

## **Chapter 2 Introduction to the Serbian Noun Phrase**

### **2.1 OVERVIEW**

This chapter is an introduction to the Serbian noun phrase, with a focus on determining headedness for it. Based on Serbian word order facts, as well as the results of previously postulated tests for determining headedness (e.g. Zwicky 1985, Hudson 1987), I show that noun phrases in Serbian are headed by Nouns, and not by Determiners. Thus, I adopt the pre-Abney (1987) analysis of noun phrases, one in which the noun is the head, and analyze noun phrases simply as NPs. I claim that headedness of the noun phrase, i.e., whether it is headed by a Determiner or a Noun, is a language specific property, related to the presence/absence of definite/indefinite articles in a given language. This view was originally put forth by Gil (1987).

This chapter is organized as follows. In Section 2.2, I examine word order of prenominal elements. In Section 2.3, I describe various means for expressing (in)definiteness in Serbian. Finally, in Section 2.4, I offer an answer to the question: What is the head of the Serbian noun phrase? In particular, I show that the noun rather than the determiner, is the head of the Serbian noun phrase.

## 2.2 ELEMENTS OF THE NOUN PHRASE

In this section, I discuss the word order of prenominal constituents, i.e., the position where determiners as well as most non-clausal noun modifiers appear. I first describe the types of prenominal elements and then discuss both neutral and scrambled word order of these constituents.

### 2.2.1 Types of Prenominal Elements

The constituents that precede the noun are of the following types: quantifiers, determiners, possessives, and ordinary adjectives. Each type is illustrated below.

- (1) a. svi            studenti                      b. mnogo studenata  
all-N.M.PL students-N.M.PL                      many students-G.PL  
'all students'    'many students'
- (2) ovaj            student  
this-N.M.SG    student-N.M.SG
- (3) studentova/Jovanova knjiga  
student's/John's-N.F.SG book--N.F.SG

'the student's book'

- (4) stara knjiga  
old-N.F.SG book-N.F.SG  
'the/an old book'

In all the examples except (1b), all prenominal elements are marked for case, number, and gender, agreeing in these features with the following noun. Thus, with respect to agreement, all these prenominal constituents behave like adjectives (cf. (4)). In (1b), the quantifier *mnogo* is uninflected and induces genitive plural features on the noun following (cf. students 'students-G.PL'). On the other hand, the universal quantifier *svi* 'all' in (1a) behaves like all other prenominal elements with respect to agreement features. The two types of quantifiers also behave differently with respect to their distribution within the noun phrase, a fact discussed in the next subsection.

### 2.2.2 Neutral Order

The neutral word order of the above prenominal constituents is depicted below.

- (5) (quantifiers) (determiners) (possessives)  
(cardinal expressions) (adjectives) noun

The semantic class 'quantifier' falls distributionally into two syntactic classes in Serbian. The first class, which I here call 'quantifier', refers to what Browne (1992) calls 'totalizers', i.e. *sve* 'all' and *svako* 'every/each', and appears in the first position of the prenominal complex, as exemplified below.

(6) sve        ove            Jovanove    stare        knjige  
 all-N.F.PL these-N.F.PL John-N.F.PL old-N.F.PL books-N.F.PL  
 'all of these old books of John's'

(7) svaka        ova            knjiga  
 each-N.F.SG this-N.F.SG book-N.F.SG  
 'each book' or 'each of these books'

The second class of quantifiers, which I call cardinal expressions, such as *mnogo* 'many/much', *nekoliko* 'several', the numerals *pet* 'five' and higher, occurs between possessives and adjectives (cf. (8)).

(8) mojih        pet    starih        knjiga  
 my-G.PL five old-G.PL books-G.PL  
 'five old books of mine'

Unlike quantifiers of the first type, some cardinal expressions impose a specific morphosyntactic form on the nominal they quantify, as in examples (1b) and (8).

For example, the numeral *pet* 'five' in (8) requires the genitive plural form on the following noun phrase (cf. *starih knjiga* 'old-G.PL book-G.PL'). I defer discussion of this type of quantifiers until Section 3.5.

Some other examples that illustrate the basic word order depicted in (5) are given below.

(9) ova            moja            knjiga  
this-N.F.SG    my-N.F.SG    book-N.F.SG  
'this book of mine'

(10) jedna           moja           knjiga  
one-N.F.SG    my-N.F.SG    book-N.F.SG  
'a book of mine' or 'one of my books'

Example (9) shows that, unlike English, Serbian allows demonstratives to co-occur with possessives, indicating that these elements do not occupy the same position in the noun phrase. Example (10) illustrates that the numeral *jedan* 'one' can occur with possessives, in which case the noun phrase has a partitive interpretation, as indicated by the corresponding English translation.

Regarding the placement of adjectives, I indicated in (5) that adjectives immediately precede the noun they modify. These adjectives are ordered with respect to each other. Furthermore, just like in English, adjectives having their

own postadjectival modifiers or complements tend to appear postnominally. I now discuss these issues.

Mrazović & Vukadinović (1990 : 304) give the following order of various semantic classes of adjectives found in a prenominal position.

- (11)            I                    II                    III                    IV  
(quantificational) (referential) (qualitative/material) (classificational)

Although it is not so common to have a sequence of four adjectives, the following example (from Mrazović & Vukadinović 1990 : 304) illustrates the above order.

- (12)            mnogobrojni    tadašnji            dobri    školski    drugovi  
                 numerous of-that-time    good    school    friends  
                 'numerous former good school friends'

Like in English (see Quirk et al. 1985), adjectives in the first prenominal position in Serbian belong to a semantic class of nongradable adjectives (disallowing comparison and modification with intensifiers). The second position is occupied by referential adjectives that denote time and location, like *tadašnji* 'former', *jučerašnji* 'yesterday's', *današnji* 'today's', *ovdašnji* 'local'. As we can see from the corresponding English translations, some Serbian referential adjectives correspond to English genitive noun phrases (e.g. *yesterday's*, *today's*). Due to

these categorial differences, we find different co-occurrence restrictions with these referential expressions. Specifically, while Serbian allows a possessive to co-occur with the above referential adjectives, English does not. This is shown below.

- (13)      moje jučer-ašnje      predavanje  
         my   yesterday-ADJ   lecture  
         \*'my yesterday's lecture'

The ungrammaticality of the above English example cannot be due to any semantic restrictions which disallow the co-occurrence of two definite elements, because they are allowed to co-occur in Serbian (and many other languages).<sup>9</sup>

The third prenominal position is occupied by qualitative or descriptive and material adjectives, such as *veliki* 'big', *visok* 'tall', *crven* 'red', *zlatan* 'golden', *gvozden* 'made-of-iron'. Within this class, as in English and many other languages, adjectives denoting size must precede adjectives denoting color (for details see Sproat & Shih 1991). The examples below (from Browne & Nakić, 1975 : 87) illustrate this ordering.

- (14) a.    velike crvene    ruže  
         big    red    roses

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<sup>9</sup>German, which patterns much like English, allows the sequence in (13) (cf. *mein gestriger Vortrag*), indicating that *gestrig* 'yesterday's' is an adjective. I thank Manfred Krifka for pointing out this fact to me.

