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THE CASE-SYSTEM IN SERBO-CROATIAN

by

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B.A., Simon Fraser University, 1968
M.A., Simon Fraser University, 1969

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
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of
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ABSTRACT

The topic of this work is the declension in Serbo-Croatian.

The primary goal was to describe the rules which assign the case-features to the formatives which in the surface structure appear in some case-form. The transformational path leading from a formative containing a case-feature to a corresponding case-form is not formulated here. However, many phonological rules are implied by bracketing.

The method of investigation is basically that of Chomsky as elaborated in Aspects.

Basically, the investigation led to the conclusion: that the case-features are assigned at the intermediate stage of a derivation in which the formatives are fully specified for person, number, and gender; that the case-feature [+nominative] is assigned to the head of an NP if that NP does not have a sister constituent on its left, or if its preceding sister constituent is devoid of semantic content--otherwise, some other case-feature is assigned. It depends on both the syntactic configuration and semantic content which of the remaining case-features are to be assigned. The sister constituent which plays a role in case-feature assignment to the head of an NP may

be a V formative, a quantifier, or a Prep formative.

A closely related topic to the central issue, is the prepositions and the deletion rules which eliminate certain prepositional formatives in the shallow structure, creating difficult problems in case investigation.

The vocative case is not discussed.

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The Case System in Serbo-Croatian

I. Introduction

The Serbo-Croatian declensional system is the main topic of this work. This system consists of seven cases. The seven cases form a tightly interwoven system which is superimposed onto the syntactic and semantic components of grammar. These two components assign cases to all substantives. The cases are represented in features. The transformational path leading from a formative containing a case-feature to a corresponding case-form is not shown. To do this it would be necessary to discuss the problems created by the introduction of the phonological component of grammar which would triple the length of this work. However, the work is executed in a way which should facilitate the linkage of the phonological component to the terminal points of this grammar.

Although the vocative case forms part of the case-system in Serbo-Croatian, the problems connected with it are peculiar to itself and their discussion does not aid in solving the problems connected with the other six cases. For this reason, the vocative has been omitted from the discussion.

The investigation of cases cannot be very profitable without discussing the structures in which they appear. Thus, as an introduction to the rest of the work, the remainder of this chapter deals with various aspects of Serbo-Croatian sentence structure. Also the selection of the method of investigation is justified in the following sections of this chapter.

I.0. Observable data.

In Serbo-Croatian a nominative case-suffix may be found attached to the head phrases of the structures which function as subjects, as predicate attributes, and as topics of existential sentences. However, the genitive, the instrumental, and even the vocative case-suffixes may be found in the same structures:

- (1) Probao sam da nadjem Mariju u školi, ali ona nije bila tamo.

I tried to find Mary in the school, but she was not there.

- (2) Probao sam da nadjem Mariju u školi, ali nje nije bilo tamo.

*I tried to find Mary in the school, but there was no her there.

I tried to find Mary in the school, but she was not there.

I tried to find Mary in the school, but
there was no trace of her there.

In the first sentence, the underlined subject (ona) occurs in the nominative. In the second sentence, the underlined item (nje) is the genitive case of ona 'she, it'.¹ It can be said that nje also functions as the subject of the sentence in which it appears.

However, the surface subject ona governs the agreement of the past active participle bila 'be (past active participle, feminine)', while nje does not: nje is feminine and the past active participle bilo 'be (past active participle, neuter)' is neuter.² To distinguish the two apparent surface subjects, the one which governs the agreement will be called the grammatical subject, and the one that does not govern the agreement will be called the logical subject.

The sentences in (1) and (2) are not synonymous. This will be demonstrated later in the text.

The next two sentences show the use of the nominative and the instrumental in the predicate attribute position:

(3) Otišao je u Ameriku da postane sluga.

He went to America to become a manservant.

(4) Otišao je u Ameriku da postane slugom.

He went to America to become a manservant.

In (3) the speaker states that fact and nothing else. In (4) the speaker implies that whoever went to America could do better elsewhere. Therefore, (3) and (4) are not synonymous. (sluga 'manservant' is in the nominative, and slugom 'manservant' in the instrumental case.)

In sentences (5) and (6) the vocative competes with the nominative:

(5) Knjigu piše kraljević Marko.

Prince Marko is writing a missive.

(6) Knjigu piše kraljeviću Marko.

Prince Marko is writing a missive.

Here, kraljević Marko 'Prince Marko' is the nominative, and kraljeviću Marko 'Prince Marko' is the vocative case. These two sentences are synonymous.

I.1. Problems and methods

Some of the problems concerning the case assignment are readily discernable from the data cited above:

- (a) What is the reason for having a particular case-form in a given structure?

(b) What is a logical subject?

(c) What is a grammatical subject?

Many other problems related to the case-assignment rules cannot be cited at this stage because they are not observable at the surface structure level.

The method used for solving these problems is essentially the one proposed by N. Chomsky (Chomsky, 1965). Certain proposed modification of that method will be adopted, and certain ones will be rejected. The results of investigation will impose some refinements of the framework in question. However, justifications for adopting Chomsky's framework will be given in the section of this paper dealing with the grammatical subjects in Serbo-Croatian.

I.1.1. The grammatical subject in Serbo-Croatian

The surface structure subject which governs the agreement in the sentence in which it occurs is the grammatical subject. In (7):

(7) Ja sam probao da nadjem Mariju u školi,
ali ona nije bila tamo.

the surface subjects are ja 'I (nominative singular)' and ona 'she (nominative singular)'. The first person

pronoun, singular ja imposes the agreement on the auxiliary-form sam 'be (first person singular, present tense)' and on the verb-form nadjem 'find (first person singular, present tense)'.³ The third person feminine singular pronoun ona imposes the agreement to the auxiliary je 'be (third person singular, present tense)' and to the participial bila 'be (past active participle, feminine singular)'. The sentences in (7) and (1) are synonymous when the pronoun ja is not emphatic. The grammatical subject which imposes the agreement on the auxiliary form sam is the formative ja. However, the formative ja does not appear in the surface structure of (1); therefore, the grammatical subject ja is not the surface subject of (1). We know that ja in (1) is the grammatical subject because the features of the auxiliary-form sam permit the recovery of ja and only ja; that is, ja is uniquely recoverable in (1). It is evident that a surface subject and a grammatical subject are closely related in spite of the fact that a grammatical subject is not necessarily present in the surface structure of a sentence. The surface subject of a sentence is always the grammatical subject of its sentence--however, the converse of this statement is not true.

The sentences in (7) and (1) have the common deep structure, but the derivation of (1) requires two more rules than the derivation of (7): (a) the deletion of the formative ja and (b) the placement of the auxiliary-form sam.⁴ These two rules are the very last syntactic rules in the derivation of (1). It will be shown later that the case-assignment rules precede the grammatical subject deletion-rule. Obviously, the deleted grammatical subject recoverable in (1) was deleted at a stage very close to the surface structure of that sentence. From here on any intermediate structure which is one to four rules away from the surface structure will be called the shallow structure, and any grammatical subject thus deleted will be called the shallow subject. Therefore, the formative ja is the shallow subject of (1) and the item ja is the surface subject of (7).⁵

I.1.2. The logical subject

If the logical subject is a subject, then a logical subject is also the surface subject of some kind. It is readily observable that the surface subject of (8) and the logical subject of the same sentence differ in two points: (a) the surface subject

ja governs the agreement while the logical subject nje 'she (genitive singular)' does not; (b) the formative ja can be deleted from the shallow structure of (8) to obtain (9):

(8) Ja sam probao da nadjem Mariju u školi,
ali nje nije bilo tamo.

I tried to find Mary in the school, but
there was no trace of her there.

(9) (= (2)) Probao sam da nadjem Mariju u školi,
ali nje nije bilo tamo.

But nje cannot be deleted:

(10) *Probao sam da nadjem Mariju u školi,
ali nije bilo tamo.

(11) *Ja sam probao da nadjem Mariju u školi.
ali nije bilo tamo.

The rather forced translation of (2) indicates that (1) and (2) are not synonymous. This is not so obvious to the speakers of Serbo-Croatian. For instance, the writer would translate I tried to find Mary in the school, but there was no trace of her there. as 'Probao sam da nadjem Mariju u školi, ali tamo od nje nije bilo ni traga ni glasa.'. In fact, most speakers of Serbo-Croatian would claim that (1) and (2) are synonymous.

However, there is evidence, probably never noticed before, that (1) and (2) differ in meaning. The sentence in (1) can be expanded as in (12):

(12) Probao sam da nadjem Mariju u školi,
ali ona nije bila tamo, nego u kafani.
I tried to find Mary in the school, but
she was not there; instead (she was) in
the bar.

(13) *Probao sam da nadjem Mariju u školi, ali
nje nije bilo tamo, nego u kafani.

The sentence in (2) cannot be expanded in the same way (see(13)). This restriction is typical with the so called existential sentences--not only in Serbo-Croatian, but also in English:

(14) Devojke nisu bile u školi, nego u kafani.
The girls were not in the school, but in the
bar.

(15) *Devojaka nije bilo u školi, nego u kafani.
*There were no girls in the school, but
in the bar.

(16) Devojke nisu bile u školi.
The girls were not in the school.

(17) Devojaka nije bilo u školi.
There were no girls in the school.

(14) and (16) are locative, and (15) and (17) are existential sentences. In (16) the topic is the location of a particular group of girls, while in (17) the topic is the existence or nonexistence of girls at a particular place. The two sentences cannot be synonymous. Therefore, it is reasonable to expect that they be structurally different.

The item devojaka 'girl (genitive plural)' occurring in (17) is in the genitive and so is nje in (2). The same restrictions apply to the two sentences: neither of the two can be expanded with a locative phrase indicating an alternate place of existence. Both devojaka and nje are the topical phrases of their sentences, but a topical phrase is not necessarily the subject. For instance, the item Mariju 'Mary (accusative singular)' is the topic of (1)--no one would claim that this item is also the subject of (1). A topical phrase becomes the logical subject only in the circumstances when the surface subject which governs the agreement is missing and when the shallow subject cannot be recovered as a specific item. (One of the arguments in this paper is that any deleted formative is uniquely recoverable; this does not mean that it is recoverable

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as a specific item. (See the section on IT and THERE sentences.) The logical subject can occur in almost any case; it never governs the agreement in Serbo-Croatian⁶ and it is never the subject in the sense of the framework used here.

In (18):

(18) Teško je Mariji da zadovolji Jovanku.

It is difficult for Mary to please Joan. the person who is trying to please Joan (Mary) is felt as the logical subject of (18). Mariji is the dative singular of Marij-. Mariji, however, does not govern the agreement. This becomes obvious when (18) is changed to the past tense:

(19) Teško je bilo Mariji da zadovolji Jovanku.

It was difficult for Mary to please Joan. The past participle bilo 'be (past active participle, neuter)' occurs in the neuter gender and yet Mariji is feminine. A possible objection to this statement could be that the oblique cases do not govern the gender, but this is not so:

(20) Devojci kojoj sam poklonio knjigu fali zub.

The girl (to) whom I gave a book is missing a tooth.

Devojci is in the dative singular, yet kojoj 'who

(dative singular, feminine)' must occur in a feminine case-form, otherwise the sentence is ungrammatical:

(21) *Devojci kome sam poklonio knjigu fali zub.
Therefore, it is incorrect to say that the oblique cases do not govern the gender.

Since almost any case-form may be felt as the logical subject, the notion logical subject is a useless cover-term for a wide variety of case-forms appearing in totally unrelated structures.

I.2. The word-order in Serbo-Croatian

The word-order restrictions in Serbo-Croatian are few, but very revealing. In particular, some basic rules on the placement of clitics help to determine what are the major constituents of a sentence, and the restrictions of order on subjects and objects help to establish the basic order of the elements in Serbo-Croatian sentences. Moreover, the order restriction of topical phrases in existential sentences occurring in the nominative helps to establish the basic structure of these sentences.

The subject, the direct object, the indirect object, the verb, or any other constituent of a Serbo-Croatian

sentence may, in most instances, appear in any position.

Consider (22):

(22) Devojka hvali učiteljicu.

The girl is praising the (female) teacher.

The item devojka is the nominative singular feminine form of devoj-k-.⁷ It is also the surface subject: devojka is doing the praising; it occurs in the nominative, and governs the agreement of the verb-form hvali 'praise (present tense, third person singular)'. The item učiteljicu is the accusative singular feminine form of učiteljic- 'teacher (feminine)'. It functions as the direct object of (22): it is the female teacher who is being praised. Each of the elements in (22) is suffixed with a particular morpheme which indicates the function of the elements in this sentence. Because of that, the elements in (22) may be rearranged (scrambled) in any way, but the sentence intonation becomes fragmented:

(23) Učiteljicu hvali devojka.

(24) Učiteljicu devojka hvali.

(25) Devojka učiteljicu hvali.

(26) Hvali devojka učiteljicu.

(27) Hvali učiteljicu devojka.

The word order in (23) is used if the speaker wishes to focus the attention on the object. This word order is usually used when one is translating the passive English sentences.⁸

The order in (24) is employed to contrast the subject of praising with another possible hvalilac 'One who praises'.

In (25) the contrasted element is the second constituent (same as in (24)).

In (26) the action of praising is emphasized.

In (27) the action of praising is emphasized, and the second element is contrasted. For example, the answer to the question Koga hvali devojka? 'Whom is the girl praising' is Hvali učiteljicu. 'She is praising the female teacher', or Učiteljicu. 'The female teacher (accusative)'.

Of all the possible permutations of (22), only (23) can have two types of intonation: one as in (23) and the other exactly the same as the one in (22).

Consider now (28):

(28) Devojke hvale učiteljice.

The girls are praising the (female) teachers.

The nominative plural devojke 'girl (nominative or

accusative plural) is homophonous with the accusative plural of devoj-k-. The accusative plural učiteljice 'teacher (accusative or nominative plural, feminine)' is homophonous with the nominative plural of učiteljic-. In fact, every substantive whose nominative singular suffix is -a has the homophonous forms in the accusative and in the nominative plural. The permutations of sentences similar to the one in (28) occur less often than the permutation of the sentences in which the subject and the object have nonhomophonous case-forms. When they do, the intonation of permuted sentences must be very emphatic on the item which is the subject of the sentence; otherwise, the permuted sentences are ambiguous: it is not known who is praising whom. Also, any permutation of (28) emphasizes the subject; Therefore, it is felt that the contrasted element is always the subject. Thus, the permutations of (28) cannot use the contrastive intonation on the direct object. (Notice that the permutation of (22) can use the contrastive intonation with the direct object, as in (25) and (27).) Although all the permutations with the broken intonation of (28) are possible, few are useful, and if they are used this is due to analogy. Compare the following sentences to (23-27):

- (29) Učiteljice hvale devojke.
- (30) Učiteljice devojke hvale.
- (31) Devojke učiteljice hvale.
- (32) Hvale devojke učiteljice.
- (33) Hvale učiteljice devojke.

(The underlined items are strongly emphasized.)

Another difficulty is that (31) is ambiguous even with the most emphatic intonation on devojke. Somehow učiteljice can be felt as the subject of (31) even when Devojke is most emphatic.

Let us now compare the unbroken permutation of the intonation of (22) to the unbroken permutation of (28):⁹

- (34) (= (22)) Devojka hvali učiteljicu.

The girl is praising the (female) teacher.

- (35) Učiteljicu hvali devojka.

The (female) teacher is being praised by the girl.

- (36) (= (28)) Devojke hvale učiteljice.

The girls are praising the (female) teachers.

(37) Učiteljice hvale devojke.

*The (female) teachers are being praised
by the girls.

The (female) teachers are praising the
girls.

Observe that the sentences in (34) and (35) are synonymous, and that the sentences in (36) and (37) are not synonymous. Sentence (37) is not a permutation of (36). The fact is that when the subject and the object are suffixed with a homophonous nominative/accusative morpheme in a sentence with an unbroken intonation, the subject is always the leftmost item of such a sentence. When the case assignment rules fail to label uniquely the subject and the direct object, the Serbo-Croatian grammar possesses another device by which it can be determined which element functions as the subject or as the object of a sentence: the basic word order is Subject - Verb - Object. When everything fails, this basic word order determines the position of the elements and, at the same time, the meaning of a sentence. This fact indicates that the basic rule for the Serbo-Croatian syntax is a fixed order of the categorial component of the base of the grammar; and this is the basic principle of the

transformational grammar, as proposed by Noam Chomsky (Chomsky, 1957, 1965). Therefore, Chomsky's grammar is better suited for Serbo-Croatian than a type of grammar with an unordered set of base rules, as, for instance, the one proposed by C. Fillmore, 1968). This is the reason that Chomsky's type of transformational grammar has been adopted for this work.

I.2.1. The word-order in existential sentences

The head of topical noun phrases in existential sentences occurs in the nominative if it is a singular count-noun. Otherwise, it must occur in the genitive case. When a topic occurs in the genitive case, it may either precede or follow the verb:

(38) Devojaka ima u toj školi.

There are girls in that school.

(39) Ima devojaka u toj školi.

There are girls in that school.

but a topic occurring in the nominative cannot precede the verb:

(40) *Devojka ima u toj školi.

*The girl has in that school.

Instead it must follow it:

(41) Ima devojka u toj školi.

There is a girl in that school.

It was already demonstrated that a surface subject must occur in the nominative, and that it may be placed before the verb of its sentence. In fact, it was demonstrated that a subject must precede the verb in some structures (see(22)). The ungrammaticalness of (40) offers evidence that devojka in (41) is not the subject of that sentence. If it were it could precede the verb-form ima 'have (third person singular, present tense)'. Moreover, the agreement of ima with devojka is accidental, for ima occurs also in (39) where devojaka 'girl (genitive plural)' is plural. Again, it could be assumed that the oblique case-forms do not govern the agreement. An argument against this position was already offered but, perhaps, it was not fully convincing because it referred to the agreement rules pertaining to the embedding rules rather than to the subject-verb agreement rules. The writer is convinced, however, that the agreement rules operate in approximately the same way regardless of whether they apply from without or from within a cyclic node. Unfortunately, the argument cannot be made stronger if the analysis is restricted to Serbo-Croatian sentences because a plural count-noun--the head of a topical phrase--in an existential sentence, always occurs in

the genitive. However, there is external evidence that the verb need not agree with such an item. In Spanish the verb-form hay 'have (an invariable form of haber)' occurs before a singular as well as before a plural count-noun:

(42) Hay una muchacha en esa escuela. (Spanish)
 Ima (jedna) devojka u toj školi. (Sr.-Cr.)
 There is a girl in that school.

(43) Hay muchachas en esa escuela. (Spanish)
 Ima devojaka u toj školi. (Sr.-Cr.)
 There are girls in that school.

and in the past tense había 'have (third person singular, imperfect indicative)' occurs regardless of the number of the topical noun:

(44) Había una muchacha en la escuela. (Spanish)
 Postojala je (jedna) devojka u školi. (Serbo-Croatian)
 There was a girl in the school.

(45) Había muchachas en la escuela (Spanish)
 Bilo je devojaka u školi. (Sr.-Cr.)
 There were girls in the school.

The agreement in Spanish, barring the idiosyncrasies of the languages in question, operates in the same way as the agreement in Serbo-Croatian. Obviously, muchacha-

chas 'girl (plural)' does not govern the agreement of the verb-form había, since muchachas is plural and había is singular. Yet, muchachas is not an oblique case of muchacha. It is reasonable, then, to assume that the agreement of the verb había is governed by the formative which becomes there in English, but becomes obligatorily deleted in Spanish.¹⁰ It will be shown in the section of this paper dealing with existential sentences that this hypothesis holds also for Serbo-Croatian. It is important to notice at this point that devojka in (41) cannot occur in the subject position.

I.2.2. The position of clitics in Serbo-Croatian

Here, the discussion will be limited to clitic forms of the auxiliary bi(-) 'be'.¹¹ Some examples of other clitics will be given to demonstrate that the clitic placement rules apply to all clitic words in Serbo-Croatian.

A possible answer to Da li je Marija htela da ti pokloni auto? 'Did Mary want to give you the car?' is

(46) (?) Da, ona jeste htela da pokloni njega
meni.

Yes, she did want to give it to me.

where jeste 'be (third person singular, full form)' is used emphatically, functioning in more or less the same way as did in the translation of (46), and where njega 'it, he (accusative singular, full form)' refers to its antecedent auto 'car'. The item meni '(to) me (dative singular, full form)' is the indirect object of (46). The sentence in (46) is not semigrammatical (as the question mark indicates), except that most speakers would prefer the clitic forms of njega (ga) and meni (mi). If these clitic forms occur, they must be moved into the position between da '(complementizer, untranslatable)' and pokloni 'give, present (3rd person singular)':

(47) Da, ona jeste htela da mi ga pokloni.

Yes, she did want to give it to me.

(The word-order of nonclitic forms is freer: Da, meni ona jeste htela njega da pokloni.)

The complementizer da must occur if the verb of the embedded sentence is tensed.¹² When clitic forms occur in a sentence headed by the complementizer da, they cannot be removed from their cyclic node. They must be placed immediately after the first constituent of the embedded sentence. In (46) the first constituent is always da because its position is inalterable.

If jeste in (47) were nonemphatic, it would have to occur in its clitic form:

(48) Da, ona je htela da mi ga pokloni.

Yes, she wanted to give it to me.

Notice that the clitic je 'be (third person singular, present tense)' must remain the second constituent of its sentence:

(49) Da, htela je ona da mi ga pokloni.

Yes, she wanted to give it to me.

(50) *Da, htela ona je da mi ga pokloni.

(51) *Da, ona htela je da mi ga pokloni.

The verb-form pokloni in (48) need not be tensed. A completely synonymous sentence with (48) and with Da, ona je htela da pokloni njega meni. may occur with the infinitival form of pokloni (pokloniti):

(52) Da, ona je htela pokloniti njega meni.

Yes, she wanted to give it to me.

The pronoun forms njega, meni in (52) may (preferably) occur in their clitic forms. If they do, they must be removed from their cyclic node. When the infinitive occurs in an embedded sentence, the complementizer da cannot occur, and there is nothing in the surface structure of such a sentence to prevent the removal of the clitics from their cyclic node.

In fact, they must be placed behind the first constituent of the main sentence:

(53) Da, ona mi ga je htela pokloniti.

Yes, she wanted to give it to me.

(54) Da, htela mi ga je ona pokloniti.

Yes, she wanted to give it to me.

The subject of (53-54) may be deleted in the shallow structure because its antecedent is known, and because the past active participle htela (past active participle, feminine, singular) carries enough information about its subject. The deletion of this subject (ona) produces (55):

(55) Da, htela mi ga je pokloniti.

Yes, she wanted to give it to me.

When there is no complementizer da, all the clitic forms of a complex sentence must be grouped together and placed after the first word (as shown in the preceding examples), after the first verb--but not after the first verb phrase, if the verb phrase consists of two or more items:

(56) Da, pokloniti mi ga je htela.

Yes, she wanted to give it to me.

or after the first noun phrase:

(57) Da, jedna lepa devojka mi ga je htela pokloniti.

Yes, a pretty girl wanted to give it to me.

Notice also that these clitics may appear immediately after jedna 'one, a (feminine)':

(58) Da, jedna mi ga je lepa devojka htela pokloniti.

Yes, a pretty girl wanted to give it to me.

but that they cannot appear after the second word of the noun phrase jedna lepa devojka 'a pretty girl':

*Da, jedna lepa mi ga je devojka htela pokloniti.

Incidentally, the order of these clitics is fixed, but this order rule is periferal to the topic of this paper; therefore, it will not be discussed.¹³

If jedna does not occur in the surface structure of the formatives jedna lepa devojka, a synonymous sentence with (58) would be (59):

(59) Da, lepa mi ga je devojka htela pokloniti.

Yes, the pretty girl wanted to give it to me.

Yes, a pretty girl wanted to give it to me.

the synonymy of these two phrases will be explained in section II.3.2.

Finally, it must be mentioned that the clitic forms cannot separate a preposition from its sister constituent:

(60) Sa tim velikim šeširom je ušla u kafanu.

With that big hat she entered into the bar.

(61) *Sa je tim velikim šeširom ušla u kafanu.

although the clitic je (as well as the other clitics) may appear after tim 'this, that (instrumental)':

(62) (?)Sa tim je velikim šeširom ušla u kafanu.

With that big hat she entered into the bar.

but not after velikim 'big (instrumental)':

(63) *Sa tim velikim je šeširom ušla u kafanu.

To recapitulate, a clitic form in Serbo-Croatian may appear in the following positions:

(a) Prep-X__(Y)

(b) PP__(y)

(c) NP__(Y)

(d) X__(Y)

(e) (Y) Comp__(Y)

(Where X is a single word and where X is not Prep. (Y) is an optional string; it may precede only Comp. Comp is the complementizer da.)

I.3. The agreement in Serbo-Croatian

In Serbo-Croatian the agreement is governed by

person, number, and gender features contained within the surface subject or within the shallow subject. However, from the surface structure point of view, the agreement seems to apply imperfectly to some nominal predicates:

(64) Marija je bila učiteljica.

Mary was a teacher.

(65) Marija je bila kapetan.

Mary was a captain.

The predicate nominal agrees with the subject if the agreement is possible: there are two words for teacher; one for a female teacher (učiteljica) and the other for a male teacher (učitelj). Since Marija, the subject in (64) is a female, učiteljica is a possible predicate nominal for that sentence. However, the item učitelj can be used in the generic sense (referring to any sex). If this is what a speaker wishes to say, (66) is also possible:

(66) Marija je bila učitelj.

Mary was a teacher.

Naturally, the feminine nominal učiteljica cannot occur with a masculine subject:

(67) *Petar je bio učiteljica.

*Peter was a female teacher.

(unless (67) were used jestingly) because učiteljica is not generic.

The predicate nominal in (65) (kapetan) has but one form. The form kapetanica 'captain's wife' exists, but the speakers of Standard Modern Serbo-Croatian would never use it with the meaning 'female captain'. Therefore (68) is ungrammatical if used with the meaning of (65):

(68) *Marija je bila kapetanica.

Mary was a captain's wife.

*Mary was a captain.

There are nouns in Serbo-Croatian which have only one gender-form: lopov 'thief, rascal (masculine, nominative singular)', bitanga 'tramp (either masculine or feminine, nominative singular)', etc. When these nominals occur as predicates, the subject can be either masculine or feminine:

(69) Marija je bila veliki lopov.

Mary was a big rascal.

(70) Petar je bio veliki lopov.

Peter was a big rascal.

(71) Marija je bila bitanga.

Mary was a tramp.

(72) Petar je bio bitanga.

Peter was a tramp.

From the above examples, it can be seen that the agreement rules apply to predicate nominals in a straightforward manner: if a predicate nominal has more than one gender-form, the agreement is possible; if it has only one gender-form, the agreement is accidental. That is, although lopov in (70) agrees with its subject, this agreement is just a coincidence. This simplicity may be masked by the scrambling rules that may apply to Serbo-Croatian sentences. (See the section on word order.)

To show the confusion that may arise due to the scrambling rules let us simplify (69) by omitting the adjective veliki:

(73) Marija je bila lopov.

Mary was a rascal.

One of the possible ways to scramble (73) is:

(74) Lopov je bila Marija.

Mary was a rascal.

The item Marija in (74) is still the subject because the past active participle bila is feminine. Compare now (74) to (75):

(75) Lopov je bio Marija.

The rascal was Mary.

Much confusion can be caused in the mind of an analyst when confronted with such sentences, but the solution is very simple: at the time the agreement rules apply the subject of (75) is lopov 'rascal, thief (masculine, nominative singular)'. Naturally, bio 'be (past active participle, masculine)' occurs in (75)--not bila. (By implication, (73-74) have a different deep structure than (75).)

Consider also the sentences in which the predicate nominal appears in the instrumental case:

(76) Marija je bila svedok. (nominative)

Mary was the witness.

Mary was a witness.

(77) Svedok je bio Marija. (nominative)

The witness was Mary.

*A witness was Mary.

(78) Marija je bila svedokom. (instrumental)

Mary was the witness.

Mary was a witness.

(79) Svedokom je bila Marija. (instrumental)

Mary was the witness.

Mary was a witness.

(80) *Svedokom je bio Marija. (instrumental)

The nominal svedok 'witness (masculine, nominative singular)', as well as the nominal lopov, can be either definite or indefinite in the predicate nominal position. But if one of these items is the subject of a sentence (as in (77)), it is always definite, unless it is modified by some indefinite item. In the dialects where the instrumental case can be used in the predicate position, the speaker implies that Mary was not only a witness to some occurrence, but that she also actively participated--testifying as a witness. Thus, it is not possible to say:

(81) *Marija je bila svedokom ali nije htela da svedoči.

*Mary was (performing the duty of) a witness, but she did not want to testify.

Notice also that the instrumental cannot occur instead of the nominative with the predicate of (77) (as shown in (82)):

(82) *Svedok je bio Marijom.

The witness was (performing as) Mary.

*The witness was (someone who was before) Mary.

This is not only because (82) is ungrammatical, but because it does not make any sense. Generally, a substantive denoting permanent characteristics cannot occur in the instrumental in the predicate nominal

section II.3.1. pp. 81 f.)

The formatives dominated by a lexical category are represented in features. Thus, [+Marij-], etc., is a bundle of features which contains selection features, categorial features, semantic and syntactic features, and all the other features needed to represent Marij-; some features of this formative are specified positively and some negatively, but in their entirety they positively specify Marij-, hence the plus sign before it: [+Marij-].

In this grammar tenses are also represented in features. There are two types of past tenses in Serbo-Croatian: the simple past tense (aorist), and the compound past tenses. The latter are much more frequent, and it can be safely said that aorist has fallen into disuse.

When aorist occurs, the Aux node becomes pruned. So, when the main verb is [+past], as in (83), the deep structure of (76) will generate Marija beše svedok. 'Mary was a witness.' (where beše is the third person singular, aorist). If the compound past tense is to occur, the V node obtains the feature [+participle]:

(84) (S(NP(N [+3rd person]))(PredP(Aux [+present]))
 [+singular]
 [+feminine]
 [+Marij-]

$$(\text{VP}(\text{V}[\text{+past}][\text{+participle}][\text{+bi}(-)]))(\text{NP}(\text{N}[\text{+masculine}][\text{+svedok}(-)])))).$$

When the main verb contains the feature [+participle], the Aux node cannot be pruned. Instead, the Aux node becomes enriched by features which are transferred under its dominance by the agreement rules. (For the notion ENRICH see page 81.)

The following Serbo-Croatian data led the writer to represent tenses in features:

- (a) The auxiliary and the so called modals always appear in their present tense-forms.
- (b) The main verb may occur in any tense, but when the main verb is in the past tense, the auxiliary is in the present tense--if it occurs.
- (c) When the main verb is used with the meaning denoting futurity, the modals appear in the present tense, and the verb is either in the infinitive, or it is tensed within an embedded S.
- (d) The future meaning of a sentence is given by the modals.

Compare the following sentences to each other:

(85a) Marija je svedok.

Mary is a witness

where je 'is' is the main verb in the present tense

(85b) Marija je bila svedok.

Mary was a witness.

where je is in the present tense and bila in the past tense. In (85b) je is an auxiliary and bila is the main verb which became a past active participle.

(85c) Marija će biti svedok.

Mary will be a witness.

where the modal će 'will (3rd person singular present tense) occurs in the present tense, but implies that the action is to take place in the future. The item biti '(to) be' is in the infinitive. The infinitive in (85c) comes from a reduced sentence. (For a more detailed discussion of reduced sentences and the infinitival forms see the section on IT and THERE sentences.)

Compare (85c) to (85d):

(85d) Marija će da bude svedok.

Mary will be a witness.

Sentences (85c) and (85d) are synonymous, and (85d) underlies (85c). Viewed from this perspective, the modals are main verbs in Serbo-Croatian. The item bude 'be (3rd person singular, hypothetical)' is the hypothetical, or conditional present tense of bi(-)--as opposed to the nonhypothetical je. It usually occurs in embedded sentences. From these data it can be deduced that the

past and the future tense are always assigned to the main verb, and when the auxiliary occurs it is always in the present tense. It is possible that the auxiliary is unmarked for tense, or that it is negatively marked as [-past, -future], and that the redundancy rule converts these features into [+present]. There is evidence that the redundancy rules convert the negatively specified features into a positively specified feature (See the section on agreement, as well as the section on IT and THERE sentences.) However, for the sake of clarity, the writer decided to use the feature [+present] in the deep structure of (76).

Because the tense is marked within the formative dominated by V, and because the redundancy rules operate only on features, it became necessary to represent tenses in features.

Notice that it is not necessary to specify the V node formative as [+active], since a passive participle will occur only if the passive transformation applies. The passive transformation assigns the feature [+passive] to the node containing the feature [+participle]. If the said transformation does not apply, the participle is always in the active voice.

The agreement rules enrich the formatives of (84)

in the following manner:

- (86) (S(NP(N[+3rd person]))(PredP(Aux[-past])
 [+singular] [-future.]
 [+feminine] [+3rd person]
 [+Marij-] [+singular]
 (VP(V[+past])(NP(N[+3rd person])))).
 [+singular] [+masculine]
 [+feminine] [+singular]
 [+bi(-)] [+feminine]
 [+svedok(-)]

The last formative in (86) contains two gender features. The writer assumes that the features of the subject are transferred by the agreement rules to every formative which is sensitive to these rules. It could be proposed that when a formative already contains a gender feature that this formative cannot be assigned another gender feature. If the agreement rules were to apply in such a way, the feature [+feminine] would not be assigned to the formative svedok. However, such a restriction on the agreement rules would not represent correctly the application of these rules in Serbo-Croatian. Consider for instance the following sentences:

- (87) Marija je bila svedok.

Mary was the witness

- (88) Petar je bio svedok.

Peter was the witness

- (89) Petar i Marija su bili svedoci.

Peter and Mary were the witnesses.

(90) Marija i Jovanka su bile svedoci.

Mary and Joan were the witnesses.

When the subject is [+masculine, +singular] the participle is also [+masculine, +singular]. (See (88) where bio 'be (past active participle, singular, masculine) contains these features.)

When the subject consists of two or more conjoined noun phrases, if all the actors are [+feminine], the participle occurs in its feminine plural form. (See (90) in which the participial form bile is [+plural, +feminine].) However, if the subject noun phrase is composed of ~~the~~ items each containing a different gender feature, the masculine feature is dominant-- all the other gender features must be ignored. Thus, in (89) we have one feminine and one masculine item, yet the participle bili is masculine and plural.

Let us say that the feature [+masculine] is "stronger" than the feature [+feminine], and that the strongest feature wins out. There are three gender features in Serbo-Croatian: masculine, feminine, and neuter. The feature, [+neuter] is the weakest one of the three:

(91) Dete je bilo svedok.

The child was the witness.

(92) Dete i žena su bili svedoci.

The child and the woman were the witnesses.

Dete 'child (neuter singular)' assigns the feature [+neuter] to the participial bi(-) (bilo is neuter singular). The plural of dete (deca 'children') assigns the plural neuter form to the participial bi(-)

(93) Deca su bila svedoci.

The children were the witnesses.

(94) Sela su bila lepa.

The villages were pretty.

Selo 'village' is neuter, and the plural of it requires the participial-form bila which is plural neuter, homophonous with the feminine singular past active participle of bi(-). However, if instead of the above plural, the conjoined singular noun phrases are neuter, the participle appears in the masculine gender:

(95) Dete i kuće su bili na ulici.

The child and the young dog were on the street.

(Where kuće 'dog, young dog, puppy' is the neuter singular.)

Even if one member of a conjoined subject is feminine and the other neuter, as in (92), the participial form must occur in the masculine plural. (In (92) žena is feminine singular, dete is neuter singular, and the participle bili masculine plural.) It must be assumed, therefore, that the features denoting gender are transfer-

red to the other formatives, that bili in (92) receives both the neuter and the feminine features, and that the redundancy rules convert these two features into the feature [+masculine]. The following formulas portray the gender reassignment in (95), (90), and (89), respectively:

$$(96) \quad \begin{array}{l} [+neuter] \\ [+neuter] \end{array} \longrightarrow [+masculine]$$

$$(97) \quad \begin{array}{l} [+feminine] \\ [+feminine] \end{array} \longrightarrow [+feminine]$$

$$(98) \quad \begin{array}{l} [+masculine] \\ [+feminine] \end{array} \longrightarrow [+masculine]$$

However, (96-98) do not represent all the possibilities.

Let us say that [+a], [+b], and [+c] stand for the features [+masculine], [+feminine], and [+neuter], respectively, and that [+x] represents any gender feature. Then the three formulas that follow

$$(99) \quad [+b, +b, (+b, \dots)] \longrightarrow [+b]$$

$$(100) \quad [+c, +x, (+x, \dots)] \longrightarrow [+a]$$

$$(101) \quad [+a, +x, (+x, \dots)] \longrightarrow [+a]$$

take care of any possibility. For instance, the formula in (101) reassigns the [+masculine] feature to the predicate nominal in (86). The participial formative in (90) becomes enriched through the agreement rules with the gender features [+feminine, +feminine], and the formula in (99) converts these two features into

one feature: [+feminine]. The predicate nominal of the same sentence contains its inherent feature [+masculine], and it becomes enriched through the agreement rules with the two features [+feminine, +feminine]. The formula in (101) converts these three features into the feature [+masculine]. After the agreement rules applied, the participle in (95) contains the features [+neuter, +neuter]. Rule (100) reassigns the feature [+masculine] to that formative.

Finally, notice that a plural item like sela 'villages' contains only one gender feature: [+neuter], and not several features. That is, this item could not be specified as [+neuter, +neuter, (+neuter, ...)], otherwise, the participle in (94) would become bili--as per rule (100)--instead of bila 'be (past active participle, neuter, plural)'. Thus, none of the formulas in (99-101) apply to (94), or to any sentence having a nonconjoined subject.

The gender agreement rules in Serbo-Croatian, particularly those imposed by conjoined NP formatives and by plural formatives, add important information concerning the derivation of plural noun phrases and conjoined noun phrases. However, this subject is rather marginal to the topic of this paper, therefore, it will not be further discussed.

I.4. Basic and surface structures.

The surface structure is within the realm of performance. Thus anything uttered, heard, or written is in the domain of performance.

Any structure to which a rule is to be applied is within the domain of competence: if there is a rule, it must be somehow learned, and if a speaker is in possession of it, it forms part of his competence. Therefore, the agreement rules, the case assignment rules, the redundancy rules, and even the scrambling rules, as well as any other rules, pertain to the realm of competence. It follows from the above statement that an intermediate structure describes competence.

