# On Leo Tolstoy, its Structure, Case, Left-Branch Extraction, and Prosodic Inversion<sup>\*</sup> Željko Bošković University of Connecticut

*Abstract*: The paper investigates the syntactic and morphological behavior of complex names like *Leo Tolstoy* in Serbo-Croatian. Two different structural patterns are posited to capture the variable behavior of such names with respect to a number of syntactic tests conducted in the paper. Whether a name is caseless or marked for default nominative case is shown to affect the behavior of complex names with respect to the tests in question. Several tests are provided to distinguish the default case and caseless options. Finally, evidence is provided against the Prosodic Inversion account of clitic placement.

The goal of this paper is to discuss the internal structure of complex names in Serbo-Croatian (SC) as well as its relevance for clitic placement. Four different patterns are posited based on the behavior of complex names with respect to case, left-branch extraction, focalization, modification by adjectives, and occurrence in inherent case contexts. However, the patterns are argued to have only two different structures, many of the differences between different patterns receiving non-structural explanations. Regarding clitic placement, it is argued that SC complex names provide evidence against the Prosodic Inversion account of SC clitic placement. I also provide ways of teasing apart default case and caseless options for various nominal elements, an important distinction which is shown to have consequences for several phenomena.

The paper is organized as follows. Section 1 discusses the relevance of SC complex names for clitic placement by examining the behavior of complex names with respect to leftbranch extraction and focalization. Section 2 examines the behavior of complex names with respect to modification by adjectives and occurrence in inherent case contexts and makes a proposal regarding the internal structure of complex names. Section 3 examines the behavior of inverted names, where the surname precedes the forename. Section 4 provides ways of teasing apart the default case and caseless options for various nominal elements as well as the consequences of this distinction for several phenomena. Section 5 examines the behavior of female names, which differ in several respects from male names. Section 6 is the conclusion.

# 1. Left-Branch Extraction and Prosodic Inversion

It is well-known that SC is rather permissive in the possibilities for extraction of left branches of traditional noun phrases (see Bošković 2005a and references therein). It even allows extraction of one name in complex names, as (1) and (2) show.<sup>1</sup>

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It is a privilege to be able to dedicate this paper to Wayles Browne as a small token of appreciation for everything he has done for Slavic linguistics. One of those things was in fact first introducing the problem of splitting names such as *Lav Tolstoj*, in his 1975/2004 seminal study (cf. pages 268-269 of the reprint). Indeed, this name has been used so often in the previous literature on splitting SC names that the source of the original observation is sometimes forgotten.

<sup>&</sup>lt;sup>1</sup>There might be some speaker variation regarding extraction of names in first+last name complexes. Some speakers actually strongly prefer the remnant to precede the verb. Such speakers find (1) but not (i) degraded.

(1) Lava čitam Tolstoja. Leo<sub>acc</sub> read Tolstoy<sub>acc</sub> 'I read Leo Tolstoy.'

(2) U Gornjem živi Vakufu. In Upper<sub>loc</sub> lives Vakuf<sub>loc</sub> 'He/She lives in Upper Vakuf.'

Franks (1998) and Bošković (2001) note a rather interesting paradigm concerning complex name extraction. In some cases it is possible to inflect for case only the first or the last name. In such cases, first name extraction is completely impossible. (For ease of exposition I will refer to this pattern as the uninflected pattern, though the term is not really appropriate since *Tolstoj* in (3a) and *Lav* (3b) bear default nominative case, as discussed in section 4.)<sup>2</sup>

(3) a.	Lava	Tols	toj	čitam.
	Leoacc	Tols	toy <sub>nom</sub>	read
b.	Lav	Tols	toja	čitam.
	Leonom	Tols	toy <sub>acc</sub>	read
(4) a.	*Lava	čitam	Tolstoj.	
b.	*Lav	čitam	Tolstoja.	

Significantly, as discussed by Franks and Bošković, a clitic (the auxiliary in (5)) is allowed to split a complex name just in case extraction can independently do that.