- b. \*crvene velike ruže  
 red big roses

Finally, the fourth position is occupied by classificational adjectives, such as *medicinski* 'medical', *seoski* 'rural', *studentski* 'student's', *beogradski* 'Belgrade's', *srpski* 'Serbian'. As can be seen from these examples, classificational adjectives, all derived from nouns, have the purpose of delimiting the interpretation of the following head noun according to a particular class. For example, the noun phrase *seoski život* 'the rural life' means life typical of a village.

As indicated in (5), adjectives usually appear prenominally. However, there are two kinds of environments in which adjectives must appear postnominally. The first arises when adjectives modify indefinite pronouns, as in *nešto lepo* 'something nice', *ništa novo* 'nothing new', *neko dobar* 'somebody good'.<sup>10</sup> As can be seen from the translations, English has the same adjective placement rule (cf. ungrammatical *\*lepo nešto* *\*nice something*'). The second case arises when the head adjective is followed by its own modifiers or complements. In other words, if there is a right-branching structure of the

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<sup>10</sup>It is interesting to note that with respect to adjective placement with proper names, adjectives can either precede or follow the proper name.

- |    |   |     |   |
|----|---|-----|---|
| i. | lepa/pametna Marija<br>beautiful /smart Mary<br>'Mary who is beautiful/smart' | ii. | Katarina Velika<br>Catherine great<br>'Catherine the Great' |
|----|---|-----|---|



adjectival phrase, then the whole adjectival phrase must appear postnominally.

The examples below (taken from Leko 1986 : 104) illustrate this restriction.

- (15) a. vojnici [AP teško ranjeni [PP u borbi]]  
          soldiers badly wounded in battle
- b. \*[AP teško ranjeni [PP u borbi]] vojnici  
              badly wounded in battle soldiers

Since the adjectival participle *ranjeni* is followed by the prepositional phrase *u borbi* 'in the battle', it must follow the head noun *vojnici* 'soldiers'.

Williams (1982) and Radford (1993) show that English also has this restriction.

- (16) a. parents [AP proud of their children]  
          b. \*[AP proud of their children] parents

To account for this restriction in English, Williams (1982) devised "the head-final filter" which says that prehead modifiers must be head-final. This filter is, of course, a descriptive generalization, not an explanation. Radford (1993 : 84) brings up the following English examples, showing that the above head-final filter is not even descriptively adequate.

- (17) a. [after dinner] speeches  
 b. [under the counter] transactions  
 c. [end of term] celebrations  
 d. a [better than average] student

The translations corresponding to the English constructions above are ungrammatical in Serbian, showing that the head-final filter is descriptively adequate for this language. Regarding the English examples above, as Ileana Comorovski pointed out (personal communication), one might question whether the prenominal elements in (17) are morphological compounds rather than phrases. The stress pattern on the bracketed elements in (17) indicates that they are, in fact, compounds.

The head final constraint can be stated in terms of an adjacency condition, which roughly says that the noun and the adjective must be adjacent. This adjacency condition is also obtained in Serbian constructions like the following, in which adjectival dependents are preposed, leaving the head adjective next to the head noun.

- (18) [AP u borbi teško ranjeni] vojnici  
 in battle badly wounded soldiers

In this example, which is a permuted version of (15a), the whole adjective phrase is preposed, with the adjective's modifier *u borbi* 'in the battle', occurring before

and not after the head adjective. In other words, the adjective's modifier must undergo 'scrambling' in such a way that the head adjective be adjacent to the modified noun, yielding the grammatical (18). A related strategy is used in English, as the following example illustrates.

- (19) a. a girl [AP suitable [PP for the job]]  
b. a suitable girl [PP for the job]

In (19b), only the head adjective *suitable*, is preposed leaving its dependent, *for the job*, in the original position (after the head noun). Serbian uses this strategy as well, so that the following Serbian sequence corresponding to the English example in (19b) is also acceptable.

- (20) a. devojka prikladna za posao  
girl suitable for job  
b. prikladna devojka za posao

### 2.2.3 Scrambling

In the appropriate context (e.g. emphasis, contrast) and/or intonation, the order of prenominal constituents (excluding cardinal expressions which are

discussed in Section 3.5) can be rather flexible. The only exception to this flexibility in word order occurs with demonstratives and the indefinite determiners *jedan/neki* 'a/some'. More precisely, the order *Poss/Adj - Det* is not allowed. I first provide some examples of these unacceptable sequences, and then show various combinations of elements that do allow permutation.

Browne & Nakić (1975 : 89) give the following example that illustrates that possessives (i.e. possessive pronouns in (21a) and possessive adjectives derived from nouns in (21b)) cannot switch the order with demonstratives.

- (21) a. \*moja ova ruža  
my this rose  
\*'my this rose'
- b. \*Petrovi oni prijatelji  
Peter's-ADJ those friends  
\*'Peter's those friends'

Similarly, possessives cannot exchange order with the indefinite determiners *jedan/neki*.

- (22) a. \*moja jedna/neka prijateljica  
my a/some friend  
'a/some friend of mine'

- b. \*Jovanova jedna/neka prijateljica  
John's-ADJ a/some friend  
'a/some friend of John's'

In addition, ordinary adjectives and determiners cannot exchange their usual order.<sup>11</sup>

- (23) \*velika ova/jedna kuća  
big this/a house

All other combinations seem to be possible. For example, possessive adjectives can switch their order with ordinary adjectives, where the focus is on the adjective.

- (24) lepa Jovanova/studentova kuća.  
beautiful John's/student's-ADJ house  
'John's/the students pretty house'

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<sup>11</sup>However, some adjectives with emphatic stress can occur before the determiners, as in the following example.

- i. Jadni ti ljudi!  
poor these people

Browne & Nakić (1975) note that unlike possessive adjectives derived from nouns (e.g. *studentova* 'the student's', *Jovanova* 'John's' in (24)), possessive pronouns do not allow the above permutation. According to them, the following sequence is ungrammatical.

(25)        \*nova    njegova    kuća.  
              new     his        house

However, the following grammatical example shows that it is possible to permute possessive pronouns with adjectives.

(26)        To je    lepa        moja    devojčica.  
              this is beautiful-N    my-N    girl-N  
              'This is my beautiful girl.'

This fact indicates that the acceptability of the sequence adjective-possessive pronoun is not due to syntactic factors, rather it depends on both the context and the choice of the head noun.

Regarding the possible order of the universal quantifiers *svi* 'all' and *svaki* 'each/every', the native speakers' judgments are not so straightforward. We saw in (5) that in a neutral context, these quantifiers occupy the first position in the

prenominal complex. All of my informants also allow them to appear after demonstratives, as in (27).

- (27)      ove   sve knjige  
             these all books  
             'all these books'

A few of my informants also accept these quantifiers after possessive pronouns.

- (28) a. ?moje sve knjige  
             my     all books  
             'all books of mine'

And none of my informants accept these quantifiers after possessive adjectives derived from nouns (cf. (29a)), or after ordinary adjectives (cf. (29b)).

- (29) a. \*Jovanove/studentove sve knjige  
             John's/student's     all books
- b. \*dobri svi studenti  
             good all students

Based on these examples, it appears that universal quantifiers pattern like determiners in not allowing the permutation with possessives and adjectives.

Before concluding this subsection, it should be noted that, in general, all of the prenominal elements listed in (5) can also occur after the noun 'in poetic or expressive style' (Browne 1992). I give three examples, all reproduced from Savić (1969 : 86), that depict this kind of scrambling. (For further examples, see Savić 1969, Ivir 1972 and Browne & Nakić 1975).