The empirical evidence for establishing the existence of any rule is to be found in the surface structure. The comparison of sentences (22-37) led to the conclusion that the basic structure of these sentences is NP - V - NP, where the leftmost NP is the subject of these sentences and the rightmost NP the direct object of their verb. This conclusion was reached by comparing the various surface structures to their meaning, and it was assumed that if the meaning changed after rearranging the same items, that the compared structures have to have different basic structures. It makes good sense to assume that if Devojke hvale uči-

teljice does not mean the same as Učiteljice hvale devojke, these two structures have two different basic structures. And because the basic structure was established through meaning, it must be required of the basic structure to be meaning preserving. Therefore, the rules that may apply to a basic structure, to change it into a surface structure, must preserve the meaning of the basic structure to which the rules applied. However, it is well known that certain rules which apply to a basic structure, often to a shallow structure, disturb the meaning of the base.¹⁴ In Serbo-Croatian the scrambling rules affect the meaning to a certain extent. So do the rules which change a full form into a clitic form. Nevertheless, while the meaning affected by the rules which apply at some stage of derivation of a sentence is affected by the features of focus, contrast, emphasis, topicalization of certain elements--the subject-object relationship, however, is never affected. Do these features really change the meaning of the base, or do they merely add a feature to a sentence which to our imperfect concept of synonymity appears as a sentence with a different meaning? The writer is incapable of offering a solution of his own, but he does agree with J. Katz's hypothesis (Katz, 1972) that focus, contrast, emphasis, and topicalization do

not belong to the semantic component of the grammar.¹⁵

The basic structure of a sentence consists of the branching diagram whose ends are labeled with the symbols of the categorial components of a grammar. The lexical categories of such a tree dominate formatives extracted from the lexicon..

The lexicon in this work is not different from the lexicon conceived by Chomsky (Chomsky, 1965, page 164).¹⁶ The basic structure, together with the formatives is the deep structure of a sentence (as per Chomsky, 1965). The deep structure of (28) is as in Figure 1.

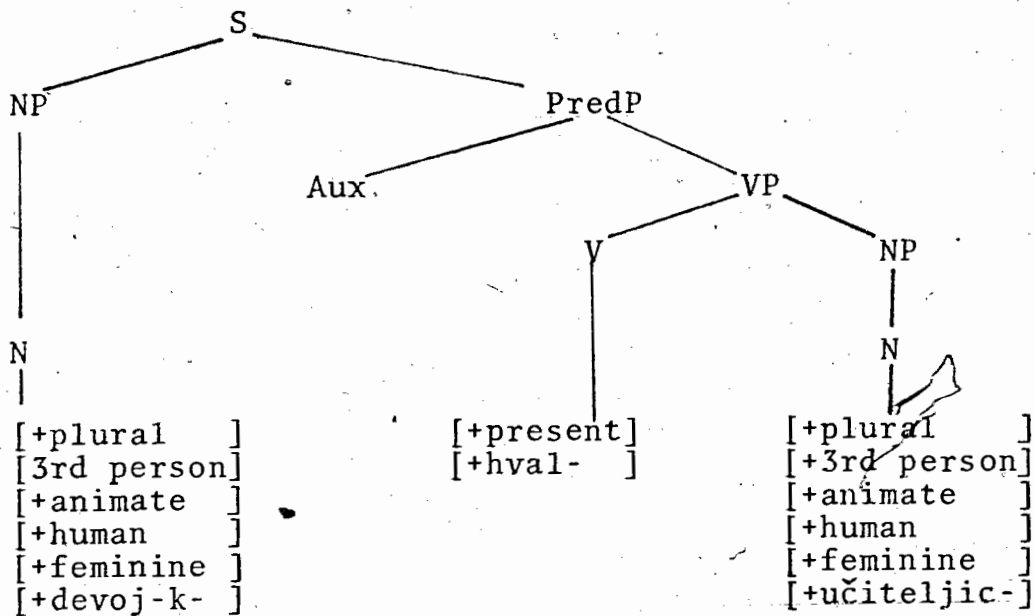
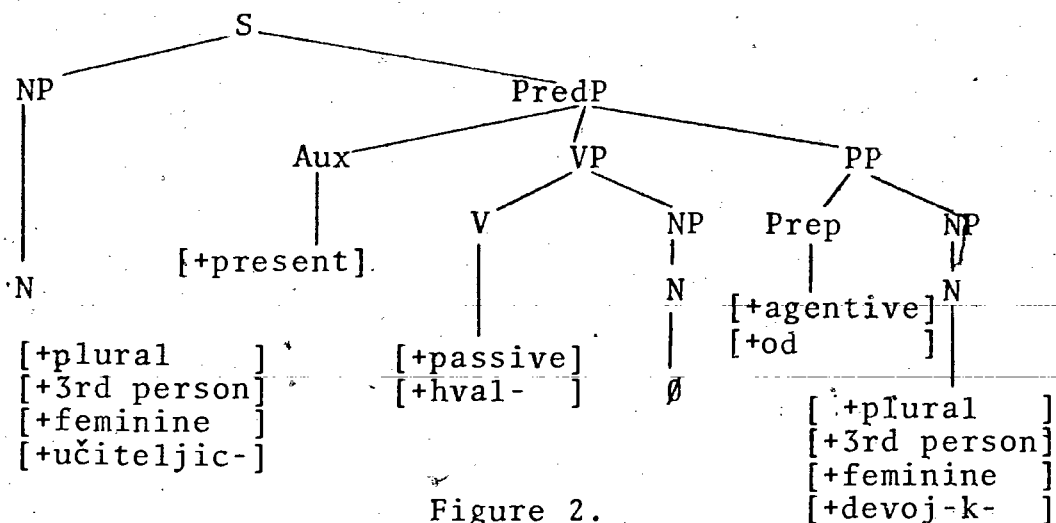


Figure 1.

The verb formative hval- contains certain selection features which admit only the [+animate, +human] features

in the formative which is the head noun phrase with-
in the NP dominated directly by the node S.

The NP node directly dominated by the node S is the deep subject of its S. If the deep subject remains in this position after passing through its transformational cycle, it will also be the shallow subject of its sentence, and if the shallow subject does not become deleted, the deep subject and the surface subject will be the same. The position of a deep subject depends on the transformations that may apply to a deep structure. If the passive transformation applies to the deep structure in Figure 1, the deep subject will move to the NP node dominated directly by a PP node, and the deep object, the formative dominated directly by the VP node (and which is the sister constituent of V) must move into the position vacated by the deep subject:



(The formative od is a preposition which may be used with passive agents. It must receive the feature [+agentive] to distinguish it from the preposition od used in a nonagentive sense.¹⁷⁾

The passive transformation assigns the feature [+passive] to the formative dominated by the V node. As soon as this feature appears in the structure, the Aux node must be assigned all the features which form the copula bi(-) 'be(-)', and the verb formative obtains the feature [+participle]:

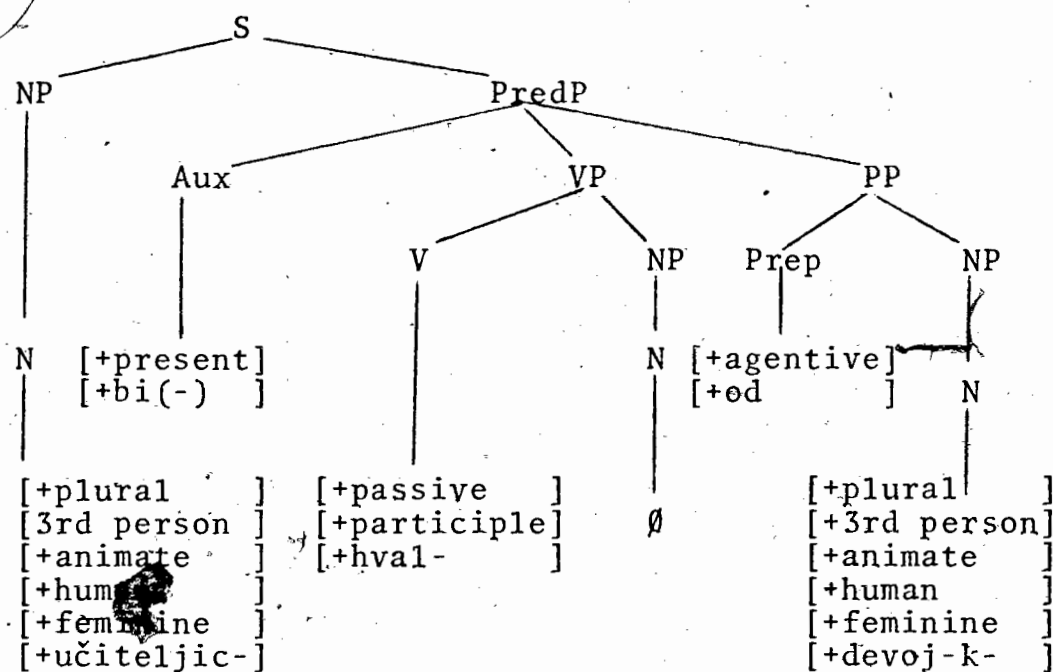


Figure 3.

Let us call the transformations which move for-
 matives from one node to another node--Total Transfer

Transformation. Total transfer transformations may be either optional or obligatory. The passive transformation is an optional TTT (total transfer transformation).¹⁸

The agreement rules are allowed to operate only after the last TTT is applied to an intermediate structure. The passive transformation is the last TTT that may apply to the deep structure on Figure 1. The agreement rules assign the agreement features to the structure in Figure 2 as in Figure 4.

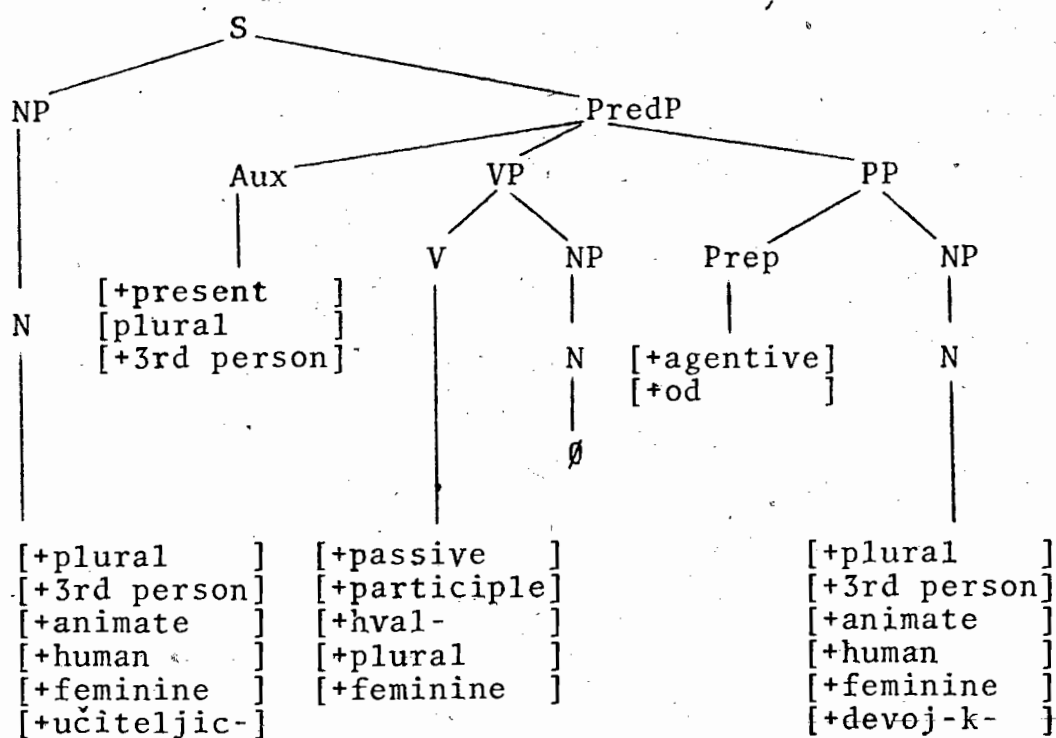


Figure 4.

The agreement rules sufficiently enriched the Aux

node because the features dominated by it can select the proper auxiliary form without further specification. This is the reason the Figure 3 was bypassed in the derivation of the structure in Figure 4.

At this stage the case assignment rules must apply. The nominative case is assigned to the formative dominated by the node NP which is directly dominated by the node S. The nominative case is assigned also to any predicate nominal if the Aux node contains the formative bi(-) and if that formative is not enriched by some semantic feature.¹⁹ The passive agent is assigned the genitive case because any declinable substantive occurring within a PP node whose Prep formative is od must be in that case.

The writer assumes that the cases appear as features: [+nominative, +genitive, ...], and that the combination of, let us say, [+plural, +feminine, +nominative] features select a feminine, nominative plural suffix for a particular formative. The case-features are assigned to the structure in Figure 4, as shown in Figure 5.

The nominative plural of učiteljic- is učiteljice 'teachers'. The third person plural present tense of bi(-) is su 'are'. The feminine nominative plural of the passive participle for the formative hval- is

It should be mentioned here that the label past passive participle is a misnomer. A passive participle is not marked for tense in Serbo-Croatian. If the structure in Figure 5 were labeled as [+future], it would generate the following sentence:

(103) Učiteljice će biti hvaljene od devojaka

The teachers will be praised by the girls.

and if the same structure were [+past], (104) would be generated:

(104) Učiteljice su bile hvaljene od devojaka.

The teachers were praised by the girls.

(See also pp. 33-37.)

A passive participle may occur in any case-form: hvaljenih 'praised (genitive plural)', hvaljenim 'praised (dative or instrumental, plural)', etc. If the agent of (102) were unspecified in the deep structure, or if it were aforementioned, it could be deleted. (The writer assumes that the deletable VP complements are directly dominated by the PredP node.) Such a structure is represented by (105):

(105) Učiteljice su hvaljene

The teachers are (being) praised.

Compare (105) to (106-107):

(106) Učiteljice su lepe.

The teachers are pretty.

(107) Učiteljice su spavale.

The teachers were sleeping.

At the time the case assignment rules apply, the structures of (105-107) are not different, except for the difference in the formatives hvaljene 'praised', lepe 'nice (nominative plural feminine)', and spavale 'sleep (past active participle)'. However, the difference between these formatives is unimportant as far as the case assignment rules are concerned. The past active participle spavale is a predicate nominal; there is no doubt about this, because it is marked for gender. The writer claims that this past participle also obtains a case feature through the case assignment rules. Thus, because spavale is a predicate nominal, and because the copula-form su is not enriched by a semantic feature which may require the [+instrumental] feature in a predicate nominal, this formative obtains the [+nominative] feature. The fact that spavale cannot be assigned any other but the [+nominative] feature, is due to the fact that a TTT cannot place a past participle into any other position. It does not, and it cannot, serve as a proof that the past active participles are not sensitive to the case assignment rules. This discussion will be

resumed presently.

Consider now the structure in Figure 1. The direct object of a verb or of a formative dominated by a V node must be assigned the [+accusative] feature. The only exception to this rule is when a V node dominates the formative bi(-). This statement is largely based on the observational criterion: when bi(-) is dominated by the V node, the accusative case cannot appear with a formative within an NP node directly dominated by the VP node. If some other formative is dominated by V, except the formatives bi(-) and izgleda(-) '(to) seem' (and, perhaps, one or two more), its direct object must occur in the accusative. The explanation why the direct object of izgledati does not take the accusative will be given in the section on predicate nominals.

The agreement rules and the case assignment rules that apply to the structure in Figure 1 are shown in Figure 6. No TTT need apply to the structure in Figure 1, since the passive transformation is optional.

(Recall that the verb formative which is not marked as [+participle] assumes the features which would otherwise be assumed by the formative dominated by the node Aux.)

The formative devoj-k- in Figure 6 becomes devojke 'girls' if it contains the features [+plural, +nominative].

If the structure in Figure 6 were in the past tense, the agreement and the case features would be assigned as in Figure 7.

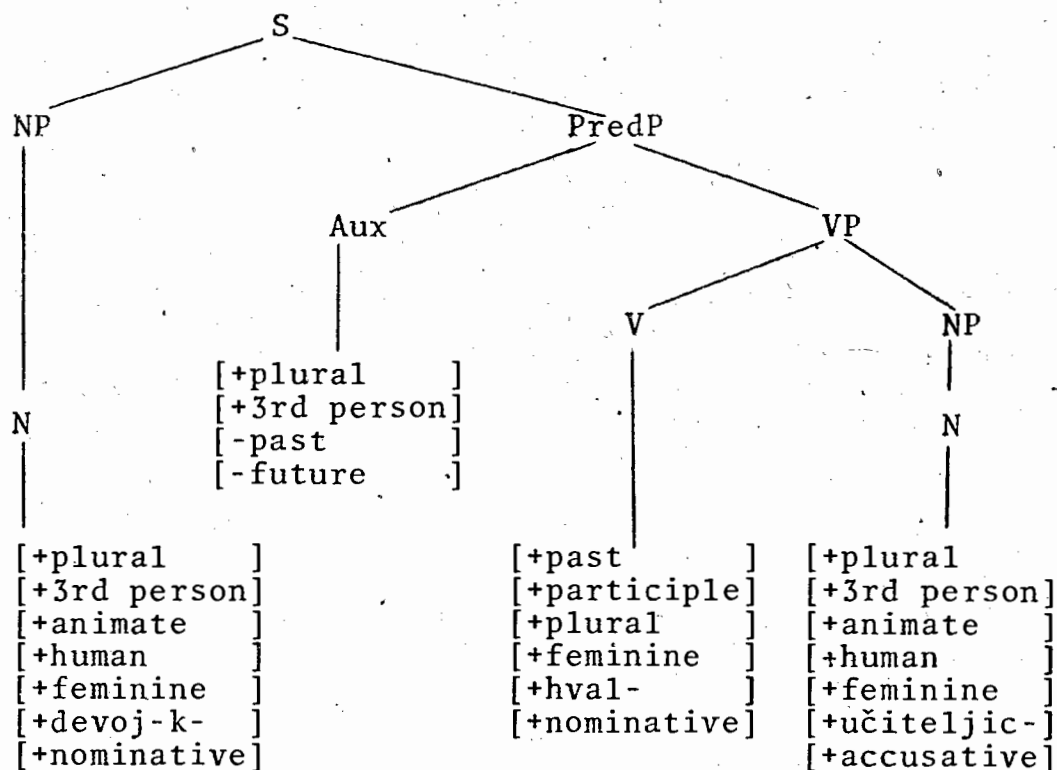


Figure 7.

The features dominated by the leftmost N in Figure 7 spell out devojke. The redundancy rules convert the features [-past, -future] into the feature [+present]. This feature, and the features [+plural, +3rd person] are sufficient to select the copula-form su 'are (3rd person)'. Actually, before these features enter the lexicon, they would have to be accompanied by

their categorial feature [+Aux]; that is, every bundle of features must be marked by a categorial feature. However, while the bundle of features are dominated by their lexical categories, the categorial features seem superfluous.

Note that the formative [+Aux, +plural, +3rd person, +present] does not contain any semantic features. It was stated often, rather carefully, that the copula be is semantically "nearly empty" (see footnote 19). It was indicated before, in this paper, that the copula may be enriched with certain semantic features. Nevertheless, the copula formative in Figure 7 is not enriched-- it is indeed empty. A copula form may be dominated by the Aux node or by the V node. There is no reason to assume that a copula dominated by a V node is less semantically empty than a copula-form dominated by Aux node. This is an important point for understanding further discussion of the case assignment rules.

The formative dominated by the node V will spell out hvalile. The writer claims that this item is in the nominative, because any item which is the sister constituent of a semantically empty copula-form must occur in its nominative case-form, whether or not the copula-form is [+Aux] or [+V].

The formative dominated by NP which is directly dominated by VP in Figure 7 will select from the lexicon učiteljice. The derived surface structure will read as in (109):

(109) Devojke su hvalile učiteljice.

The girls were praising the (female) teachers.

The girls praised the (female) teachers.

It was demonstrated in this section of the paper

- (a) That the deep subject and the surface subject are two unrelated notions
- (b) That the TTT must precede the agreement rules and the case assignment rules because the latter ones must read the features assigned by the former ones.
- (c) That passive participles are not marked for tense
- (d) That copula may be semantically empty.

Also, the claim was made, that a nominal which is a sister constituent of an empty copula form obtains the [+nominative] feature. This will be proven in section II.

II. The nominative case

II.1. The nominative case in the surface subject position.

It was already demonstrated that the head noun phrases of surface subjects always occur in the nominative case. However, there are several classes of defectively declinable substantives in Serbo-Croatian (mostly numbers and quantifiers), and when these appear as the head nouns of any phrase, their case-suffix is usually zero:²⁰

- (110) Nekoliko mladića je razgovaralo sa
nekoliko devojaka.

Several young men conversed with
several (a few) girls.

- (111) Nekoliko mladića su razgovarali sa
nekoliko devojaka.

Several young men conversed with
several (a few) girls.

- (112) Mladić je razgovarao sa devojkom.

The young man conversed with the girl.

- (113) Mladići su razgovarali sa devojnama.

The young men were conversing with the
girls.

The young men conversed with the girls.

(114) Ujak mladića je razgovarao sa ujacima
devojaka.

The uncle of the young man conversed
with the uncles of the girls.

(115) Ujaci devojaka su razgovarali sa ujakom
mladića.

The uncles of the girls conversed with
the uncle of the young man.

The following phenomena can be observed in

(110-115):

- (116) a. Nekoliko 'several, a few' is the head
noun phrase in (110-111)
- b. Ujak 'uncle (masculine, nominative
singular)' ujacima 'masculine, instru-
mental plural)', ujaci 'uncle (masculine
nominative plural)', and ujakom 'uncle
(masculine, instrumental singular)' are
the head noun phrases in (114-115).
- c. Ujak(-) is declinable. Nekoliko is
indeclinable.
- d. The sister constituent of nekoliko
and ujak(-) in (110-115) always occur
in the genitive case: mladića is
genitive singular and devojaka is
genitive plural.

- e. If devoj-k- and mladic(-) appear as head-nouns, they occur in the expected case-forms: in the nominative in the subject position, and in the instrumental if they are sister constituents of the preposition s(a) 'with (associative)'.

(It can be observed also by comparing (110) to (111) that the verbal agreement is either singular or plural. This phenomenon will be discussed in the section on existential sentences.)

The case assignment rules assign the case features to all substantives, but the indeclinable substantives, as per Chomsky (Chomsky, 1965, page 164), contain in the lexicon features 'that exempt items from certain phonological rules'. It will be required of this grammar that the bundles of features which spell out nekoliko and any other indeclinable substantive contain the feature [-case suffix]. (See also footnote 20.)

II.2. The nominative case in the predicate nominals.

The nominative case does occur outside of grammatical subjects. For instance, it occurs as a predicate nominative in the following sentences:

(117) a. Marija je učiteljica.

Mary is a teacher.

b. Ova kuća je nekad bila škola

This building was once a school.

A predicate nominative always refers back to the subject. It differs semantically from the direct object in this respect because unless the direct object repeats the subject, almost feature by feature, the direct object is not in a direct semantic relationship with the subject NP while a predicate nominative always is.

The writer claims that a predicate nominative may occur only if the main verb is nearly empty of semantic content, and that there are only two formatives in Serbo-Croatian which are sufficiently semantically empty to allow the nominative case in predicate position, namely the copula bi(-) and the existential ima(-) 'there is'. (The formative ima(-) will be discussed in the section on IT and THERE sentences.) This claim will be justified presently.

II.2.1. The deep structure of predicate nominals.

Emonds (in Emonds, 1969, pp. 38 f.) draws attention to a certain class of verbs whose nominal complements modify the subject. He refers to them as predicate attributes:

(118) (=Emonds(26)) The boy was a good swimmer.

Some teenagers are very submissive.

Three of the managers became vice-presidents.

John became violently ill.

One boy seemed too polite.

He seems the perfect choice.

The girl looked happy.

He remained the only Latin teacher in the school.

The very same verbs which require a predicate attribute in English, require the nominative case for their substantival complements in Serbo-Croatian. Observe the underlined nominative case-forms in the Serbo-Croatian sentences in (119) which are structurally equivalent translations of (118).

(119) Dečak je bio dobar plivač.

Neka deca su suviše pokorna.

Troje od tih direktora su postali podpredsednici.

Jovan je postao strašno bolestan.

On (mi) izgleda najbolji izbor.

Devojka je izgledala sretna.

On je ostao jedini ucitelj latinskog jezika u našoj školi.

Emonds (in Emonds, 1969, page 39) introduces into the grammar the feature [\pm PRED] which pertains to the node directly dominated by a VP node, and which immediately follows the lexical category V. He needs this feature to distinguish sentences with nominal complements which do not refer to the subject, from those that do so. In fact, no other solution is possible, short of listing the verbs which require predicate nominatives, if it is assumed that the deep structure of the sentences in (118) is as proposed by Emonds. Within his framework the sentences

(120) Devojka je izgledala sretna.

The girl looked happy.

(121) Devojka je izgledala ošamućena.

The girl seemed bewildered.

would be analysed as follows:

(122) (S(NP(N^{devoj-k-}))(VP(V^{izgled-})(Adj^[+PRED]_{sret-n(-)}))).

(123) (S(NP(N^{devoj-k-}))(VP(V^{izgled-})(ADJ^[+PRED]_{ošamućen(-)}))).

However, the structure in (123) cannot be the deep structure of (121), since the item ošamućena 'bewildered (nominative singular)' is a passive form of the verb ošamutiti '(to) bewilder'. The only source of passive

forms is the passive transformation, and the deep structure of (121) must be as in Figure 8, where the deep subject of the embedded sentence is unspecified.

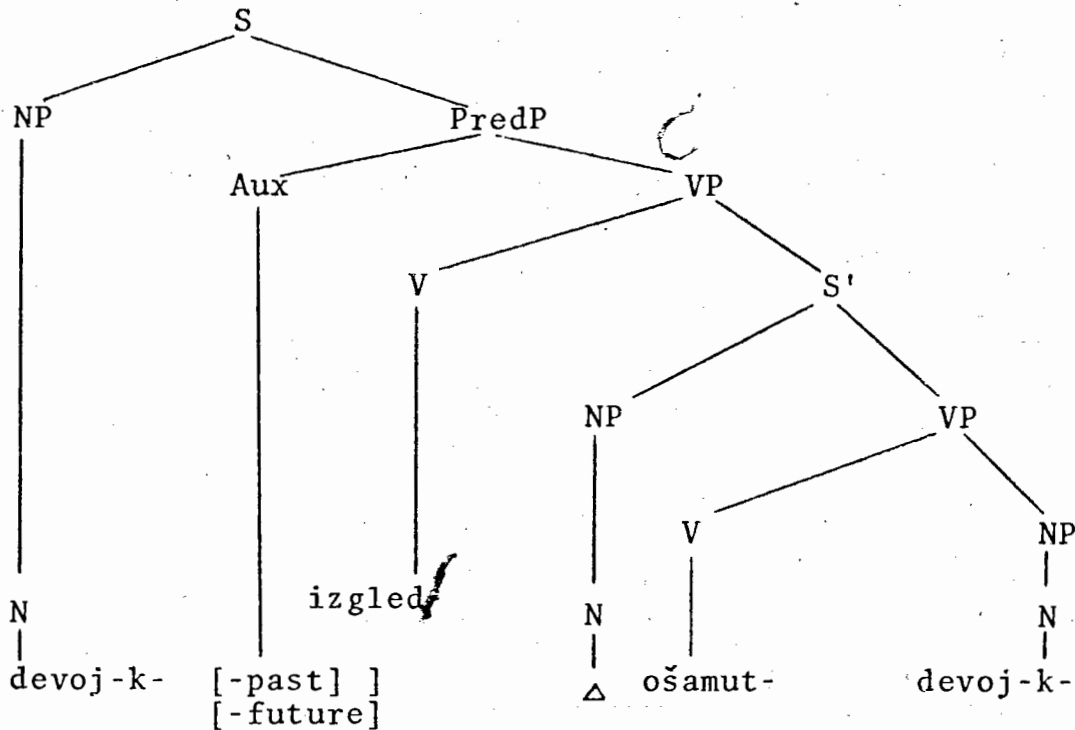


Figure 8.

The passive transformation must apply on the first cycle producing $(S_{devoj-k-} izgled-(S_{devoj-k-} bi(-) ošamut- od dummy)_{S'})_{S}$. The formative devoj-k- in S' is now in the subject position--therefore, it can be deleted by the EQUI NP deletion rule. In the place of the deleted formative the feature [+PRO] must occur. This feature relates the deleted bundle of features and its node to the item in the matrix sentence which

was used to delete the item in the embedded sentence. When the subject of the embedded sentence becomes deleted, the copula-form must be deleted too--otherwise an ungrammatical string occurs: *Devojka je izgledala je ošamućena.

Recall that the past tense which requires a compound past tense-form, assigns the feature [+participle] to the formative dominated by V. Recall also that the passive transformation introduces a copula-form into a passive structure and that the verb-formative also receives the feature [+participle] as well as the feature [+passive]. Thus, after the EQUI NP deletion and the copula deletion in S' in Figure 8--which had to apply to the passive-form of S'--the string (124)

$$\begin{aligned}
 (124) \quad & (S(NP(N[+singular \quad])))(PredP(Aux[-past \quad])) \\
 & \quad \quad \quad [+3rd \text{ person}] \quad \quad \quad [-future] \\
 & \quad \quad \quad [+feminine \quad] \\
 & \quad \quad \quad [+devoj-k- \quad] \\
 & (VP(V[+past \quad]))(S'(NP(N[+PRO]))) \\
 & \quad \quad \quad [+participle] \\
 & (Aux zero)(VP(V[+passive \quad]))(PP(Prep[+agentive])) \\
 & \quad \quad \quad [+participle] \quad \quad \quad [+od \quad] \\
 & \quad \quad \quad [+ošamut- \quad] \\
 & (NP(N^{dummy})N)NP)PP)VP)S')VP)PredP)S.
 \end{aligned}$$

is the intermediate structure on which the agreement rules apply, and on which, one step later, the case

assignment rules may apply.

The formative devoj-k-, the shallow subject of the matrix sentence in (124), obtains the feature [+nominative]. A formative containing the feature [+PRO] obtains the case of the formative which controls that feature (see footnote 21). Now, the formatives containing the feature [+participle] must be assigned a case feature too because all participles are substantives, and all substantives, unless indicated otherwise in the lexicon, must have a case-suffix. We will continue discussing participles after comparing (122) to (123).

The deep structure of (122) should not be very different from the deep structure of (123). The embedded sentence in the deep structure of (123) is well motivated. In fact, the passive form ošamućena could not be generated otherwise. Since the matrix sentence of (122) is the same as the matrix sentence of (123), there is no reason to assume that the former does not have a sentential complement too. Thus, the deep structure of (122) is as in Figure 9.

The formative sret-n(-) 'happy' is not a passive participle: there is no verb *srećiti from which a passive can be derived. (Although there is a verb usrećiti 'make happy' whose passive is usrećena.)

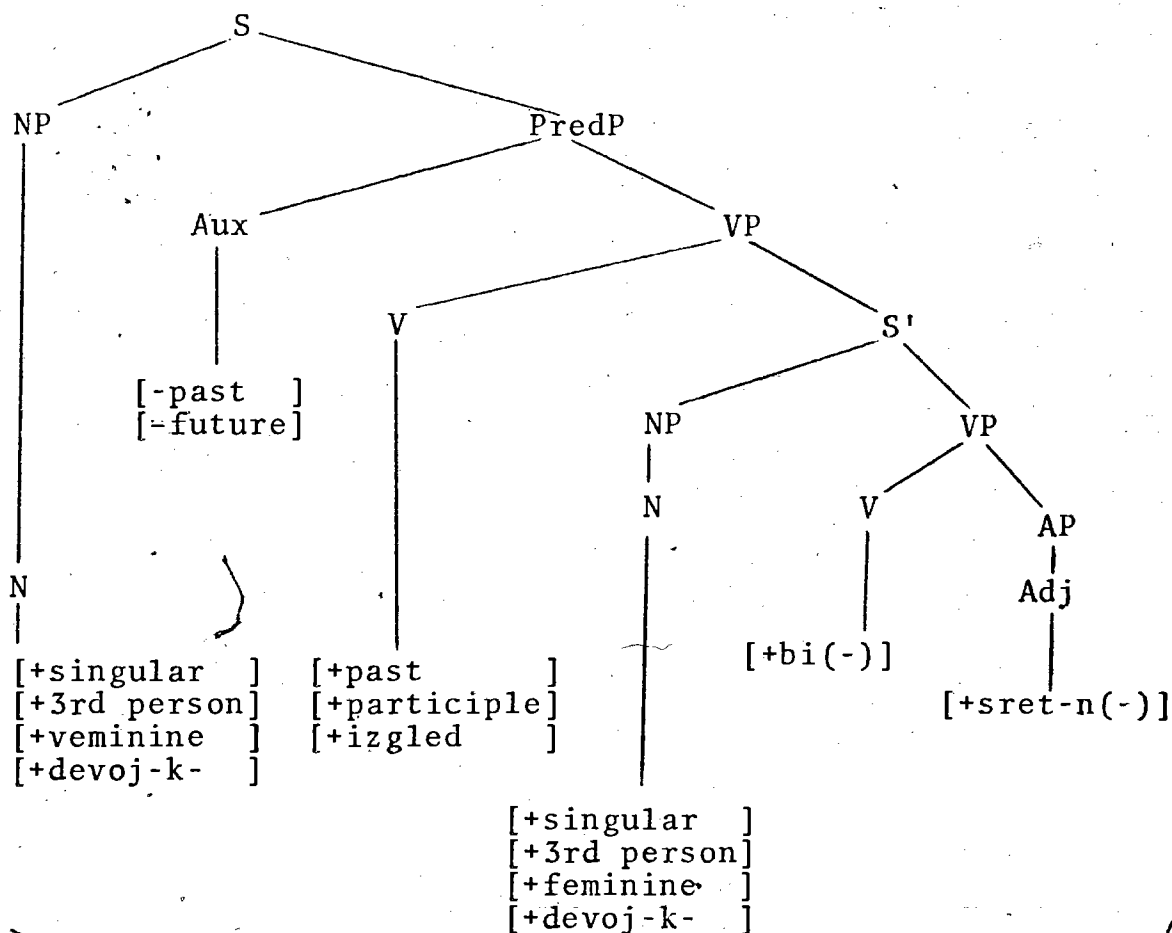


Figure 9.

Consequently, after the EQUI NP deletion, the agreement rules, and the case assignment rules--which apply in the same way as explained in the commentary on (123)--the formative sret-n(-) obtains the feature [+nominative].

Consider also:

(125) Devojka je sretna.

The girl is happy.

Sentence (125) has the same deep structure as the S' in Figure 9. The EQUI NP deletion rule cannot apply

to the deep structure of (125) because there is no formative in this structure which is equivalent to the formative devoj-k-. Moreover, devoj-k- is the deep subject of the main sentence, and the EQUI NP deletion rule cannot delete a subject of main sentences.

However, sret-n(-) is assigned the feature [+nominative] because it is the sister constituent of bi(-), and the copula-form of bi(-) in (125) is semantically sufficiently empty to admit the feature [+nominative].

Notice that the predicates of (119) can be changed without changing the matrix sentences:

(126) a. Dečak je bio ošamućen.

The boy was bewildered.

(126) b. Neka deca su ošamućena.

Some children are bewildered.

(127) a. Jovan je postao ošamućen.

John became bewildered.

(127) b. Troje od tih direktora su postali ošamućeni.

Three of the managers became bewildered.

(127) c. Devojka je izgledala ošamućena.

The girl looked bewildered.

(127) d. On je ostao ošamućen.

He remained bewildered.

Therefore, the deep structure of these sentences must have an embedded sentence as in Figures 8 and 9 which proves that all the verbs in (119), 126a-127d), and also in (118)--if we are to accept the claim that the deep structure of all natural languages is essentially the same--admit sentential complements.

Emonds' feature [+PRED] in [122-123] would work equally well, but the fact is that (122-123) are not the deep structures of (120-121). By establishing the true deep structures of (120-121) and similar sentences (e.g., He grew bewildered.) the feature [+PRED] becomes superfluous.

II.2.2. Participles as predicate nominals.

In this section the writer wishes to prove that all substantives must be assigned a case-feature and that the participles in Serbo-Croatian are no exception to this rule. This statement is valid for both past active and passive participles. The following structures are revealing in this respect:

(128) Ja lečim devojku koju je neko ranio.

I am looking after the girl whom
someone wounded.

(129) ?Ja lečim devojku koja je ranjena od nekoga.

I am looking after the girl who was wounded
by someone.

(130) Ja lečim ranjenu devojku.

I am looking after the wounded girl.

The deep structure of these sentences is as in

(131):

(131) (S (NP [+singular])
[+1st person]
[+ja])) (PredP (Aux [-past])
[-future]))

(VP (V [+present])
[+leč-])) (NP (N [+singular]))
[+3rd person]
[+feminine]
[+devoj-k-]))

(S' (NP [+singular])
[+3rd person]
[+masculine]
[+nek-])) (PredP (Aux [-past])
[-future]))

(VP (V [+past])
[+participle]
[+ran-])) (NP (N [+singular]))
[+3rd person]
[+feminine]
[+devoj-k-])))).

The embedded sentence in (129) is passive; therefore,
the passive transformation must apply to (131) if it
is to produce (129):

(132) (S' (NP (N [+singular])
[+3rd person]
[+feminine]
[+devoj-k-])) (PredP (Aux [+present]))

(VP (V [+passive])
[+participle]
[+ran-])) (PP (Prep [+agentive])
[+od]))

(_{NP} [+singular])))).

[+3rd person]
 [+masculine]
 [+nek-]

The relativization transformation will add the feature [+relative] to the formative devoj-k- within S'. Its N brackets must be erased then. Any formative containing the feature [+relative] will select from the lexicon koj- 'who, which' or što 'that', depending on the structure of the sentence in which it appears.

The formative devoj-k- occurring in the matrix sentence will obtain the feature [+accusative] because it is the direct object of a verb which is neither a copula nor an enriched copula form. The now familiar rules will generate (129).

Assume now that the agent of the embedded passive is unspecified, where instead of the formative nekoga the dummy symbol occurs. In such a situation the dummy symbol would be insufficiently specified to find an item in the lexicon, and its node would be empty in the surface structure. Also, the formative od would have to be deleted because that prepositional formative is not intransitive. Such a structure would create

(133) Ja lečim devojku koja je ranjena.

I am looking after the girl who is wounded.

The relative, naturally, does not contain the feature [+PRO]; therefore, it is not controlled by the formative which enforced the relativization transformation. As an uncontrolled shallow subject it obtains the feature [+nominative]. However, the relative may be also deleted under specific circumstances. Then, instead of that formative the feature [+PRO] appears in the shallow subject position:

- (133) (s_{ja} lečim devojku(_s, (NP [+PRO])
 (PredP (Aux [+present]) (VP (V [+passive]))
 [+participle]
 [+ran-]))

Now, the NP containing the feature [+PRO] must be assigned the case of the formative which dominates it (which is [+accusative]). The formative containing the feature [+participle] obtains also the feature [+accusative].

