, I have proposed, following Chomsky (2007); Borer (2005); Roehrs (2006) that the (presumably definite) article *na* generally moves to a higher position (labeled ArtP), and can raise further unless blocked by an intervening head. If *na* raises across a modifier, both occurrences are phonetically realized (*na tolu na ivola*) – an effect which, I have argued, follows from a pronunciation rule of Fijian phonology (“pronounce *na* only if it has overt phrasal material to its right”). If a the Num-head intervenes between Art and K, movement is blocked and structural case on K is realized as *o* if nominative, \emptyset otherwise. A side-effect of this is that nominative proper-noun phrases always occur with *o*: since names are inherent definites (i.e., bear a feature [+definite]), there is no D head that could raise to KP.

Second, I have proposed a layered hierarchical structure of the kind **KP > (NumP) > ArtP > DP > nP > NP**, drawing on various existing proposals in the literature. I showed that adjunction (of adjectival, relative-clause, and demonstrative modifiers) is invariably to the right, while specifiers (numerals, *taucoko*, *mataqali*) are invariably to the left. These two assumptions derive the correct word-order facts: numerals and some other elements are always prenominal, while adjectives, relative clauses, and demonstratives are postnominal. The general linear order **Adj > Rel > Dem** was argued to follow directly from different attachment sites for each type of modifier: demonstratives adjoin to the top projection (KP), relative clauses to DP, and adjectives to *nP*. An important argument for the structural difference

between adjectives and relative clauses was provided by cases of pseudo-incorporation, where, due to absence of D(P), relative-clause modifiers are not possible, while adjectives are.

Before closing, I would like to point out that the basic three-way layering proposed here (KP > DP > nP, plus ArtP as an extension of DP) corresponds neatly to the layers proposed by Rijkhoff (2002) from a functionally motivated perspective:



The convergence is striking and makes me hope that my basic assumptions will withstand further refinements of the theory. As emphasized in the introduction, this paper is a mere very first step towards a comprehensive analysis of the Fijian noun phrase. While many interesting issues have been left for future work, I think that the present proposal is a promising step towards a plausible analysis.

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