(30) lepe i vredne žene srpske  
beautiful and diligent women Serbian  
'beautiful and diligent Serbian women'

(31) cveće naše, posivelo, tužno  
flowers our grey sad  
'our grey, sad flowers'

(32) starica ova, bespomoćna, suva, uvela  
old-woman this helpless thin withered  
'this helpless, thin, withered old woman'



Example (30) illustrates postposing of adjectives (cf. *srpske* 'Serbian'). Example (31) illustrates postposing of possessives (cf. *naše* 'ours') as well as adjectives. And example (32) illustrates postposing of demonstratives (cf. *ova* 'this'). That we are dealing with postposing of the noun's modifiers rather than preposing of the noun, can be supported by the following permuted sequences, in which some modifiers precede and some follow the noun.

- (33) a. *dobra majko moja*  
good mother my  
'my good mother'

- b. sve lepe zemlje ove  
all beautiful countries these  
'all these beautiful countries'

To summarize, with the exception of determiners and universal quantifiers, the word order of prenominal constituents is rather flexible. The fact that demonstratives and the indefinite determiners *jedan/neki* behave identically with respect to their distribution within the noun phrase indicates that they both occupy the same syntactic position in the noun phrase.<sup>12</sup>

In conclusion, it is worth mentioning Chomsky's (1981) and Hale's (1981, 1983) observation that the free constituent order is an important indicator of non-configurational structure of a given phrase. Gil (1987 : 260) uses this observation to make the claim that the Japanese noun phrase is nonconfigurational, since it allows unrestricted permutation of elements. Based on the word order patterns in the Serbian noun phrase, it can be concluded that the Serbian noun phrase structure is a hybrid between fully configurational (with rigid word order) and non-configurational structure (with totally free word order, i.e. a 'flat' structure). In the following section, I describe various means for distinguishing definite from indefinite noun phrases in Serbian.

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<sup>12</sup>Note that demonstratives and *jedan/neki* cannot occur together. However, this is most likely due to semantic factors, since demonstratives are intrinsically definite while *jedan/neki* 'a/some' are indefinite.

### 2.3 MEANS FOR EXPRESSING (IN)DEFINITENESS

Although Serbian has no articles, it has many other means for expressing (in)definiteness. The purpose of this section is to describe these.

Languages use diverse means to express (in)definiteness. However, the research on (in)definiteness has focused mainly on definite and indefinite articles, as prototypical lexical items used for these purposes. The main discourse function of the definite article is anaphoric, to refer back to an entity mentioned or known to the discourse participants. The referent expressed by a singular noun phrase containing a definite article must be unique in a given situation. The indefinite article, on the other hand, has a role of introducing an entity into the discourse. Semantically, noun phrases with an indefinite article pick out an unidentified member of a set of entities denoted by the common noun.

Not all languages have both definite and indefinite articles. Some languages have only a definite article (e.g. Greek, Arabic) or just an indefinite article (e.g. Chamorro). Also, there is a large group of languages that lack both definite and indefinite articles (e.g. Korean, Japanese, Chinese, most Slavic languages). In order to express (in)definiteness, these languages use various other means: lexical, syntactic, or contextual. The most common lexical device is the use of demonstratives, which perform the anaphoric function of the definite article and, in addition, have a deictic function, to locate the object by pointing. Based on the fact that almost all languages have demonstratives and that children acquire demonstratives (accompanied by pointing) prior to definite/indefinite

articles, many linguists claim that deixis is the most fundamental means for expressing definite reference. The fact that in Indo-European languages definite articles were historically derived from demonstratives, further supports this claim. For expressing the indefiniteness of singular NPs, some languages use the numeral *one*, from which an indefinite article has been derived historically (as in Germanic and Romance languages). Some other languages, e.g. Romance (with the exception of French), Slavic, Hungarian, Greek, Albanian, Chinese, Swahili, vary the word order in order to differentiate definite from indefinite noun phrases. In general, the subject noun phrase of both intransitive and transitive verbs may occur postverbally if the subject is indefinite, and preverbally, if the subject is definite. This is exemplified by the following Chinese sentences, reproduced from Sasse (1987 : 537).

- (34) a. Lai-le            ke-        ren  
           come-PERF    guest-    person  
           'A guest/guests has/have come'.
- b. Ke-ren            lai-le.  
           'The guests have come.'

The purpose of the above word order pattern is to indicate the discourse status of the subject. Specifically, if the subject occurs preverbally, it is the topic of the sentence, carrying old information, and if it occurs postverbally, the subject

is de-topicalized, introducing a novel referent and creating a new information structure, known as athetic statement (cf. Sasse 1987).

In some topic-prominent languages (for the comprehensive list, see Gundel 1988) topics are grammaticalized. For instance, in the following Japanese sentence (from Gundel 1988 : 213), the noun phrase *neko* is followed by the topic marker *wa*, and as such, it can only be interpreted as definite.

- (35)      Neko-*wakingyo*-o            ijitte  
            cat-TOPIC goldfish-OBJECT play-with  
            The/\*a cat is playing with the/a goldfish.'

Based on this brief cross-linguistic survey, it comes as no surprise that Serbian, although lacking definite/indefinite articles, utilizes some of the above means to distinguish definite from indefinite noun phrases.

### 2.3.1 Determiners

There are three types of semantic determiners employed in Serbian: demonstratives, the numeral *jedan* 'a/one' and the determiner *neki* 'some'. As illustrated earlier, in the neutral word order, all these determiners occur before the noun they specify, agreeing with the noun in case, number and gender. I describe each of these determiners separately.

### 2.3.1.1 Demonstratives

As discussed above, just like a definite article, demonstratives have an anaphoric function, referring to an entity already introduced in the discourse. In addition, demonstratives have a deictic function, pointing to an entity/object present in the context. Unlike English, which makes only a two-way distinction with respect to a proximity feature (cf. *this book* vs. *that book*), Serbian makes a three-way distinction, as graphically depicted below.

- (36) Speaker : fi — fi — fi —  
Vidim ovo dete to dete ono dete  
I see this child / that child / that child (over there).'

As the diagram above shows, the form of a demonstrative varies depending on the location of the object in relation to the speaker (i.e. the 1st person). The demonstrative *ovo*-NT.SG (*ovaj*-M.SG/*ova*-F.SG) indicates that the object denoted by a noun is in the proximity (spatial or temporal) of the speaker. The medium distance demonstrative *to*-NT.SG (*taj*-M.SG/*ta*-F.SG) indicates that an object is further away from the speaker. And, the distal demonstrative *ono*-NT.SG (*onaj*-M.SG/*ona*-F.SG) indicates that an object is remote from both the speaker and the hearer. For ease of reference, the first type of demonstratives (e.g. *ovo* 'this') will be called the proximal demonstrative, the medial demonstrative will be called *that*<sub>1</sub>, and the distal demonstrative would be called *that*<sub>2</sub>. All three types of

demonstratives can be used anaphorically, with *that*<sub>1</sub> and *that*<sub>2</sub> being almost exclusively used for these purposes. For instance, one can say:

- (37) Taj/onaj čovek je danas oputovao.  
that<sub>1</sub>/that<sub>2</sub> man AUX today left  
'The man left today.'

to mean 'The man I talked to you about left today.' Used in this way, Serbian demonstratives behave like a definite article (as indicated in the English translation).