The writer cannot be positive as to which comes first: the copula formative deletion or the case assignment to the participle. Across the copula, the case feature assigned to the participle would be [+accusative] because a predicate attribute obtains the case through its subject, and its subject is [+accusative] through the item that controls it. If the copula form is deleted first, the participle becomes an adjective and as such it must agree in case with its head, which

will be generated as devojk ([+accusative]). Whichever may come first the outcome is the same:

(135) *Ja lečim devojk ranjenu.

*I am looking after the girl wounded.

Structure (135) is ungrammatical because the participle ranjen-, which now functions as an adjective, must be preposed:

(136) Ja lečim ranjenu devojk.

I am looking after the wounded girl.

(Here (136) = (130).)

Let us examine what happens if the passive transformation does not take place in the derivation of (131). The verb in the embedded sentence becomes [+participle] if a compound past tense occurs:

(137) (S_j lečim devojk (S_i (NP_i [+singular]
 [+3rd person]
 [+masculine]
 [+nek-]
 (PredP_i (Aux_i [-past]
 [-future]) (VP_i (V_i [+past]
 [+participle]
 [+ran-]
 (NP_i (N_i [+singular])))))))).
 [+3rd person]
 [+feminine]
 [+devoj-k-]
 [+relative]

Since no TTT applies to this structure the agreement rules and the case assignment rules must now apply.

It is the formative nek- that receives the feature

[+nominative] because it is in the shallow subject position. The relative obtains the feature [+accusative] because it is the direct object of the verbal participle which is not a copula. These and the other now familiar rules would produce:

- (137a) *Ja lečim devojku neko je ranio koju.
 *I am looking after the girl someone wounded whom.

This structure is ungrammatical because, as in English, the relative must be placed in the front of its cyclic node. It should be clear that the case assignment-rules precede the relative fronting rule; otherwise the accusative koju and whom could not be generated.

In English the order of these two rules might be optionally reversed. If the fronting of the relative occurs first, the relative is often assigned colloquially the feature [+nominative]:

- (137b) I am looking after the girl who someone wounded.

*Ja lečim devojku koja je neko ranio.

This cannot happen in Serbo-Croatian.

In English the relative can be deleted in passive as well as in active sentences; however, in the latter

only the accusative relative may be deleted: The girl whom you see has the same meaning as The girl you see, but The girl who sees you does not mean the same as The girl sees you.

In Serbo-Croatian only the nominative relative occurring in passive sentences may be deleted--as in (135). Thus, (137c) is ungrammatical:

(137c) *Ja lečim devojku neko (je) ranio.

I am looking after the girl someone wounded.

Therefore, in the derivation of an active sentence from (131), neither of the two noun-phrase formatives occurring within S' may be deleted. The structure in (137a) is the only path leading to (128): Ja lečim devojku koju je neko ranio.

The formative ranio is a main verb in the deep structure which becomes a participle as soon as the auxiliary node becomes sensitive to the agreement rules. (Or, from the surface structure point of view, whenever a copula-form is generated under the Aux node.) Essentially, the passive participle becomes a participle for the same reason and not because of the feature [+passive].

Both the passive and the active participles are

sensitive to gender and number features:

- (138) ranio ranjen (masculine, singular)
 ranila ranjena (feminine, singular)
 ranilo ranjeno (neuter, singular)
 ranili ranjeni (masculine, plural)
 ranile ranjene (feminine, plural)
 ranila, ranjena (neuter, plural)

and both are insensitive to person-features. The only difference between the two types of participles is that the passive participles may occur in any case-form while the active participles might seem to be insensitive to case-features. This is not so, however.

The fact is, as it was demonstrated in this section of the paper, that the active participles cannot occur in a position in which some other case-feature, other than the feature [+nominative], may be assigned. In the embedded active sentences the relative koj- cannot be deleted, and this deletion is the only mechanism which can place a participle in a position in which it can obtain an oblique case-feature. Therefore, the past active participles in (138), and any other past active participles, are indeed in their nominative case-forms. This interaction between the participial forms and the case-feature assignment in Serbo-Croatian has not been investigated before. However, every so

often statements appear on the similar verb-forms in Russian. A statement against the position taken here occurs in Babby's article (Babby, 1973, pp. 350-351):

It seems that one of the reasons tha SF is said to be nominative is that it agrees in gender with the subject (vesel m. sg., vesela f. sg. 'gay'); evidently, it is assumed that gender implies case in Russian. But Russian verbs in the past tense also agree with the subject in gender (on znal m. sg. 'he knew', ona znala f. sg. 'she knew'), and it is patently incorrect to claim that verbs agree in case.

Babby is saying that znal, znala are verbs. This, of course, is true. But Babby avoids the issue by not stating what forms they are and how these forms are derived. Babby's argument would be of no consequence to the analysis of past active participles in Serbo-Croatian if the grammar of Serbo-Croatian and the grammar of Russian were not related. But they are indeed related. The writer maintains here that the deep structure of (139), for Russian as well as for Serbo-Croatian is exactly the same:

- (139) Oná znála jegó (Russian)
 Ona je znala njega (Serbo-Croatian)
 She knew him.

In Russian past active sentences, the auxiliary node receives the features capable of selecting the present tense-forms of the copula bi(-). When this occurs znal(-) becomes marked with the features [+past, +participle], exactly as in Serbo-Croatian. (See Figure 7) The features dominated by the node Aux in the derivation of the Russian sentence in (139) are capable of selecting a present tense copula-form. The evidence is in the history of Russian language. The forms jesm 'am', jesi 'are (singular)', jest 'is', jeste 'are (second person plural)', and sut 'are (3rd person plural)' used to occur up to the eighteenth century--often in front of past active participles. (See Sobolevskîi, Aleksêi Ivanovich. Lektsii po istorii russkago îazyka. pp. 263-266.) The Modern Russian no longer uses these forms, but it must be assumed that the derivation of (139) transfers the agreement features in the same way for both languages in question. Modern Russian deletes the copula formative by the obligatory copula deletion-rule eliminating the features under the Aux node. The two languages are also similar in this respect: even this Russian copula deletion

rule is operative in Serbo-Croatian. The copula formatives may be deleted from some Serbo-Croatian structures, as is indicated by the parentheses in the following sentence:

- (140) Ona ga (je) znala, ali mu nije htela prići.
 She knew him, but she did not want to approach him.

Suppose that this copula deletion rule which is now optional in Serbo-Croatian will become obligatory, as it did in Russian. Would it be necessary, then, to derive the participles in Serbo-Croatian differently when the copula-forms never appear in the surface structure, than now when they are not always deleted? The obvious answer to this question is an emphatic no.

Finally, Babby's statement, quoted above, maintaining that it is patently incorrect to claim that verbs agree in case can be refuted by likewise maintaining that it is patently incorrect to claim that verbs agree in gender. Neither of the two claims can be justifiable if verbs are assigned the feature [~~participle~~].

II.2.3, The nominative versus the instrumental in the predicate nominals.

The instrumental case may occur instead of the expected nominative case in the predicate nominals. Examples of this phenomenon were shown with sentences (3) and (4):

(141) (= (3)) Otišao je u Ameriku da postane sluga.

He went to America to become a manservant.

(142) (= (4)) Otišao je u Ameriku da postane slugom.

He went to America to become a manservant. (to his disadvantage).

In (141) the speaker states a fact without adding any comments. In (142) the speaker implies that being a servant is not an enviable position. In (143-144),

(143) Otišao je u Ameriku da postane ministar.

He went to America to become a minister.

(144) Otišao je u Ameriku da postane ministrom.

He went to America to become a minister to his advantage).

the sentence with the predicate nominative expresses the facts without additional comments; in (144) the speaker implies that it is a good thing to be a minister.

Actually, it is up to the hearer to decide whether slu-gom implies a good or a bad position. The hearer will assign the interpretation closest to his personal bias. However, the hearer will know without any doubt that the speaker is offering a value judgment when using the instrumental case in (142, 144). This value judgment is in common possession of both the speakers and the hearers, and it is made evident by the use of the instrumental case-form with the predicate nominals. Therefore, a feature representing the value judgment must be present in the structures of (142, 144) at the time the case-rules apply. Moreover, this feature must be in the deep structure of those sentences in order to differentiate (141) from (142) and (143) from (144). Let us call this feature [+v judgment]. It is the feature [+v judgment] which is subject to the surface structure interpretation. That is, the hearer will assign his own interpretation of the value judgment-- which may or may not coincide with that of the speaker.

Because the predicate nominal can occur in the instrumental case, only if it is the sister constituent of a copula formative, it is assumed here that the V node is enriched by this feature in the deep structure, and that this feature assigns the feature [+instrumental]

to a nominal.

This assumption, as well as the notion of enrichment is based on the data evident in the following sentences:

(145) Ja sam otišao u Ameriku.

I went to America.

(146) Ja sam otišla u Ameriku.

I went to America.

The participle in (145) is masculine, while the participle in (146) is feminine. (otišao 'go (past active participle, masculine singular)'; otišla 'go (past active participle, feminine singular)'). Yet, the pronoun ja is not marked for gender. Those who are fond of interpretive rules would propose that the formative ja(-) is marked for gender as [+masculine, +feminine], and that the base is capable of generating both (145) and (146). Then if a male is the speaker, (146) becomes tagged as ungrammatical. However, as it was demonstrated in the section on agreement, this solution cannot be correct because when the subject is [+feminine, +masculine], the agreement is always [+masculine]. Therefore, sentence (146) could not be generated if the formative ja(-) were assigned these features in the deep structure.

Notice that only the speaker's pronouns may require two different genders in their predicate nominals:

(147) Ti si otišao u Ameriku.

Ti si otišla u Ameriku.

(148) Mi smo otišli u Ameriku.

Mi smo otišle u Ameriku.

(149) Vi ste otišli u Ameriku.

Vi ste otišle u Ameriku.

(150) One su otišle u Ameriku.

They (females) went to America.

(151) *One su otišli u Ameriku.

What the speaker does is rather obvious: he assigns the gender to the speaker's pronouns--[+masculine] feature if he is a male, [+feminine] feature if the speaker is a female. In other words, the speaker enriches the formatives ja(-) 'I', ti(-) 'you (singular)', mi(-) 'we', and vi(-) 'you (plural)' with a gender feature which denotes his sex. This is what is meant by the notion ENRICH.

It may be asked: why not enrich the participle directly with this feature? This is a possibility, but considering that the gender features are transferred to the participles and nominals generally by the agreement rules, from substantives which are marked for gender, it is better to make the grammar consistent. That

is, it is better to assign the gender feature to the speaker's pronouns first; then let the agreement rules perform their proper function. By the same token it seems more reasonable to assign the feature [+v judgment] to the node V which dominates a copula form, than to assign it directly to the nominal. It is evident that all verbs except the copula require the accusative case for their sister [+N] formatives.²¹ This is not the case of the [+N] formatives which are sister constituents of a copula form. Thus, it is reasonable to assume that the features which govern the case-features are to be found within the formatives directly dominated by the node V. Therefore, if a basic string is enriched by a feature that governs a particular case, it is reasonable to propose that it should be assigned to a [+V] formative.

One could propose instead that there are several bi(-) formatives: bi(-)₁, bi(-)₂, bi(-)₃, etc., but this would be equivalent to proposing that the personal pronouns be classified as ja(-)₁, ja(-)₂, etc. Such a solution would be not only unrevealing, but also counter-intuitive.

On the basis of the previous discussion the proposed deep structure of (142) is as shown in Figure 10.

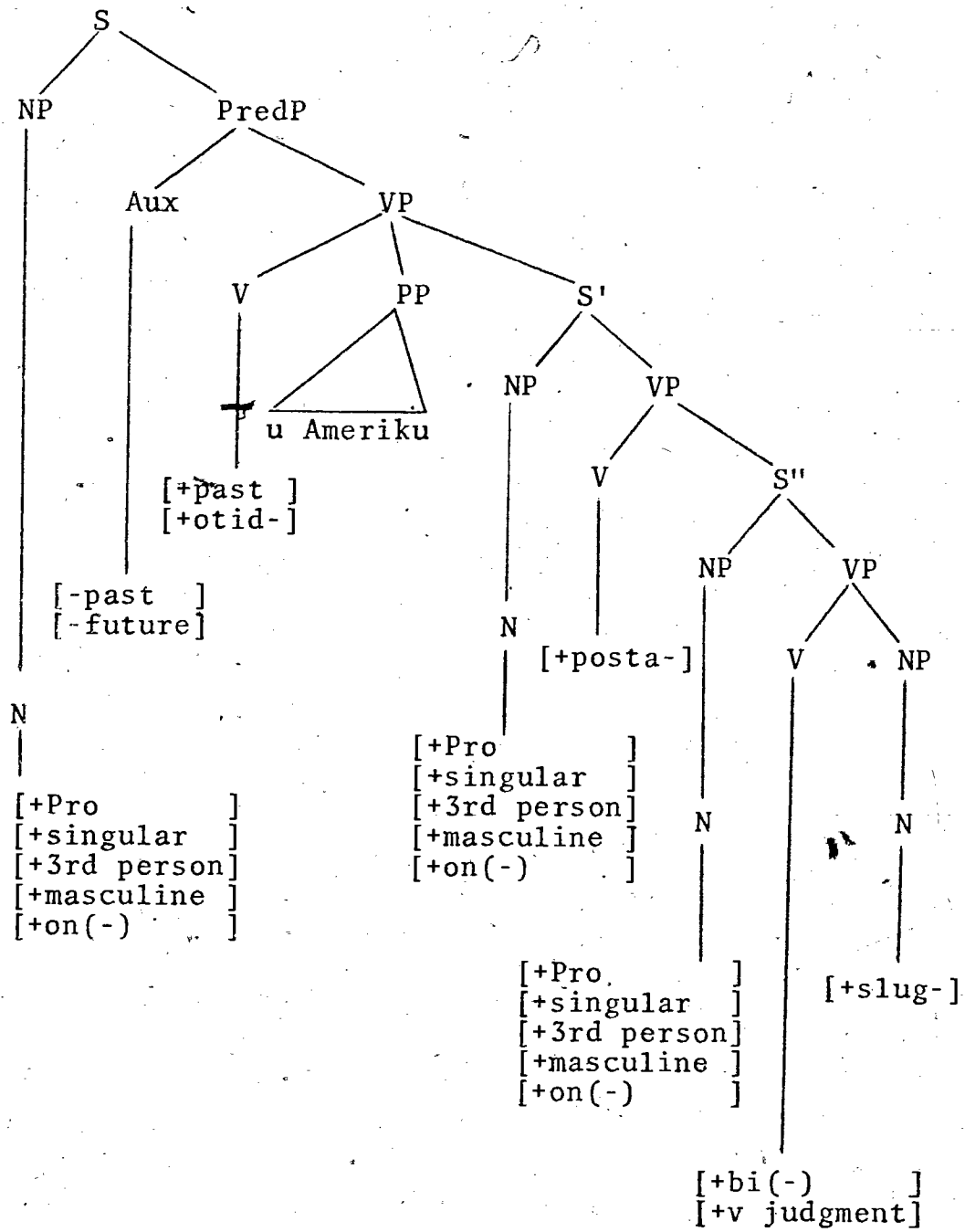


Figure 10.

The deep structure of (141) would be almost exactly as in Figure 10. except that the feature [+v judgment] would be missing.

Notice also that it is possible to say

(152) On je bio sluga.

He was a manservant.

as well as

(153) On je bio slugom.

He was (working as) a manservant.

and

(154) On je bio učitelj u Adi.

/ He was a teacher in Ada.

as well as

(155) On je bio učiteljem u Adi.

He was (working as) a teacher in Ada.

In these instances the speaker is not necessarily offering a value judgment. Instead, the speaker is implying that this is not the real profession of the person in question--he was only for the time being working as a manservant or as a teacher. These instrumental nominals occurring in main sentences are seldom used in Modern Serbo-Croatian. Instead of (155) the writer would rather use the following sentence to express the

same meaning:

(156) On je radio u Adi kao učitelj.

He was working in Ada as a teacher.

(After kao 'as, like' the nominative must appear.)

A predicate instrumental may also appear if a sentence is in the future tense:

(157) On će biti učitelj iduće godine.

He will be a teacher next year.

(158) On će biti učiteljem iduće godine.

He will become a teacher next year.

Again, (158) would occur less often in Modern Serbo-Croatian than (157).

In (158) the speaker implies that the person talked about is not a teacher, but that he will become one. In (155) it is implied that he is not a teacher now, but that he was a teacher before. The common meaning conveyed by the instrumental case in (155) and in (158) is that his being a teacher is not actual; hence the feature [-actual].

Of course there are other features of this kind; the writer does not intend to enumerate all of them. The important point is that whatever these features may be, they are assigned to the copula formative which is [+V]. This is also the reason that the past

active participles can never occur in their instrumental case-form: a feature which requires the instrumental case in a nominal cannot occur within a formative which contains the feature [+Aux], and the copula which is the sister constituent of a past active participle is always [+Aux].

Finally, it should be noted that predicate instrumentals appear more often in embedded sentences than in main sentences. That is, sentences such as (142) occur more often than those resembling (155, 158). This will become evident in the following section.

II.2.4. The predicate nominals and the particle se.

Observe the following structures.

(159) Ona se pravi luda (žena).

She pretends to be (a) crazy (woman).

(160) Ona se pravi ludom (ženom).

She pretends to be (a) crazy (woman).

She is making a fool of herself.

(161) Ona sebe pravi ludom (ženom).

She is making a fool of herself.

*She pretends to be (a) crazy (woman).

(162) *Ona sebe pravi luda (žena).

(163) On nju pravi ludom (ženom).

He is making a fool of her.

(164) *On nju pravi luda (žena).

The deep structure of (163) is as in Figure 11.

The unessential details are omitted.

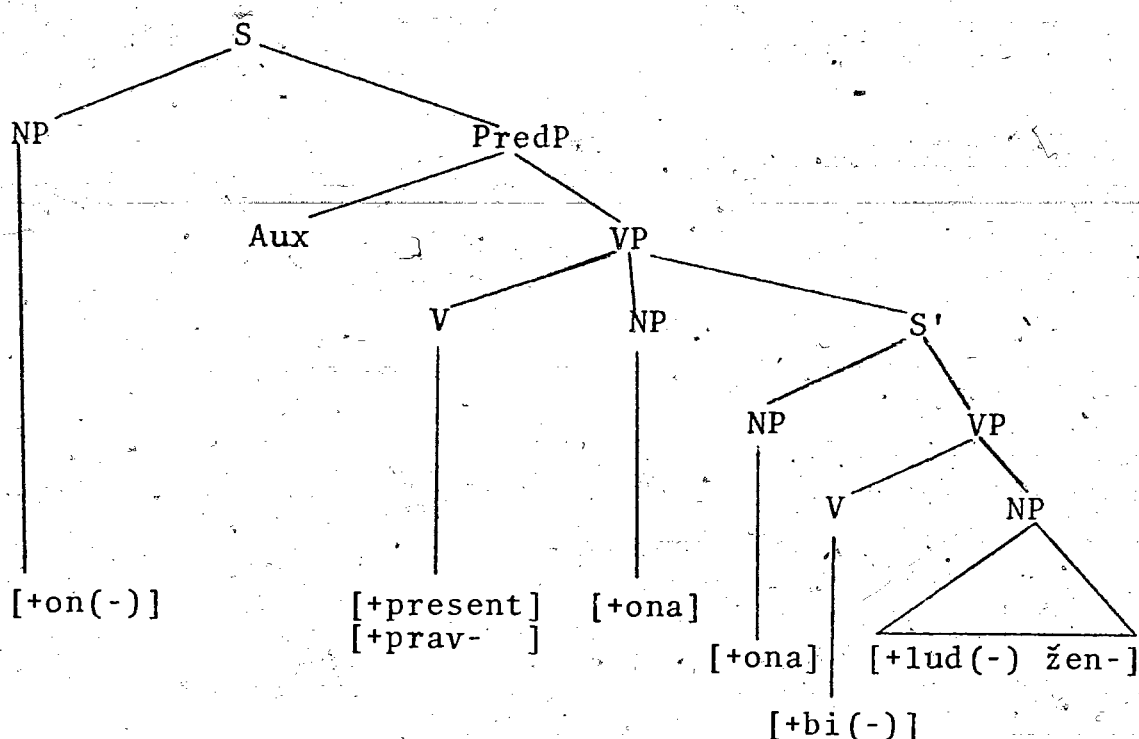


Figure 11.

This deep structure cannot generate the nominative case in the predicate nominal lud(-) žen-. Only the instrumental or the accusative case occur in this position.

Consider the already discussed rules following the EQUI NP deletion rules. Ona in S' becomes deleted because of the formative ona in the main sentence in Figure 11. In the place of the deleted formative the feature [+PRO] must appear. At the time the case assignment rules apply the following intermediate structure

may be generated:

- (165) (S_{on} pravi nju (S_i (NP_i [+PRO]]
[+accusative]]
(VP (V \emptyset) (NP_i [+lud(-) žen-]]
[+accusative]]))))).

This structure will generate the semigrammatical sentence in (166):

- (166) ?On pravi nju ludu (ženu).

He is making a fool of her.

Here, the accusative case of the predicate nominal is assigned by the feature [+PRO] through the formative that controls it (nju 'her (accusative)').

One often hears Nemoj me praviti ludu. 'Don't make a fool of me' instead of Nemoj me praviti ludom.

'Don't make a fool of me'. Such sentences and sentence (166) are an innovation in Modern Serbo-Croatian where there now exists a general aversion to predicate nominals in the instrumental case. The important factor is that the nominative case cannot be assigned because of the case of the formative which controls [+PRO]. Since the nominative case cannot appear in that nominal, the instrumental should occur because of the feature [-actual]. And it does as in (163).

For essentially the same reason, the instrumental of ludom (ženom) occurs in (161). The formative sebe

is the accusative reflexive of any personal pronoun in Serbo-Croatian. It is well known that there is no nominative reflexive of sebe. The reason for this should be obvious: a formative can never become reflexive in a position where a [+nominative] feature can be assigned. The vocative reflexive does not exist either, but the other case-forms of the reflexive pronoun do exist.²²

The intermediate structure of (161) on which the case-features are assigned is as in (167):

(167) (S_{ona pravi nju}(S, (NP<sub>[+PRO
[+accusative]</sub>]
(VP<sub>(V<sub>[-actual]
[+bi(-)]</sub>)</sub>(NP_{[+lud(-) žen-}]]

When the formative bi(-) is enriched with the feature [-actual] the instrumental should occur in the predicate nominal. However, if the speaker does not use the instrumental in such a construction, the accusative case-feature must be assigned through the intervention of [+PRO]. Thus, the reading of the feature [-actual] produces (161). If that feature is ignored, (168) is the only alternative:

(168) ?Ona sebe pravi ludu (ženu).

She is making a fool of herself.

The formative sebe is the full-form reflexive. There

is also a clitic form of that reflexive: the form se. Thus the second meaning of (160) is due to the fact that (161) underlies (160) when the latter is synonymous with the former.

The problems arise with the first meaning of (160) and with the nominative case of the predicate nominal in (159). It is obvious that (161) does not underlie (159) because the predicate nominative cannot be generated by the deep structure of (161). The item se occurring in (159) is not the clitic-form of sebe; rather, it is a verbal particle which does not have an alternate form. The item praviti '(to) make', and the item praviti se '(to) pretend' do not mean the same thing. Thus, the grammar will allow the particle se to be generated from the V node, as in Figure 12.²³

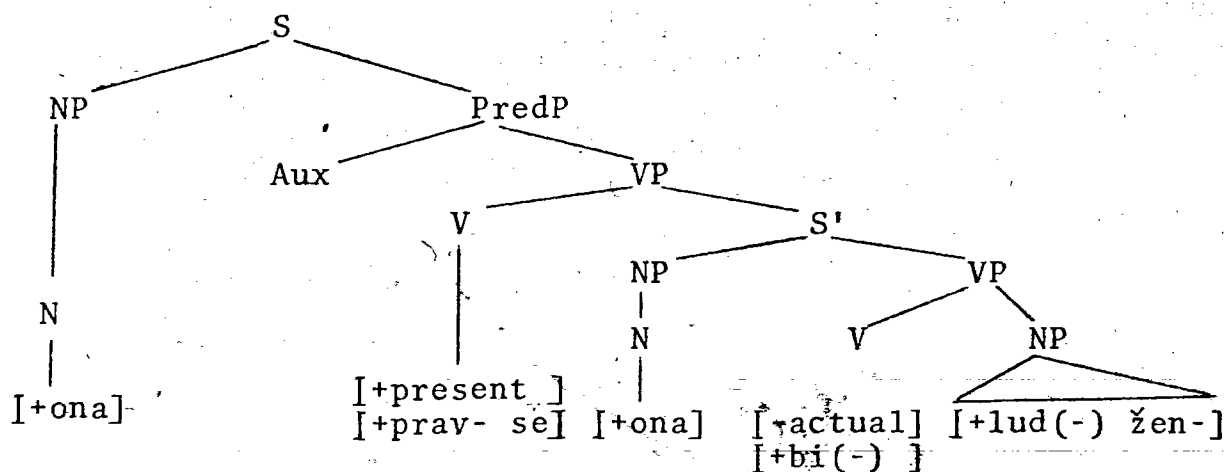


Figure 12.

Recall that the EQUI NP deletion rule will delete the subject of S', leaving in its place the feature [+PRO]. This feature is controlled by the shallow or surface subject ona at the time the case-rules apply. The case of ona will be [+nominative] and so will be the case feature of the node which dominates [+PRO].

The feature [+PRO] is capable of assigning the feature [+nominative] to its predicate nominal (through the item that controls that feature). If this happens, (159) is produced.

Recall that praviti se '(to) pretend' implies that X is not actually Y; X only pretends 'to be Y'. Therefore the feature [-actual] must be assigned to the copula. If the speaker reads this feature, the feature [+instrumental] will be assigned to the nominal lud(-) žen-. If this occurs, (160) becomes generated. Therefore, the deep structure in Figure 12 is the common deep structure for (159) and for the first meaning of (160).

This concludes the discussion of the nominative case of predicate nominals.

II.3. IT and THERE sentences in Serbo-Croatian.

It seems strange to discuss IT and THERE sentences in Serbo-Croatian because these items do not exist in this language in the surface structure.

However, these items are not being discussed here, only their formatives.

II.3.1. IT sentences.

In this section the discussion zeroes in on sentences lacking a grammatical subject. The following structures occur without grammatical subjects:

(169) Teško je zadovoljiti Jovanku.

It is difficult to please Joan.

(170) (= (18)) Teško je Mariji da zadovolji Jovanku.

It is difficult for Mary to please Joan.

(171) Teško je Mariji zadovoljiti Jovanku.

It is difficult for Mary to please Joan.

(172) Teško je bilo Mariji zadovoljiti Jovanku.

It was difficult for Mary to please Joan.

(173) (= (19)) Teško je bilo Mariji da zadovolji

Jovanku.

It was difficult for Mary to please Joan.

It is claimed here that the deep structure of these sentences is equivalent to the deep structure of English IT sentences.

The problems, as well as the evidence for establishing the deep structure of these sentences are:

- (a) the third person singular-form of the item je 'is' which regularly appears in these sentences;
- (b) The neuter form of the participial bil(-) (bilo) which regularly appears in It sentences when these are in a compound past tense;
- (c) The agreement of the tensed verb-form zadovolji 'please (3rd person singular, present tense)';
- (d) the possibility to have the infinitival form zadovoljiti '(to) please', instead of the tensed form, as in (c).

Except for the third person agreement of the copula-form and the infinitival complement (in (a) and (d) respectively), these forms and the agreement evident in them do not occur in the English IT sentences.

Because sentences (172-173) are synonymous, and because the verb in (172) is not tensed, while the same verb in (173) is tensed, it is necessary to select a basic structure which is capable of generating both sentences. This leads to the discussion of previously proposed deep structures for IT sentences. There are three well known proposals which offer three different

solutions to this problem: one by Rosenbaum (Rosenbaum, 1976), one by Emonds (Emonds, 1969), and one by Chomsky (Chomsky, 1971a).

Rosenbaum (Rosenbaum, 1967) proposes that the deep structure of a sentence such as

(174) It is easy to please John.

is as in Figure 13. (The unessential details are omitted.)

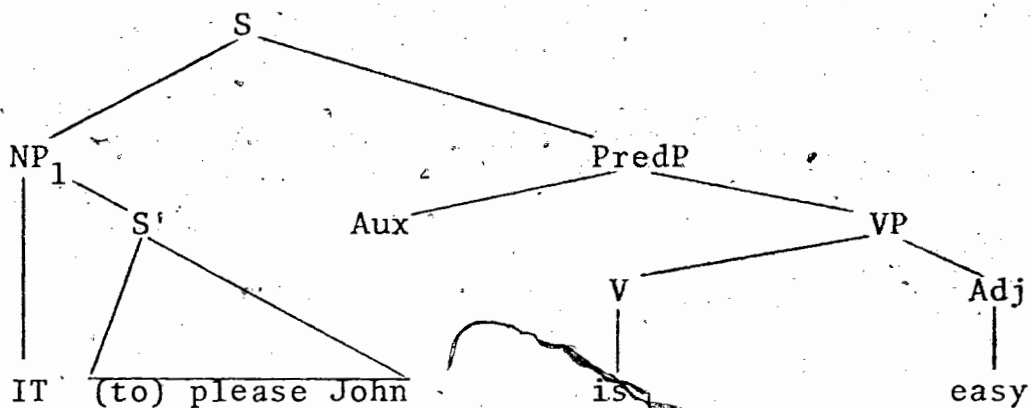
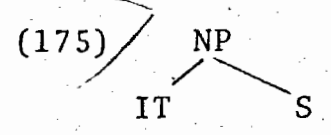


Figure 13.

The extraposition rule removes the infinitival NP complement from the S' position and places it to the extreme right of the branching tree in Figure 13, to produce (174). Rosenbaum assumes that the item it is the antecedent of (to) please John and for that reason he suggests that the infinitival complement is dominated by the NP₁ node in the deep structure.

Emonds (Emonds, 1969) rejects the above proposal on the grounds that, according to his analysis, the

configuration of the deep structure for a sentence } or
an infinitive complement cannot be (175)



Instead he postulated a deep structure as in

Figure 14.

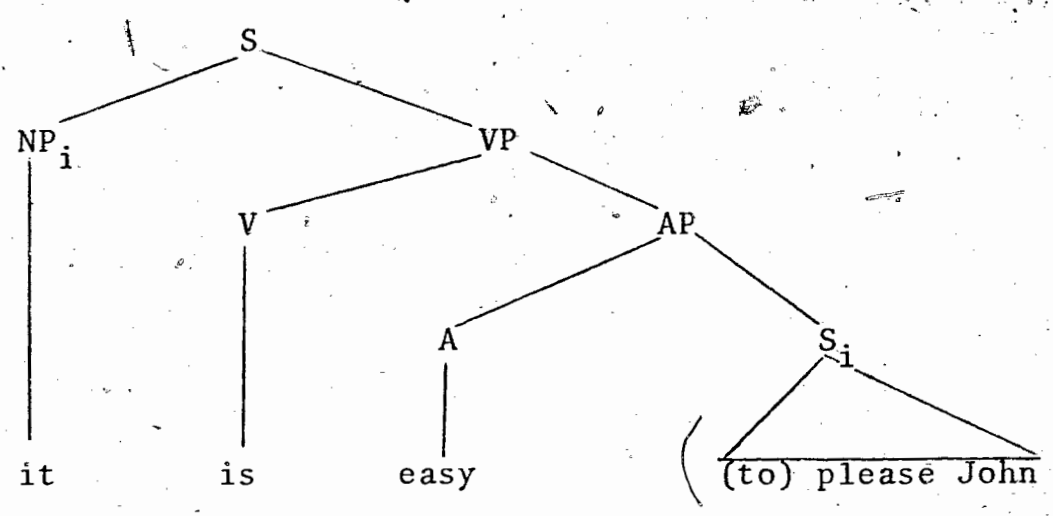


Figure 14.

(A similar figure appears in Emonds, 1969, page 51.)

Specifically, Emonds states:

The difference between the two analyses is that Rosenbaum considered IT to always be a deep structure sister to its S antecedent, while I consider the corresponding it to be co-referential with its antecedent S, which is in extraposition. (Emonds, 1969, page 94)

Chomsky (Chomsky, 1971a, page 9) proposed the

following deep structure for IT sentences:

(176) (=Chomsky (33)) It - is predicate (for NP)
 [_SNP - VP]

This deep structure differs from the Emonds structure above in that Chomsky posited an overt NP node for the embedded S. and an optional PP node in the matrix S. This implies the assumption of the hypothesis that the infinitive complements are actually sentences in the deep structure.

Chomsky's concern (Chomsky, 1971a) is with the sentences which contain a for phrase in the surface structure and with the problem of control of the infinitival complements occurring after a for phrase. It is obvious, for instance, that the infinitival complement in the following sentence:

(177) It is easy for Mary to please John.

is controlled by Mary and not by It. Semantically, it is Mary who pleases John. (The answer to the question For whom it is easy to please John? would be For Mary., if (177) were thus questioned.)

Rosenbaum (Rosenbaum, 1967) felt that the antecedent of (to) please John is the subject IT. But if the antecedent were IT, what is the subject of (to) please John? Rosenbaum's deep structure could not delete that subject.

There must be two equal formatives in a structure if the EQUI NP deletion rule is to become operative.

His only logical alternative was to assume that the infinitive complements originate in the deep structure.

Chomsky's proposal (Chomsky, 1971a) solves this problem rather neatly: the immediate antecedent of [_S NP -VP] is the prepositional phrase for NP (for Mary in (177)). Mary which is in the matrix sentence in (177) is used to erase the subject of the embedded S which is identical to it.

Some speakers feel that for Mary to please John is a single constituent. This presents problems. If for Mary to please John is one constituent, (176) must be wrong. However, there is evidence in Serbo-Croatian that the exact equivalent of for Mary to please John: Mariji zadovoljiti Jovana is not a single constituent. The first test relies on the placement of the clitic je: It is possible to say:

(178) Mariji je zadovoljiti Jovana lako.

For Mary to please John is easy.

But it is not possible to say

(179) *Mariji zadovoljiti je Jovana lako.

or

(180) *Mariji zadovoljiti lako je Jovana.

The second test for finding if Mariji and zadovolj- are a single constituent is the structure in which zadovolj- is tensed. Consider (173) which is repeated here as (181):

(181) Teško je bilo Mariji da zadovolji Jovanku.
The item Mariji cannot penetrate into the embedded sentence by crossing over the complementizer da nor can the tensed verb-form appear in the matrix sentence to join Mariji, for no scrambling rule can allow the crossing of da. Since (181) and (172) are synonymous, the items Mariji zadovoljiti in (172) is not one constituent because Mariji da zadovolji is not a single constituent. (Actually, Mariji da zadovolji consists of three constituents.)

We can now proceed to determine what is the shallow subject of zadovolji Jovanku. Notice that the embedded verb agrees in person with the one who pleases:

(182) Teško je bilo meni da zadovoljim Jovanku.

It was difficult for me to please Joan.

(183) Teško je bilo tebi da zadovoljiš Jovanku.

It was difficult for you to please Joan.

The deep structure of, say, (183) (as per Chomsky in (176)) is:

(184) IT - je teško PP(Prep[+X])(NP[+Pro
[+2nd person]
[+singular]
[+ti(-)]))

(S(NP[+Pro
[+2nd person]
[+singular]
[+ti(-)])(VP(V[+past
[+zadovolj-])

(NP(N[+3rd person]))))..
[+singular]
[+feminine]
[+Jovank-]

Where IT is a formative of a special nature. This will be explained in this section. The X indicates non-comittedness of the writer as to what preposition should appear in this context. Notice that the dative-form of tebi 'for you, to you' occurs without a preposition in the surface structure of (183). The writer assumes that the datives originate within a PP node in the deep structure.

The formative ti(-) in (184) occurring within the embedded S assigns the number and the person features to the formative zadovolj-: [+2nd person, +singular]. With these features this formative becomes zadovoljiš in the surface structure. The EQUI NP deletion rule deletes the formative ti(-) after the agreement rules take place. If this happens, (183) becomes generated. However, the EQUI NP deletion rule need not apply to the structure in (184). If it does not, (185) becomes generated:

(185) Bilo je teško tebi da ti zadovoljiš
Jovanku.

*It was difficult for you that you please
Joan.

The order between the agreement rules and the EQUI NP deletion rule may be reversed: The latter rule may apply first. If this happens, the agreement rules apply vacuously to the formative zadovolj- because there are no features in the deleted formatives which can be transferred to the formative zadovolj-. In that case, the verb of the embedded sentence obtains the feature [+infinitive]. With this feature the verb in question becomes zadovoljiti in the surface structure. This is how (172) becomes generated.

Notice that if the for phrase is missing in Serbo-Croatian, the tensed verb cannot occur:

(186) (= (169)) Teško je zadovoljiti Jovanku.

It is difficult to please Joan.

(187) *Teško je da zadovolji Jovanku.

It is difficult that he will please
Joan.

Here, the meaning can be assigned to (187), as it can be assigned to, say, *she love me, which does not make it grammatical.

However, (188) is possible:

(188) Teško je da on zadovolji Jovanku.

It is difficult that he will please Joan.

If (187) were ever to occur, it would be generated by the improper use of anaphoric deletion of on in (188).

The nominative case of on in (188) and of ti in (185) if the case of the surface subject.

The existence of sentences such as (186) points to the possibility that some infinitival complements might originate in the deep structure, but this is not pertinent to the topic of this paper.²⁴

The formative which spells out IT in English, becomes deleted in Serbo-Croatian. However, it does leave traces through the agreement rules. It will be shown now that some structures related to IT sentences cannot occur in Serbo-Croatian. After all, it is possible, first, that the deep structure of these sentences is different from what was previously thought, and, second, that for Serbo-Croatian the basic word-order is like the one in (189):

(189) Joan is difficult to please.

Consider the following structure and its equivalents in English:

(190) Lepo je bilo njemu pričati.

It was nice to talk to him.

He was nice to talk (to).

In Serbo-Croatian it is not possible to move the indirect object to the subject node before the case assignment rules take place:

(191) *On je bio lep pričati.

He was nice to talk (to).

(192) *On je bilo lepo pričati.

He was nice to talk (to).

In short, njemu 'him (dative singular)' cannot be moved to the surface subject position before it became the dative of on(-) 'he' to become the nominative of on(-). That is, on(-) cannot be the shallow subject of its IT sentences. Of course, njemu may be moved to the front of (190), but this is due to the scrambling rules. Wheresoever that njemu might be found, the neuter bilo will remain neuter.