(5) a.	Lava	sam	Tolstoja	čitao.
	Leo <sub>acc</sub>	am	Tolstoy <sub>acc</sub>	read
b.	*Lav	sam	Tolstoja	čitao.
	Leonom	am	Tolstoy <sub>acc</sub>	read
c.	*Lava	sam	Tolstoj	čitao.
	Leo <sub>acc</sub>	am	Tolstoy <sub>nom</sub>	read
	'I read L	eo To	olstoy.'	

Leo he Tolstoy reads

<sup>&</sup>lt;sup>2</sup>The pattern in question is possible with foreign male names, but generally not with native male names. Even with respect to the former, speakers differ regarding which names are allowed to participate in the pattern in question. A speaker's familiarity with who the name denotes seems to be one of the factors (though not the only one). Thus, a student of Russian literature is unlikely to allow (3), and will likely find (i), with invented names, better than (3).

<sup>(</sup>i) a. Nila/Nika Munus čitam. Nil/Nik<sub>acc</sub> Munus<sub>nom</sub> read
'I read Neil/Nick Munus.'
b. Nil/Nik Munusa čitam. Nil/Nik<sub>nom</sub> Munus<sub>acc</sub> read

I put aside here what is responsible for the availability of the uninflected pattern. What is important for our purposes is that the pattern is available (apparently for all speakers), at least with some names. *Leo Tolstoy* is used here merely for historical reasons, since the name in question was often used in the previous literature on SC names. Notice also that with most female names, the last name uninflected pattern is quite generally the norm. Below, I will concentrate on male names since they allow for more possibilities, returning to female names in section 5.

These data provide a rather conclusive argument against the Prosodic Inversion (PI) analysis of clitic placement in SC (Halpern 1995),<sup>3</sup> and in favor of the analysis on which a clitic host can only be placed in front of the clitic in the syntax (Progovac 1996, Wilder and Ćavar 1994, Bošković 2001, among others). Under the latter analysis, the reason why only (5a) is acceptable is that the extraction of *Leo* is acceptable only in this context. Turning to the PI analysis of (5), on which the clitic precedes the complex name, (located in SpecIP), in the syntax and then undergoes PF movement that places it following the first stressed element, we can easily derive (5a) under this analysis.

(6) Syntax:	auxiliary	clitic	Leo	Tolstoj
PF:	Leo	auxilia	ry clitic	Tolstoy

However, the problem is that we cannot stop the PI derivation for the other examples in (5). All the constructions in (5) are then expected to be acceptable under the PI analysis.

A related argument against PI is provided by a somewhat similar construction discussed in Bošković 2005b. Bošković (2005b) observes that a prerequisite for left branch extraction in (7) is that the element that undergoes left-branch extraction is inflected for accusative case (i.e., it agrees in case with the remnant).<sup>4</sup> This is particularly interesting, since without left-branch extraction the element in question cannot be inflected for accusative case, as in (7c).

(7) a.	Čičinu	je	on T	Tominu	kolibu	srušio.
	uncle's <sub>ac</sub>	<sub>c</sub> is	he T	om's <sub>acc</sub>	cabin <sub>acc</sub>	torn-down
	'He tore	down u	ncle To	m's cabii	1.'	
b.	*Čiča	je	on To	minu	kolibu	srušio.
	unclenom	is	he To	m's <sub>acc</sub>	cabin <sub>acc</sub>	torn-down
c.	*On je	srušio	čičinu	Tominu	kolibu.	
d.	On je	srušio	čiča	Tominu	kolibu.	

Note now that a clitic is allowed to split the complex NP in question, but only if the first element is inflected for accusative.

- (8) a. Čičinu je Tominu kolibu srušio.
  - b. \*Čiča je Tominu kolibu srušio.