Serbian demonstratives can also modify proper names, as in the following sentence, reproduced from Grickat (1967 : 45).

- (38) Taj Jovan, što večito sedi kraj televizora, mogao bi nešto da nam ispriča.  
that John who always sits besides television could something COMP us tell  
'That John, who always sits next to the TV, could tell us something.'

As pointed out by Grickat, the demonstrative *taj* in the above example does not have a deictic function but only an anaphoric function, in the meaning: John, already mentioned in the discourse.

The choice between *that*<sub>1</sub> and *that*<sub>2</sub> depends on the reference time relative to speaking time. The medial demonstrative *taj* 'that<sub>1</sub>' is used when the entity is

'recently' mentioned, where 'recently' is contextually determined. Otherwise, the distal demonstrative *onaj* that<sub>2</sub> is used.

In addition to 'regular' demonstratives, Serbian also has two 'specialized' types of demonstratives, which traditional grammars (e.g. Stevanović 1962, 1991) call qualitative and quantitative demonstratives. Like regular demonstratives, these demonstratives also inflect for case and phi-features, agreeing in these features with the noun they specify. Qualitative demonstratives, such as *ovakvo/takvo/onakvo* 'this kind/that<sub>1</sub> kind/ that<sub>2</sub> kind', indicate the quality of an object denoted by a noun in comparison with some other object. This is depicted below.

- (39) Video      sam    takvu                      ženu.  
Saw-1.SG    AUX    that+kind-A.F.SG    woman-A.F.SG  
'I saw that kind of a woman.'

This sentence might, for example, mean that the speaker saw a woman that resembles some other woman the speaker has in mind, but the hearer does not need to know the referent expressed by that noun phrase. In other words, the noun phrase with the qualitative demonstrative behaves like a specific indefinite noun phrase. The fact that these demonstratives can occur in existential sentences, where only indefinite NPs go, support such conclusion.

- (40) Još uvek postoje takve            knjige.  
still always exist those-kind    books



'There still exist those kinds of books.'

In this respect, these noun phrases resemble the English noun phrases comprised of definite determiners and common nouns such as *kind*, *sort*, and *type* (e.g. *this kind/sort/type of + NP*). As described by Wilkinson (1991), such NPs, although containing definite determiners, behave like (specific) indefinite NPs, as seen in the English translation of (40) (cf. the ungrammatical example with the regular demonstrative \*'There still exist those books).

Quantitative demonstratives, such as *ovoliko/toliko/onoliko* 'this size/that<sub>1</sub> size/ that<sub>2</sub> size', denote the size or quantity of an object in comparison with some other object.

(41) a. Video      sam    ovoliku      lubenicu.

Saw-1.SG    AUX    this+size-A.F.SG    watermelon-A.F.SG

'I saw a watermelon this big.'

b. Proputovala      sam    tolike      zemlje.

traveled-through-1.SG    AUX    that-many-A.F.PL    countries-A.F.PL

'I traveled through that many countries.'

Both qualitative and quantitative demonstratives are morphological compounds. A qualitative demonstrative is formed by combining a root of an ordinary demonstrative (*ov-*, *t-*, *on-*) with the morpheme *-akv* indicating quality. The inflectional morpheme, marking case and f-features, is attached to the end of

the compound (e.g. *ov+akv+u* 'this+kind+A.F.SG'). A quantitative demonstrative consists of a root of an ordinary demonstrative and the morpheme *-olik* indicating size or quantity. As was the case with qualitative demonstratives, the inflectional morpheme, marking case and f-features, is attached to the end of the compound (e.g. *ov-olik+u* 'this+size+A.F.SG').<sup>13</sup>

Qualitative demonstratives and (indefinite) adjectives can be questioned using the wh-word *kakav* 'what kind/sort':

- (42)      *Kakvo      dete    si      video?*  
               what+kind child AUX saw-2.SG  
               'What kind of a child did you see?'

The answer to the above question can, for example, be *ovakvo* 'this kind' or *pametno (dete)* 'smart (child)'. When ordinary demonstratives are questioned, however, the wh-word used is not *kakav* 'what kind/sort', but rather *koji* 'which'. The purpose of *koji* is to induce an answer about the identity of a noun's referent, rather than about its quality. The example below depicts this.

- (43)      *Koje      dete      si      video?*

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<sup>13</sup>Demonstratives denoting quantity must be distinguished from adverb-like quantity expressions *ovoliko/toliko/onoliko*. The latter do not inflect for the agreement features of the following noun (as in ii.).

- i.            *ovolike lubenice* 'this-many-F.PL watermelon-F.PL'  
               *ovoliki krompiri* 'this-many-M.PL potatoe-M.PL'
- ii.          *ovoliko lubenica/krompira* 'this-many watermelon/potatoe-G.PL '

which child AUX saw-2.SG

'Which child did you see?'

The answer to the above question could, for example, be the demonstrative *ovo* 'this', or the relative clause *ono koje stalno plače* 'that (one) who always cries'.

Due to the fact that qualitative and quantitative demonstratives can occur with the indefinite determiners *jedan* or *neki* (cf. (44) from Mrazović & Vukadinović 1990 : 254), I assume that they are unspecified for the semantic feature definite, contrary to what Mišeska-Tomić (1974) has suggested.

- (44) a. jedna/neka takva žena  
one/some that+kind woman  
'a/some woman of that sort'
- b. jedno ovoliko dete  
one this+size child  
'a child of this size'

In these two examples, the noun phrase comprised of *jedan* + qualitative/quantitative demonstrative induces a specific indefinite reading, akin to the English expressions *a certain/a particular*, or the indefinite-*this* NP, as described in Hawkins (1978) and Prince (1981). To illustrate, the following English sentence with the indefinite-*this* NP expression (from Prince 1981 : 233) corresponds to the Serbian *jedan takav* NP.

- (45) A few years ago,  
 there was *this* hippie, long-haired, slovenly.  
 bio je *jedan takav* hipik, dugokos, prljav

In this respect, qualitative/quantitative demonstratives are unlike ordinary demonstratives, which cannot occur with indefinite determiners (cf. (46)).

- (46) \*jedna/neka ova žena  
 a/some this woman

### 2.3.1.2 The Determiner *Jedan* 'One'

The numeral *jedan* can be used as both a cardinal expression (as in (47)) or as an indefinite article (as in (48)). In both usages, *jedan* inflects for case, number and gender agreeing in these features with the noun which follows.

- (47) On ima samo jednu godinu.  
 He has only one-A.F.SG year-A.F.SG  
 'He is only one year old'

- (48) a. Jedan student te čeka.  
 a/one-N.M.SG student-N.M.SG you wait

- b. Čeka te jedan student.  
 wait you a/one-N.M.SG student-N.M.SG  
 'A/one student is waiting for you.'

In both examples in (48), *jedan* is ambiguous between cardinal denotation and indefinite article denotation. In general, *jedan* is used as an indefinite article only for purposes of emphasis. In a neutral context, *jedan* is usually omitted, the indefiniteness of the noun phrase being expressed by other means (e.g. indefinite markings on the adjectives, genitive case, word order).<sup>14</sup>

Mrazović & Vukadinović (1990 : 243) list the following usages of *jedan*.