Next, it might be imagined that njemu somehow becomes the dative in the subject position, and that when the case rules apply njemu, for being an oblique case, assigns the feature [+neuter] to the formative bi(-). However, the English equivalent of (190) is a very strong proof that he is transformationally removed

from its original position, leaving the preposition to behind. This, in fact, is the only position in which the formatives on 'he' and he can occur in the dative case.

Moreover, pričati njemu is a constituent. Compare for instance,

(193) Pričati njemu je meni bilo lako.

To talk to him it was easy for me.

(194) Pričati meni je njemu bilo lako.

To talk to me it was easy for him.

Pričati njemu '(to) talk to him' can never be understood as '(to) talk for him', and pričati meni '(to) talk to me' could never mean '(to) talk for me'. The meaning of njemu and meni is so closely tied to the verb when these words mean 'to him', 'to me' that it is impossible to propose that these formatives might originate in any other position, but immediately after their verb.

Recall that the agreement rules always precede the case assignment rules.²⁵ It is therefore impossible to propose that an oblique case-form assigns the neuter feature to the participle bilo in (190). Since all the above assumptions are invalidated, it must be concluded that the structures proposed by Chomsky, (Chomsky, 1971a, page 9), is also valid for Serbo-Croatian.

Obviously, because there is no it in Serbo-Croatian, the deep subject node will have to be empty. This is not a novel idea, but it is the only one that portrays correctly the deep structure of IT sentences in Serbo-Croatian. Emonds suggested it in his dissertation (Emonds, 1969, page 53):

It may be that some or all of the it's in (58)-(63) are transformationally inserted, and that the NP's dominating them are still empty when they are replaced by the subject NP of the embedded S.

Thus, the structure of (172-173) is conceived by the writer as in Figure 15.

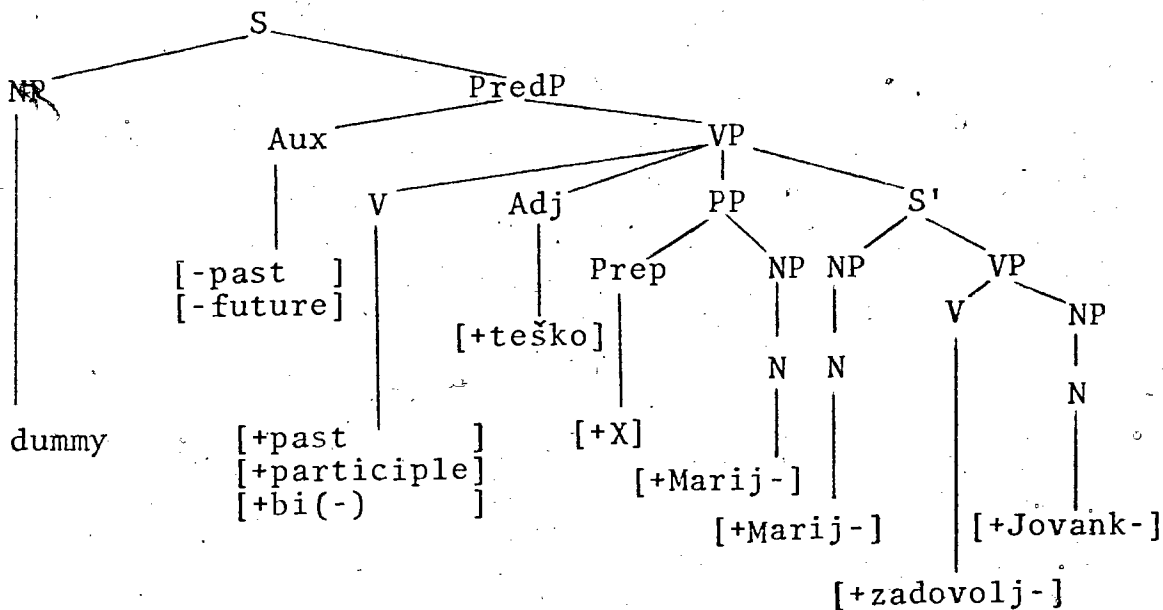


Figure 15.

However, all subject nodes must carry the gender features when a deep structure represents a Serbo-Croatian sentence. An empty node is neither masculine nor feminine; therefore, it carries the features [-masculine, -feminine]. The redundancy rules convert these features into the feature [+neuter]:

$$(195) \begin{array}{l} [-\text{masculine}] \\ [-\text{feminine}] \end{array} \rightarrow [+neuter].$$

Also, any NP which is not marked for 1st or 2nd person is automatically [+3rd person]. This is why all substantives are in 3rd person unless they are personal pronouns marked as 1st and 2nd person. That is: the pronoun ja 'I'; the pronoun ti 'you (singular)'; the plurals of these two pronouns and their oblique case-forms are the only formatives marked for 1st or 2nd person--all the other substantives are [+3rd person]. The redundancy rules convert these negative features into the feature [+3rd person]:

$$(196) \begin{array}{l} [-1\text{st person}] \\ [-2\text{nd person}] \end{array} \rightarrow [+3\text{rd person}].$$

An empty node in the deep subject position is certainly not in the plural. Therefore, it is [-plural, -dual]. The redundancy rules convert the negatively specified number features into the feature [+singular]:

(197) $\left. \begin{array}{l} [-\text{plural}] \\ [-\text{dual}] \\ [-\text{trial}] \\ [-\text{quadrigal}] \end{array} \right\} \rightarrow [+singular]$

(The number features [+trial, +quadrigal] are explained in the following section.)

The rules in (195-197) assign, one step before the agreement rules apply, the features [+singular, +3rd person, +neuter] to any empty subject node. The empty subject node in Figure 15 is now sufficiently specified to enable the assignment of the agreement features to the Aux node and to the V node. Because of these features, the Aux formative becomes je 'is (3rd person singular)' and the participial formative becomes bilo 'be (past active participle, neuter, singular)'.

The formative IT also obtains the feature [+nominative]. However, this formative is not sufficiently specified to find an item in the Serbo-Croatian lexicon; therefore, it becomes deleted in the surface structure.

II.3.2. THERE sentences.

The derivation of THERE sentences in Serbo-Croatian will be discussed to explain only the nominative case-forms occurring in such sentences.

The fate of the formative THERE is exactly the same

as that of IT. THERE fills the empty subject nodes instead of IT if a sentence is existential.

Recall that an item occurring in the nominative in an existential sentence cannot be placed before the main verb. (See the section discussing the word-order in existential sentences.) Consider again the following structures:

(198) (= (41)) Ima devojka u toj školi.

There is a girl in that school.

(199) (= (40)) *Devojka ima u toj školi.

*The girl has in that school.

*A girl has in that school.

The topical noun devojka in (198) is in the nominative, but it is not the subject of that sentence, for if it were it should be able to appear in the leftmost position in (199). All subjects of Serbo-Croatian sentences may occur in such a position, and there is no motivation for assuming that some do and some do not. In fact, it would be impossible to explain why this particular "subject" cannot appear before its verb.

The fact is that devojka in (198) is a topical noun of an existential sentence occurring in its nominative case because it is in the predicate attribute position

in the deep structure. It is important to note that the topic of a positive (not negated) existential sentence is always indefinite. The numeral jedan 'one' is often used as an indefinite article.²⁶ Naturally, this item, for being also a numeral, can be used only with the count nouns. Thus, as in English, a topical noun may be quantified by a number:

(200) Ima jedna devojka u toj školi.

There is a girl in that school.

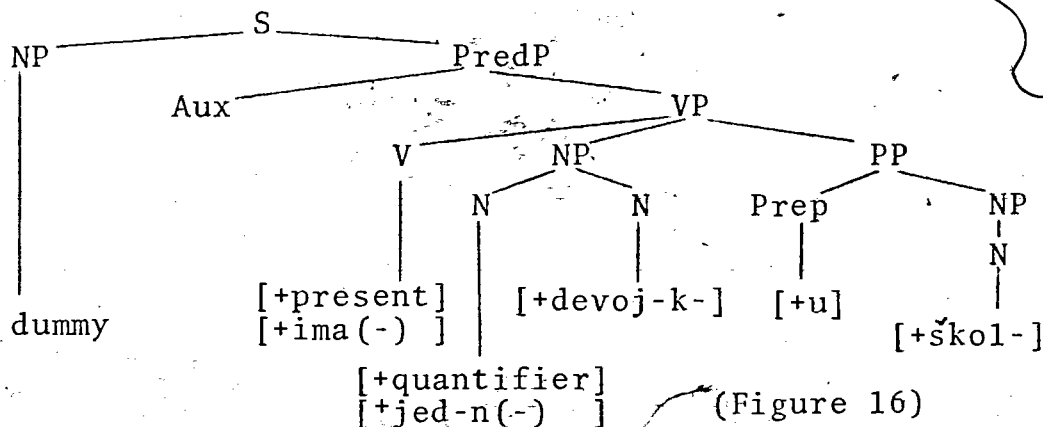
There is one girl in that school.

(201) Ima dve devojke u toj školi.

There are two girls in that school.

(Any numeral, or quantifier may modify devojka in these two sentences. See section II.1. for more detail on numbers and quantifiers. See also footnote 20.)

Sentence (200) and sentence (198) are synonymous; therefore, both are derived from a common deep structure. The deep structure of these sentences is as in Figure 16.



It seems that quantifiers are the only formatives subject to backward agreement in Serbo-Croatian.²⁷ This is not a very appealing solution, but it does not cause problems as far as the case assignment rules are concerned.

The real problems are the occurrence of the item ima and the nominative case in the predicate position after this verb.

Notice that in the past tenses ima need not appear:

(202) Bila je jedna devojka u toj školi.

There was a girl in that school.

A girl was in that school.

(203) Jedna devojka je bila u toj školi.

A girl was in that school.

*There was a girl in that school.

(204) *Imalo je jedna devojka u školi.

*Imala je jedna devojka u školi.

(205) *Bilo je jedne devojke u školi.

*Imalo je jedne devojke u školi.

*Imala je jedne devojke u školi.

The structures in (204) show that ima(-) cannot appear in the past tense if the topical phrase is in the nominative. The structures in (205) show that jed-n(-) devoj-k- cannot occur in the genitive to cause a neuter singular form of bi(-) or ima(-). Structure (202) is

the only one that can convey the meaning of (200) when it is in the past tense. Since (202) is ambiguous, it is necessary to accept the hypothesis that the backward application of agreement rules is operative in Serbo-Croatian. However, jed-n(-) is the only quantifier which assigns the agreement backwardly. Compare (202) to (206-208):

(206) Bilo je dve devojke u toj školi.

There were two girls in that school.

*Two girls were in that school.

(207) Dve devojke su bile u toj školi.

Two girls were in that school.

*There were two girls in that school.

(208) ??Imalo je dve devojke u toj školi.

There were two girls in that school.

Notice that the agreement of bi(-) is bilo when it agrees with the formative THERE, and bile when it agrees with the formatives dv- devoj-k-. Since dv- 'two' is marked for gender it could be assumed that dv- governs the agreement in (206-208). However, this assumption is incorrect because tri 'three' is not usually marked for gender, yet the participle occurs in different genders if the quantified nouns are distinct in gender: Tri devojke su bile..., Tri mladića su bila... The point is that ima occurs in the existential

sentences only when these are in the present tense; otherwise a form of bi(-) must appear. Moreover, even in the present tense bi(-) instead of ima(-) may occur:

(209) Gde je vatre tu je i dima.

Gde je vatra tu je i dim.

Where there is fire there is smoke.

When gde 'where' heads an existential sentence, the predicate nominal may be either in the nominative or in the genitive case, regardless of whether the substantive is [+count, +singular] or [-count, +singular]. Recall that je cannot occur as the first word of a sentence. (See the section on clitics.) Thus, one can say ima vatre or ima vatra 'there is fire', but not je vatra or je vatre 'there is fire', unless an item such as gde precedes these phrases. Also, vatre je may occur in an existential sentence because vatre is in the genitive and as such it cannot be taken for the subject. Further, ima may substitute for je in (209):

(210) Gde ima vatre tu ima i dima.

Gde ima vatra tu ima i dim.

Where there is fire, there is smoke.

Obviously there is no difference between je and ima occurring in existential sentences, except that the latter item may start a sentence while the former cannot.

In the past tenses bi(-) takes the form of bil(-); this form can occur as the first item of a sentence; thus, the need for ima(-) in the past tense of existential sentences is eliminated. Now, since ima and je are one and the same formative in the deep structure of existential sentences, it is not peculiar that the nominative case occurs after the existential ima(-).

The existential ima(-) and the verb bi(-) are the only formatives which admit the nominative case in a predicate attribute-position. Moreover, the copula bi(-) admits that case for the participles even when it is [+Aux].

The genitive case occurring in existential sentences is imposed by a deep quantifier, but this is outside of the topic of this paper. (However, see section II.1.)

The formative THERE, like the formative IT, obtains the feature [+nominative], and this feature is assumed by its predicate nominals. However, this formative is insufficiently specified for Serbo-Croatian; therefore, it becomes deleted in the surface structure. This deletion is possible because before the deletion, the agreement rules transferred the features pertaining to THERE to its predicate nominal, thus leaving traces of its prior existence. In a language in which the gender is not marked, the agreement rules do not leave enough data

for the subject to become uniquely recoverable. Then the formative THERE cannot be deleted--as in English. For instance, in this language the formative THERE becomes the item there. In this instance the English grammar was simplified by eliminating the gender features from the syntactical component, but the lexicon was made more complex by enriching it with the existential there. In Serbo-Croatian the agreement features are quite complex, but the lexicon, on the other hand, does not need to be enlarged. It is for this reason necessary to stipulate for Serbo-Croatian that a deleted formative must be uniquely recoverable--a formative, not an item because there is no an item for the formative THERE. The same goes for the formative IT.

II.4. The vocative versus the nominative.

It was mentioned in the section of the observable data that the vocative may substitute for the nominative case. (See sentences (5-6).) The vocative may occur instead of the nominative only in verses, and the main purpose of this substitution is to increase the number of syllables in a line--usually to complete a strophe in a decameter.

II.5. Conclusion

There is nothing more to say about the nominative case, except that it cannot occur within a PP node.²⁸

The rules which convert a deep structure into surface structure were illustrated in some detail in the text; listing them again would be purposeless. But it is possible now to summarize the writer's concept of the deep structure.

The deep structure consists of a pre-lexical branching diagram whose ends are labeled with lexical categories. The lexical categories are filled with formatives extracted from the lexicon.

Formatives are composed of features: categorial features; subcategorization and selectional features; syntactic and semantic features; inherent features pertaining to a particular formative; phonological features, and any other features pertaining to a formative.

The deep structure may be enriched by some features which are not introduced into it by formatives: the tense features, some semantic features (e.g., [-actual], [+v. judgment], etc.), and the negatively specified gender, person, and number features.

Thus, the enriching features, the pre-lexical

branching diagrams and formatives ~~create~~ deep structures.

The selectional features allow some formatives within a deep structure, prevent the entry of some formatives into a deep structure, or prevent any formative from entering into a deep structure, thus creating structures which may contain empty nodes. The negatively specified gender, number, and person features, mentioned above, fill the empty subject nodes; these features also belong to the deep structure.

III. The accusative case.

III.1. Introduction.

There are six oblique cases in Serbo-Croatian: the genitive, the dative, the accusative, the vocative, the locative, and the instrumental.

In the surface structure the vocative never appears within prepositional phrases and the locative case never appears outside of a prepositional phrase. The other four oblique cases may occur without or within prepositional phrases. When the latter four occur as prepositionless case-forms they often occur in complementary distribution, and this distribution causes many difficulties in the investigation of these cases. Therefore, in order to explain the accusative case it is necessary to compare it with the genitive, the dative, and the instrumental case.

III.1.1. The observable data.

(211) Jovan voli svoju susetku. (accusative)

John likes his neighbour.

(212) Jovan se seća svoje susetke. (genitive)

John remembers his neighbour.

In (211) svoju susetku 'his neighbour (feminine, accusative)' is the direct object of the verb-form voli

'like, love (3rd person singular, present tense)', and in (212) svoje susedke 'his neighbour (feminine, genitive)' seems to be the direct object of the verb-form se seća 'remember (3rd person singular, present tense)'. Assuming that the verbs voleti '(to) like, (to) love' and sećati se '(to) remember' are transitive, the noun phrases which follow them should be the direct objects of these verbs. If so, then why svo- susedk- does take the accusative case in (211) and the genitive case in (212)? If these two sentences were to represent all the problems of this nature, the solution would be simple. It was demonstrated in the previous chapter that the accusative case cannot occur after a reflexive verb (i.e., a verb accompanied by the particle se). Therefore it could be proposed that the genitive substitutes for the accusative when the direct object is the object of a reflexive verb. However, consider also the following sentence:

(213) Jovan ugadja svojoj susedki. (dative)

John accomodates his neighbour.

John pleases his neighbour.

The verb ugadjati '(to) please, (to) accomodate' is also transitive in the surface structure, yet svo- susedk- occurs in the dative. Now, it could be proposed that

the dative occurs in the direct object position whenever a verb carries the features [+commodi], [+incommodi]. After all, it was noticed a long time ago that when something is done for the benefit or disadvantage of someone the dative case usually occurs, and traditionally such datives are called commodi or incommodi. Thus, a direct object would occur in the dative if a verb implies that something is being done, or was done for someone's advantage or disadvantage; the genitive if a verb is reflexive; and the accusative if a verb is neither reflexive nor [+commodi] or [+incommodi]. But consider also (214):

(214) Jovan zadovoljava svoju susedku.

John accomodates his neighbour.

John pleases his neighbour.

Surely the verb zadovoljavati '(to) accomodate, (to) please' carries also the feature [+commodi] as ugadjati does, yet svo- susedk- occurs here in the accusative.

The existence of sentences such as (214) destroys the above assumption, at least as far as the dative and the accusative are concerned, and the solution must be looked for elsewhere.

The investigation becomes even more complicated when the instrumental case is compared to the accusative:

(215) Jovan upravlja fabrikom. (instrumental)

John manages the factory.

If fabrikom 'factory (singular, instrumental)' is the direct object of the verb upravljati '(to) manage' why does it occur in the instrumental case? The explanation is not easy to find, but once found the answer to this question becomes amazingly simple: fabrikom is not the direct object of the verb in (215). Consider the following sentences.

(216) Jovan upravlja dvema fabrikama. (instrumental)

John manages two factories.

(217) Jovan upravlja trima fabrikama. (instrumental)

John manages three factories.

(218) Jovan upravlja četirima fabrikama. (instr1)

John manages four factories.

(219) *Jovan upravlja pet fabrika. (genitive)

John manages five factories.

(220) Jovan upravlja s pet fabrika. (genitive)

John manages five factories.

If a number is indeclinable, as in (220), the noun modified by that number occurs in the genitive; the instrumental case cannot occur. If the instrumental case cannot occur, the preposition s(a) must intervene between the verb and the noun phrase--as in (220)--other-

wise the sentence becomes ungrammatical. (see (219)).

The speakers who do not decline numbers dva, tri, and četiri (see footnote 20) are obliged to introduce this preposition even in front of these numbers:

(221) Jovan upravlja s dve fabrike.

John manages two factories.

There are many examples such as these:

(222) Jovan maše maramicom. (instrumental)

John waves the handkerchief.

(223) Jovan maše maramicama. (instrumental)

John waves the handkerchiefs.

but

(224) Jovan maše sa dve maramice.

John waves two handkerchiefs.

Consider also the following examples which are even more revealing:

(225) Jovan crta olovkom.

John is drawing with a pencil.

(226) Jovan crta sa dve olovke.

John is drawing with two pencils.

(227) Jovan crta dve olovke.

John is drawing two pencils.

Sentence (227) is grammatical, but it has a different meaning from (226). Moreover, many speakers say

(228) Jovan crta sa olovkom.

John is drawing with a pencil.

(229) Jovan maše sa maramicom.

John waves a handkerchief.

John is waving a handkerchief.

(230) Jovan upravlja sa fabrikom.

John manages the factory.

instead of (225), (222), and (215). Obviously, the situation is as follows: for some speakers the preposition s(a) becomes obligatorily deleted if the instrumental case occurs, but this preposition must occur if the head of the noun-phrase which follows it is indeclinable.

All the examples given up to this point pertain to observable data--including the conclusion that olovkom, maramicom, and fabrikom are not the direct objects in the sentences in which they occurred. The rules which delete the preposition s(a) will be given in the chapter on the instrumental case.

The type of investigation which led to the clear cut distinction between the accusative and the instrumental should be tried out on the other two prepositionless cases. Consider, then, the following structures:

(231) (=213) Jovan ugadja svojoj susedki.

John pleases his neighbour.

(232) Jovan ugadja svojim dvema susedkama.

John pleases his two neighbours.

(233) Jovan ugadja dvema svojim susedkama.

John pleases two of his neighbours.

(234) *Jovan ugadja svojim dve susedke.

(235) *Jovan ugadja svojim dve susedkama.

(236) *Jovan ugadja dve svojim susedkama.

(237) *Jovan ugadja dve svoje susedke.

If a number is indeclinable, the structures become ungrammatical. Because the number pet is indeclinable in any dialect of Serbo-Croatian it is impossible to say

(238) *Jovan ugadja pet svojih susedki.

John pleases five of his neighbours.

Unfortunately, it is not possible to insert a preposition between the verb-form ugadja and the noun phrase which follows it, without producing a substandard sentence (which was not the case with the insertion of s(a)--not even in (228)):

(239) *Jovan ugadja k pet svojih susedki.

(240) ?Jovan ugadja na pet svojih susedki.

However, (240) is the only possibility in Serbo-Croatian,

if one wishes to preserve the pattern of the structure in (231). Moreover, in the dialects in which the dative is not used any more, the speakers use the preposition na to express the meaning of (231):

(241) On ugadja na svoju susetku.

He pleases his neighbour.

where susetku is in the accusative.

These occurrences cannot be ignored--rather it is better to assume that the dative, the same as the instrumental, deletes the preposition in the surface structure.

There are clear cut examples of preposition deletions with the directional datives, where the deletion is optional:

(242) Jovan ide k svojoj susetki.

John is going to his neighbour.

(243) Jovan ide svojoj susetki.

John is going to his neighbour.

Within the framework that this paper is executed (242) underlies (243); the prepositional formative k(a) becomes deleted in the shallow structure after the case assignment rules, and this deletion produces (243).

Notice that this deletion applies only when the sister constituent of a preposition is in the dative: for

example the preposition na in (241) cannot be deleted, for (244) is ungrammatical.

(244) *On ugadja svoju susetku.

These examples, viewed together with the examples of the preposition deletion when the instrumental occurs in the surface direct object position, indicate that the dative originates within a PP node.

The problem of the genitive versus the accusative in the direct object position could be of the same nature. However, because the genitive can occur in such a position only after the reflexive verbs and because the accusative cannot occur immediately after these verbs, the complementary distribution of these two cases does not cause immediate problems: the reflexive verbs are intransitive, and it is no wonder that the accusative cannot appear after them. The problem is, however, since the reflexive verbs are intransitive the genitive cannot be allowed to originate in a configuration such as

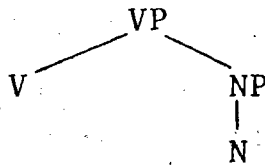


Figure 17.

for this configuration indicates that the verb is transitive. Thus, if the genitive is to be dominated direct-

ly a VP node, it cannot be the head of an NP. If it is the head of a noun phrase, then it is either dominated by a PP node, or it must be removed from the direct dominance of the VP node. This will be discussed further in the chapter on the genitive case.

In the surface structure of a Serbo-Croatian sentence, but before the scrambling rules apply, a substantive may occur in the accusative if it immediately follows the verb as in (211), or it immediately follows a preposition as in (245):

(245) Jovan prolazi kroz baštu.

John is going through the garden.

Traditionally, the prepositions are said to "govern" the case of the noun-phrase they modify. In this sense the preposition kroz 'through' in (245) governs the accusative in the item bašt-.

The preposition kroz co-occurs only with the accusative. In this chapter the discussion is limited to the accusative which co-occurs with the preposition kroz and the other prepositions which govern exclusively the accusative case. However, there are prepositions which govern more than one case. The prepositions which co-occur with more than one case, usually co-occur also with the accusative. These prepositional accusative case-forms will be discussed in the ensuing chapters. For example,

the preposition u 'in, at, to' which co-occurs with the accusative, the locative and the genitive will be first discussed in the chapter on the locative case; then, in the same chapter, the locative will be compared to the accusative. The bulk of this chapter deals with the prepositionless accusative.

III.2. The prepositionless accusative.

The accusative which is not governed by prepositions is the surface direct object of a verb which is not semantically empty. (For the notion semantically empty see the discussion on the predicate nominals in the previous chapter.)

III.2.1. The direct object.

In the expansion of a VP node an NP node may be directly dominated by the VP as in (246)

(246) VP — V (NP) (PP)...

This NP node (if it occurs) may be filled by a bundle of features specifying a formative. A formative dominated by the NP node which is the sister constituent of a V node is the deep direct object. In the expansion of an S node the deep direct object is in NP₂ position.

A complex S may have only one deep object for each embedded S. The transformations may change the order of formatives in an S, and some rules may delete one or several nodes in a complex S, thus forming a surface structure very different from its deep structure. An item in the NP₂ position in the surface structure is the surface direct object. Every surface direct object occurs in the accusative.

III.2.2. The accusative case-feature.

It is assumed here that the surface direct object formatives in Serbo-Croatian become marked with the feature [+accusative]. The assignment of the accusative case-feature is a straight forward process: the formative which ends up in the NP₂ position in the surface structure receives the [+accusative] case-feature. In complex sentences the case-feature assignment becomes complicated because of the many transformational rules that may apply to them. The main concern here is with the assignment of the [+accusative] case-feature to the structures in which these problems materialize. However, the above general rule which is formulated in (247) applies in all instances.

$$(247) \quad [+N] \longrightarrow [+accusative]/[+V] \underline{\quad}.$$

(The dash-line in (247) indicates the position of the

head noun (phrase) occurring immediately after the verb.)

III.2.3. The epicenes and the case-form of their adjectives.

An epicene is defined as a substantive which has but one form to indicate any gender. These words were extensively discussed in section I.3: kapetan 'captain (masculine)' which may apply to either a male or a female; lopov 'thief, rascal (masculine)' a description used for a person of any gender; bitanga 'tramp, scoundrel, scum (feminine)' said of either a male or a female. There are many other words such as these: varalica 'swindler' izdajica 'traitor', veseljak 'merry person', etc.

All substantives belonging to the -a stem group have their singular accusative case-forms ending in -u:

(248) Video sam učiteljicu.

I saw the (female) teacher.

(249) Video sam izdajicu.

I saw the (male or female) traitor.

The determiners and the adjectives of the qualifying nouns such as the one in (248) also must have their singular accusative case-forms ending in -u:

(250) Video sam tu prokletu učiteljicu.

I saw that accursed (female) teacher.

The determiners and the adjectives of the epicenes belonging to the -a stem group may be of either gender:

(251) Video sam tu prokletu izdajicu.
I saw that accursed (female) traitor.

(252) Video sam tog prokletog izdajicu.
I saw that accursed (male or female) traitor.

The item tog is the accusative singular, masculine of taj 'this, that (nominative singular, masculine)', and tu is the accusative feminine, singular of ta 'this, that (nominative singular, feminine)'.

The word izdajica, according to the solution in section I.3, becomes [+masculine] when its determiner is marked with this feature but it remains an -a stem substantive because there is no alternate form of izdajica.³⁰

In the Yugoslav national anthem exists the following sentence

(253) Proklet bio izdajica naše domovine.

Accursed be the traitor of our homeland.

Of course, the traitor is neither a male nor a female, but rather any traitor, male or female. This word is used here in the generic sense and as such it is masculine. This is why bio occurs--and not bila.

The deep structure of (252) is as in Figure 18.

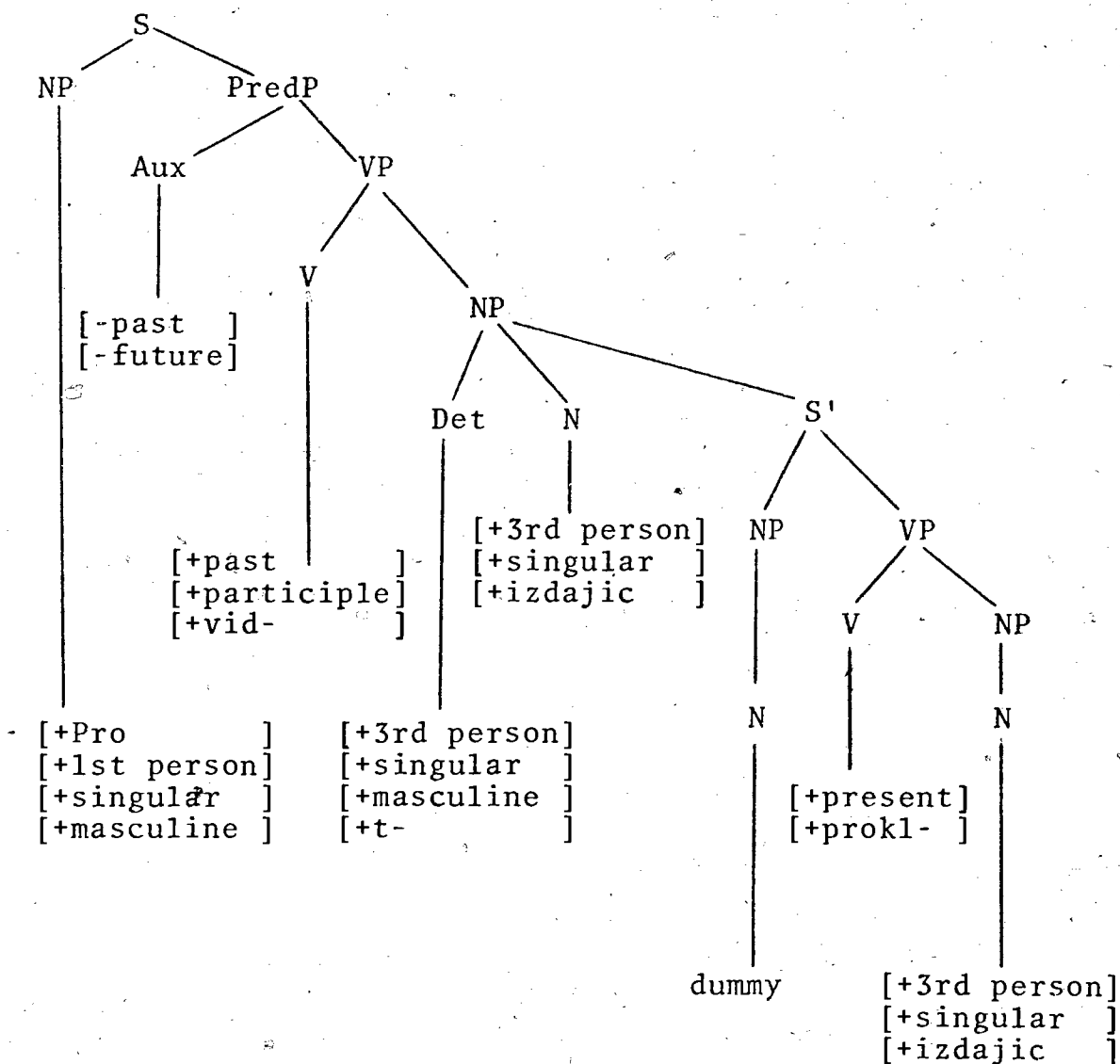


Figure 18.

The S' must pass through the passive transformation because prokletog derives from the verb prokleti through the passive transformation. Compare, for instance:

Svi su ga prokleli. 'Everybody damned him' to On je proklet od sviju. 'He is damned by everybody'.

After the passive transformation the substantive in the subject position in the embedded sentence may be subjected to the relativization transformation. If this occurs, (254) will be produced:

- (254) ?Ja sam video tog izdajicu koji je proklet.
 ?I saw that traitor who is accursed.
 ?I saw that traitor who is damned.

Alternatively, the EQUI NP deletion rule may apply. Then, in the place of the subject of the passive S' the feature [+PRO] must occur. The intermediate structure which was affected by these rules is as in (255)

- (255) (S(NP[+Pro
 [+1st person]
 [+singular]
 [+masculine]]) (PredP(Aux[+bi(-)
 [+present]])
 (VP(V[+past
 [+participle]
 [+vid-]) (NP(Det[+3rd person]
 [+singular]
 [+masculine]
 [+t-])
 (N[+3rd person]
 [+singular]
 [+izdajic-]) (S'(NP(N[+PRO]))
 (VP(V[+passive
 [+participle]
 [+present]
 [+prokl-]) (PP(Prep[+agentive]
 [+od])
 (NP(N[+dummy])))))))))).

When the feature [+PRO] occurs in the subject position of S', the round brackets of the embedded sentence become erased. Then, after the agreement rules, the case assignment rules apply to the entire string:

- (256) (S(NP(+Pro
[+1st person]
[+singular]
[+masculine]
[+nominative]) (PredP(Aux(+bi(-)
[+present]
[+1st person]
[+singular])
(VP(V(+past
[+participle]
[+singular]
[+masculine]
[+vid-]
[+nominative]) (NP(Det(+3rd person]
[+singular]
[+masculine]
[+t-]
[+accusative])
(N(+3rd person]
[+singular]
[+izdajic-]
[+masculine]
[+accusative]) (NP(N(+PRO
[+accusative]))
(VP(V(+passive
[+participle]
[+present]
[+prokl-]
[+masculine]
[+accusative]) (PP(Prep(+agentive]
[+od])
(NP(N(+dummy
[+genitive]))))))).

The formative [+PRO] receives the case from the formative which controls it, and the passive participle obtains the case through the node containing the defective formative [+PRO]. The two defective formatives ([+PRO, +accusative] and [+dummy, +genitive]) become deleted, for being insufficiently specified. After these

deletions the following structure is obtained:

- (257) (_Sja sam video tog izdajicu prokletog)_S.
 (_SI saw that traitor accursed)_S.

The S brackets cannot be removed in (257) because the item prokletog must be placed immediately before the item izdajicu. This rule produces (252).

The case-form of the items tog prokletog is homophonous with the genitive case-form, but it should be clear that tog prokletog is the accusative and not the genitive because the [+genitive] feature cannot be assigned to these formatives when they occur in the structure shown in Figure 18.

III.2.4. The ambivalent case assignment in the reduced relative.

This section of the paper discusses the dual case assignment in sentences such as (258-259)

- (257) Mladić voli devojku koja je slična boginji.
 The boy loves the girl who is similar to a goddess.

- (258) Mladić voli devojku sličnu boginji.
 The boy loves the girl similar to a goddess.

(259) Mladić voli devojku sličnoj boginji.

The boy loves the girl similar to a goddess.

In (258) sličnu 'similar (accusative singular, feminine)' is in the accusative and in (259) sličnoj 'similar (dative singular, feminine)' is in the dative.

Ross (Ross, 1967. pp. 43-47) discusses the sentences structurally equivalent to (257-258):

(260)(= Ross 3.52) Puer amat puellam quae est
similis deae. (Latin)

Mladić voli devojku koja je
slična boginji. (Serbo-Croatian)
The boy loves the girl who is
similar to a goddess.

(261)(=Ross 3.54) Puer amat puellam similem deae.
(Latin)

Mladić voli devojku sličnu boginji.
(Serbo-Croatian)
The boy loves the girl similar to
a goddess.

Ross' concern here is with the dative case-form deae 'goddess (dative singular)' which occurs in these sentences and the mechanism for preventing deae from assuming the accusative form deam (i.e., *Puer amat puellam similem deam). Ross represents (26) with a diagram as

the one in Figure 19.

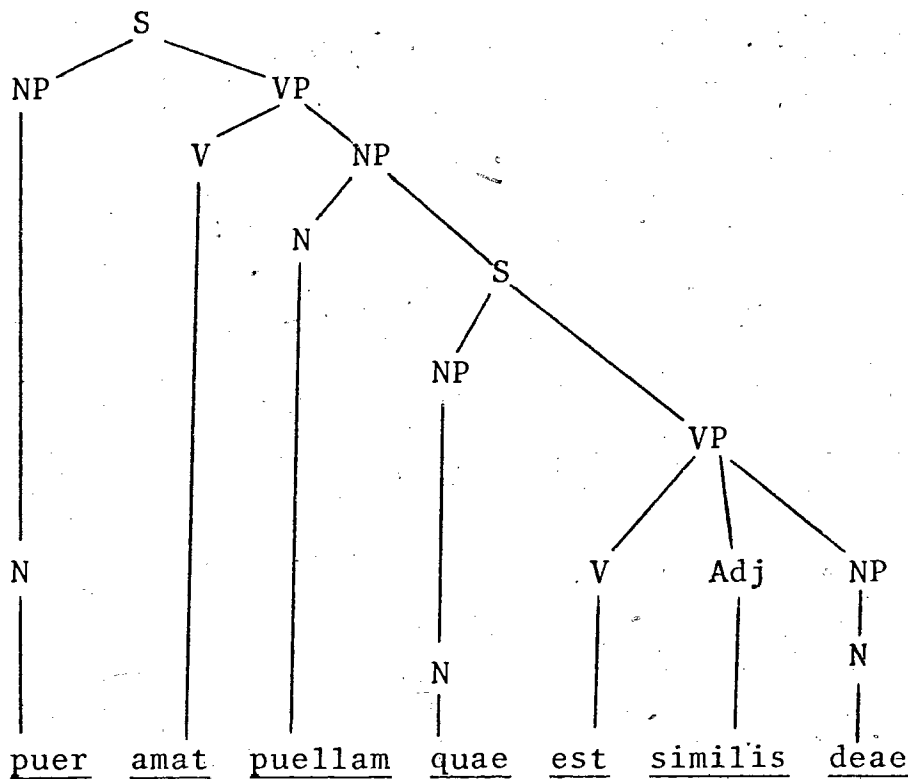


Figure 19 (Ross, 3.53)

Ross' concern is justified because if it is assumed that the above structure is correct there is no way of preventing deae- from becoming deam. Recall that if the relativisation transformation does not apply the EQUI NP deletion rule must apply. Then, instead of the formative qua- the feature [+PRO] occurs in its place. Now this feature must assign the accusative case to every formative to the right of it, except to est which becomes deleted. To prevent this, deae- must be placed within a PP node which is dominated

by the VP node or, alternatively, it must be removed from the dominance of the VP node, still allowing that it be generated from an NP node, but now directly dominated by the PredP node. These two mechanisms are the only two possibilities which could prevent dea- from becoming deam. However, the latter mechanism must be incorrect because dea- strictly subcategorizes the est similis predicate for Puella est similis 'The girl is similar' is not a complete sentence; it violates the strict subcategorization feature of the predicate adjective similis. Thus, the only remaining possibility is that dea- occurs within a PP node, and not as shown in Figure 19.

There is evidence, at least in Serbo-Croatian, that the last NP in Figure 19 originates within a PP node: the Serbo-Croatian equivalents of (261) must have a preposition in the surface structure if the equivalent of dea- appears in any other but the dative case-form:

(262) ?Mladić voli devojku sličnu na boginju.

The boy loves the girl similar to a goddess.

Sentence (262) is questionable, but consider (263-264) where the item sličnu is substituted by its synonym nalik 'similar (indeclinable)':

(263) Mladić voli devojku nalik na boginju.

The boy loves the girl similar to a goddess.

(264) Mladić voli devojku nalik boginji.

The boy loves the girl similar to a goddess.

Here, both sentences are correct--with or without the preposition na.

The problem of the case-assignment to dea- in Figure 19 is parallel to the problem of case-assignment to the formative boginj- 'goddess'. With the branching diagram such as the one in Figure 19, boginj- would also occur in the accusative, and that would produce an ungrammatical sentence. But the sentences in (263-264) and the many other examples of this nature given throughout this paper indicate that it is proper to have the formative boginj-, and probably any item occurring in the dative in Serbo-Croatian, within a PP node. Thus, it is proposed here that the deep structure of (258) is as in Figure 20. (The unessential details are omitted.)

In this structure the formative boginj- cannot be assigned the accusative case-feature, because the feature [+PRO] cannot assign case-features to a formative within a PP node.³¹

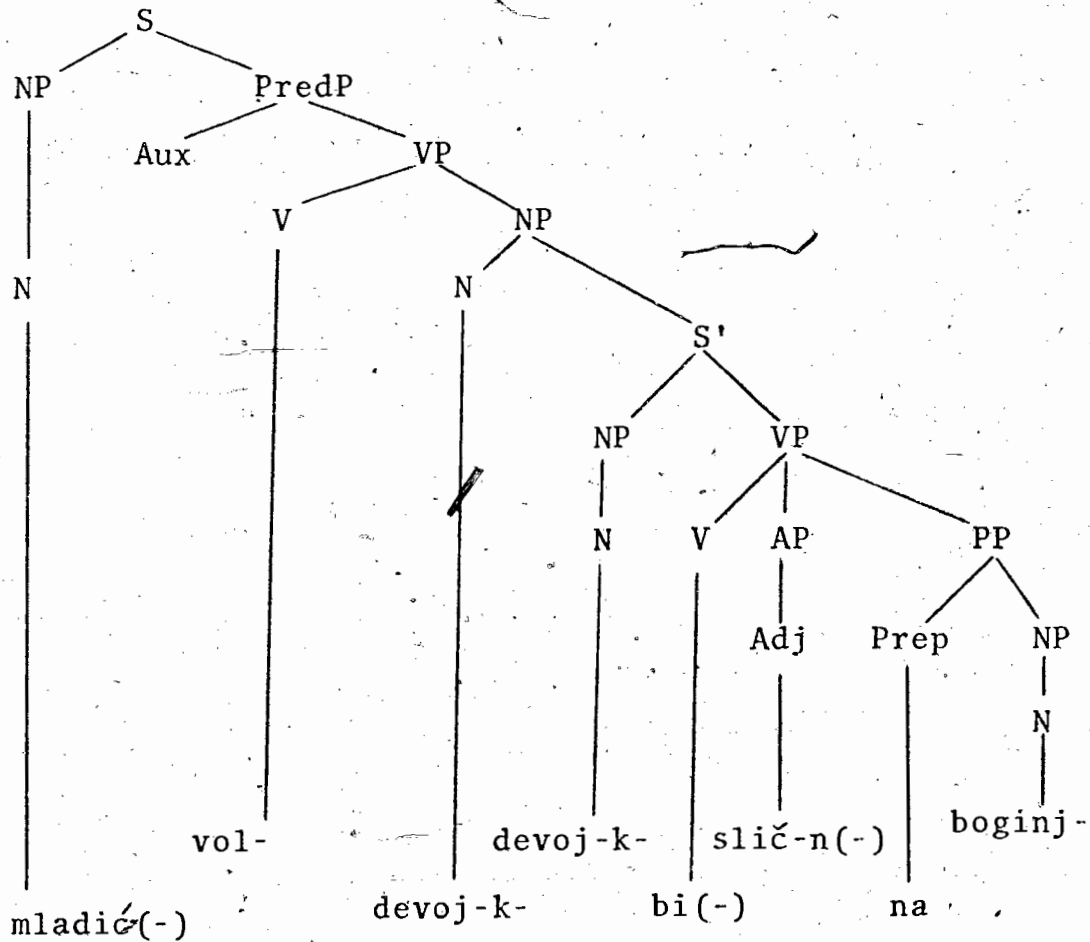


Figure 20.

Now, we are left with the problem of the ambivalent case of slič-n(-) in (258-259). The structure in Figure 20 will generate the following intermediate structure.

- (265) $(S_{NP(N[+mladić(-)])})(PredP(Aux^{\emptyset}))$
 $(VP(V[+vol-])(NP(N[+devoj-k-]))$
 $(S'(NP[+PRO])(VP(V^{\emptyset})(AP(Adj[+slič-n(-)]))$
 $(PP(Prep[-place][+na])(NP(N[+boginj-]))))))).$

It will be shown in the chapter on the locative case that prepositional formatives may become enriched by certain semantic features. This was already demonstrated with the preposition od which becomes [+agentive] when it occurs as the sister constituent of a passive agent. The formative slič-n(-) contains subcategorization features which, among other restrictions, require a prepositional phrase headed by the nonlocative preposition na. Moreover, the formative slič-n(-) invites comparison. Now, whenever comparison takes place and whenever the prepositional formative is na the dative must be assigned to the sister constituent of na, and na must be deleted. This is valid for the dialects which still use extensively the dative case. However, for the dialect which are using the dative less extensively, or not at all, the accusative case is assigned to the sister constituent of na; then, this preposition cannot be deleted. Because the comparison plays important part in the assignment of the dative to the substantive within such a PP node, let us call the feature which enriches the preposition na [+comparison].³²

It can be said now that if na is [-place, +comparison]

it assigns the dative to the head of its sister constituent, and it becomes obligatorily deleted. Thus the assignment of the dative to the formative boginj- is independently assigned in the structure in (265). That is, it can be assigned the dative before the case rules apply to the matrix sentence:

(266) (S (NP (N [+mladić(-)])) (PredP (Aux \emptyset))
 (VP (V [+vol-]) (NP (N [+devoj-k-]))
 (S (NP [+PRO]) (VP (V \emptyset) (AP (Adj [+slič-n(-)]))
 (PP (Prep [-place
 [+comparison]) (NP (N [+boginj-]) (NP [+dative])))))))).

For some reason which the writer cannot explain, when the Adj formative is sandwiched between a node containing the feature [+PRO] and a dative (after the preposition deletion), slič-n(-) may be assigned the [+accusative] feature through the feature [+PRO] or the [+dative] feature through the formative boginj-.

However, this can happen only in the following instances:

(267a) The nouns which precede and follow the adjective must be of the same gender and number.

(267b) The embedded sentence must be "symmetric".

A symmetric sentence is defined here in much the same way as in (Dougherty, 1971, page 332):³³

A verb can be said to be symmetric if it can occur in context 344-5, and if the truth value of 344 is the same as that of 345:

(344) NP₁ V (Prep) NP₂

(345) NP₂ V (Prep) NP₁.

Dougherty's formula applies to our examples:

slič-n(-) is the predicate in the deep structure of the above sentences and the truth value does not change if the reversal occurs. That is, if A is similar to B, B is similar to A.

The conditions in (267a-267b) account for the ungrammaticality of (268-269) and (273-274):

(268) *Mladić voli devojku sličnoj ocu.

The boy loves the girl similar to
(her) father.

(269) *Devojka voli mladića sličnom majci.

The girl loves the boy similar to (his)
mother.

(270) *Mladić voli devojku sličnoj boginjama.

The boy loves the girl similar to the
goddesses.

Sentences (268-270) become grammatical if slič-n(-) occurs in the accusative.

Consider also (271-274):

(271) Mladić voli devojku žrtvovanu boginji.

The boy loves the girl sacrificed to the goddess.

(272) Mladić voli knjigu poklonjenu majci.

The boy loves the book given to his mother.

(273) *Mladić voli devojku žrtvovanoj boginji.

*The boy loves the girl to the sacrificed goddess.

(274) *Mladić voli knjigu pokonjenoj majci.

*The boy loves the book to the given mother.

Although the object noun and the noun in the dative are of the same gender and number, the dative case-forms žrtvovanoj, poklonjenoj cannot possibly occur in (271-272) because the embedded S is not symmetric. That is, Devojka je žrtvovana boginji. 'The girl is sacrificed to the goddess' does not mean the same as Boginja je žrtvovana devojci. 'The goddess is sacrificed to the girl'.

The writer assumes that the bundle of features which specifies the adjective predicate slič-n(-), or any symmetric formative, carries the feature [+symmetric].

This feature allows the ambivalent case assignment in (258-259) and in any other sentences subject to the conditions in (267a-267b).

III.3. The accusative case within PP's.

Few prepositions "govern" exclusively the accusative case. One such preposition is kroz 'through':

(275) On je išao kroz baštu.

He was going through the garden.

He used to go through the garden.

However, most prepositions co-occurring with the accusative also co-occur with some other case:

(276) On je bacio loptu u baštu. (accusative)

He threw the ball into the garden.

(277) On je bacio loptu u bašti. (locative)

He threw the ball in the garden. (Where in ≠ into.)

(278) Marija je pala pod prozor. (accusative)

Mary fell under the window. (Mary was probably on the roof just before she fell.)

(279) Marija je pala pod prozorom. (instrumental)

Mary fell under the window. (Mary was under the window when she fell.)

It is impossible to discuss the accusative occurring

in the prepositional phrases without discussing first the other oblique cases. For this reason these accusatives will be discussed in the chapters in which they can be contrasted with the other prepositional cases.

IV. The locative case.

IV.1. Introduction.

The locative is the only case in Serbo-Croatian which always occurs within a propositional phrase in the surface structure. The following prepositions head the locative noun phrases: u 'in, to, at', na 'on, in, to, of, like, at', po 'on, around, to fetch, by' o 'on, in, about', and pri 'by, at'.

The prepositions u, na, po, and o may also head the prepositional phrases in which the heads of noun phrases occur in the accusative case. Moreover, the preposition u also "governs" the genitive case.

The important question is when do these prepositions govern the locative and when the accusative case? The answer to this question leaves us with the residual problem of the genitive case "governed" by the preposition u.

The investigation begins with Chomsky's hypothesis (Chomsky, 1965, page 102) that the optional place adverbials stem from the PredP node because they do not strictly subcategorize a V, and that the obligatory place adverbials stem from the VP node because they do strictly subcategorize a V. This method of investigation

demonstrates that if a prepositional phrase headed by u, na, po, or o strictly subcategorizes a directional verb, the substantive within these phrases must be in the accusative. If the subcategorized verb is not a directional verb the substantives heading noun phrases within these prepositional phrases must be in the locative case.

If a place adverbial phrase is directly dominated by the PredP node, and if the verb is [+directional], either the locative or the accusative may occur with the head-nouns within the prepositional phrases headed by u, na, po, or o. If the verb is [-directional], the same head-nouns must occur in the locative case.

Also, some noun phrases of the following configuration are investigated:

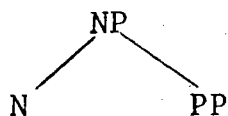


Figure 21

This line of investigation indicates that the feature of directionality need not be within a verb formative, but it also indicates that subcategorization plays an important role in the case assignment within these prepositional phrases.

Finally, it is demonstrated here that if the pre-

prepositions u and na are not place prepositions they can "govern" the accusative case, but no other case may co-occur with them. If the prepositions o and po are [-place], they can "govern" only the locative case.

IV.1.2. The accusative versus the locative.

Consider the following sentences:

(280) Marija baca loptu.

Mary is throwing the ball.

(281) Marija hrani kokoške.

Mary is feeding the chickens.

These sentences are complete. On the other hand, (282) is not a complete sentence.

(282) Marija baca

Mary is throwing

The verb-form baca 'throw (3rd person singular, present tense)' must be strictly subcategorized as in (283):

(283) bac- [+__NP, -__#, ...]

The structure in (282) is violating the strict subcategorization feature in (283), and for this reason it is both incomplete and ungrammatical.

Structures (280-281) are complete sentences. If a prepositional phrase were added to them, it would be a VP complement--not a V complement. Let us add the

phrase na verand- to sentence (280):

(284) Marija baca loptu na verandi. (locative)

Mary is throwing the ball on the veranda.

(Mary is on the veranda and she is throwing the ball there.)

(285) Marija baca loptu na verandu. (accusative)

Mary is throwing the ball onto veranda.

(Mary is not on the veranda, but she is throwing the ball there.)

Obviously, the two sentences are not synonymous; therefore they must be different in their respective deep structures. However, for the moment, the writer is not concerned with the deep structures of these two sentences, but with the accusative and the locative case occurring within these prepositional phrases.

Consider also the expansion of (281) with the same prepositional phrase (na verand-):

(286) Marija hrani kokoške na verandi. (locative)

Mary is feeding chickens on the veranda.

(Mary is on the veranda, and she is feeding chickens there.)

(287) *Marija hrani kokoške na verandu. (accusative)

*Mary is feeding chickens onto veranda.

When (281) is expanded as in (286-287), only the

locative case may occur: verandi--not verandu--for the latter case-form makes (287) ungrammatical. Moreover, it seems obvious that the same rule which prevents the preposition onto to be generated in the English equivalent of (287), prevents the accusative case-form to be generated within the prepositional phrase in (287).

Likewise, the rule that admits both on and onto into the following frame:

(289) Mary is throwing the ball _____ veranda.

must be the same rule that admits both the accusative and the locative case endings into the following frame:

(290) Marija baca loptu na verandu.

The verb bacati '(to) throw (imperfective)' is a verb which implies directionality. When a verb is [+directional], either the accusative or the locative case may occur in the frame of (290). The verb throw, the exact equivalent of the Serbo-Croatian baciti, is also [+directional] and this feature admits either on or onto into the frame in (289).

The verb hraniti '(to) feed (imperfective)' is [-directional]. A [-directional] verb will not admit the accusative case within a prepositional phrase denoting place. This is why (287) is ungrammatical. By the same token a [-directional] verb will not admit

the preposition onto within a prepositional phrase denoting place. This is why the translation of (287) is ungrammatical.

Consider also sentences with intransitive verbs:

(291) Marija pljuje.

Mary is spitting.

(292) Marija spava.

Mary is sleeping.

Any place adverbial added to these sentences would be a complement which does not strictly subcategorize these verbs. The speaker who uttered these two sentences may want to explain in what direction Mary spits or, alternatively, the location of Mary at the time she spits. It is the nature of the verb pljuvati '(to) spit' which allows the two possibilities:

(293) Marija pljuje u sobu. (accusative)

Mary is spitting into the room.

(294) Marija pljuje u sobi. (locative)

Mary is spitting in the room.

The verb spavati is not a directional verb, therefore the accusative cannot occur:

(295) *Marija spava u sobu. (accusative)

*Mary is sleeping into the room.

but the locative can:

(296) Marija spava u sobi. (locative)

Mary is sleeping in the room.

Consider now the sentences in which a prepositional phrase denoting place strictly subcategorizes a verb.

The following structures are not sentences because they violate the rules of strict subcategorization.

(297a) *Brod je udario

*The ship struck

(297b) *Brod je naleteo

*The ship ran

*the ship hit

But when these structures are expanded with a prepositional phrase, they become grammatical sentences:

(298a) Brod je udario u stenu. (accusative)

The ship struck against the rock.

(298b) Brod je naleteo na stenu. (accusative)

The ship ran into the rock.

The ship hit the rock.

The prepositional phrases u stenu, na stenu strictly subcategorize the verbs udariti, naleteti. Notice that these verbs cannot be strictly subcategorized with a prepositional phrase whose head noun is in the locative:

(299) *Brod je udario u steni. (locative)

*The ship struck in the rock.

(300) *Brod je naleteo na steni. (locative)

*The ship ran in the rock.

The verbs udariti 'strike', naleteti 'ran, hit, fly into' imply directionality--therefore, they are [+directional]. As it is shown by the examples in (296-300), when a prepositional phrase denoting place strictly subcategorizes a [+directional] verb, the head noun of such a phrase must be in the accusative. If the strictly subcategorized verb is [-directional], the prepositional phrase denoting place which strictly subcategorizes such a verb must have its head noun phrase in the locative case:

(301) Brod je na steni. (locative)

The ship is on the rock.

(302) *Brod je na stenu.

*The ship is onto the rock.

Whatever has been said here about the prepositional phrases headed by the prepositions u and na is valid for the prepositions o and po:

(303) Brod je udario o stenu. (accusative)

The ship struck against the rock.

(304) *Brod je udario o steni. (locative)

(Not translatable.)

(305) Marija ide po oca. (accusative)

Mary is going to fetch the father.

(306) Marija ide po travi. (locative)

Mary is walking all over the grass.

However, the prepositions o and po are composed of features which have different semantic content than the features which describe the prepositions u, or na. The preposition po, for instance, indicates a kind of aimless movement when it governs the locative case and, of course, aimless movement is [-directional]. For this reason, the preposition po may strictly subcategorize a verb, or may be a VP complement, only if that verb is a verb of movement. The use of the preposition o is even more restricted when it is employed as a place preposition, for it can occur only after a very limited number of verbs (visiti '(to) hang (imperfective)', obesiti '(to) hang (perfective)', udariti, and two or three more).

When the prepositions po, and o are not used as the place preposition, they govern only the locative:

(307) On govori o Mariji.

He is talking about Mary.

(308) Da je po Hitleru, Vladivostok bi pripadao
Nemačkoj. (locative)

If it were according to Hitler, Vladivostok
would belong to Germany.

Of course, it is to be expected that the accusative case does not co-occur with po and o when these prepositions are [-place], for they can never occur with the [+directional] verbs. Therefore, the distinction [+place], [-place] need not be mentioned when writing the rules of the case assignment for the cases which may or may not co-occur with these formatives.

The prepositions u and na are exceptional in this respect. When they are [-place] prepositions they always require the accusative for the head noun phrases of their sister constituents:

(308) Marija je na majku. (accusative)

Mary is like her mother.

(309) Marija misli na Jovanku. (accusative)

Mary is thinking about Joan.

(310) Marija je zaljubljena u Jovana. (accusative)

Mary is in love with John.

This is the reason that the time adverbials occur in the accusative case, when they are headed by u or na:

- (311) Marija dolazi u ponedeljak (accusative)
Mary is coming (on) Monday.
- (312) Marija dolazi na Božić. (accusative)
Mary is coming on Christmass:
- (313) Marija je bila bolesna u ponedeljak.
Mary was ill (on) Monday.
- (314) Marija se prejela na Božić.
Mary overate (on) (this) Christmass.
- (315) Marija je bila ovde u sredu. (accusative)
Mary was here (on) Wednesday.

Here, the prepositions u and na are not place prepositions, therefore, the underlined items must occur in the accusative, regardless of the type of the verb in such sentences. However, if place in time is designated the locative will occur:

- (316) Sneg obično pada u januaru. (locative)
Usually, the snow falls in January.

- (317) *Sneg obično pada u januar. (accusative)

Structure (317) would be grammatical if januar was a type of a container; then its meaning would be 'Usually, the snow falls into january.'. However, with the meaning 'Usually, the snow falls into January' (317) is ungrammatical.

Some time units are not long enough, as far as the speakers of Serbo-Croatians are concerned, to be

marked for place. Some time units are divided in such a way that it is not convenient to designate the place in time with some preposition. For instance, although it is proper to say Sneg je padao u januaru. 'It was snowing in January', it is not correct to say Sneg je padao u hiljadu devetsto šezdeset i petoj godini (u Jerusalimu). 'It was snowing in nineteen sixty five (in Jerusalem)'. Rather, one must say Sneg je padao hiljadu devetsto šezdeset i pete godine (u Jerusalimu). 'It was snowing in nineteen sixty five (in Jerusalem)'.

When a preposition occurring in time adverbials may be used as a preposition which designates the place in time, it is beside the point. But, whenever it is used that way, it is used as a place preposition. In that instance the head noun phrase occurring within such a prepositional phrase must be in the locative. The reason that such a noun phrase cannot occur in the accusative is obvious: a time phrase is not a container into which something may fall. Thus, the accusative in the time adverbials denoting the place in time is prevented by the selectional features which do not allow a container called januar to serve as a time measure.

IV.1.3. The accusative and the locative within NP complements.

The feature [+directional] may be inherent not only in verbs, but also in substantives. When a prepositional phrase denoting place is the complement of a [+directional] substantive either the locative or the accusative may occur with the head noun phrase of such a prepositional phrase:

(318) Put u Jugoslaviju je bio oskudan u doga-
djajima, ali put u Jugoslaviji je bio
vrlo interesantan.

The trip to Yougoslavia was uneventful,
but the trip in Yougoslavia was very
interesting.

Notice that the clitic je follows the phrases Put u Jugoslaviju, put u Jugoslaviji and that it may follow the prepositional phrase oskudan u dogadjajima 'poor in events, uneventful':

(319) Oskudan u dogadjajima je bio put u Jugo-
slaviju.

Therefore, each of these phrases is a single constituent.

(For more detail see section I.2.2.)

The formative put(-) contains the [+directional]

feature. When this feature is contained within a substantive and when such a substantive has a prepositional complement denoting place, the head noun phrase occurring within such a prepositional phrase may be either in the accusative or in the locative case. There can be no instances where the accusative can occur and the locative can not. Recall that the locative can be prevented from occurring within such prepositional phrases only if a directional verb is strictly subcategorized by the said phrases. Because a substantive can never be strictly subcategorized, this can never happen in the structures described above.³⁴ Thus there are noun phrases such as:

(320) Put u Jugoslaviju (accusative)

The trip to Yugoslavia

(321) Put u Jugoslaviji (locative)

The trip in Yugoslavia

Of course, the accusative cannot occur in such a construction if the [+directional] feature is not present:

(322) Oskudan u dogadjajima (locative)

Uneventful

(323) *Oskudan u dogadjaje (accusative)

(There is nothing in the meaning of oskudan 'poor' which would imply directionality.)

Finally, if na or u are [-place] the accusative must occur:

(324) Misao na Mariju (accusative)

The thought about Mary

But, if some other preposition which co-occurs with both the accusative and the locative is [-place] the locative must occur:

(325) Misao o Mariji (locative)

(326) *Misao o Mariju (accusative)

The following rules summarize the findings in this chapter:

(327) [+N] → [+accusative] / PP (Prep $\begin{matrix} [+Prep] \\ [-place] \\ [+na] \end{matrix}$)
(NP (N [+N, _]))).

(The rule in (327) says that an [+N] formative is assigned the feature [+accusative] if it is within a PP whose preposition is the nonlocative na.)

(328) [+N] → [+accusative] / PP (Prep $\begin{matrix} [+Prep] \\ [-place] \\ [+u] \end{matrix}$)
(NP (N [+N, _]))).

- (329) [+N] → [+accusative] / (VP (V [+V
[+directional]
(PP (Prep [+Prep])
[+place]
[+x]]) (NP (N [+N, ___])))) VP

(The x stands for any preposition discussed in this chapter as well as for some other prepositions which will be discussed in the chapter on the instrumental.)

- (330) [+N] → (i) [+accusative]
(ii) [+locative] /
(VP (V [+V
[+directional]
(V...)) VP
(PP (Prep [+Prep])
[+place]
[+x]]) (NP (N [+N, ___])) PP

- (331) [+N] → (i) [+accusative]
(ii) [+locative] /
(NP (N [+N
[+directional]
(PP (Prep [+Prep])
[+place]
[+x]]) (NP (N [+N, ___])) NP) NP

- (332) [+N] → [+locative] / ([-directional])
(PP (Prep [+Prep])
[+place]
[+x]]) (NP (N [+N, ___])) PP

(Where x is not na or u when these prepositions are [-place], and where the [-directional] feature occurs instead of the [+directional] feature in (329), (330), and (331).)

IV.2. The deep structure of locative and directional structures.

Structures such as (294) are called locative sentences, and structures such as (293) are called directional sentences. Analogously, the structures such as the one in (321) are called locative noun phrases, and the structures such as the one in (320), the directional noun phrases.

The formulas in (327-332) show when the locative or the accusative may appear in these structures, but they do not show the deep structures of these phrases and sentences. For example, the feature of directionality in (330) admits both the accusative and the locative case-features within a PP node, thus one rule may be used to produce (293) and (294). However these two sentences are not synonymous, therefore they cannot be derived from the same deep structure.

It is claimed here that the deep structure of (293) is as in Figure 22, and that the deep structure of (294) is as in Figure 23. This claim will be substantiated presently.

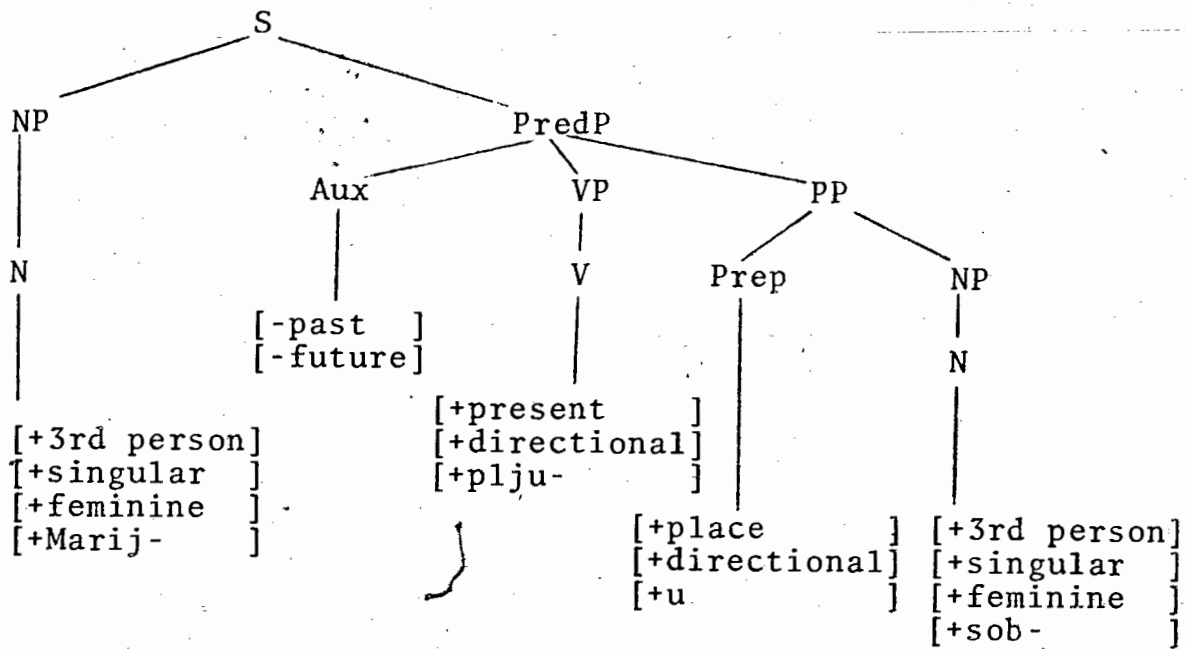


Figure 22.

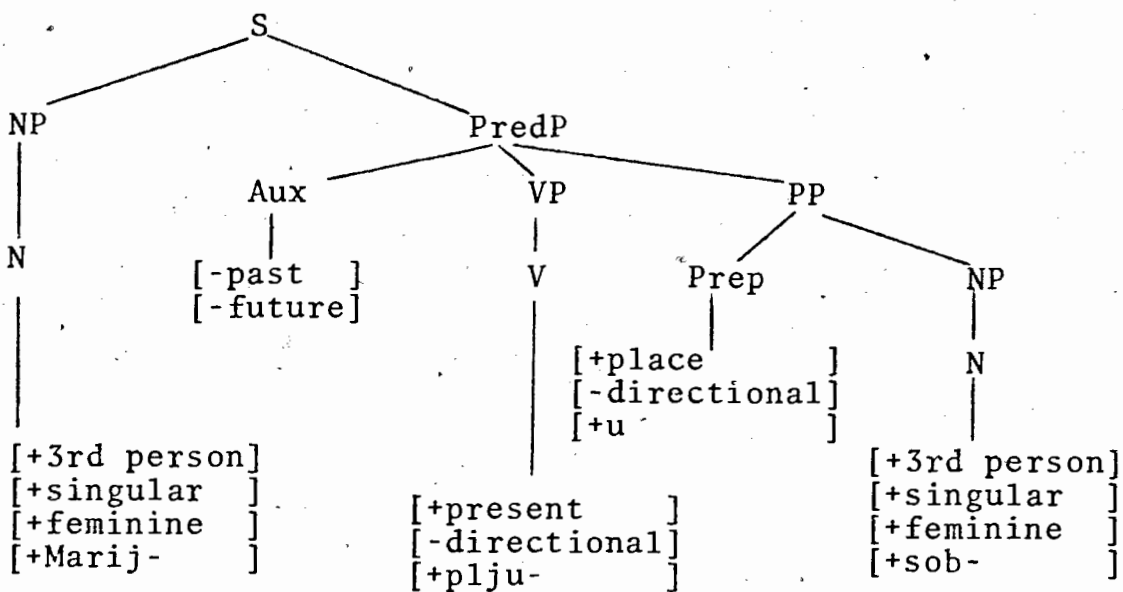


Figure 23

These two base phrase-markers represent the speakers' ability to select either the [+directional] or the [-directional] sense of the formative plju- 'spit'. Then, these features admit, through the selection features, a [+directional] Prep formative if the V formative is [+directional] or a [-directional] Prep formative if the V formative is [-directional].

Notice that it would be simpler for the English equivalents of (293-294) to require that the selection restriction features be within the Prep formative:

(333) (S(NP(N^{Mary}))(VP(V[[±]directional]))_[+spit(-)]VP
 (PP(Prep[[±]directional])<sub>[+place
+into]</sub>(NP(N^[+room]))))).

(334) (S(NP(N^{Mary}))(VP(V[[±]directional]))_[+spit(-)]VP
 (PP(Prep[-directional])<sub>[+place
+in]</sub>(NP(N^[+room]))))).

These two English prepositions have distinct forms when they are [+directional] or [-directional]. Now, the selectional features eliminate a [-directional] V formative or they eliminate the [-directional] sense of a V formative from the base in (334). Likewise, a [+directional] formative within a Prep node would require the [+directional] feature within the V node.

However, this simplicity cannot be accomplished when the Serbo-Croatian structures equivalent to (333-334) are considered, because there is no a preposition u which is [+directional] and another preposition u which is [-directional]. No speaker of Serbo-Croatian would ever claim that u, na, o, or po are [+directional] when they are considered alone. (A speaker of English recognizes readily the sense of directionality of into or onto.) However, in some contexts, u, na, etc. may be felt as [+directional] or [-directional]. These features are more evident and readily recognizable when they occur within a verb formative. It is for this reason that the writer assumes that the V formatives select the Prep formatives and not the other way around.

In the lexicon both the V formative and the Prep formatives occurring in Figure 22 and 23 are marked as [+directional].

The deep structures of the noun phrases in (320) and (321) are shown in Figure 24 and Figure 25 respectively. There is nothing more to say about these structures, since everything that was said about the deep structures in Figure 22 and 23 applies to the deep structures represented in the following figures, except that the directional feature which selects the Prep formative is within an N formative rather than within

a V formative.

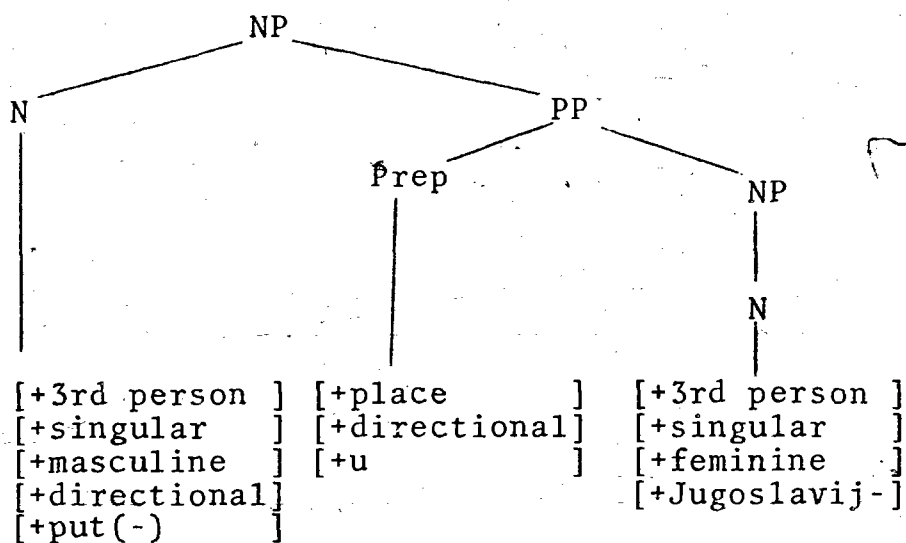


Figure 24.

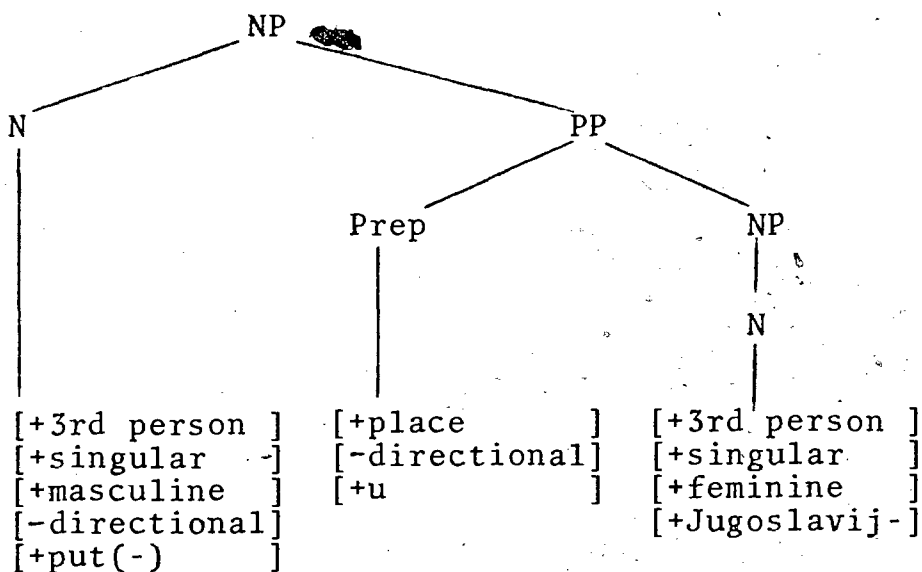


Figure 25.

Now it can be stated simply that the case rules assign the accusative feature to an N formative within a PP if the Prep formative is [+place, +directional, +u].

The locative case feature is assigned by the case rules if an N formative is the sister constituent of a Prep formative which contains the features [+place, -directional, +u].

All the other occurrences of the accusative and the locative similar to those discussed in this chapter are assigned by the following rules:

$$(335) \quad [+N] \rightarrow [+accusative] / \left(\text{pp} \left(\begin{array}{l} \text{Prep} \left[\begin{array}{l} +\text{Prep} \\ +\text{place} \\ +\text{directional} \\ +x \end{array} \right] \right) \right) \right) \\ \left(\text{NP} \left(\text{N} \left[+N, _ \right] \right) \right) \right).$$

In this formula x is either u, na, o, or po.

$$(336) \quad [+N] \rightarrow [+locative] / \left(\text{pp} \left(\begin{array}{l} \text{Prep} \left[\begin{array}{l} +\text{Prep} \\ +\text{place} \\ -\text{directional} \end{array} \right] \right) \right) \right) \\ \left(\text{NP} \left(\text{N} \left[+N, _ \right] \right) \right) \right).$$

In this formula x is either u, na, o, or po.

$$(337) \quad [+N] \rightarrow [+accusative] / \left(\text{pp} \left(\begin{array}{l} \text{Prep} \left[\begin{array}{l} +\text{Prep} \\ -\text{place} \\ +x \end{array} \right] \right) \right) \right) \\ \left(\text{NP} \left(\text{N} \left[+N, _ \right] \right) \right) \right).$$

Here, x is either u or na, but not po or o.

$$(338) \quad [+N] \rightarrow [+locative] / \left(\text{pp} \left(\begin{array}{l} \text{Prep} \left[\begin{array}{l} +\text{Prep} \\ -\text{place} \\ +x \end{array} \right] \right) \right) \right) \\ \left(\text{NP} \left(\text{N} \left[+N, _ \right] \right) \right) \right).$$

Here, x is either o or po, but not u or na.

Recall now the discussion regarding the preposition kroz at the end of the previous chapter. It co-occurs

with the accusative case only. It is now rather obvious why this is so: the preposition kroz 'through' is inherently [+directional]. Naturally, a [-directional] verb will not admit this preposition within its sentence, therefore a locative case-form can never co-occur with it.

On the other hand, the preposition pri is never admitted together with a directional verb as its complement or its VP complement; therefore the accusative can never co-occur with this preposition.

IV.3. The preposition prema.

The preposition prema 'towards' may co-occur with either [+directional] or [-directional] verbs. However, prema never co-occurs with the accusative. Much was written about this preposition, the main topic being when it governs the locative case, and when the dative case-forms.

Stevanović (Stevanović, 1969) suggests that when prema occurs with the verbs of motion this preposition governs the dative; otherwise it governs the locative. Thus, the noun within the prepositional phrase in (339) is in the dative and the one in (340) is in the locative:

(339) On trči prema bašti. (dative)

He is running towards the garden.

(340) On je pažljiv prema svojoj susetki. (locative)

He is kind (attentive) toward his neighbour.

Occasionally, some items will have different accentuation in the dative singular than in the locative singular. However the accentuation of svojoj susetki remains the same whether it is a complement of a [+directional] or a [-directional] verb:

(341) On trči prema sv^ojoj s^usetki.

He is running towards his neighbour.

(342) On je učtiv prema sv^ojoj s^usetki.

He is polite toward his neighbour.

Stevanović (Stevanović, 1969, page 359) dismisses the criterion of accentuation as unreliable, because most speakers have homophonous form for the dative and the locative case-forms.

It will be seen in the chapter on the dative case that the preposition prema and the preposition k(a) are closely related. The preposition prema is an innovation in Serbo-Croatian. It substituted for k(a) in most instances and often they are used in the same context:

(343) Suncokreti su se okrenuli k jezeru.

The sunflowers turned towards the lake.

(344) Suncokreti su se okrenuli prema jezeru.

The sunflowers turned towards the lake.

Moreover, the prepositions k(a) and prema can be deleted from (343-344) without changing the meaning of these sentences:

(345) Suncokreti su se okrenuli jezeru.

The sunflowers turned towards the lake.

While prema in (340) cannot be so deleted:

(346) *On je pažljiv svojoj susedki.