- i. For introducing a new, unknown referent in which case *jedan* can be substituted by the indefinite determiner *neki* 'some'.

- (49) Videla sam jedna/neka crvena kola.  
 saw-1 AUX a/some red car  
 'I saw a/some red car.'

However, we will see below that this substitution is not always possible since *jedan* tends to be used to refer to specific indefinites, whereas *neki* to non-specific indefinites.

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<sup>14</sup>As Naylor (1983) remarks, there is a tendency in Slavic languages to formally mark definite (or indefinite specific) objects but to omit marking of indefinite (non-specific) objects.

ii. Although in Serbian a bare noun phrase is generally used for expressing genericity, *jedan* can also be used for this purpose, in which case the noun phrase with *jedan* is focused.

(50) Samo jedno dete to može da uradi.  
only a child this can that do-3.SG  
'Only a child can do something like that.'

iii. *Jedan* can modify proper names, in which case it denotes a typical characteristic of an individual with that proper name.

(51) Ko sme da protivreči jednom Čomskom?  
Who dares that contradicts a Chomsky  
'Who dares to counter a person such as Chomsky?'

Ivić (1971 : 110) gives the following example in which *jedan* occurs with a proper name, but here, the purpose of *jedan* is to mark partitiveness.

(52) Ja sam htio da oborim jednog tvrdog, ogromnog Glembaja  
I AUX wanted that knock down one strong, huge Glembaj  
'I wanted to knock down one of the strong, huge Glembajs...'

In (52), out of the known set of Glembaj family members, the speaker is talking only about one specific member of that set. Ivić observes that, in this example, *jedan* cannot be replaced by *neki* (corresponding to the English unaccented form of *some*), indicating that *neki* cannot be used with singular nouns to induce partitiveness.

iv. *Jedan* can modify plural nouns (with the meaning of *neki* 'some') in which case it inflects for the plural feature of the noun. Example (53a) illustrates that *jedan* can modify pluralia tantum nouns, i.e., nouns that are grammatically plural, but semantically refer to a single entity. When modifying regular plural nouns, *jedan* induces a partitive interpretation, as in (53b).

- (53) a. Našla sam jedne naočare na bazenu.  
 found-1.F AUX a-F.PL glasses-F.PL on swimming pool  
 'I found (a pair of) glasses at the swimming pool.'
- b. Jedni ljudi tevole, a drugi ne.  
 one-N.M.PL people-N.M.PL you-A like and others not  
 'Some of the people like you, and some not.'

The fact that *jedan* inflects for the plural feature in agreement with the following noun, shows that number features come from the noun rather than from *jedan*. However, when *jedan* is in combination with other numerals, as in 21, 31, 101,

10,001, etc., the noun gets a singular marking rather than a plural marking. This indicates that the numeral *jedan* in the number sequence is the source for number.



- (54)        dvadeset jedan    student/\*studenti  
               twenty    one-SG student/students

It is interesting to note that *jedan* and *neki* are precluded from occurring in a predicative position. Rather, only determinerless noun phrases are allowed in this position. This follows from the fact that predicative NPs introduce no discourse referent, hence, the indefinite determiners are omitted.<sup>15</sup>

- (55)        Ona je    (\*jedan) matematičar.  
               she is    one        mathematician  
               'She is a mathematician.'

### 2.3.1.3 The Determiner *Neki* 'Some'

As mentioned above, the quantifier *neki* 'some' can also function as an indefinite article, and as such, it can sometimes be substituted for *jedan* 'one' (cf (49) above and (56) below).

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<sup>15</sup>However, Ivić (1971) provides examples in which *jedan* and *neki* can occur in this position, in which case they impose a pejorative or derogatory meaning on the noun following. This is shown below.

- i.    Ona mi        je        neki matematičar.  
       she me-D is        some mathematician  
       'To me, she is only a so-called mathematician.'

- (56) Čeka te neko/jedno dete  
 wait you-A some/a-N.M.SG child-N.NT.SG  
 'Some/a child is waiting for you.'

However, the substitution of *neki* for *jedan* is not always possible, due to the fact that *neki* can only introduce nonspecific indefinite NPs, i.e. NPs whose referents are new to both the speaker and the hearer, while *jedan* can introduce both nonspecific and specific indefinite NPs, i.e. NPs whose referents are known to the speaker, but unknown to the hearer.<sup>16</sup> For instance, in (56), *jedan* cannot be substituted for *neki* if the speaker has in mind a particular child that could be unknown to the hearer. The following sentence can be continuation of (56) only if *jedan*, but not *neki*, modifies *dete*.

- (57) U stvari, ja to dete znam.  
 in fact I that-A child-A know  
 'In fact, I know that child.'

*Neki* can also be used with plural nouns, functioning as an indefinite article. In fact, *neki* is the only choice here, *jedan* being precluded from occurring with plural nouns in this function (exceptions being pluralia tantum nouns, as in

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<sup>16</sup>It is important to mention here that *neko*-N.NT.SG, used as an indefinite article in ( 64), must be distinguished from the homophonous indefinite pronoun *neko* 'somebody', specified for singular, masculine features. They do not have the same distribution either in a sentence or in a phrase.

(53a)). When modifying plural nouns, *neki* can have both a specific and nonspecific indefinite reading, paralleling the behavior of the English *some*.

(58) Neke/\*jedne žene                    te            čekaju.  
some/one-N.F.PL woman-N.F.PL you-A wait  
'Some women are waiting for you.'

Just as was the case with demonstratives and *jedan*, *neki* can also modify proper names, indicating that proper names behave like common nouns.

(59) Dolazi nam neki Jovan.  
come us-D some Jovan  
'A person named Jovan is coming (to our house).'

The noun phrase *neki Jovan* means a 'person named *Jovan*' whose real identity is unknown to the speaker.

In addition to *neki*, there is another determiner, not as frequently used, the indefinite qualitative determiner *nekakav* 'some kind of'. It is a morphological compound of the indefinite determiner root *nek-* and the morpheme *-akv*, indicating quality. An example with this determiner is given below.

(60) Nekakav      čovek te      traži.  
some-sort-of man you-A looking for

'Some man is looking for you.'

There are a few more words, such as *koji*, *kakav*, *pokoji*, *poneki*, *gdekoji*, that serve as indefinite articles (for details see Hlebec 1986).<sup>17</sup>

### 2.3.2 Definite vs. Indefinite Adjectives

One interesting feature of Serbian is that (in)definiteness can be expressed by definite and indefinite markings on the descriptive adjectives.<sup>18</sup> This distinction is reflected through different morphological endings or through different stress patterns on the adjective. For example, when modifying masculine singular nouns, indefinite adjectives have a zero ending (cf. (61a)), while definite adjectives have a long *-i* ending (indicated as *i-* in (61b)).

(61)	a.	lep	grad	b.	lep- i—	grad
		beautiful-INDEF	grad-N.M.SG		beautiful-DEF	grad-N.M.SG
		'a beautiful town'			'the beautiful town'	

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<sup>17</sup>As Hlebec points out, the lexemes *pokoji*, *poneki*, *gdekoji* have distributive connotation, meaning 'seldom', as in i. (from Hlebec 1986 : 37).

i. Uloviš li pokoju/poneku/gdekoju pticu?  
Do you hunt a/some bird from time to time.