If the deletable prema were to co-occur with the locative this would be an exception, for in all the other instances the locative cannot occur without a preposition. The inconsistency created by the apparent exception shown above can be avoided by maintaining that the head noun-phrases which are sister constituents of prema are in the dative if prema can be deleted.

There are several other data which lend support to the above solution: (a) prema is often synonymous with k(a) (b) prema is a relatively new preposition in Serbo-Croatian which is now often used instead of the older k(a) (c) when translating from Serbo-Croatian into Russian or Slovenian prema translates as k(o) or k(a) (d) in Serbo-Croatian, Russian, and Slovenian k(a) (k(o)) always governs the dative case.

The data in (a)-(d), and the examples in (344-345) indicate that jezeru is in the dative if prema can be deleted. If prema cannot be deleted--as it is the case in (340)--the head of its sister constituent_v is in the locative case.

V. The instrumental case

V.1 Introduction.

The cases discussed in the previous chapters either occur as prepositionless forms (the nominative and the accusative) or they occur within prepositional phrases (the accusative and the locative). When the accusative and the locative occur within a prepositional phrase their prepositions cannot be deleted, for if they are deleted the sentence in which these case-forms occur becomes ungrammatical.³⁵

The instrumental may occur outside of a PP node. When this happens the instrumental is either a predicate nominal or a passive agent. In these constructions the instrumental case-forms occur as prepositionless cases. In all other constructions the instrumental occurs within PP nodes.

The instrumental occurring within PP's co-occurs with the following prepositions: pod 'under', nad 'over, above', pred 'in front of', za 'behind, by', medju 'between, among', and s(a) 'with, off'.

The prepositions pod, nad, pred, za, and medju co-occur with the accusative as well as with the instrumental case.³⁶ These prepositions cannot be deleted in the shallow structure because the surface

structure produced after such a deletion results ungrammatical.³⁷

The preposition s(a) co-occurs with the genitive as well as with the instrumental. When s(a) co-occurs with the genitive, s(a) is a place preposition denoting separation. When this preposition is employed as a place-preposition, it cannot be deleted,³⁸ but when s(a) is not used as a place preposition, it may be deleted in certain specific situations. The main part of this chapter deals with the instrumental of the nouns occurring after the formative s(a).³⁹

V.1.2. The accusative versus the instrumental

The following sentences demonstrate that the accusative and the instrumental may occur after the same prepositions:

(347) Marija je pala pod prozor. (accusative)

Mary fell under the window. (Mary was probably on the roof before she fell.)

(348) Marija je pala pod prozorom. (instrumental)

Mary fell under the window. (She was under the window when she fell.)

(349) Marija se nagnula nad prozor.

Mary leaned over the window.

- (350) Lampa visi nad astalom. (instrumental)
The lamp is hanging above the table.
- (351) Dete je dotrčalo pred mamu. (accusative)
The child ran up to his mother.
- (352) Dete trči pred mamu.
The child is running to his mother.
- (353) Dete trči pred mamom. (instrumental)
The child is running in front of his mother.
- (354) Dete je selo za astal. (accusative)
The child sat at the table.
- (355) Dete sedi za astalom. (instrumental)
The child is sitting at the table.
- (356) Dete je selo medju nas. (accusative)
The child sat between us.
- (357) Dete živi medju divljacima. (instrumental)
The child lives among savages.

With these prepositions, the accusative occurs under the exactly the same conditions as with the prepositions which co-occur with the locative and the accusative case. For example, whatever was said about (293-294) is valid for (347-348): Marija je pala. 'Mary fell' need not be strictly subcategorized, and the verb pasti '(to) fall' may be used in order to

indicate either the direction of the fall or the place of the fall. Also, if (291-292) are expanded with a pod prepositional phrase the restriction on the accusative are the same as in (293-296):

(358) Marija pljuje pod prozor. (accusative)
 Mary is spitting under the window. (But
 Mary is not necessarily under the window.)

(359) Marija pluje pod prozorom. (instrumental)
 Mary is spitting under the window. (But,
 she is probably spitting in a direction
 far away from the window. Mary is under
 the window, however.)

(360) *Marija spava pod prozor.
 *Mary is sleeping to under the window.

(361) Marija spava pod prozorom.
 Mary is sleeping under the window.

The strict subcategorization of a verb of motion with a pod prepositional phrase requires the accusative case for the head noun-phrase of such a prepositional phrase:

(362) *Muva je podletela.
 *The fly flew under.

(363) Muva ~~je~~ podletela pod astal. (accusative)
 The fly flew under the table.

The structures in (362-363) are parallel with the structures in (297b) and (298b). And analogously to (300), (301), and (302) the same restrictions apply to (364), (365), and (366):

(364) *Muva je podletetela pod astalom. (instrumental)

(365) Muva je pod astalom. (instrumental)
The fly is under the table.

(366) *Muva je pod astal. (accusative)
(Untranslatable because no meaning can be assigned to this structure.)

This parallelism is also evident when such prepositional phrases are N complements. Compare (320-323) to (367-370):

(367) Let nad Jugoslaviju. (accusative)
*The flight to over Yugoslavia.

(368) Let nad Jugoslavijom. (instrumental)
The flight over Yugoslavia.

(369) Spavanje pod vedrim nebom. (instrumental)
Sleeping under the clear sky.

(370) *Spavanje pod vedro nebo. (accusative)

What is said about (320-323) is valid for (367-370), except that in the latter constructions the instrumental occurs instead of the locative.

finally, parallel to the prepositions u and na the preposition za 'behind, at, by, for' co-occurs with the accusative exclusively, when it is not a place preposition. Compare

(371) On je za Forda. (accusative)

He is for Ford.

to

(372) On je za Fordom. (instrumental)

He is behind Ford. (Behind, here, indicates the relative position of the subject he.)

Thus, in order to incorporate the preposition za into the rule in (337), this rule should be changed by expanding the field of [+x]. The same must be done with the rule in (335). The rules in (336) and (338) must be changed by substituting the feature [+locative] with the feature [+instrumental] and by changing the specifications of [+x].

V.2. The instrumental and the preposition s(a).

It is demonstrated in section III.1.1. that the prepositionless instrumental in the direct object position originates within a PP node and that the prepositional formative dominated by such a PP is s(a). It is also demonstrated in that section that

the formative s(a) must appear in the surface structure as the item s(a) if its sister head noun phrase is indeclinable. However, this preposition must appear in the surface structure if it contains the feature [+associative] even if its sister head noun phrase is declinable. Also, s(a) must appear in the surface structure if its deletion leads to ambiguity. In this section it is shown when s(a) may or may not be deleted, when its sister head noun phrase is declinable. Consider, then, the following structures:

(373) Marija putuje sa svojom susedkom.

Mary is traveling with her neighbour.

(374) *Marija putuje svojom susedkom.

*Mary is traveling with her neighbour.

(where svojom susedkom is understood as
a means of locomotion.)

(375) ?Marija putuje sa avionom.

Mary is traveling by plane.

(376) Marija putuje avionom.

Mary is traveling by plane.

In (373) sa is used in the associative sense. In such a use s(a) cannot be deleted because its deletion creates ungrammatical structures (e.g. (374)).

In (375) sa is understood as a preposition denoting the instrument of locomotion. When it is used in this sense it becomes preferably deleted. However if s(a) is used as a preposition which denotes a medium of locomotion, but which cannot be understood as an instrument of locomotion, s(a) cannot occur in the surface structure:

(377) Idite ovim putem!

Go by this road!

(378) *Idite s ovim putem!

(379) *Idite sa ovim putem!

In (377) putem 'road (instrumental)' is a thing acted upon, hence put 'road' used in this construction is [+patient]. Whenever a substantive is used in the [+patient] sense it occurs in the instrumental case:

(380) Livadom se šetala devojčica mala.

On the field promenaded the little girl.

The little girl walked over the field.

The writer cannot construct any sentences in which the patient co-occurs with the preposition s(a), but (380) is synonymous with (381):

(381) Po livadi se šetala devojčica mala.

On the field promenaded the little girl.

The little girl walked over the field.

However the synonymy is not always obtainable:

(382) Devojkica skače po livadi.

The (little) girl is jumping all over the field.

(383) *Devojkica skače livadom.

The preposition po implies some aimless action, while the instrumental without a preposition, which denotes a patient, anticipates some aim. The sentence in (380) is taken from a song in which the next line indicates the purpose of the little girl's walk: she was picking flowers. Notice that no aim is implied in (382) or in (383). This is why po occurs in the former, and this is why the prepositional instrumental results ungrammatical in the latter. On the basis of the above observation it is proposed here that when the formative po becomes enriched by the feature [+aim], this feature assigns the instrumental case-feature to its sister head noun phrase. Then, [+po, +aim] becomes deleted. Notice that po used in this sense is [-directional], for one usually picks flowers here and there, and not in a specific direction.⁴⁰ Notice also that the sister constituent of that prepositional formative is patient. This is important because the manner in which a substantive is used determines whether or not a preposition can

be deleted. This was already demonstrated by (372-375) where avionom is a patient used as an instrument of locomotion. The feature [+instrument] is not within the prepositional formative, for s(a) by itself does not imply instrumentality. It is assumed here that the feature [+instrument] is transferred to the prepositional formative which is the sister constituent of a substantive denoting an instrument. Then, the instrumental case-feature is assigned to the instrument and the prepositional formative which is [+instrument] becomes optionally, but preferably, deleted. If the instrument is indeclinable the prepositional formative becomes the item s(a).⁴¹

It was already demonstrated that a [+associative] s(a) cannot be deleted. Thus, (384-385) are not related:

(384) On čisti sa Bogdanom.

He is cleaning with Bogdan. (That is, he and Bogdan are cleaning together.)

(385) On čisti Bogdanom.

He is cleaning with Bogdan. (Bogdan is the instrument of cleaning.)

Sentence (385) seems strange, but it may occur in the following context:

(386) Hrvač je podigao Bogdana i njime očistio
astal.

The wrestler lifted Bogdan up and cleaned
the table with him (with his body).

If the preposition s(a) occurs in the surface
structure of such sentences they become ambiguous:

(387) Hrvač je podigao Bogdana i s njime očistio
astal.

The wrestler lifted Bogdan up and cleaned
the table with him (both of them cleaned
the table or, alternatively, the wrestler
used the body of Bogdan to clean the table).

Because of the ambiguity created with the use of s(a),
it is better from the point of view of stilistics to
delete s(a) whenever the sister constituent of s(a)
denotes an instrument. However there are two const-
rains on the instrumental s(a) deletion:

(388) If the deletion leads to ambiguity s(a)
cannot be deleted.

(389) The preposition s(a) cannot be deleted
if it becomes the prefix of its sister
constituent.

Rule (389) is evident in the following structures:

(390) *A B Hrváč je podigao mene i mnome
očistio aстал.

The wrestler lifted me up and
cleaned the table with me (with
my body).

(391) *A *B Hrváč je podigao mene i mnom
očistio aстал.

(392) A *B Hrváč je podigao mene i sa mnom
očistio aстал.

The wrestler lifted me up and
cleaned the table with me (together
with me or, alternatively, with my
body).

The item mnome is the full-form instrumental of ja 'I'. This form is not used extensively in Standard Serbo-Croatian as spoken in Belgrade. The clitic-form mnom is preferred in this dialect. The item mnom is unstressed, but this cannot be the reason for the ungrammaticality of (391), since many other clitic and unstressed form may occur in a Serbo-Croatian sentence.

The following rule explains the ungrammaticality of (391):

(393) #[+Prep]##[+clitic]#—#[+Prep][+clitic]#.
[-stress]

The unstressed clitics agglutinate with any preposition which immediately precedes them. Rule (393) erases the internal word boundaries creating one word out of two. Now the preposition deletion rules cannot apply because they do not operate on the bound forms. Because of the rule in (393) sa in (392) is a prefix, even though the orthography does not show it: sa mnom is always pronounced as [sǎmnom]. The ungrammaticality of (391) shows in the most convincing way that the instrumental case of an instrument originates within a PP node and that the clitic rules and the words bounding rules precede the preposition deletion rules. Moreover, it is obvious that the case assignment rules precede the clitic rules, for a word cannot become a clitic before its case is known.

Consider now the following sentences in connection with (388).

(394) Hrvāci su podigli Bogdana i Mariju i
s njima obrisali a stal.

The wrestlers lifted up Bogdan and Mary
and wiped off the table with them (with
their bodies).

(395) Hrvači su podigli Bogdana i Mariju i njima obrisali astal.

The wrestlers lifted up Bogdan and Mary and wiped off the table for them.

??The wrestlers lifted up Bogdan and Mary and wiped up the table with them (with their bodies).

With the latter meaning, (395) is highly questionable. Oni 'they' has homophonous forms for the dative and the instrumental: njima 'they (dative or instrumental)'. Apparently the Serbo-Croatian language tolerates ambiguity if it occurs before the deletion of s(a), as it can be discerned in the numerous examples given previously, but the ambiguity must not be created by the deletion of s(a). It is for this reason that s(a) cannot be deleted from a structure such as (394) to produce (395).

V.3. The instrumental case in the predicate nominals.

Because of the deletion rules which operate on the preposition s(a), which leaves the instrumental case prepositionless in the surface structure, the writer was under the impression that the predicate nominals which occur in the instrumental should also

originate within PP nodes. However, there is no evidence whatsoever that this hypothesis may be correct. For instance, the writer could not find a single sentence whose predicate instrumental occurs prepositionless in most instances, but which must co-occur with some preposition (a) if the noun which would, otherwise, occur in the instrumental is indeclinable (b) if a noun in the instrumental is homophonous with the dative (as in (394-395)) or (c) if the instrumental is a clitic (as in (391-392)). Since there is no evidence for the assumption that the predicate instrumentals occur within PP nodes, this assumption must be abandoned.

The question that should be asked is: is it necessary to postulate that the predicate instrumentals originate within PP nodes? The answer is no because there are only two cases which can occur in the predicate nominal position: the nominative and the instrumental; and each case is assigned to a predicate nominal in a straight forward fashion. Just how the instrumental is assigned when in this position is explained in sections II.2.3. and II.2.4.

V.4. The instrumental case in passive constructions.

If an agent is allowed to appear in a passive construction in Serbo-Croatian it will occur either

In the genitive or in the instrumental:

(396) Ova tvrđjava je bila opkoljena od sviju.

This fort was besieged by everybody.

(397) Ova tvrđjava je bila opkoljena od Turaka.

This fort was besieged by the Turks.

(398) ?Ova tvrđjava je bila opkoljena Turcima.

This fort was besieged by the Turks.

(399) Ova tvrđjava je bila opkoljena vodom.

This fort was encircled with water.

(400) *Ova tvrđjava je bila opkoljena od vode.

This fort was encircled by water.

In modern Standard Serbo-Croatian as spoken in Belgrade, the passive agent occurs within a prepositional phrase whose preposition is od and this preposition co-occurs with the genitive. However if the agent is felt as the instrument it may occur as a prepositionless instrumental. Thus, Turcima in (398), for being felt as the instrument of besieging and encircling, appears in its instrumental case-form.

The active counterpart of (399) is

(401) Voda je bila opkolila ovu tvrđjavu.

Water encircled this fort.

The subject of (401) (voda 'water (nominative singular)') must occur in the instrumental when (401) is expressed

in its passive form because vod- is understood as the instrument of encircling--not as the agent of this action. There is a question of degree, however. Vodom in (399) ^{is} mostly an instrument and partly an indifferent agent. In (397) od Turaka is a phrase which conveys the notion of a willing group of agents--this group is not conceived by the speaker as the instrument of besieging. In (398) Turcima is conceived as some rather disinterested group of agents which is the instrument of encircling commanded by a higher authority. The situation in Serbo-Croatian is, then, as follows:

- (402) If a passive agent is felt as [+instrument] the instrumental case may occur. If a passive agent is felt as [-instrument] the genitive case must occur.

According to the statement in (402), (398) should be a grammatical sentence. In fact, it will be shown presently that the semigrammaticalness of this sentence is caused by the deletion of the preposition s(a) which creates a slight ambiguity, for (398) may mean 'This fort was besieged for the Turks' as well as 'This fort was besieged by the Turks'.

Suppose that the fort was besieged by a determined number of Turks:

(403) Ova tvrđjava je bila opkoljena od petsto
Turaka.

This fort was besieged by five hundred
 Turks.

(404) Ova tvrđjava je bila opkoljena sa petsto
Turaka.

This fort was besieged with five hundred
 Turks.

As (403) and (404) show petsto Turaka may be conceived
 as the agents or as the instruments of besieging.

Moreover, if the head noun of the phrase which denotes
 the instrument of besieging is indeclinable the pre-
 position s(a) must appear in the surface structure.

Notice that (405) is ungrammatical:

(405) *Ova tvrđjava je bila opkoljena petsto
 Turaka.

Since the preposition s(a) must appear with the
 indeclinable instruments it is reasonable to assume
 that all instruments occurring in passive constructions
 originate within a PP node whose Prep formative is s(a).
 Now, when this formative is deleted from the structure
 which underlies (398), (398) becomes ambiguous because
Turcima is the instrumental homophonous with the dative.
 It was already demonstrated in section V.2. that the

deletion which creates ambiguities is not permissible.

The discussion in this section leads to the conclusion that the instrumental case occurring in passive constructions originates within a PP node and that the Prep node dominated by this PP contains the formative s(a).

V. 5. The s(a) prepositional phrases as NP complements.

If a noun or a noun phrase denotes some action, the s(a) phrase complements may denote association or instrumentality:

(406) Rad sa kompjuterom.

The work with the computer.

(407) Rad kompjuterom.

The work with the computer.

(408) Rad sa Marijom.

The work with Mary.

(409) *Rad Marijom.

The item kompjuterom 'computer (instrumental)' is understood as the instrument with which some work was done or is being done. When s(a) prepositional phrases which denote instrumentality are noun or noun-phrase complements, s(a) need not be deleted. When s(a) phrases

are used in the associative sense, as before, s(a) cannot be deleted. However if PP phrases denote some patient agency the Prep formative, which may appear in the surface structure as the preposition po, may be deleted:

(410) Razgovor po telefonu.

The conversation by telephone.

(411) Razgovor telefonom.

The conversation by telephone.

(412) *Razgovor sa telefonom.

*The conversation with telephone.

If it is deleted, po becomes enriched with the feature [+aim]. With this feature the formative po assigns the instrumental case-feature to the head noun phrase of its sister constituent--then the formative po must be deleted. (See also pp. 180-181.)⁴²

The above examples show that the prepositionless instrumentals which function as NP complements originate within PP nodes.

V.6. The prepositionless instrumentals as time adverbials.

A time adverbial which denotes an iterative action may occur in the instrumental. If it does it is always

prepositionless. However, there is evidence that the prepositionless instrumental used in the iterative sense originates within a PP node. This evidence is found in the synonymy of some prepositional phrases whose preposition is po with the prepositionless instrumental, (Compare (380) to (381) and (410) to (411).) and the complete equivalency between a Russian iterative time adverbial headed by the preposition po and a Serbo-Croatian iterative time adverbial which occurs in a prepositionless instrumental. This is evident in the following sentences:

- (413) Ponedeljkom ja sam uvek kod kuće. (Sr. Cr.)
On Mondays I am always home.
- (414) ?Ponedeljcima ja sam uvek kod kuće. (Sr. Cr.)
On Mondays I am always home.
- (415) Po ponedel'nikam ja vségda doma. (Russian)
On Mondays I am always home.

In (413) ponedeljkom 'Monday (instrumental singular)' is in the instrumental singular and ponedeljcima 'Monday (instrumental plural)' is in the instrumental plural in (414). The plural form of the iterative instrumental is unnecessary in Serbo-Croatian in such sentences precisely because this instrumental is iterative in the singular. However, sentences such as (414) do occur.

In Russian the iterativeness is not felt unless ponedel'nik(-) 'Monday' is a sister constituent of the preposition po and unless it occurs in the plural. Moreover, when the preposition po is used in Russian in the distributive or the iterative sense the head noun of its sister constituent occurs in the dative. Thus, ponedel'nikam is in the dative.

On the basis of the similarities shown above, it is proposed here that the deep structure of (413) is as in Figure 26.

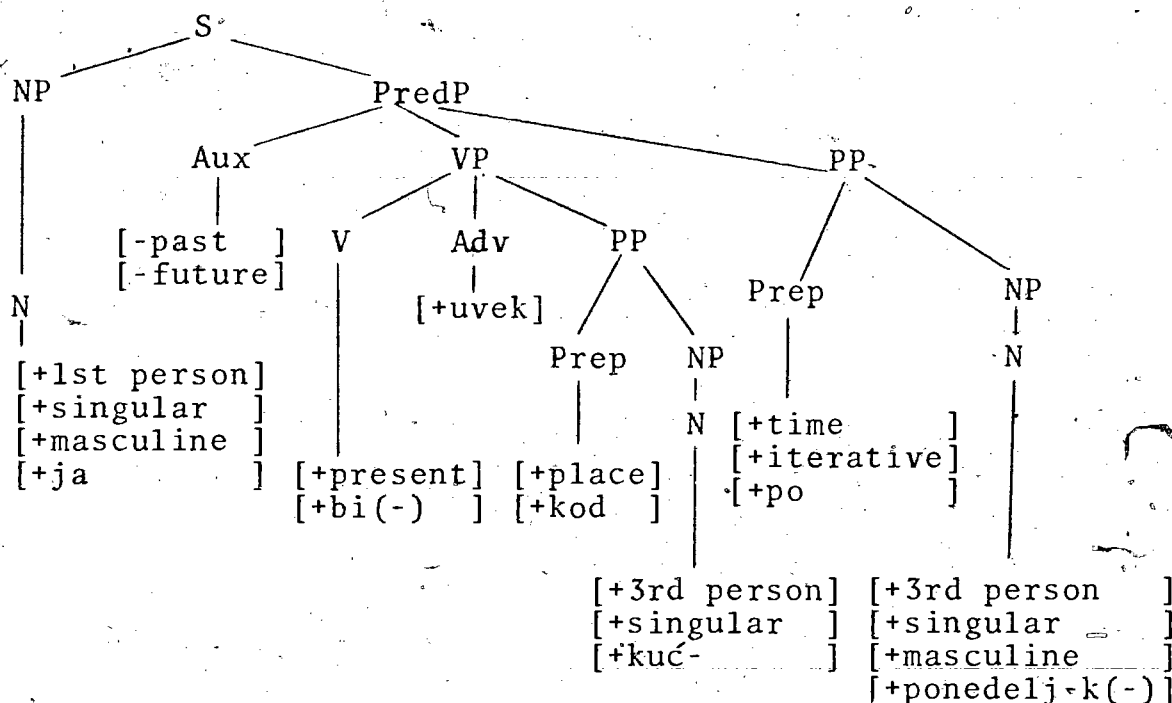


Figure 26.

The feature [+iterative] requires the instrumental case for its sister constituent, then the same feature

demands that its formative be deleted after the case assignment rules apply. This can be represented by the following formulas:

$$(416) \quad [+N] \rightarrow [+instrumental] / (PP (Prep \begin{matrix} [+time] \\ [+iterative] \\ [+po] \end{matrix})) (NP (N [+N, _]))).$$

$$(417) \quad (Prep \begin{matrix} [+Prep] \\ [+time] \\ [+iterative] \\ [+po] \end{matrix})) \rightarrow \emptyset.$$

These two rules must be ordered so that (416) precedes (417). However, since the preposition po must be deleted whenever its formative contains the features [+iterative] or [+aim], (Recall the examples in (380-381) and in (410-411).) and when its sister head noun phrase is in the instrumental, it is possible to rewrite (417) in such a way that the order of the case assignment rules and the preposition deletion rules becomes intrinsic:

$$(418) \quad \begin{matrix} [+Prep] \\ [+po] \end{matrix} \rightarrow \emptyset / (PP (Prep _) (NP (N \begin{matrix} [+N] \\ [+instrumental] \end{matrix})))).$$

V.7. Summary

It was established in this chapter that the predicate instrumental is the only instrumental case which occurs outside of a PP node. All the other

instrumentals occur within PP's in the deep structure. Some instrumentals occur within PP's whose Prep is the formative [+po, +aim] or [+po, +iterative]. The instrumental within these PP's is assigned by the rule in (416) and the Prep formatives are deleted as in (418). All the other instrumentals occur within PP's whose Prep formative is [+s(a), -separative]. (Recall that a [+separative] s(a) co-occurs with the genitive, and that s(a) does not co-occur with the accusative in Serbo-Croatian.) Thus, the instrumental within these PP's is assigned by the following formula:

$$(419) \quad [+N] \rightarrow [+instrumental] / PP(Prep[-separative] [+s(a)]) \\ (NP(N^{[+N], _}))]$$

The Prep formative s(a) may be deleted if its sister constituent's head noun phrase contains the feature [+instrumental] and if the formative s(a) is [-associative]:

$$(420) \quad \begin{array}{l} [+Prep \\ [-associative] \\ [+s(a)] \end{array} \rightarrow \emptyset / (NP(N^{[+N] [+instrumental]}))]$$

Rule (420) is rendered inoperative if rule (393) applies because (393) destroys the structures on which (420) may apply. Finally, (420) cannot apply if the deletion leads to ambiguity. (See constraint (388) and the examples that follow it.)

VI. The genitive case

VI.1. Introduction.

It is demonstrated in this chapter

(a) that a substantive in a prepositionless genitive which occurs in the surface direct object position denotes an unspecified quantity or a negated quantity of anything which may be described by such a substantive.

(b) that a topical phrase occurring in an existential sentence must be in the genitive if its quantifier terminates in a number greater than one, if the quantifier is a fraction, or if it denotes an unspecified or negated quantity of anything which may be described by such a phrase.

(c) that a prepositionless genitive occurring as a surface direct object or as a topical phrase of an existential sentence is always within a Quantifier-Phrase (QP) which expands as follow:

(421) $QP \rightarrow Q NP.$

where Q is a lexical node which dominates quantifiers.

The head noun of the NP which is the sister constituent of a Q formative occurs in the genitive if the Q formative is indeclinable.

(d) that a Q formative need not appear in the surface structure

(e) that a QP may occur in any position in the deep structure.

(f) that if a ~~prepositionless~~ genitive occurs as the head of a noun phrase which is not derived by rule (421) it originates within a PP node in the deep structure.

VI.1.1. Quantifiers in Serbo-Croatian.

The Serbo-Croatian quantifiers divide into three distinct groups:

- (a) numerical quantifiers
- (b) approximate quantifiers
- (c) unspecified quantifiers.

The numerical quantifiers are numbers and fractions. If a number is declinable, it behaves like an adjective. In particular, it differs from the indeclinable numbers in that agrees in gender with the quantified noun. When a QP contains a declinable quantifier it resembles an AP node. In Standard Serbo-Croatian (as spoken in Belgrade) jedan 'one', as well as the composite numbers ending in jedan, are the only numbers which remain declinable. (See also footnote 20.) All the other numbers require

the genitive case for the head noun phrase of their sister constituents. The numbers dva 'two', tri 'three', and četiri 'four' require the genitive singular and so do the numbers which end in dva, tri, and četiri. The number pet 'five' and any number greater than five require the genitive plural.

The approximate quantifiers resemble the numerical quantifiers in that they can be either declinable or indeclinable. Again, when they are declinable they behave like adjectives. However, the approximate quantifiers require the plural forms for the substantives which they quantify--whether they be declinable or indeclinable. The indeclinable approximate quantifiers require the genitive case for the head noun phrase of their sister constituents.

The indeclinable approximate quantifiers are the items such as malo 'some, a little, a few, few', mnogo 'much, a lot', mnoštvo 'a large number', nekoliko 'several, a few', nešto 'a bit, a few, some', and puno 'a lot, much, plenty'.

The declinable approximate quantifiers are the items such as mnogi 'many [diverse] (nominative plural, masculine)', mnoge 'many [diverse] (nominative plural,

feminine)', and mnoga '[diverse] (nominative plural, neuter)'.
 2

The unspecified quantifiers are evident in the following structures:

(422) Kupio sam olovaka. (genitive)

I bought some pencils.

(423) Kupio sam hleba. (genitive)

I bought some bread.

I bought bread.

When the prepositionless genitive occurs in the surface object position, it denotes an unspecified quantity of something. If the quantified noun is [+count], it must occur in the genitive plural. If the noun, quantified by an unspecified quantifier is [-count], it must occur in the genitive singular. Often a [-count] noun may be used in a [+count] sense. In such a use a mass-noun becomes a count-noun; if this happens it must occur in the genitive plural.

Traditionally, the genitive which occurs with the heads of the phrases which are sister constituents of an unspecified quantifier is called the partitive genitive. However, the label partitive fails to describe properly this type of genitive: (a) it does

not relate the partitive genitive to the other prepositionless genitives, particularly to those occurring after quantifiers, and (b) the so called partitive genitive is not always partitive. For instance, the meaning of (424) may or may not be partitive depending on the context:

(424) Dajte nam hleba. (genitive)

Give us bread.

Give as some bread.

Sentence (424) uttered by children would imply partitiveness, but if uttered by striking workers hleba would by no means be partitive, rather, by such a phrase they would demand all the bread they need to sustain themselves and their families.

Or consider (425-427):

(425) Mars ima samo dva satelita. (genitive)

Mars has only two satellites.

(426) Kupio sam olovaka. (genitive).

I bought some pencils.

(427) Kupio sam pet olovaka. (genitive)

I bought five pencils.

The feature [+partitive] does not relate olovaka in (426) to olovaka in (427) unless it is maintained that the numerical quantifiers are also partitive because

the speakers of Serbo-Croatian have a concept about numbers which makes pet olovaka a part of an indefinite whole. However, further investigation shows that this hypothesis is erroneous. For example dva satelita would have to be considered partitive although this phrase in (425) denotes the total number of Mars' satellites and not a part of the total number of satellites circling around the planet Mars.

The notion of partitiveness plays an important role in the assignment of the genitive case, as it will be demonstrated presently, but a generalization can be stated only through the intervention of quantifiers: an item occurs in the prepositionless genitive if it is preceded by an indeclinable quantifier.

There are certain verbs in Serbo-Croatian which admit only unspecified quantifiers:

(428) Marija je nabrala šljiva.

Mary picked some plums.

(429) ??Marija je nabrala pet šljiva.

Mary picked five plums.

(430) ??Marija je nabrala nekoliko šljiva.

Mary picked several plums.

(431) *Marija je nabrala sve šljive

Mary picked all the plums.

(432) *Marija je nabrala šljive.

Mary picked all the plums.

and there are verbs which admit only the quantifiers which imply totality:

(433) Marija je obrala sve šljive.

Mary picked all the plums.

(434) Marija je obrala šljive.

Mary picked all the plums.

(435) *Marija je obrala pet šljiva.

*Mary picked five plums.

Mary finished picking five plum trees.

Mary picked all plums from five plum trees.

(436) *Marija je obrala nekoliko šljiva.

*Mary picked several plums.

Mary finished picking several plum trees.

Mary picked all plums from several plum trees.

(437) *Marija je obrala šljiva.

((435-436) are ungrammatical if šljiv- refers to plums.)

Finally, there are verbs which admit the numerical and the approximate quantifiers but not the unspecified quantifiers or the quantifiers denoting totality:

(438) Marija je ubrala šljivu. (accusative)

Mary picked a plum.

Mary picked the plum.

(439) Marija je ubrala pet šljiva.

Mary picked five plums.

(440) Marija je ubrala nekoliko šljiva.

Mary picked several plums.

(441) ?Marija je ubrala šljiva.

Mary picked some plums.

(442) *Marija je ubrala sve šljive.

Mary picked all the plums.

(443) *Marija je ubrala šljive.

Mary picked all the plums.

For the writer, (441) is ungrammatical, but some speakers feel that (441) is a possible alternative to (428), the latter being slightly better. Moreover, the speakers who feel that (441) is grammatical also feel that (437) is semigrammatical.

Obviously, the verbs nabrati, obрати and ubрати admit quantifiers, but the selection restrictions admit some quantifiers and prohibit co-occurrence with other quantifiers. The verb nabrati clearly implies partitiveness, therefore it is [+partitive]. The verb obрати refers to a total amount, therefore

one of its inherent features is the feature [+total]. The verb ubрати is [-total, -partitive] because it does not admit a quantifier denoting totality or partitiveness. Therefore the deep structure of (428) is as in Figure 27.

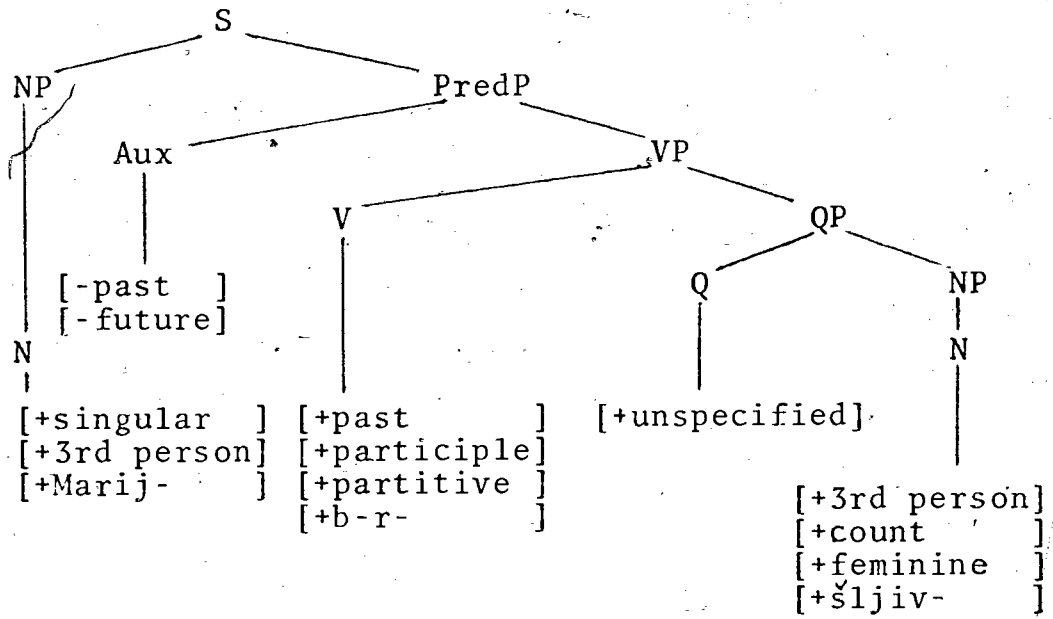


Figure 27.

If the verb formative b-r- is unmarked for partitiveness or totality, its infinitive form becomes brati 'to pick, to gather'. (Brati admits all quantifiers.) If it is marked for partitiveness, its forms are prefixed with na-. The [+partitive] b-r- admits only the unspecified quantifiers. If the quantified N is a formative which contains the feature [+count], it must occur in the plural. And, if the quantifier is indeclinable, the quantified N formative obtains the

case feature [+genitive]. The indeclinable formatives are marked with the feature [-case suffix]. Such formatives obtain the case features which are assigned to them by the case-assignment rules, but in the surface structure these formatives become items which lack a case-suffix. It is assumed here that the genitive is assigned to the head noun of a quantified noun phrase by the following rule:

$$(444) \quad [+N] \rightarrow [+genitive] / \text{QP}(Q[-\text{case suffix}]) \\ (\text{NP}(\text{N}[+N, _]))).$$

The unspecified quantifiers are always marked with the feature [-case suffix].

The deep structure of (433) is represented in Figure 28.

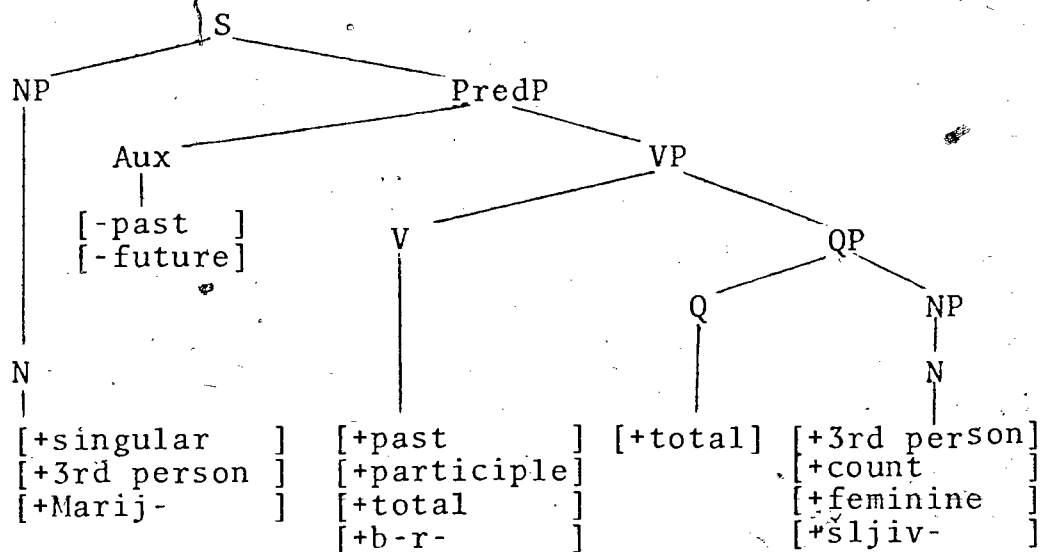


Figure 28.

The formative b-r- containing the feature [+total] obtains the prefix o(b)- in the surface structure. It only admits the quantifiers which denote totality, such as s-v(-) 'all'. This formative is declinable. The formative s-v(-) occurs in the singular if its quantified noun is [-count]: sav secer 'all the sugar', sva voda, 'all the water', svo brašno 'all the flour'. If the quantified noun is [+count] s-v(-) occurs in the plural: svi tanjiri 'all the plates', sve olovke 'all the pencils', sva sela 'all the villages'. If the meaning of s-v(-) is entire, it occurs only in the singular: sav tanjir 'the entire plate' sva olovka 'the entire pencil', svo selo 'the entire village'.

It was already shown that a declinable quantifier obtains the case feature as any other substantive (See footnote 20.) and that the quantified head noun agrees in case with the declinable quantifier. Thus, it is evident that both the quantifier and the quantified N formative in Figure 28 must occur in the accusative.

When a verb contains the feature [+total], the quantifier s-v(-) may be deleted in the shallow structure. This deletion follows the case assignment rules. Thus the structure in Figure 28 is the deep structure of (434) as well as of (433).

The deep structure of (438) is shown in Figure 29.

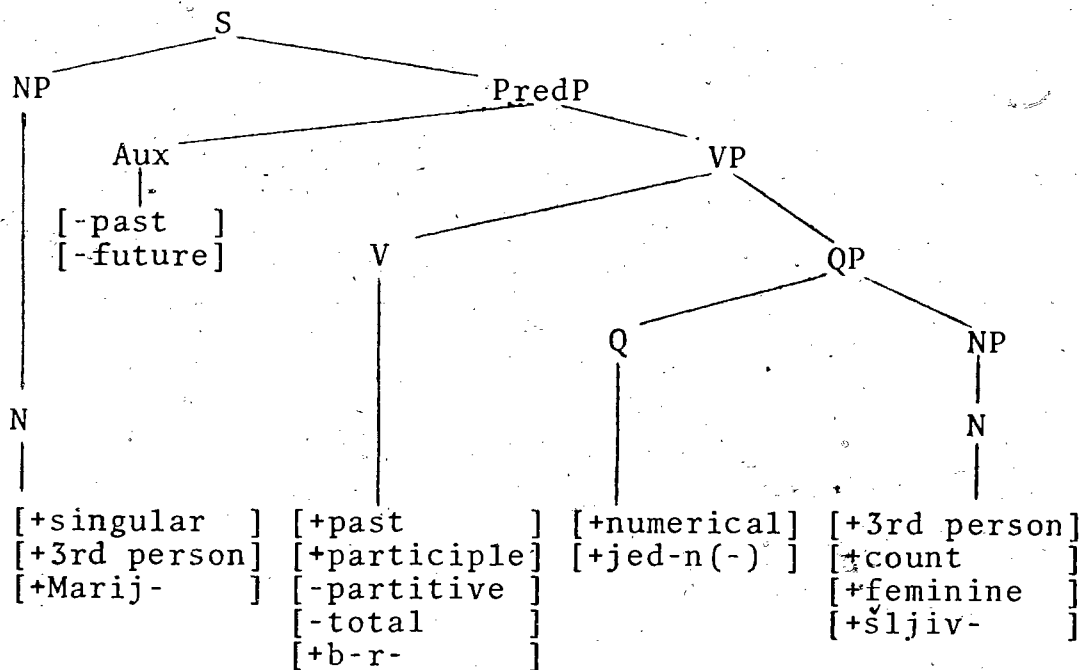


Figure 29.

The formative jed-n(-) is declinable; therefore, if no TTT applies to the deep structure in Figure 29, the case assignment rules assign the feature [+accusative] to it. The quantified noun obtains the same feature. The formative b-r- obtains the prefix u- if it contains the features [-partitive, -total].

If the numerical quantifier admitted by the verb in figure 29 is indeclinable, the quantified noun occurs in the genitive. This is shown by sentence (439).

It is also shown by sentence (440) that this verb formative admits the approximate quantifiers. The approximate quantifier in (440) is indeclinable;

therefore, the rule in (444) applies to the quantified noun in (440).

It was demonstrated by the examples of sentences with the verbs nabrati, obрати, ubрати that only certain specific quantifiers may occur after each of those verbs and, what is more important, that the numerical quantifiers are not [+partitive]; because if they were, they could not co-occur with a [-partitive] verb such as ubрати.

There are structures in Serbo-Croatian which preclude the unspecified and the numerical quantifiers:

(445) Mi fabrikujemo olovke. (accusative)

We manufacture pencils.

(446) Mi fabrikujemo sve olovke.

We manufacture all pencils.

(447) Mi fabrikujemo sve vrste olovaka.

We manufacture all kinds of pencils.

(448) *Mi fabrikujemo olovaka. (genitive)

We manufacture some pencils.

(449) *Mi fabrikujemo pet olovaka.

*We manufacture five pencils.

(450) ?Mi fabrikujemo mnogo olovaka.

We manufacture many pencils.

(451) Mi fabrikujemo mnogo olovaka godišnje.

We manufacture many pencils per year.

(452) Mi fabrikujemo pet olovka dnevno.

We manufacture five pencils daily.

These examples show that if a progressive action is implied the approximate and the numerical quantifiers occurring after such verbs do not form grammatical sentences unless these are modified by some time adverbial. Because neither the numerical nor the unspecified quantifiers cannot occur in such constructions, and because the former are not partitive and the latter may or may not be partitive, and yet both are excluded from such constructions, it is reasonable to conclude that the common denominator for both groups is quantification and not partitiveness.

The unspecified quantifiers may differ from each other by the assigned features. For instance, they may be [+singular] or [+plural], but the inherent features of the unspecified quantifiers are always the same. Thus, there is only one unspecified quantifier. The unspecified quantifier always requires the genitive for the head of its sister constituent and this genitive marks the absence of the unspecified quantifier in the surface structure. Evidently, the unspecified quantifier cannot be [+dual] because then, by definition, it would not be the unspecified quantifier.

VI.1.2. The negated quantity and the negated existence.

It was demonstrated in the previous section that some constructions do not allow the occurrence of the unspecified quantifier. These constructions are exceptional. Most Serbo-Croatian sentences readily admit quantifiers:

(453) Marija je kupila olovku. (accusative)

Mary bought a pencil.

Mary bought the pencil.

(454) Marija je kupila olovke. (accusative)

Mary bought pencils.

Mary bought the pencils.

(455) Marija je kupila olovaka. (genitive)

Mary bought some pencils.

Mary bought pencils.

*Mary bought the pencils.

The first meaning of (453) derives from a structure which contains the numerical quantifier jedan 'one', hence the accusative olovku occurs.

The first meaning of (454) derives from a structure which has an indefinite plural noun phrase in the direct object position. The second meaning of this sentence comes from its definite plural noun phrase occurring in the direct object position. Neither of

the two structures have a QP in the direct object position. The second meanings of (453) and (454) differ only because the direct object of the former is an NP in the singular and of the latter is an NP in the plural.

The sentence in (455) has a QP in the direct object position and its Q dominates the unspecified quantifier which can never be [+definite]. It was already demonstrated in the previous section that the unspecified quantifier may be either [+partitive] or [-partitive]. Thus, for the first meaning of (455) the unspecified quantifier is [+partitive] and for the second meaning [-partitive].

Notice that a singular [+count] item cannot occur in the genitive singular when it is in the direct object position:

(456) Marija je kupila jednu olovku.

Mary bought one pencil.

Mary bought a pencil.

(457a) *Marija je kupila jedne olovke. (genitive singular)

(457b) Marija je kupila jedne olovke. (accusative plural)

Mary bought some pencils.

However, if a quantity is negated, even a [+count] noun may occur in the genitive singular:

(458) Marija nije kupila ni jedne olovke.

(genitive singular)

Mary did not buy a single pencil.

(459) Marija nije kupila olovke. (genitive singular)

Mary did not buy a single pencil.

But the genitive need not occur:

(460) Marija nije kupila ni jednu olovku.

Mary did not buy a single pencil.

(461) Marija nije kupila olovku.

Mary did not buy a pencil.

Mary did not buy the pencil.

(462) Marija nije kupila olovke. (accusative plural)

Mary did not buy pencils.

Mary did not buy the pencils.

(463) Marija nije kupila olovaka. (genitive plural)

Mary did not buy any pencils.

Mary did not buy pencils.

When the genitive singular occurs in a negative statement, it is clear from the above examples that this genitive is optional. However, it is also clear

that it occurs only if the quantity is negated. This optional genitive becomes obligatory in the existential sentences:

(464) Ima jedna devojka u selu koja se zove Marija. (nominative singular)

There is a girl in the village whose name is Mary.

(465) Nema ni jedne devojke u selu koja se zove Marija. (genitive singular)

There is not a (single) girl in the village called Mary.

(466) ?Nema ni jedna devojka u selu koja se zove Marija.

When a topical noun phrase in an existential sentence is indefinite, the genitive seems to be optional, but when a topical phrase is definite the genitive singular is obligatory:

(467) Nema Marije u školi. (genitive)

There is not a trace of Mary in the school.

(468) *Nema Marija u školi. (nominative)

VI.1.3. The existence brought into focus.

When the existence is brought into focus, either the nominative or the genitive may occur and both cases

are considered grammatical when in the singular:

(469) Eno Marije. (genitive)

There is Mary.

(470) Eno Marija. (nominative)

There is Mary.

But a plural topical phrase brought into focus must be in the genitive:

(471) Eno njih. (genitive)

There they are.

(472) *Eno oni. (nominative)

The feature of focus is within the word eno 'there is'. This translation is misleading because eno is not a demonstrative verb as the translation implies, but simply a demonstrative pronoun.

Working under the assumption that sentences must have a verb in their deep structures, it is proposed here that the deep structure of (469) is as in Figure 30.

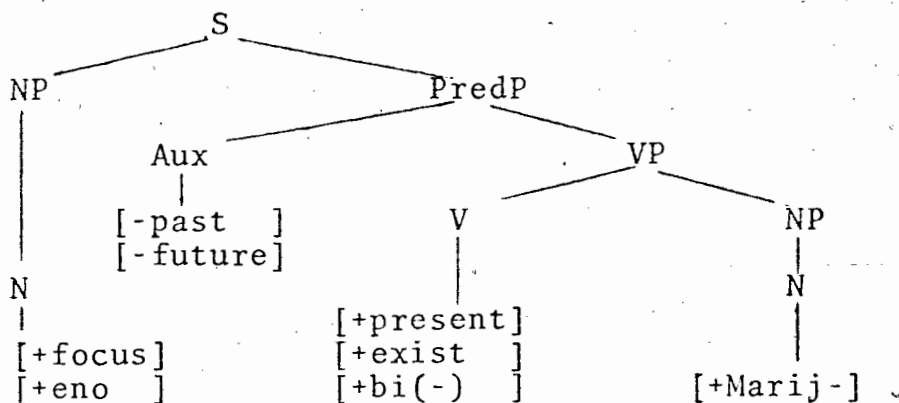


Figure 30.

From the structural point of view, Marij- should occur in the nominative case because it occurs in the predicate nominal position. However, many speakers consider the features occurring within the verb bi(-). This has been already demonstrated when the instrumental versus the nominative occurring in similar constructions were discussed. Thus, when the feature [+existence] occurs within the verb, and the feature [+focus] occurs within the subject, the predicate nominal obtains the feature [+genitive].

Therefore, for the speakers who do not consider these features, the deep structure in Figure 30 produces (470), and for the speakers who do consider these features, the same structure produces (469).

The verb formative [+present, +existence, +bi(-)] must be deleted in any Serbo-Croatian dialect for there are no structures such as

(473) *Eno je Marije.

There is Mary.

(474) *Eno je Bogdana.

There is Bogdan.

((473) is ungrammatical if je is a bi(-)-form.)

VI.1.4. The genitive in the existential sentences.

The existential sentences have been already discussed in sections I.2.1, II.3, and II.3.2. It is demonstrated there that the nominative case of topical noun phrases occurs only if the head of a topical noun phrase is a quantifier. In the present chapter this rule has been modified by the introduction of the QP node within the categorial component of the grammar, where a topical NP of a positive existential sentences is dominated by the QP node.

Of all the quantifiers which exist in Serbo-Croatian, only a [+total] quantifier cannot quantify a topical phrase:

(475) *Ima sve devojke u školi.

*There are all girls in the school.

A nonquantified topical noun phrase cannot occur in a positive existential sentence because these are felt in such constructions as [+definite].

Since only a quantified noun phrase may be a topical phrase of a positive existential sentence, the genitive occurs in such phrases because they are quantified and not because they are topical noun phrases. The case rule which assigns the feature

[+genitive] is given in section VI.1.1.

For the negative existential sentences the following deep structure is proposed here:

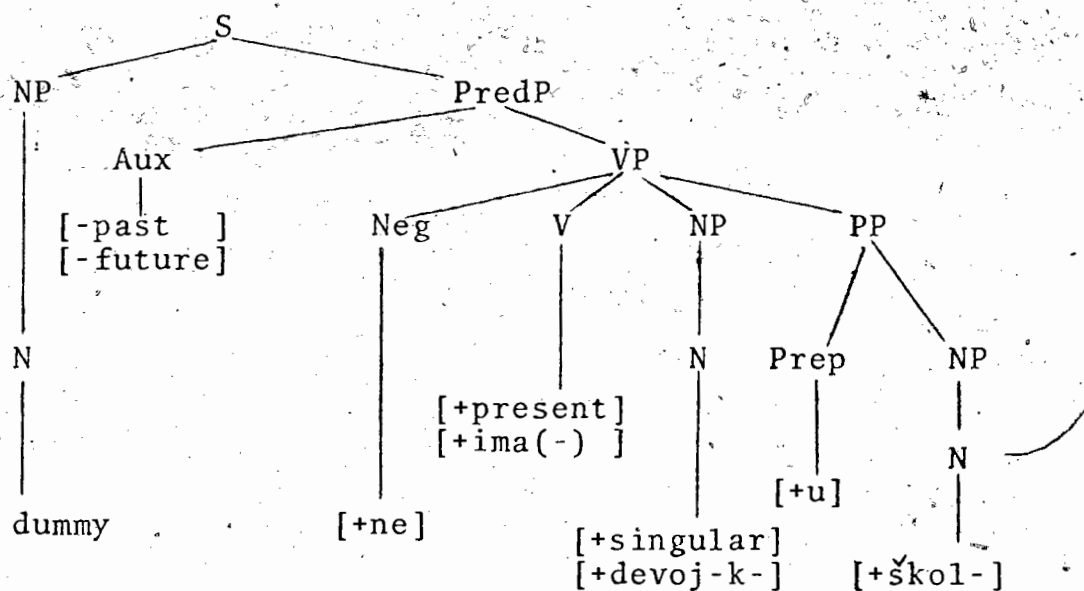


Figure 31.

Recall that when the subject of ima(-) is empty, ima(-) is always [+existential]. And, when the existence is negated, the topical phrase must occur in the genitive. Therefore, the structure in Figure 31 produces (476).

(476) Nema devojke u školi.

There is not a trace of the girl in the school.

Recall also that the past tense of an existential sentence such as (476) is

(477) Nije bilo devojke u školi.

In (477) bi(-) occurs instead of ima(-). This substitution is explained in section II.3.2.

The case assignment to the formatives whose existence is brought into focus and to the formatives whose existence is negated is executed in the similar manner:

(478) $[+N] \rightarrow [+genitive] / (VP (VP (Neg [+negative]) (V [+existence] [+3rd person] [+bi(-)])) (NP (N [+N, _]))))$.

(479) $[+N] \rightarrow [+genitive] / (S (NP (N [+Pro] [+focus] [+x])) (VP (VP (V [+existence] [+3rd person] [+bi(-)])) (NP (N [+N, _])))))$.

(Here [+x] stands for any formative containing the feature [+focus].)

If the features [+focus] or [+negative] do not appear in conjunction with the feature [+existence], the genitive cannot be assigned to an NP which is not quantified.

VI.2. The genitive within PP's.

There are more than twenty prepositions which co-occur exclusively with the genitive. These prepositions do not cause any problems and they will not be discussed.

However, there are two prepositions which must be discussed. One is the preposition s(a) which co-occurs with the genitive when the structure in which it appears denotes separation; otherwise, as it is shown in the chapter on the instrumental, it co-occurs with the instrumental case. The other one is the preposition od. This preposition always co-occurs with the genitive but, unlike the other prepositions which co-occur with the same case, od often becomes deleted in the surface structures.

VI.2.1. The separative s(a).

Compare (480) to (481):

(480) On je skočio sa stolice (u bunar).

He jumped off the chair (into the well).

(481) On je skočio sa stolicom (u bunar).

He jumped into the well with the chair.

In (480) the preposition s(a) is [+separative] and as such it requires the genitive for the head of its sister constituent (stolice is in the genitive).

In (481) s(a) is [-separative] and as such it assigns the feature [+instrumental] to the head of its sister constituent through the rule in (419).

The genitive is assigned to the formatives go-

verned by the separative s(a) through rule (482)

- (482) [+N] → [+genitive]/_{pp}(_{prep}[+separative]
[+s(a)]
(_{NP}(_N[+N, __])))).

VI.2.2. The preposition od.

There are many instances in which the preposition od is clearly deletable:

- (483) Marija se plaši od Jovanke.

Mary is afraid of Joan.

- (484) ~~Marija se plaši~~ Jovanke.

Mary is afraid of Joan.

The sentences in (483-484) are completely synonymous; therefore, it stands to reason that (483) underlies (484).

There are such pairs of sentences whose synonymy is not complete when od is lacking:

- (485) Marija se stidi od Jovanke.

Mary is ashamed of Joan. (Mary probably wronged Joan, and she is uncomfortable in Joan's presence.)

- (486) Marija se stidi Jovanke. (Mary

Mary is ashamed of Joan. (Joan, for some reason, is a person whom Mary considers inferior and because of that she shuns her company.)

Some speakers are aware of the difference of meaning between (485-486) and similar sentences, some claim that bought meanings may be assigned to either one of these two sentences, and some would say that the meaning assigned here to (486) is a pure fiction, claiming that both sentences have the meaning of (485). For the writer the two sentences are not synonymous; therefore, (485) and (486) must derive from two different deep structures. If so, there are two possibilities: (a) Jovanke occurring in (486) originates outside of a PP node and (b) Jovanke occurring in the same sentence originates within a PP node whose Prep node dominates a prepositional formative od which is different than the preposition od in (485). Possibility (a) must be dismissed because, then, the formative Jovank- would be in the direct object position at the time the case assignment rules operate and in such a position Jovank- would occur in the accusative and not in the genitive. Therefore, we are left with the possibility in (b).

Thus, it is proposed here that the deep structure of (485) is as in Figure 32, and that the deep structure of (486) is represented by Figure 33.

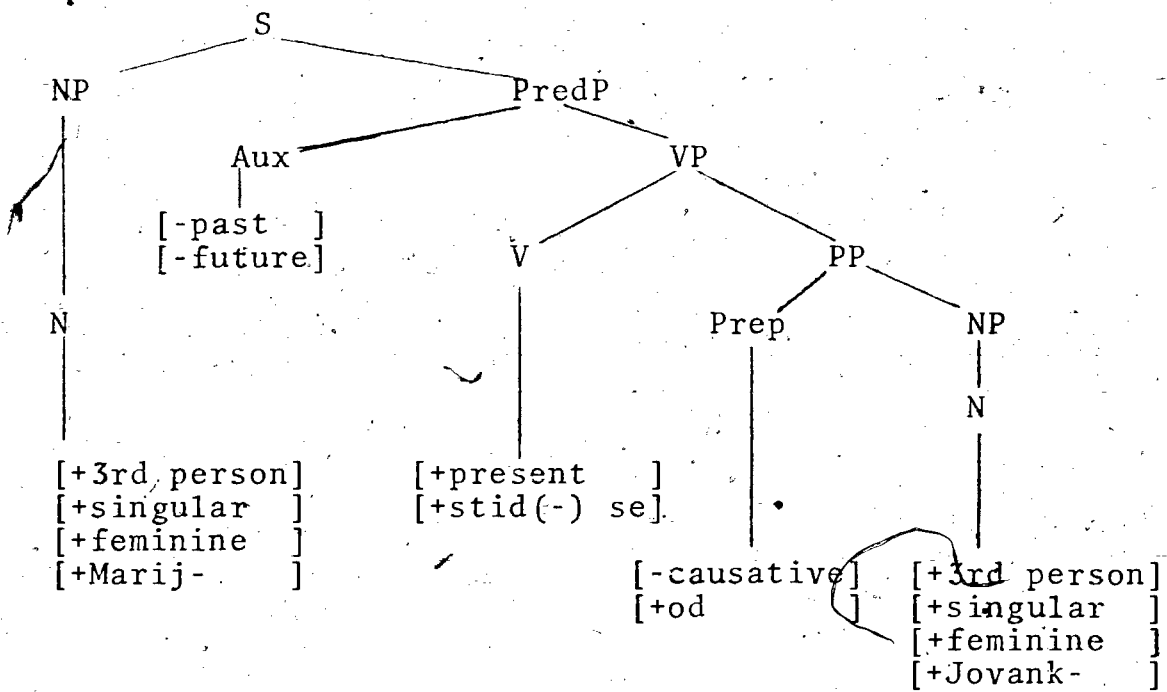


Figure 32.

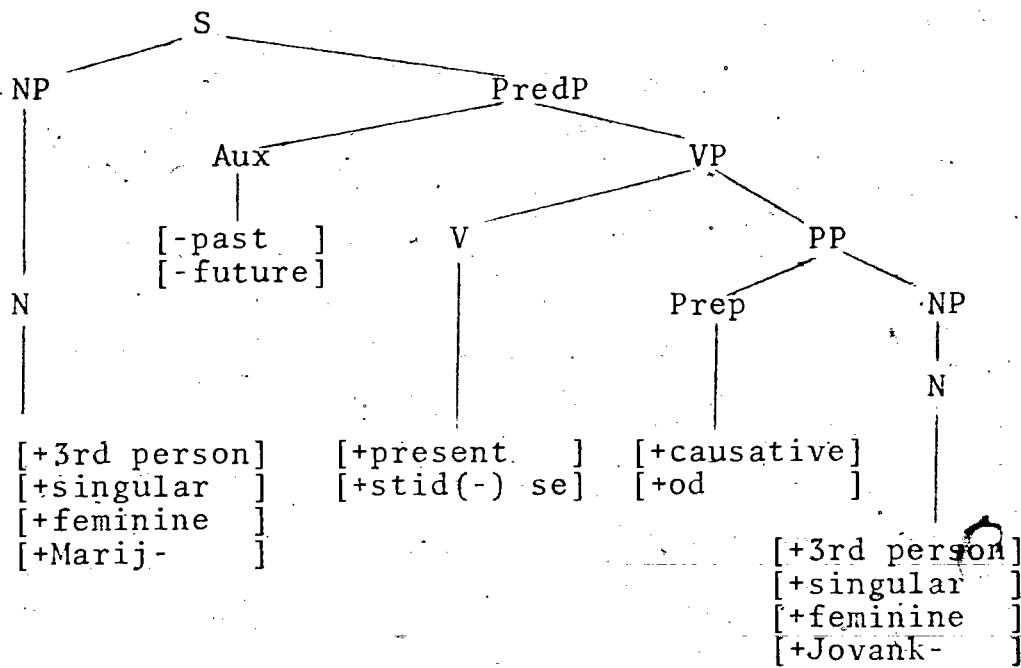


Figure 33.

In Figure 33 the [+causative] od is obligatorily deletable in the writer's dialect; it is optionally deletable in some other dialects, and it is not deletable in the other Serbo-Croatian dialects.

One could ask why there must be a formative which spells out od within the PP in Figure 33 rather than some other prepositional formative? The reason for assuming that the two sentences have two different od formatives in the deep structure is justified because the item od occasionally does appear in the surface structure generated by the structure in Figure 33. However, some care is necessary in positing prepositional formatives in the deep structure because not all prepositional genitives have the preposition od in the deep structure:

(487) To me seća na minule dane. (accusative)

This reminds me of the bygone days.

(488) Marija se seća svoje susedke. (genitive)

Mary remembers her (female) neighbour.

(489) ?Marija se seća na svoju susedku. (accusative)

Mary remember her (female) neighbour.

(490) *Marija se seća od svoje susedke.

The examples in (487-490) demonstrate clearly that

when a preposition appears in the surface structure of sentences containing the verb seća- the preposition is na and not od. When na appears in the surface structure, the head of its sister constituent occurs in the accusative, but when na is deleted in the surface structure, the head of its sister constituent occurs in the genitive. What would be the most logical deduction that one could derive from (487-490) and the observations which followed? It seems logical to assume, that a [+causative] na requires the genitive for the head of its sister constituent, then, that the [+causative] na becomes obligatorily deleted in the writer's dialect.⁴³ It would not be very revealing nor more economical to write od₁, od₂, od₃, na₁, na₂, na₃ because with such an exposition it would be necessary to state which na governs the accusative, which governs the locative, and which requires the genitive. With the exposition used in this work both the causative na and the causative od require the genitive. When this is considered together with the Serbo-Croatian causative preposition zbog 'because of' which always requires the genitive for the head of its sister constituents, this exposition introduces some explanatory criteria: the genitive is primarily, in the above instances, caused

by the feature [+causative]--not by od₂ and na₃.

Consider also the following noun phrases:

(491) Drška od kofera.

The suitcase handle

(The handle belonging to a suitcase.)

(492) Drška kofera.

The suitcase handle

(The handle belonging to a suitcase.)

(493) Kutija od šibica.

The match box.

The box made of matches.

(494) Kutija šibica.

The match box.

*The box made of matches.

It is obvious that (493) underlies (494) when od is [+possessive], and it is obvious that the possessive od may be deleted. However, when od is used in the sense of napravljena od 'made of' it cannot be deleted. In these examples, when od is a formative containing the feature [+quality], it could be proposed that (493) derives from (495)

(495) Kutija napravljena od šibica.

The box made of matches.

where 'gapping' produces (493). However the verb de-

letion does not always create synonymous structures:

(496) Kuća napravljena od karata.

The house made of cards.

(497) Kuća od karata.

A fragile construction or a poor quality of something.

Therefore, the hypothesis that (493) is the result of a specific verb deletion must be incorrect.

There are several other od formatives which may become deleted in the surface structure. It would be interesting to enumerate all the features that permit the deletion of od. However, the deletion rules which apply to this preposition are, somehow, peripheral to the topic of the assignment of the genitive case, particularly because all od formatives co-occur with the genitive. The only reason that these deletions are being discussed here is to prove that the nonquantified prepositionless genitive occurs within a PP node, and the examples given in this chapter lend more than sufficient support to this claim.

VII. The dative case

VII.1. Introduction.

Here, the writer puts forth the following arguments in support of the hypothesis stated in the chapter on the accusative case that the dative case originates within PP nodes:

(a) a prepositionless dative occurring in a surface direct object position could not occur in that position at the time the case rules apply.

(b) there is enough empirical evidence to establish a PP node for the deep structure of any prepositionless dative.

VII.2. The dative in the direct object position.

Consider the following sentences:

(498) Marija zadovoljava Bogdana. (accusative)

Mary pleases Bogdan.

Mary satisfies Bogdan.

(499) Marija ugadja Bogdanu. (dative)

Mary pleases Bogdan.

Mary satisfies Bogdan.

The two sentences are near synonyms--it is hard to pinpoint the difference in meaning between the verbs

zadovoljiti and ugoditi or between their imperfective forms zadovoljavati and ugadjati. It is clear, however, that both verbs indicate that a beneficial action is being performed in someone's behalf. The dative case usually occurs if an action is performed for the benefit or advantage of someone, or for the disadvantage of someone. Because of this, the datives occurring after such verbs are traditionally called commodi and incommodi datives, respectively. The observations of the traditional grammarians were usually intuitively correct: they were right when they claimed that the dative occurring after a verb such as ugadjati is due to the feature commodi which is implied by these verbs. However, the traditional grammarians could not explain satisfactorily why the dative does not occur after the verb zadovoljiti. Again, the traditional grammarians dealing with Serbo-Croatian repeatedly offered an intuitively correct path to the solution of this problem: the item occurring in the dative is dopunski objekt 'complementary object' or daleki objekt 'distant object' and the item occurring in the accusative is bliski objekt 'direct object' or direktni objekt 'direct object'. They were unable to explain, without abandoning the framework of the traditional grammar, why would

Bogdana in (498) be a direct object and why would Bogdanu in (499) be a distant or indirect object.

Within the framework of the transformational grammar the features commodi, incommodi can be restated as the features [+commodi]; [+incommodi], stating that they form part of the formatives [+zadovolj-, +commodi], [+ugod-, +commodi]. Within the same framework, it must be assumed that the deep structural ~~pre~~ pre-lexical branching diagrams of (498) and (499) differ to such an extent as to be able to differentiate a direct object from an indirect object. At the same time it is necessary to find some empirical evidence to justify positing two different pre-lexical deep structures for (498) and (499). This evidence will be given in the next section.

Consider also the following sentences:

(500) Sudite me! (accusative)

Put me on trial!

(501) Sudite mi! (dative)

Form a judgment about me!

In (500) the speaker demands a trial--nothing is said or implied about the expectations of the speaker. In (501) the speaker expects a decision which will be either for his advantage or his disadvantage. Here,

it would be possible to posit in an ad hoc manner that there are two verbs suditi one being [+commodi] or [+incommodi] and the other [-commodi] or [-incommodi], where the former requires the dative for its direct objects and the latter the accusative for its direct objects. Such a solution would not be satisfactory for the two previous sentences, however, because both verbs occurring in (498-499) carry the feature [+commodi]. Since the ad hoc solutions are not only unacceptable, but also unrevealing, the above solution is to be considered incorrect. Instead it is proposed here that the difference lies primarily in the strict subcategorization of these verbs and only secondarily in the features of these verbs. Thus, zadovolj- is subcategorized as [__+NP, -PP]; ugod- as [__-NP, +PP]; and sud- as [__+NP, +PP]. If a commodi or incommodi verb is subcategorized by a PP, the dative will occur within that PP, but if the same type of verbs are subcategorized by an NP, the accusative must occur. The dative is assigned to the head of the NP dominated by the PP node in the following manner: the feature [+commodi] or the feature [+incommodi] is transferred onto the Prep formative; when the Prep formative contains one

of these features, the case rules assign the feature [+dative] to the object of the prepositional formative. Then, the prepositional formative becomes obligatorily deleted. The next section of this chapter deals with this prepositional formative. It is demonstrated there that this formative appears occasionally in the surface structure as the preposition na.

VII.2.1. The dative occurring within PP's.

It was demonstrated throughout the previous chapters that the prepositional formatives are not deletable if the head of their sister constituents obtains the [+locative] or the [+accusative] feature, but that they may be deleted if the head of their sister constituents obtains the [+instrumental] or the [+genitive] case-feature. Also, it was shown that the prepositional formatives which can be deleted (after the case rules assign the [+instrumental] and the [+genitive] features) become the prepositions s(a), od, and less frequently the preposition na if the deletion rule fails. The deletion of these formatives creates complexities of various degrees. The preposition od always co-occurs with the genitive and

because of this its deletion is not problematic:

(502) On se plaši od te žene. (genitive)

He is afraid of this woman.

(503) On se plaši te žene. (genitive)

He is afraid of this woman.

Sentences (502-503) are synonymous and are derived from the same deep structure. The prepositional formative od becomes optionally deleted in the shallow structure. If it is deleted, (503) becomes generated; if it is not deleted, (502) becomes generated, but the object of the prepositional formative is always in the genitive.

The deletion of the preposition s(a) creates more complexities. First, s(a) may co-occur with the genitive as well as with the instrumental. When s(a) co-occurs with the genitive, it cannot be deleted. Second, when the preposition s(a) co-occurs with the genitive, s(a) is always a place preposition. Third, when s(a) is not a place preposition, it co-occurs with the instrumental. Fourth, when s(a) co-occurs with the instrumental, it may become deleted under specific conditions--as explained in the chapter dealing with the instrumental case. Fifth, the [-place] s(a) cannot be deleted if the head of its sister constituent is indeclinable. The fifth con-

dition is a subpart of a general rule which prevents the deletion of any preposition if the head of its object is not clearly marked in the surface structure with a case morpheme which permits such a deletion. Thus, a formative containing the feature [-case suffix] which is the head of the object of a preposition will always block the preposition deletion rule. Therefore, it can be stated that the preposition deletion becomes blocked if the head of its sister constituent is either [+locative], [+accusative] or [-case suffix].

In the surface structure the preposition na may co-occur with the locative or with the accusative case. When this item is [-place], it co-occurs with the accusative exclusively.

The prepositional formative [+na, -place] may co-occur with the genitive, the accusative, or the dative. It will co-occur with the genitive if it carries the feature [+causative] and it may co-occur with the dative if it contains the feature [+comparative] or some other feature which requires the dative in Serbo-Croatian. Observe the following sentences:

(504) Jovanka je nalik na Bogdana.

Joan is similar to Bogdan.

Joan resembles Bogdan.

(505) Jovanka je nalik Bogdanu.

Joan is similar to Bogdan.

Joan resembles Bogdan.

Sentences (504-505) are synonymous; therefore, it is not unreasonable to assume that they are generated by the same deep structure. This assumption becomes quite appealing when viewed in conjunction with the preposition deletion rules outlined in this section. It is claimed here that the deep structure of (504-505) is as in Figure 34.

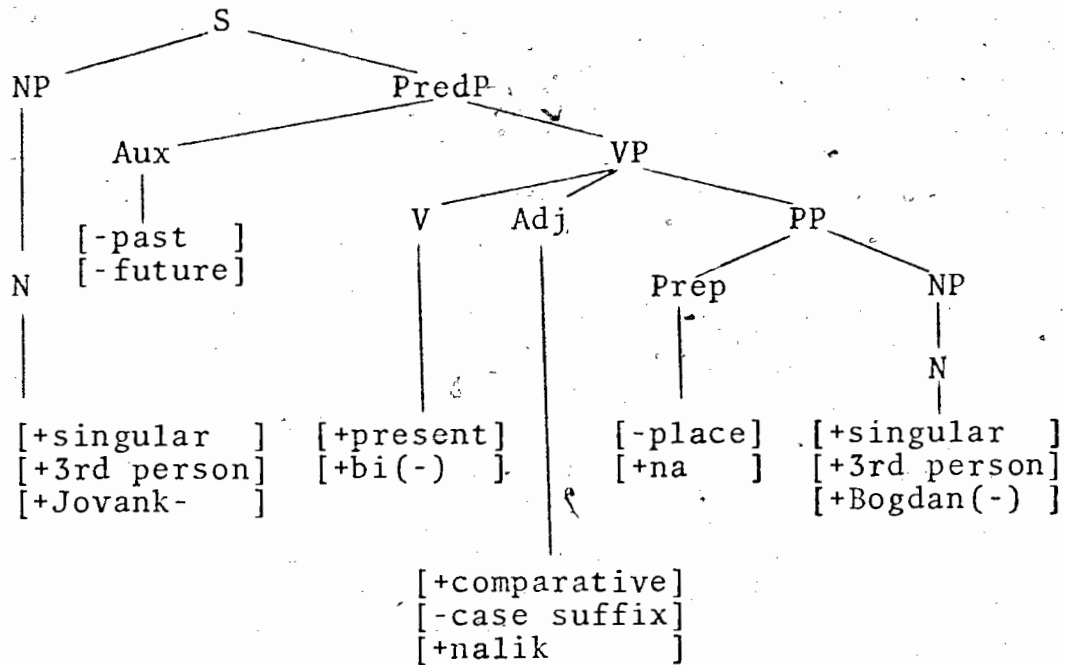


Figure 34.

The adjective nalik contains the feature [+comparative]. For the sake of uniformity it is assumed that the features are transferred onto the Prep

formative in the same way as the agreement features. Thus, the formative [-place, +na] becomes [-place, +na, +comparative]. When na is [-place] it requires the [+accusative] case-feature for the head of its sister constituent; if this na is also [+comparative] it, still, may require the [+accusative] feature or, alternatively, it may require the [+dative] feature for the head of its sister constituent. Apparently, (504) and (505) are in free variation. A speaker may decide to ignore or not to ignore the feature [+comparative] at the time the case rules apply. If he refuses to take notice of this feature, the head of the object of the [+comparative] na will occur in the accusative. Then, this na cannot be deleted. If the speaker does take notice of the feature [+comparative], the case-feature [+dative] will be assigned instead. Then, this na must be deleted.

The prepositionless dative is obligatory for the indirect objects occurring in Serbo-Croatian:

(506) Dajem olovku učitelju. (dative)

I give a pencil to a teacher.

(507) Dajem olovku njemu. (dative)

I give a pencil to him.

(508) Dajem mu olovku. (dative)

I give him a pencil.

However, compare these Serbo-Croatian sentences to the following Bulgarian equivalents:

(509) Davam moliv na učitel. (Bulgarian)

I give a pencil to a teacher.

(510) Davam moliv na nego. (Bulgarian)

I give a pencil to him.

(511) Davam mu moliv. (Bulgarian)

I give him a pencil.

It would be unreasonable to assume that (510) and (511) derive from two different structures. In Bulgarian the full pronominal forms must occur in their unique oblique case-form if they are objects of a preposition. If the personal pronouns occur in their clitic forms, the preposition na must be deleted. If the indirect object is a noun, as in (509) it must be preceded by the preposition na. The indirect object in such an instance is indeclinable. However, in some South-Eastern dialects of Serbo-Croatian the speakers would say:

(512) Dajem olovku na učitelja. (accusative)

The accusative case-form učitelja in (512) is to be expected with the preposition na.

Considering that the deep structure of (509-511) must have a PP node, and considering the closeness of (511) and (508), and by comparing (506) to (512), it

is reasonable to assume that the datives in (506-508) also originate within a PP node and that the Prep formative consists of a bundle of features which spells out na if it is ever allowed to appear in the surface structure. Thus, it is proposed here that the deep structure of (506) is as in Figure 35.

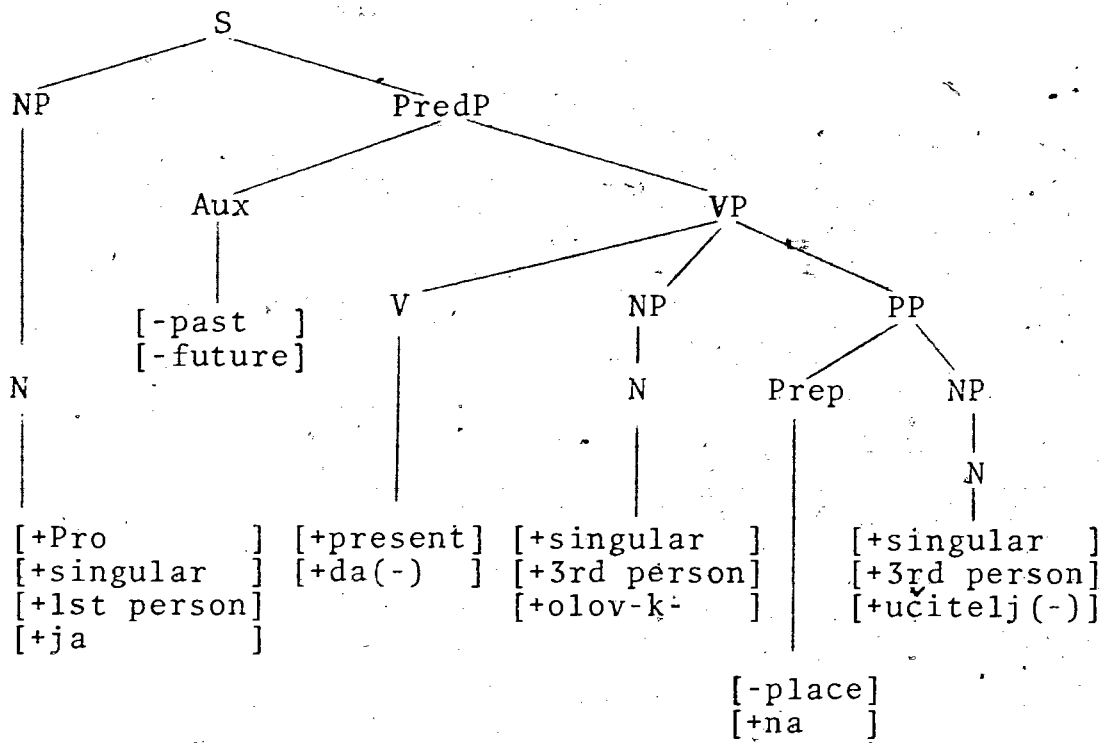


Figure 35.