<sup>18</sup>However, only adjectives in nominative and accusative case show this distinction. In addition, not all descriptive adjectives make this distinction, as for example, adjectives ending in the vowel *-i*, such as *mali* 'little' *veliki* 'big', *kasni* 'late', *žarki* 'hot' (for details see Bidwell 1970, Hlebec 1986, Mrazović & Vukadinović 1990).

When modifying feminine and neuter nouns, the distinction between indefinite and definite adjectives is expressed by different vowel length (a short vowel on indefinite adjectives, a long vowel on definite adjectives), and by different stress patterns on the adjectives (not indicated in the examples below). The first set of examples below illustrates the adjective endings for feminine nouns and the second for neuter nouns.

(62) a. lep-a                      zemlja                      b. lep-a—                      zemlja  
           beautiful-INDEF    country-N.F.SG            beautiful-DEF            country-N.F.SG  
           'a beautiful country'                      'the beautiful country'

(63) a. lep-o                      selo                      b. lep-o—                      selo  
           beautiful-INDEF    village-N.NT.SG            beautiful-DEF            village-N.NT.SG  
           'a beautiful village'                      'the beautiful village'

The distinction between definite and indefinite adjectives is disappearing, at least in colloquial speech, so that both forms can be used interchangeably. The examples below (from Hlebec 1986 : 34) depict this free variation.

(64) a. Daj    mi    onaj zelen/zeleni—    kaput.  
           give-2    me-D    that    green-INDEF/DEF    coat  
           'Give me that green coat.'

- b. Daj mi zelen/zeleni— kaput.  
 give-2 me-D green-INDEF/DEF coat  
 'Give me the/a green coat.'

The first example shows that both definite and indefinite adjective forms can occur with the demonstrative, definiteness being induced by the determiner rather than by an adjective. In the second example, the determiner is absent, and definiteness is determined by the context.

However, interchangeability of adjectives is not possible in the following circumstances:

- i. In a sequence of two or more adjectives, all adjectives must have the same (in)definiteness markers.

- (65) a. dobar, veseo čovek  
 good-INDEF cheerful-INDEF man  
 'a good, cheerful man'

- b. dobr-i—, vesel-i— čovek  
 good-DEF cheerful-DEF man  
 '**the** good cheerful man'

- c. \*dobr-i—, veseo čovek

	good-DEF	cheerful-INDEF	man
d.	*dobar,	veseli—	čovjek
	good-INDEF	cheerful-DEF	man

With respect to the unacceptable sequences in (65c-d), it is worth noting that Leko (1986, 1996) considers only the sequence in (65c) unacceptable, i.e., a sequence in which the definite adjective precedes the indefinite adjective. However, all my informants, including myself, find all types of mismatched adjective sequences ungrammatical.

ii. In a predicative position, only indefinite adjective forms can be found.

- (66) Grad/Jovan je jako lep/\*lepi—.  
town/John AUX very beautiful-INDEF/\*DEF  
'The town/John is very beautiful.'

iii. Finally, in question formation, when questioning indefinite adjectives, the question word *kakav* 'what kind' is used, whereas when questioning definite adjectives the question word is identical to that used by determiners, namely *koji* 'which'. In this respect, definite adjectives have two functions, to identify and to qualify.

In summary, (in)definiteness of the noun phrase is expressed by morphosyntactic markings on the modifying adjective, rather than by a determiner

(which can be absent) or by a noun (which makes no morphological distinction between definite and indefinite).

### 2.3.3 Genitive NPs vs. Possessive Adjectives

In her (1986) article on adjectivization and genitivization in Serbian, Ivić was the first one to offer an explanation for the different interpretation of postnominal determinerless genitive NPs and prenominal possessive adjectives. Her basic claim was that possessive referential adjectives are always interpreted as having a specific definite referent, while determinerless genitive NPs are interpreted as property denoting.<sup>19</sup> Ivić shows this contrast by the following example.

- (67) a. matematičareva      ćerka  
          mathematician-ADJ daughter  
          'the daughter of **the** mathematician'
- b. ćerka      matematičara  
          daughter mathematician-G  
          'the daughter of **a** mathematician'

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<sup>19</sup>Actually, Ivić does not use the term 'property denoting', but rather she uses the indexicality feature, where "indexicality implies non-descriptiveness' (p. 25). According to her, determinerless genitive NPs are negatively specified for this feature, hence, they are descriptive (i.e. attributive), while possessive adjectives are positively specified for this feature, hence, they are non-descriptive.



In (67a), the pronominal possessive adjective, *matematičareva*, derived from the noun stem *matematičar* by adding the affix *-ev*, induces a definite interpretation, as indicated by the definite article in the English translation (cf. *the mathematician*). On the other hand, the postnominal genitive NP *matematičara* in (67b), translated in English as preceded by the indefinite article, invokes descriptiveness, i.e. it describes the property of being a mathematician, whoever that person might be.<sup>20</sup>

In addition to denoting a property, determinerless genitive NPs can also be interpreted as regular indefinites (specific or non-specific), whereas the corresponding possessive adjectives are always definite. The following example depicts this.

- (68) a. Čula sam plač deteta.  
 heard-1.SG AUX cry-A child-G  
 'I heard the crying of **a** child.'
- b. Čula sam detetov plač.  
 heard-1.SG AUX child's-ADJ cry-A  
 'I heard the crying of **the** child.'

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<sup>20</sup>This interpretation of determinerless genitives in Serbian seems to correspond to the interpretation of articleless noun phrases in Greek, as reported by Pentheroudakis (1980).

In (68a), the noun phrase *plač deteta* can either mean crying that is typical of a child, or crying of some child, whose identity might not be known (or is irrelevant) to conversation participants.

However, Ivić (1986 : 26) brings up an example in which a determinerless genitive can in fact, refer to a particular, identifiable person.

(69) nad grobom Branka  
over grave Branko-G  
'over Branko's grave'

According to Ivić, the referant denoted by the genitive proper name *Branka*, can only be a person 'known to everybody' for his professional achievements, as for example, the well-known Serbian poet Branko Radičević, but not the speaker's friend named *Branko*. If the speaker wants to refer to her/his friend Branko, s/he must use the possessive adjective *Brankov*. In other words, the genitive proper name *Branka* in (69) is acceptable only if the speaker intends to describe some property/characteristic of the bearer of that proper name. As Manfred Krifka points out, this condition is similar to that of adjectives based on names in English (e.g. *the Chomskian revolution*).

The above contrast between possessive adjectives and determinerless genitive NPs is not always possible. This is because the possessive adjective formation is subject to very rigorous syntactic and semantic constraints. Specifically, only unmodified genitive nouns, having singular, human and definite

semantic features, can be turned into possessive adjectives. To illustrate, the unmodified genitive plural noun *studenata* 'students' in (70), or the modified genitive singular noun *slavnog matematičara* 'famous mathematician' in (71) cannot undergo adjectivization. These postnominal genitives are ambiguous between definite or indefinite interpretation, because they have no competing adjectival form.

(70) knjiga studenata  
book students-G  
'a/the book of the students' or 'a/the book of students'

(71) ćerka slavnog matematičara  
daughter famous-G mathematician-G  
'the daughter of the/a famous mathematician'

In order to disambiguate the above determinerless genitives, the appropriate determiners are added, as in (72).

(72) a. ćerka jednog slavnog matematičara  
daughter a-G famous-G mathematician-G  
'the daughter of a famous mathematician'

b. ćerka ovog slavnog matematičara

daughter this-G famous-G mathematician-G  
'the daughter of the famous mathematician'

Due to the fact that proper names are inherently definite and human, within a noun phrase they appear in the form of a possessive adjective (as in (72a)) rather than as a genitive noun (cf. ungrammatical (73b)). (But see the discussion of example (69) above.)

- (73) a. Marijin        strah  
         Marija-ADJ.N fear-N  
         'Mary's fear'
- b. \*strah        Marije  
         fear         Marija-G.F.SG

The example in (73a) illustrates that the traditional term 'possessive adjective', is not quite adequate, as already noted by Ivić (1967). This is because these adjectives do not necessarily denote possession, but can function as an argument of the argument taking nominals, bearing various thematic roles. In the above example, the possessive adjective has an experiencer role. (For details see Chapter 4.)

To summarize, the purpose of this section is to show that the two different syntactic categories within the noun phrase, possessive adjectives and bare genitive NPs, are able to make a fine-grained distinction in definiteness. The generalization is that prenominal possessive adjectives are interpreted as definite whereas postnominal genitive NPs tend to be interpreted as indefinite. A similar pattern is found in clauses, as discussed in Section 2.3.5.

#### 2.3.4 Genitive vs. Accusative NPs

In some circumstances, nouns marked for accusative and nouns marked for genitive case yield a different value for the (in)definiteness feature. Specifically, plural or mass nouns marked for accusative case are interpreted as definite, whereas the corresponding nouns in genitive case are interpreted as indefinite.<sup>21</sup> This is illustrated below.

- (74) a. Daj mi mleko/jabuke.  
           give-2.SG me milk/apples-A  
           'Give me the milk/the apples.'

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<sup>21</sup>In some Slavic languages, there are verbs which can take either genitive or accusative objects. With such verbs, the genitive case can indicate regular indefinite interpretation of count nouns, whereas the accusative indicates definite denotation. The following Russian sentences (from Naylor 1983 :218) depict this.

- |    |                           |     |                         |
|----|---------------------------|-----|-------------------------|
| i. | Ja      ždal    poezd.    | ii. | Ja      ždal    poezda. |
|    | I        waited train-A   |     | I        waited train-G |
|    | 'I waited for the train.' |     | 'I waited for a train.' |

- b. Daj mi mleka/jabuka.  
give-2.SG me milk/apples-G  
'Give me some milk/apples.'

In (74a), both the accusative mass noun *mleko* and the plural count noun *jabuka* have a definite interpretation, as indicated by the definite article preceding these nouns in the English translation. In (74b), however, the genitive NPs *mleka* and *jabuka*, have an indefinite interpretation, with the meaning 'some unspecified quantity of milk/apples'.

However, as pointed out by Hlebec (1986 : 39), with some predicates, accusative NPs can be interpreted as either definite or generic.

- (75) On pije mleko.  
he drinks milk-A  
'He is drinking the milk,' or 'He drinks milk.'

The generic interpretation is due to the fact that the imperfective verb *piti* 'to drink' can be interpreted as either the English present continuous or the English simple present. The latter denotes a habitual action, which is responsible for the generic reading of *mleko* 'milk' in (75).

Related to this fact, it is worth mentioning Krifka's (1992) observation that in Czech and Slavic languages in general, the aspectual marking on the verb can

determine definiteness of either mass nouns or bare (i.e. determinerless) plural NPs. The generalization is that perfective verbs induce definite interpretation on their NP objects, whereas imperfective verbs induce indefinite interpretation. Krifka's observation is illustrated for Serbian by the following examples.

- (76) a. On je jeo hleb/jabuke.  
 he AUX ate-IMPERF bread/apples-A  
 'He ate bread/apples'.
- b. On je pojeo hleb/jabuke.  
 he AUX ate-PERF bread/apples-A  
 'He ate the bread/the apples'.

### 2.3.5 Word Order (Theme-Rheme)

Word order is another device used to differentiate definite from indefinite noun phrases, whereby different positioning of determinerless noun phrases results in different interpretations with respect to (in)definiteness. Serbian is a discourse-oriented language, i.e. a language in which the order of constituents in a sentence is driven by theme-rheme (or topic-comment) information structure, rather than by syntactic relations such as subject and object.

In a neutral context, Serbian has an SVO (subject-verb-object) word order, as the following example illustrates.

- (77) Student voli Mariju.  
 student-N likes Mary-A  
 'The student likes Mary.'



A theme-rheme structure is reflected in this basic word order. Namely, the subject is the theme, i.e. given information, which in English is indicated by the definite article. The predicate, i.e. VO, corresponds to rheme.

If the subject is indefinite, however, it must occur postverbally, as the example below shows.

(78) Knjigu je napisao student.  
book-A AUX wrote student-N  
'A student wrote the book.'

As Bibović (1971) points out, an active sentence such as (78) corresponds to the English passive sentence: 'The book was written by a student', in which *the book*, being in a syntactically salient position (i.e. subject) is a theme, whereas the rest is the rheme. Due to the fact that Serbian has a rather rich inflectional morphology, which helps identify grammatical functions, subject NPs can be readily inverted (as in (78)), without resorting to passivization.

A similar pattern is found with intransitive predicates.

(79) a. Student je danas telefonirao.  
student AUX today phoned  
'**The** student phoned today.'

- b. Danas je telefonirao student  
 today AUX phoned student  
 'A student called today.'

It is worth noting here that not all Serbian grammarians agree that word order is the most important determinant of the theme-rheme structure. For example, Hlebec (1986 : 42-43) claims that stress and intonation pattern, rather than word order, determine what is new and what is old information. However, it seems to me that both stress and word order strategies are used to convey the theme-rheme relation. To illustrate, the following English sentence below has two correspondents in Serbian.

(80) a. A STUDENT came in.

(81) a. STUDENT je ušao  
 student AUX entered

b. Ušao je STUDENT.  
 entered AUX student

These are the so-called 'thetic' or all-comment sentences. The grammatical subject in the English sentence has the primary stress (indicated by capital letters)

and it contains the indefinite article, therefore it is interpreted as indefinite. Serbian, on the other hand, can use either the stress strategy (as in (81a)) or it can use both stress strategy and subject inversion (as in (81b)) to convey the same information.

In summary, (in)definiteness is interpreted not by lexical means, but by the position of the noun phrase in a sentence. We saw that word order is governed by the theme-rheme information structure, whereby in declarative sentences, the initial elements tend to be interpreted as definite (themes) and the final elements as indefinite (rhemes). This is in accordance with the principle of Functional Sentence Perspective, originally put forth by the linguists of the Prague School (e.g. Mathesius, Daneš, Firbas, Sgall).

### **2.3.6 Summary**

In this section, I described various devices for expressing the (in)definiteness of noun phrases in Serbian. I first provided a cross-linguistic survey of the most common means for expressing (in)definiteness, emphasizing that research on (in)definiteness has focused mainly on definite and indefinite articles. I showed that Serbian, a language that lacks articles, uses lexical means (e.g. demonstratives, the indefinite determiners *jedan/neki*), morphosyntactic means (e.g. possessive adjectives vs. bare genitive NPs; accusative vs. genitive NPs, definite vs. indefinite adjectives), syntactic means (e.g. word order), and intonation, to distinguish definite from indefinite noun phrases. These devices

seem to compensate for the lack of definite/indefinite articles as prototypical lexical items for denoting (in)definiteness.