The verb formative da(-) requires the dative for the indirect object. This verb is neither commodi nor incommodi when considered by itself, but together with its direct object they may indicate a [+commodi] or [-commodi] action: dati olovku '(to) give a pencil' may be [+commodi]; dati batina '(to) give a beating'

is more likely [+incomodi]. Because both features require the dative for the indirect object, it would be convenient to find one feature which would cover both meanings. A good cover term would be the feature [+ethical]. Ethics is a discipline dealing with what is good and what is bad. Then, it could be stated that the verb da(-) is composed of a bundle of features which carries the feature [+ethical] and that the direct object of this formative specifies whether it is meant to be ethically good or ethically bad for the person or thing designated by the indirect object; except that now it is not necessary to know in what sense is the feature [+ethical] used: it alone requires the dative in the indirect object. As before, the feature which requires the dative (now the [+ethical] feature) is transferred to the Prep formative. Next, after all the agreement rules are applied, the case rules assign the feature [+dative] to the head of any NP which is the sister of a prepositional formative containing the feature [+ethical]. Then, the formative [-place, +na, +ethical] becomes obligatorily deleted. This happens in Standard Serbo-Croatian. However, the same deep structure is capable of producing the dialectal (512).

In this dialect the speakers are becoming unfamiliar with the dative case. Their grammar assigns the case which would be assigned in Standard Serbo-Croatian if the feature [+ethical] were not mentioned at the time the case rules apply--that is the accusative case. Now, as before, the formative na cannot be deleted because the head of its sister constituent is in the accusative.

The structure in Figure 35, barring the phonological differences (e.g., moliv instead of olov-k-), is capable of generating the Bulgarian sentence in (509). In Bulgarian the great majority of nouns are indeclinable; thus, the formative učitel contains the feature [-case suffix]. Again, as before, the prepositional formative cannot be deleted if the head of its sister constituent carries this feature. Consider also the Bulgarian sentence in (510). The full form pronouns have two case-forms only: the nominative and the oblique case. The oblique case is the old accusative. The preposition na in (510) cannot be deleted because its object nego is in the accusative. However, the clitic pronouns do have a separate dative case-form. Now, because mu is in the dative the ethical na becomes obligatorily deleted. That is how (511) is generated.

The discussion in this section of the paper supports the hypothesis that the datives in (499) and (501) occur within PP nodes and that their Prepositional formative is [-place, +na, +commodi] or [-place, +na, +incommodi], or instead of these two formatives, following the revision on page 239, [-place, +na, +ethical].

Not all the datives have the formative na for their sister constituents. There are other prepositions which govern the dative case. One of the few prepositions which govern the dative is the preposition k(a):

(513) Ja idem k Bogdanu.

I am going to Bogdan's.

(514) Ja idem Bogdanu.

I am going to Bogdan's.

Obviously the deleted preposition in (514) is k(a) and not na. Sentences (513-514) are in free variation. Since the preposition k(a) always co-occurs with the dative the case-form of Bogdanu 'Bogdan (dative)' is not problematic.

The traditional grammarians consider the items nadomak 'within the reach of' and uprkos 'in spite of' as prepositions which govern the dative. (These two items are listed as the prepositions which govern the dative

in (Stevanović, 1969).) They are not prepositions, however:

(515) On je nadomak k Bogdanu.

He is within the reach of Bogdan.

(516) On je nadomak Bogdanu.

He is within the reach of Bogdan.

(517) On je Bogdanu nadomak.

He is within the reach of Bogdan.

In (517) nadomak occurs as the last item. This could not happen if nadomak were a preposition. This item is an indeclinable predicate attribute. Sentence (515) is quite acceptable, and (516) is derived from a structure which is capable of generating (515).

After nadomak the genitive may occur instead of the dative, with more or less the same meaning:

(518) On je nadomak od Bogdana.

He is within the reach of Bogdan.

(519) On je nadomak Bogdana.

He is within the reach of Bogdan.

The traditional grammars state that after nadomak either the genitive or the dative occur. No relationship is established between the sentences such as (515-516) and (518-519); therefore, only a taxonomical account can be given within this framework. However, if

(515) and (518) are not left unnoticed, nadomak need not be considered as a preposition--then the genitive and the dative can be easily explained: after the preposition od the genitive must occur, and after the preposition k(a) the dative must occur. The item nadomak may mean either 'within the reach of' or 'close to'. With the former meaning, od occurs and with the latter meaning k(a) occurs.

What is said here about the predicate attribute nadomak applies also to the adverbial uprkos, except that uprkos does not admit the preposition k(a):

(520) ?On je došao uprkos na Bogdana.

He came in spite of Bogdan.

(521) *On je došao uprkos ka Bogdanu.

(522) On je došao uprkos Bogdanu.

He came in spite of Bogdan.

Thus the dative Bogdanu in (522) is not governed by the preposition k(a) but by the feature [+ethical] contained within the formative (-)prkos. This becomes clear when prkos 'defiance' is used as a subject:

(523) Prkos Marije Bogdanu je svima poznat.

Mary's defiance of Bogdan is known to all.

Prkos Marije means 'Mary's defiance' and prkos Bogdanu 'the defiance of Bogdan'. The writer actually heard

the following sentence uttered by a speaker of Serbo-Croatian from the south-eastern part of Yugoslavia:

(524) Prkos od te devojke na Marka je nešto
strašno.

This girl's defiance of Mark is something
terrible.

Although (524) would be considered incorrect in Standard Serbo-Croatian, every speaker of Serbo-Croatian would be able to understand this sentence; although the speakers who adhere to the standard model would not utter such a sentence, they would rather say

(525) Prkos te devojke Marku je nešto strašno.

This girl's defiance of Mark is something
terrible.

Again, it makes sense to assume that (524) underlies (525) and that te devojke occurs in the genitive because it originates within a PP whose Prep formative is od; Marku occurs in the dative because it originates within a PP whose Prep formative is na, and because prkos is a formative which implies that the action is disadvantageous for Mark. Hence, it carries the feature [+ethical] (specifically the feature [+incomodi]) within its bundle of features. As before, it is assumed here that the feature [+ethical] is transferred onto

the formative na--then the case rules assign the feature [+dative] to Mark-. After the case assignment, the formative [-place, +na, +ethical] becomes deleted.

As it can be deduced from the examples in (515-516) and (520-522) or (524-525) the underlying prepositional formative can be either k(a) or na. The preposition k(a) is required by the formatives which imply direction while na is required by the formatives which contain the feature [+ethical]. Therefore, the dative of the so called subjectless sentences must also occur within PP nodes. The problem is which of the two prepositions is deleted in the shallow structure to form sentences such as

(526) Mariji se spava.

Mary is sleepy. (Mary feels like sleeping.)

(527) Mariji se trči.

Mary feels like running.

(528) Mariji je hladno.

Mary is cold. (It is cold for Mary.)

If Mary feels like doing something, it is implicit that this something will be beneficial for her; hence, the feature [+ethical] is discernable within the structure of (526) and (527). Therefore, Mariji occurring

in (526-527) originates within a PP node whose Prep formative is [-place, +na, +ethical] at the time the case rules apply.

In (528) it is implied that Mary is afflicted disadvantageously by the temperature; therefore, the feature [+ethical] occurs within the structure of this sentence. Consequently, Mariji originates within a PP node whose Prep formative is na.

The writer could not elicit any sentences such as

(529) ?Hladno je na Marija
Mary is cold.

(530) *Hladno je k(a) Mariji.
*It is cold to Mary.

but (529) seems much better than (530), although--it must be admitted--the writer would not utter either of the two strings. Therefore, the solution of the dative, as far as (526-528) and the similar sentences are concerned, is purely a hypothetical one; however, it is based on the examples previously offered in this chapter which are not hypothetical and which supply valid empirical evidence.

The so called possessive dative also originates in the indirect object position. The deep structures of

(531) Natiče mu noga. (dative)

His leg is swelling.

(532) Boli ga noga. (accusative)

His leg is hurting.

are similar to the deep structures of (499) and (498), respectively. The verb naticati '(to) swell' is subcategorized as [+#, +PP, -NP] and the verb boleti '(to) hurt' as [+#, -PP, +NP]; thus, the following sentences may occur:

(533) Noga natiče.

The leg is swelling.

(534) Noga natiče Bogdanu.

(The leg is swelling to Bogdan.)

Bogdan's leg is swelling.

where in (533) natic- is strictly subcategorized as [+#] and in (534) as [+PP]. (In the South-Eastern dialects (534) would have a prepositional phrase instead of the dative Bogdanu: Noga na Bogdana natiče.)

(535) Noga boli.

The leg is hurting.

(536) Noga boli Bogdana.

(The leg is hurting Bogdan)

Bogdan's leg is hurting.

In (535) the verb bol- is strictly subcategorized as [+#] and in (536) as [+NP]. That is why the accusative Bogdana and ga occurs in (536) and (532).

The term possessive dative is a good descriptive term, but not very helpfull for solving the problems in question. The dative becomes semantically possessive when the subject is an inalienable possession of the person or thing occurring in the dative. But the accusative also becomes possessive in the similar construction; yet no one uses the term possessive accusative. (The possessive accusative occurs in (532) and in any sentence in which the subject is an inalienable possession of the person or thing in the accusative.)

Not all the possessive datives occur with the inalienable subjects, but this is where both the dative and the accusative become possessive.

When the possessive dative originates in the deep structure as an NP complement it must occur as a clitic pronoun in Serbo-Croatian:

(537) Mečkina noga je bila zagnojena od trna.

The bear's paw was infected because of the thorn.

(538) Njena noga je bila zagnojena od trna.

Her (its) paw was infected because of
the thorn.

These two sentences cannot be paraphrased with a
full dative form:

(539) ?Noga mečki je bila zagnojena od trna.

(The paw to the bear was infected because
of the thorn.)

The bear's paw was infected because of
the thorn:

(540) *Noga njoj je bila zagnojena od trna.

But the clitic joj 'to her' may freely occur:

(541) Noga joj je bila zagnojena od trna.

(The paw to her was infected because of the
thorn.)

However, in languages related to Serbo-Croatian (537)
can be paraphrased with an NP complement:

(542) Nógata na méčkata ì bíla gnojósana od
trñot. (Macedonian)

(The paw to the bear was infected because
of the thorn.)

The bear's paw was infected because of the
thorn.

(The item ì 'to her' occurring in (542) is the clitic
dative which repeats na méčkata 'to the bear'. The

use of the dative clitic with the prepositional phrase indicating possession is frequent in Macedonian.)

To differentiate the two noun phrases: njena noga and noga jof occurring in (538) and (541), respectively, it is necessary to assume that the deep structure of the former phrase is as in (543), and the deep structure of the latter phrase as in (544).

(543) (NP (Det [+Pro])) (N [+3rd person] [+singular] [+feminine] [+on(-)] [+nog-])).

(544) (NP (N [+3rd person] [+singular] [+feminine] [+nog-])) (pp (prep [-place] [+possessive] [+na]))

(NP (N [+Pro] [+3rd person] [+singular] [+feminine] [+on-])))).

(The description of the pronouns in (543-544) is different because they are two different, but related, pronouns and because the former agrees in number and gender with its N while the latter does not; therefore, the latter must be specified for these features.)

If a structure similar to the one in (544) were to occur in Macedonian or Bulgarian the formative na need not be deleted and the head of its sister constituent would occur in its unique oblique case-form. In Serbo-Croatian the possessive na becomes [+ethical],

and as such it must be deleted. Moreover, the datives which are NP complements must be the clitic pronouns. Thus it is possible to say

(545) Marijina knjiga je na astalu.
Mary's book is on the table.

(546) Knjiga joj je na astalu.
(The book to her is on the table.)
Her book is on the table.

but not

(547) *Knjiga Mariji je na astalu.

(548) *Knjiga njoj je na astalu.

or

(549) *Knjiga je Mariji na astalu.

(550) *Knjiga je njoj na astalu.

Notice that (539) and (540) result grammatical if the clitic je is placed between the subject and the dative:

(551) Noga je mečki bila zagnojena od trna.

(The paw was infected to the bear because of the thorn.)

The bear's paw was infected because of the thorn.

(552) Noga je njoj bila zagnojena od trna.

(The paw was infected to her because of...)

Her paw was infected because of the thorn.

Sentences (551-552) are possible because, here, mečki and njoj are the indirect objects of the verb *zagnojiti--not the subject complements. On the other hand, the structures in (549-550) are ungrammatical because the verb bi(-) does not admit the indirect objects.

It must be mentioned that in Serbo-Croatian a possessive NP complement and a possessive indirect object cannot co-occur in the same sentence; thus, it is not possible to find a sentence such as:

(553) *Noga joj je mečki bila zagnojena od trna.

However, the repetition of the possessor in (542) could be the result of a structure in which the possessive NP complement and the possessive indirect object may co-occur.

Finally, every possessive NP complement occurring in the dative, as all the other datives, is felt as [+ethical]. There is a noticeable difference in meaning between (538) and (541) in spite of the fact that a proper translation of (541) make these two sentences appear synonymous: njena noga simply specifies whose paw it is, but the phrase noga joj implies a great deal more--with this phrase and in this sentence the speaker expresses his sorrow. Even in the seemingly neutral statement as in (546) the speaker's choice of knjiga joj instead of njena knjiga 'her book' indicates

some kind of ethical feeling, which is to be interpreted in the context of the situation in which such a sentence might be uttered: the speaker could be annoyed because she placed her book on the table or he may be glad that the book was finally found, etc.

The dative is widely used in Serbo-Croatian. The writer tried to cover the entire field of the use of the dative with the few examples given in this chapter, but it is more likely than not that some important facets of the use of this case have been omitted. The writer is confident, however, that the datives which are not discussed here are also generated by the rules given in this chapter.

VIII. Conclusion

VIII.1. Summary.

At this point it is possible to state the following generalizations:

(a) The case-features are assigned at the intermediate stage of a derivation in which the formatives are fully specified for person, number, and gender. This stage must follow all TTT's (Total transfer transformations) and all partial transformations such as those imposed by the agreement rules and the redundancy rules.

(b) The case-feature [nominative] is assigned to the head of shallow subjects and to the head of NP's found in shallow structures in the predicate attribute position. The verb of a predicate attribute must be a formative which contains the least number of inherent semantic features. Such verbs are bi(-) and the existential ima(-).

The verb bi(-) may be used in sentences which tell more about their subjects than a simple predication would. (See the chapters on the nominative and the instrumental for details.). In such sentences the verb bi(-) is semantically enriched. If this occurs, the head of the predicate attribute

may receive the feature [+instrumental] if the speakers "read" the feature which enriched this verb. If they do not, the feature [+nominative] must be assigned to the predicate attribute.

(c) The head of an NP must obtain the feature [+accusative] if that NP is directly dominated by a VP node and if the V formative is any verb other than bi(-) or the existential ima(-).

The NP's occurring in the predicate attribute position are the direct objects of bi(-) or of the existential ima(-). The only difference between the so called predicate attributes and the direct objects is that the former occur as sister constituents of a class of V formatives which are semantically deficient while the latter occur as sister constituents of V formatives which are semantically "rich". The fact that predicate attributes always describe the subject is the direct result of the semantic deficiency of their sister V formatives. When the nominative and the accusative are examined from this point of view, it becomes evident that the semantic component plays the decisive role in the case-feature assignment: if there is no semantic influence imposed by some sister constituent, the

feature [+nominative] is assigned to the head of an NP. This is why the head of a shallow subject always occurs in the nominative. The head of a subject cannot be preceded by a sister constituent and, generally, only the preceding sister constituents of an NP are capable of imposing a case-feature.

The head of an NP in the direct object position is free of semantic influence if its sister constituent is either the formative bi(-), or its substitute the existential ima(-). (It was demonstrated in section II.3.2. that ima(-) substitutes for bi(-) in existential sentences.) If bi(-) becomes enriched, its direct object may occur in the instrumental. However, if the head of an NP in the direct object position is a sister constituent of a V formative which contains inherent semantic features, it must obtain the feature [+accusative].

(d) If the sister constituent of an NP is anything but a V formative, the head of that NP obtains the appropriate case-feature. All such constituents possess inherent semantic features; therefore, the feature [+nominative] cannot be imposed by them.

Footnotes

¹The structures of (1) and (2) are identical at the observable level. Their deep structures differ considerably, however. This will be demonstrated in the section dealing with existential sentences.

²The participles agree in gender and number with the grammatical subject. A subject may be masculine, feminine, or neuter--singular or plural. Remnants of dual are also evident. Thus, bio, bila, bilo in the next three sentences

(i) Mladić je bio u crkvi.

The young man was in the church.

(ii) Devojka je bila u crkvi.

The girl was in the church.

(iii) Dete je bilo u crkvi.

The child was in the church.

are masculine singular, feminine singular, and neuter singular, respectively. (Mladić 'young man (nominative singular)' is masculine; devojka 'girl (nominative singular)' is feminine; and dete 'child (nominative singular)' is neuter.) Moreover, bila can be also masculine dual:

(iv) Dva mladića su bila u crkvi.

Two young men were in the church.

Since the same form appears with numbers three and four and with any composite number ending in two, three, and four, bila is masculine trial and "quadrigal" as well as masculine dual. (The term 'trial' was borrowed from (Benjamin Elson and Velma Pickett, 1967, page 21).)

(v) Tri mladića su bila u crkvi.

Three young men were in the church.

(vi) Četiri mladića su bila u crkvi.

Four young men were in the church.

Moreover, masculine dual, trial, and quadrigal participles are homophonous with neuter dual, trial, and quadrigal forms:

(vii) Dva sela su ležala na istoj strani reke.

Two villages were located on the same side of the river.

(viii) Dva grada su ležala na istoj strani reke.

Two cities were located on the same side of the river.

Where sela 'village (genitive dual)' is neuter, and grada ([grāda]) 'city (genitive dual)' is masculine.

The feminine dual, trial, and quadrigal forms are different from the above forms:

- (ix) Dve devojke su bile u crkvi.
Two girls were in the church.
- (x) Tri kuće su ležale na istoj strani reke.
Three houses were located on the same side of the river.
- (xi) Četiri kuće su ležale na istoj strani reke.
Four houses were located on the same side of the river.

(Where devojke 'girl (genitive dual/trial/quadrival)' and kuće 'house (genitive dual/trial/quadrival)' are feminine.) Thus, bile, ležale are feminine dual, trial, or quadrival.

The forms bili, bile, and bila are masculine plural, feminine plural, and neuter plural, respectively:

- (xii) Mladići su bili u crkvi.
The young men were in the church.
- (xiii) Devojke su bile u crkvi.
The girls were in the church.
- (xiv) Sela su bila na istoj strani reke.
The villages were on the same side of the river.

(Where mladići 'young man (nominative plural)', devojke 'girl (nominative plural)', and sela ([sěla])

'village (nominative plural)' are masculine, feminine, and neuter, respectively.)

See also the section dealing with the agreement rules.

³Just how ja 'I (nominative singular)' governs the agreement of nadjem will be discussed in section II.3.1.

The present tense conjugation of biti '(to) be' is shown in the following sentences.

(i) Ja jesam visok.

I am tall.

(ii) Ti jesi visok.

You are tall.

(iii) on jeste visok.

He is tall.

(iv) Ona jeste visoka.

She is tall.

(v) Ono jeste visoko.

It is tall.

(vi) Mi jesmo visoki.

We are tall.

(vii) Vi jeste visoki.

You are tall.

(viii) Oni jesu visoki.

They (masculine/neuter) are tall.

(ix) One jesu visoke.

They (feminine) are tall.

(Where jesam, jesi, jeste ([jěste]), jesmo, jeste ([jěste]), jesu are full forms--used for emphasis in the above examples. If emphasis, contrast, or some other grammatical rule does not require the full forms, then the clitic forms appear in the surface structure: sam 'am', si you (singular)', je 'is', smo 'are (1st person plural)', ste 'are (2nd person plural)' and su 'are (3rd person plural)'.

⁴See the section discussing the position of clitics.

⁵In this paper a formative is a bundle of features to which at least one rule must apply. An item is any word which passed through all the components of a grammar and to which no rules may apply.

⁶The final argument in favor of this position is given in the section discussing IT sentences.

⁷A formative with a dash-line at the end of a formative represents a stem without its suffix(es). A terminal dash-line between parentheses indicates

that a suffix or suffixes are optionally bound. A terminal dash-line without parentheses indicates that a suffix or suffixes are obligatorily bound.

A dash-line within a stem indicates that an intrusive sound may appear. An intrusive sound is either obligatorily present or obligatorily absent. Its presence or absence depends on the kind of suffix assigned to such a formative.

⁸It is possible to say

(i) Učiteljica je hvaljena od devojaka.

The (female) teacher is being praised by the girls.

Sentence (i) is a true passive. The passive transformation is discussed in the section entitled 'The basic structures and the surface structures'. Many speakers of standard Serbo-Croatian avoid passive constructions, substituting it with a scrambled active construction. This mechanism preserves the case-forms of the active sentence, but uses the word order similar to that of passive sentences.

⁹The unbroken permutation may occur, as can be deduced from the examples (22-37), only when the word order of a scrambled active sentence is parallel to the

word order of a nonscrambled passive sentence. See also the previous footnote.

¹⁰Introducing evidence from another language is rather risky. A support from Spanish evokes a refutation based on similar constructions found in English where the agreement operates in the opposite direction in such sentences. However, some native speakers of English are wavering between singular and plural of the copula-form when the topical phrase is in plural.

¹¹The auxiliary bi(-) and the verb bi(-) have the same forms. See also footnote 3.

¹²A tensed verb is any verb-form occurring in a tense. Because a tense in Serbo-Croatian may be evident in the auxiliary in the surface structure, but not necessarily in the surface verb, these two must be considered jointly to determine if a verb is tensed. In the deep structure, an infinitive is always nontensed. This will be demonstrated in the body of the text.

¹³Generally, the indirect object precedes the direct object. The auxiliary-form je is always the last clitic in a group of clitics. The other auxiliary clitics precede all the other clitics.

¹⁴These phenomena have been discussed by many investigators working within the framework of the transformational grammar. Chomsky, in (Chomsky, 1970b) cites several authors who argue that grammar should be semantically based. In that article Chomsky maintains his former position (Chomsky, 1965) that the semantic component is an interpretive system which operates on the phrase markers generated by the syntactic component of grammar, but he relaxed the stipulation that all the semantic information has to be determined by the deep structure. In his (1970b) article he had argued that some surface structure informations also play a role in determining semantic interpretation.

The author of this paper believes that the change of meaning from a deep structure to a surface structure is not caused by the main semantic component of the grammar (but see footnote 15). Beliefs are scientifically not very valuable--fortunately the topic of this paper is not affected by the above assumption.

¹⁵Jerrold Katz (Katz, 1972) proposed that grammar has the Rethorical component besides the semantic component, and that the surface structures are subject to the rethorical interpretation (Katz, 1972, pp 417 f). It is

possible, however, that this is a subcomponent of the semantic component. Limits between the two are easily discernible:

(i) Bilo je dosadno govoriti Mariji.

It was boring talking to Mary.

(ii) Mariji je bilo dosadno govoriti.

For Mary it was boring to talk.

The two sentences with the unbroken intonation have two different meanings. Obviously (ii) cannot be the result of scrambling of (i) because scrambling cannot change the meaning to the extent where the speaker becomes a different person. The scrambling may lead to ambiguity, but this is due to the fact that both (i) and (ii) may be scrambled in such a way that they become identical in shape:

(iii) Dosadno je bilo Mariji govoriti.

It was boring talking to Mary.

(iv) Dosadno je bilo Mariji govoriti.

It was boring for Mary to talk.

[Where (i) is scrambled as in (iii) and (ii) as in (iv)].

¹⁶There is evidence that some formatives remain insufficiently specified to be able to find a bundle

of features in the lexicon. (See the section discussing the IT and THERE sentences.) Therefore, although the lexicon in this paper is not different from that of Chomsky (1965), the interaction between the formatives in the base and the lexicon differs to some extent. This statement is sharpened in the conclusion of this paper.

¹⁷The preposition od may have different meanings, each being determined by the structure in which it appears:

(i) To je napravljeno od drveta.

This is made of wood.

(ii) Ovu knjigu sam dobio od Bogdana.

This book I received from Bogdan.

¹⁸It will be seen later that some TTT are obligatory. (See the section dealing with the particle se and footnote 23.)

¹⁹Chomsky (Chomsky, 1971b, page 194, footnote a) states that the verb be is "in some sense relatively empty of semantic content." It is interesting and revealing that the verb bi(-) 'be' may have a predicate nominal in the instrumental case only when it is clearly not semantically empty.

²⁰If a quantifier (or a number) is declinable, it functions as an adjective--not as a head noun. For some speakers a quantifier may be indeclinable, while for other speakers the same quantifier may be declinable. In an ethnic paper American Srbobran, English edition, April 7, 1976, page 2, appears the lesson on Serbo-Croatian: 'Learn Serbian' (by Vasa Mihailovich:

Dva, dve, dva having all three genders, declines as follows:

| | | | |
|-------|-------------|-------|----------------|
| dva | (m. and n.) | dve | (nominative) |
| dvaju | | dveju | (genitive) |
| dvama | | dvema | (dative) |
| dva | | dve | (accusative) |
| dvama | | dvema | (locative) |
| dvama | | dvema | (instrumental) |

Tri and četiri have only one form each. Their declension is simpler:

nom. and acc.: tri, četiri

gen.: triju, četiriju

dat., instr., and loc.: trima četir(i)ma

Other numerals do not decline at all

(and the noun following them is always in the genitive plural, remember?) [Mihailovich already

mentioned that jedan is also declinable.]

Thus, if a noun modified by a numeral from 1 to 4 is in a case other than the nominative, both the adjective and the noun should be in that case:

Idem u školu sa trima prijateljima.

[I am going to school with three friends.]

Dobila je pisma od dvaju prijateljica.

[She received letter from two girl friends.]

However--and fortunately for us--the declined form of numerals are usually ignored. The above sentences are just as correct as follows:

Idem u školu sa tri prijatelja.

[I am going to school with three friends.]

Dobila je pisma od dve prijateljice.

[She received letters from two girl friends.]

Unfortunately, the learned people like to throw their weight around by still using the declined forms. If we want to read the very literate Serbian, we better get acquainted with them; in everyday speech we will probably never use them.

However, not only the learned people use the declined forms of these numerals. There are regions in Yugoslavia (Hercegovina, for instance) where some

unschooled persons use them quite regularly. For those speakers these items must be marked as [+case suffix], or, if exceptions are marked and the expected morphological rules which apply in a regular fashion unmarked, these items would not have to carry such a feature.

The writer has no intention of pinpointing the region of every dialectal variation mentioned in this paper. However, it is assumed here that the learned speech is an acquired dialect. Therefore, a learned speaker of Serbo-Croatian from Vojvodina or from Mačva who uses regularly the forms such as trima and a peasant from Hercegovina who also uses the form trima belong to the dialect group X, and those who say tri instead of trima for dative, locative, or instrumental belong to the dialect group Y

²¹It will be demonstrated in section II.3.2. that the existential bi(-) and the existential ima(-) are the same formative in the deep structure. A copula-form also assigns the nominative case to its sister constituents which are [+participle].

²²The following are the reflexive pronouns occurring in different case-forms:

- (i) On ju je odgurnuo od sebe. (genitive)
He pushed her away from himself.
- (ii) Kupio je sebi cipele, a ne njoj. (dative)
He bought shoes for himself, not for her.
- (iii) Kupio si je cipele. (dative)
He bought shoes for himself.
- (iv) On sebe gleda u ogledalu, a ne nju. (accusative)
He is watching himself in the mirror, and not her.
- (v) On se gleda u ogledalu. (accusative)
He is watching himself in the mirror.
- (vi) On govori o sebi. (locative)
He is talking about himself.
- (vii) On govori sam sa sobom. (instrumental)
He is talking to himself.

²³There is good evidence that the verbal particle se originates in the direct object position. It should be noted that whenever the verbal particle se occurs in the surface structure, the accusative case cannot occur. Also, barring the semi-grammatical sentences e.g. (166, 168), the accusative case cannot occur if the reflexive sebe occurs. These facts strongly suggest that the particle se originates in the deep

direct object position, as a formative which contains the categorial feature [+N]. Moreover, the deep subject of the sentences which contain the verbal particle se are empty. An obligatory TTT moves the formative in the deep object position into the deep subject position leaving in the place of the vacated node certain features which spell out se.

²⁴It is not unlikely that the for NP node is obligatory in (176), where the NP node dominated by for is unspecified. For example:

(i) It is easy to please Joan.

and

(ii) It is easy for anyone to please Joan.

seem to be synonymous. If they are then (ii) underlies (i) and the deep structure for both would be

(iii) It is - predicate for anyone [_SNP - VP].

where the embedded S in anyone please(-) Joan. If the it sentences have an obligatory for dummy node then there is no need for the infinitival complements to originate in the deep structure.

²⁵See sections I.3., I.4.

²⁶Perlmutter (Perlmutter, 1968) claims that the indefinite article is represented in deep structure

not as an article but as the numeral one. The item, jedan can occur in plural when used as an indefinite article: jedni, jedne, jedna 'some'.

²⁷In some specific circumstances the participial bil(r) takes the agreement from the item on its right (See sentence (202).) This exceptional and very rare type of agreement in Serbo-Croatian is doubtlessly an instance of backward agreement. It seems that that type of agreement can occur in two instances only:

- (a) when the quantifiers agree with their nouns and
- (b) when bil(-) agrees with topical noun-phrases, when these are in the nominative singular.

²⁸In sentences such as

- (i) Marija je lepa kao lutka.
Mary is as nice as a doll.
- (ii) On je lep kao ona.
He is as nice as she is.
He is nice like her.

kao 'as, like' is not a preposition, but a conjunction. After kao a substantive is always in the nominative because when the case rules apply that substantive is in the subject position.

²⁹The formative containing the feature [+V] cannot be either bi(-) or the existential ima. It was demonstrated in the chapter on the nominative that after these two verbs the accusative cannot occur.

³⁰There are -a stem substantives which are always [+masculine]: deda 'grandfather', Pera 'Pete', etc., but this is so because they always describe a male.

³¹It is obvious that [+PRO] cannot assign case-features within a PP node if [+PRO] itself is not within it. If it were otherwise the agents of embedded passives could occur in almost any case.

³²The preposition na 'on, in, to, about, like' may be (a) a place preposition which indicates location:

(i) On sedi na podu.

He is sitting on the floor.

(b) a place preposition which indicates direction:

(ii) On ide na poštu.

He is going to the post office.

(c) it can be used in a nonlocative sense:

(iii) On ne misli ni na koga

He does not think about any one

(d) or it can be used for comparison. In this instance, as well as in (c), na is also nonlocative

(in features: [-place]):

(iv) On je na oca.

He is on his father.

He is like his father.

³³Here, the notion of symmetricalness is extended to sentences: if a verb or a BE predicate is symmetric, the sentence that contains such a verb is also symmetric.

³⁴The distribution of the locative and the accusative occurring within prepositional phrases cannot be shown without the notion of strict subcategorization. Because the strict subcategorization cannot be shown if Fillmore's Case-grammar is used as a model, the writer decided that Fillmore's grammar is not suitable. Also, it was necessary to adopt Chomsky's PredP node, for otherwise it would not be possible to show which verb is and which verb is not strictly subcategorized.

³⁵This statement is based on the native speaker's intuition of the writer and on the relatively few trials of the following nature:

(i) On je živeo u Beogradu.

He lived in Belgrade.

(ii) *On je živeo Beogradu.

*He lived Belgrade.

(iii) On je bacio loptu u baštu.

He threw the ball into the garden.

(iv) *On je bacio loptu baštu.

*He threw the ball the garden.

³⁶The preposition s(a) also used to co-occur with the accusative when used in the comparative sense. However it is not used this way now.

³⁷This statement is also based on a few trials (see footnote 35).

³⁸For example, the deletion of s(a) in (i) produces the ungrammatical structure in (ii):

(i) On je skočio sa stolice.

He jumped off the chair.

(ii) *On je skočio stolice.

*He jumped the chairs.

³⁹Recall that the label formative is used here in a very specific sense. As it will be seen later, this formative need not appear as an item in the surface structure.

⁴⁰Recall that when po is [+directional] it co-occurs with the accusative.

⁴¹See section III.1.1. and, in particular, sentences (215-230).

⁴²The rules which delete this formative and the formative s(a) are given in the following sections.

⁴³Those speakers who do not delete the causative na seldom use the genitive in the ~~con~~structions in which the genitive can be avoided.

Bibliography

- Babby, Leonard H. (1973). "The deep structure of adjectives and participles in Russian." Language 49 (1973) 349-360.
- Bach, Emmon and R.T. Harms. (1968). Universals in linguistic theory. Holt, Rinehart and Winston, Inc. New York.
- Bajec, Anton, Rudolf Kolarič and Mirko Rupel. (1971). Slovenska slovnica, Ljubljana: Državna Založba Slovenije.
- Benson, Morton. (1974). Srpskohrvatsko-engleski rečnik. Prosveta, Beograd.
- Belić, Aleksandar. (1951). Savremeni srpskohrvatski jezik. Beograd: Naučna knjiga.
- Bernstein, Samuil Borisovich (ed.). (1958). Tvoritel'nyĭ padezh v slavianskikh ĭazykakh. Izd-vo Akademii Nauk.
- Chomsky, Noam. (1965). Aspects of the theory of syntax. Cambridge, Massachusetts. The M.I.T. Press.
- Chomsky, Noam. (1970). "Remarks on nominalization." Readings in English transformational grammar. ed. by R. Jacobs and P. Rosenbaum. 184-216. Waltham, Massachusetts: Ginn.
- Chomsky, Noam. (1970a). "Some empirical issues in the theory of transformational grammar." In P.S. Peters (ed.). The goals of linguistic theory. Englewood Cliffs, N.J.: Prentice-Hall.
- Chomsky, Noam. (1971a). "Conditions on transformations." Reproduced by the Indiana University Linguistics Club.
- Chomsky, Noam. (1971b). "Deep structure, surface structure, and semantic interpretation." Semantics. Edited by D.D. Steinberg and L.A. Jakobovitz. Cambridge, Massachusetts: Cambridge University Press. pp. 183-216.
- Chomsky, Noam and Morris Halle. (1968). The sound pattern of English. New York: Harper and Row.

- Daničić, Djuro. (1874). Istorija oblika srpskoga ili hrvatskoga jezika. Beograd: Izdanje Državne Stamparije.
- DeArmond, Richard C. (1972). "On the accusative case-form in Contemporary Standard Russian." To appear in the Russian Language Journal (1976).
- Dinneen, R.P.S.J. (ed.). (1966). Monograph series on language and linguistics, no. 19. Georgetown: University Press.
- Dougherty, Ray. (1970). "A grammar of coordinate conjoined structures." Language, 46, pp. 850-898.
- Dougherty, Ray. (1970). "A grammar of coordinate conjoined structures." Language, 47, pp. 298-339.
- Dougherty, Ray. (1972). "Generative semantic methods: A Bloomfieldian counterrevolution." Reproduced by the Indiana Linguistic Club.
- Emonds, J.E. (1969). Root and structure-preserving transformations. M.I.T. Ph. D. dissertation. Reproduced by Indiana University Linguistics Club (1970).
- Fillmore, C.J. (1968). "The case for case." In E. Bach and R. Harms. (eds.), Universals in linguistic theory. pp. 1-88. Holt Rinehart and Winston.
- Goldin, Mark G. (1968). Spanish case and function. Washington: Georgetown University Press.
- Gruber, Jeffrey. (1967). Function of the lexicon in formal descriptive grammars. Reproduced by the Indiana University Linguistics Club (1972).
- Ivić, Milka. (1954). Značenje srpskohrvatskog instrumentala i njihov razvoj: sintaksičko-semantička studija. Beograd: Naučna Knjiga.
- Ivšić, Stjepan. (1970). Slavska poredbena gramatika. Compiled by Josip Vrana and Radoslav Katičić. Zagreb: Skolska Knjiga.

- Jackendoff, R. (1968). "An interpretive theory of pronouns and reflexives." Reproduced by the Indiana Linguistics Club.
- Jacobs, Roderick A. and Peter S. Rosenbaum. (1968). English transformational grammar. Waltham, Massachusetts: Ginn and Co.
- Jespersen, Otto. (1961). A modern English grammar. London: George Allen and Unwin.
- Jespersen, Otto. (1969). Analytic syntax. Holt, Rinehart and Winston, Inc. First Published in 1937. Copenhagen: Levin and Munksgaard.
- Katz, Jerrold J. (1972). Semantic theory. New York: Harper and Row.
- Kiefer, Ferenc. (1970). Studies in syntax and semantics. Dordrecht: Reidel Publ. Co.
- Maretić, Tomislav. (1963). Gramatika hrvatskoga ili srpskoga jezika. Zagreb: Matica hrvatska. First published in 1899 under the title: Gramatika i stilistika.
- Mihailovich, Vasa. (1976). "Learn Serbian." In American Srbobran, Serbian newspaper. Wednesday, April 7, 1976, page 2. Pittsburgh, Pa.
- Perlmutter, David. (1968). "On the article in English." Eric/Pegs Clearinghouse for Linguistics, Pegs No. 29. Washington, D.C.
- Peters, P.S. (ed.) (1970). The goals of linguistic theory: Prentice Hall.
- Postal, Paul M. (1966). "On so-called pronouns in English." In Dinneen. Reprinted in Reibel and Schane. pp. 187-224.
- Postal, Paul (1970). "On the surface verb 'remind'." Linguistic Inquiry, 1. pp. 37-120.
- Postal, Paul M. (1971). Cross-over phenomena. Transatlantic series in linguistics, New York: Holt, Rinehart and Winston, Inc.

- Reibel, David, and Sanford Schane (eds.) (1969). Modern studies in English. New York: Prentice Hall.
- Rosenbaum, P.S. (1967). The grammar of English predicate complement constructions. Unpublished doctoral dissertation, Massachusetts Institute of Technology.
- Ross, J.R. (1967). Constraints on variables in syntax. Unpublished doctoral dissertation, Massachusetts Institute of Technology.
- Smith, C.S. (1961). "A class of complex modifiers in English." Language, 37, pp. 342-365.
- Steinberg, D.D. and L.A. Jakobovitz (eds.). (1971). Semantics: an interdisciplinary reader in philosophy, linguistics, and psychology. Cambridge, Massachusetts: Cambridge University Press.
- Stevanović, M. (1969). Savremeni srpskohrvatski jezik (gramatički sistem i književna norma). II: Sintaksa. Beograd: Naučna Knjiga.