I next examine whether Serbian noun phrases have an extended projection Determiner Phrase (DP). The term 'extended projection' is used in Grimshaw's (1991) sense, i.e. as a functional projection (or F-projection) of a lexical category (e.g. N, V). The main characteristic of such a projection is that "the N and D have the same categorial features, but are distinguished by their lexical versus functional status" (p. 2).

#### **2.4 THE NOUN AS THE HEAD OF THE NOUN PHRASE**

Based on the word order patterns in the Serbian noun phrase discussed in Section 2.2, and the results of tests used for identifying the head of a phrase (from Section 1.3 of Chapter 1), it will be shown that the Serbian noun phrase is headed by a noun rather than by a functional category D.

In Section 2.2 I illustrated that determiners occur prenominally. I also showed that they can occur postnominally, in the appropriate context. The fact that determiners can also occur after the head noun, indicates that these elements do not have the status of a functional category, since generally, functional categories (e.g. D, AGR(ement), TNS(tense), C(omplementizer)) do not allow postposing. Note that in English, or any languages which are claimed to have a functional category Determiner, the postposing of determiners is not an option (cf. English: *\*book the* French: *\*livre le*, Italian: *\*libro il*). Corver (1992) uses the

same argument to show that Polish and Czech noun phrases lack the extended projection DP. The following Czech example (from Corver 1992 : 72) illustrates the postposing of determiners as well as adjectives.

- (82) a. ta devčata pekná  
          these girls beautiful  
      b. devčata ta pekná

In some other articleless languages postposing of determiners is also allowed. For example, Japanese demonstratives usually precede the noun (as in (83a)) but in certain context, can also be postposed (as in (83b) from Napoli 1993 : 290, and attributed to Simon 1989).

- (83) a. ano hasami  
          those scissors  
      b. Hasami tote-kure-nai, ano?  
          scissors hand-won't those  
          'Won't (you) hand (me) those scissors?'

In what follows, I apply headedness tests from Section 1.3, to show that the Noun, and not the Determiner, is the head of the Serbian noun phrase.

We saw earlier that Zwicky (1985) considers the morphosyntactic locus test to be one of the most important tests for determining the head of a given phrase. Applying this test to the Serbian noun phrase, it can be easily established that the noun is the morphosyntactic locus, and hence, the head of the noun phrase. In other words, the grammatical phi-features, i.e., gender and number (but see the discussion of examples like (54) above), as well as animacy, are lexical properties of the noun and not the determiner, and thus, originate on the noun. This is especially obvious when considering gender features, which are lexically assigned to all common nouns, as depicted in the example below.

(84)	Masculine	Feminine	Neuter
	<i>grad</i> 'city'	<i>država</i> 'country'	<i>selo</i> 'village'

Furthermore, the animacy feature is an inherent property of a noun, not a determiner. As an illustration, Serbian has a morphosyntactic rule that explicitly refers to the animacy feature of a certain class of nouns. This rule, applying to masculine nouns ending in a consonant (traditional first declension class), says that animate singular nouns have an accusative ending equal to the genitive case ending (cf. (85)), while other (i.e. non-animate) singular nouns have identical accusative and nominative case endings (cf. (86)).

(85)	a.	Videla	sam	<b>ovog</b>	<b>čoveka.</b>
		saw-1.F	AUX	this-A	man-A

'I saw this man.'

b. Strah me je od **ovog** **čoveka**.  
 fear me-A AUX from this-G man-G  
 'I am afraid of this man.'

(86) a. **Ovaj hrast** je jako veliki.  
 this-N oak tree-N is very big  
 'This oak tree is very big.'

b. Videla sam **ovaj hrast**  
 saw-1.F AUX this-A oak-tree-A  
 'I have seen this oak tree.'

As the above examples show, there is nothing inherently animate about demonstratives, but rather, demonstratives simply agree in the morphosyntactic features that originate on the noun. In this respect, determiners behave no differently from regular adjectives, agreeing in morphosyntactic features with the noun (cf. (87)). We can thus conclude that the noun is a concord determinant, and hence, the head of the noun phrase.

(87) a. ova zanimljiva knjiga  
 this-N.F.SG interesting-N.F.SG book-N.F.SG  
 b. ovaj zanimljivi čovek



this-N.M.SG interesting-N.M.SG man-N.M.SG

Similarly, with respect to the obligatoriness criterion for headedness, the noun is the obligatory constituent (disregarding here, elliptical constructions) since a determiner is always an optional element in Serbian, as shown in Section 2.3. The following examples illustrate occurrences of determinerless noun phrases.

(88) a. Student voli Mariju.

student-N likes Mary-A

'The student likes Mary.'

b. Knjigu je napisao student.

book-A AUX wrote student-N

'A student wrote the book.'

The sentences in (88) illustrate that word order can be used to differentiate definite from indefinite noun phrases. As discussed in Section 2.3.5, Serbian is one of the discourse-oriented languages, i.e. a language in which the word order is driven by the theme-rheme (or topic-comment) information structure. The determinerless subject noun phrase *student* in (88a), being the theme, is interpreted as definite. If the subject is indefinite, however, it must occur postverbally, as in (88b)). Besides word order, definiteness of the determinerless

noun phrase can be distinguished by definite and indefinite markings on the adjectives, as discussed in Section 2.3.2.

As a consequence, the noun is also a distributional equivalent, and hence, the head of the noun phrase. In other words, the Noun has the same distribution as the Determiner+ Noun:

- (89) Znam (ovog) studenta.  
know-1.SG ovog-A student-A  
'I know this/the student.'

The remaining two criteria for headedness, the subcategorizand and form governor tests, cannot conclusively prove whether the noun or the determiner is the head of the noun phrase. This is because, in general, common nouns in Serbian do not require an overt determiner, so that they do not act as 'obligatory' subcategorizands and consequently form governors. However, we could loosen our definition of subcategorizands, allowing lexical items to be subcategorizands even if they optionally select their dependents. In this case, the determiner can be a subcategorizand. However, with respect to form government, neither the noun nor the determiner is the form governor, since both elements inflect for the appropriate phi-features, which, as we argued above, originate on the noun.

To sum up, with the exception of the subcategorizand and the form governor tests, all other headedness tests clearly indicate that the noun is the head of the Determiner + Noun construction in Serbian. With respect to the form

governor test, I have shown that neither element is the head. In other words, the noun rather than the determiner exhibits most of the head-like properties.

A final argument for the NP analysis of Serbian noun phrases concerns the status of gerundives in Serbian. Unlike English gerundives, which show mixed nominal and verbal characteristics (see Section 1.2.1), Serbian gerundives have pure nominal characteristics (see Section 4.3). Recall from Section 1.2.1 that the main motivation for positing the functional category D in English was to account for the mixed behavior of gerundives without violating X-bar theory. However, the fact that Serbian gerundive nominals, such as *pevanje* 'singing', *opisivanje* 'describing' (see Table 1 of Chapter 4 for further examples), have pure nominal characteristics on a par with regular nouns, adds to the argument for choosing the simpler NP structure over the DP structure of the noun phrase. In the next chapter, I show what the structure of the Serbian noun phrase is.