Since the inflection is required for syntactic movement, (8) is easily accounted for under the analysis of clitic placement which involves syntactic movement of the host. On the other hand, the data raise a serious problem for the PI analysis. Under this analysis, the clitic in (8) precedes the complex name in the syntax, undergoing movement in PF to place it after the first stressed word. We would then expect either both examples in (8) to be acceptable or only (8b), if

<sup>&</sup>lt;sup>3</sup>PI is a last-resort PF movement operation that affects clitics if their prosodic requirements are not satisfied and moves them the minimal distance necessary to satisfy these requirements. PI analyses generally place SC clitics quite high in the structure (in C, under most PI analyses).

<sup>&</sup>lt;sup>4</sup>I return to the requirement in question in sections 4 and 5 (for some relevant discussion, see also Zlatić 1997; see also Bošković 2005b for an account of the requirement in question, which, as discussed in Bošković 2005b, is also at work with discontinuous NPs in Warlpiri).

(7) is taken as an indication that the inflectional pattern in (8a) is possible only with syntactic movement.

(9) Syntax:	auxiliary clitic	uncle	Tom's cabin
PF:	uncle	auxiliary clitic	Tom's cabin

In fact, even (10) is surprising under the PI analysis because PI moves the affected element the minimal distance necessary for it to satisfy its prosodic requirement, which in the case of an enclitic means after the first stressed word. PI can then move the enclitic only after  $\ddot{c}i\dot{c}a/\ddot{c}i\dot{c}inu$  'uncle<sub>nom</sub>/uncle<sub>acc</sub>' in (10), which accounts for (10b) but not (10a). The data do not raise a problem for the syntactic movement analysis, since syntactic movement is independently available only in (10a), as shown by (11).

(10) a.	Čiča	Tominu je	kolibu srušio	).
b	. *Čičinu	Tominu je	kolibu srušio	).
(11) a.	Čiča	Tominu	ruši	kolibu.
	unclenom	Tom's <sub>acc</sub>	tears-down	cabin <sub>acc</sub>
	'He is te	aring down u	ncle Tom's cabi	n.'
b	. *Čičinu	Tominu	ruši	kolibu.
	uncle's <sub>ac</sub>	c Tom's <sub>acc</sub>	tears-down	cabin

Notice also that we may now have an explanation for why left-branch extraction is not possible with the uninflected pattern of *Leo Tolstoy*. Example (4b) may be ruled out for the same reason as (8b), namely, because the extracted element is not inflected. The account can be extended to (4a) if (8) is interpreted as indicating that left-branch extraction is possible only if the extracted element agrees in case with the remnant.

Focusing on *Leo Tolstoy*, consider the last name uninflected pattern more closely. Interestingly, on this pattern the complex name cannot stay *in situ*. (I discuss the relevant behavior of the first name uninflected pattern below.)

 (12) a. \*Čitam Lava Tolstoj. read Leo<sub>acc</sub> Tolstoy<sub>nom</sub>
 b. cf. Čitam Lava Tolstoja. read Leo<sub>acc</sub> Tolstoy<sub>acc</sub>

I suggest that the reason for this is that the last name uninflected pattern is possible only if the name — in particular, the first name — is focused. Since SC is a focus movement language in which focalized elements must undergo focus movement that places them in a position preceding the verb (see Bošković 2002, Stjepanović 1999), it is then not possible to leave *Lava Tolstoj in situ*. What bears focus in (3a) is the inflected part — it is not possible to focalize only *Tolstoj* or the whole complex name in (3a). However, since first name extraction is not an option in the uninflected pattern, it is not possible to front only the focused name. Rather, the focalized element pied-pipes the whole name. (Contrastive focus is indicated with capital letters.)

(13) a. LAVA Tolstoj čitam. Leo<sub>acc</sub> Tolstoy<sub>nom</sub> read b. \*Lava TOLSTOJ čitam.c. ?\*LAVA TOLSTOJ čitam.

This is in fact also possible with the inflected pattern in (1). Moreover, it is possible to have focus only on the first name, only on the second, or on the whole complex name, as shown in (14).

(14)	a.	LAVA	Tolstoja	čitam.
		Leo <sub>acc</sub>	Tolstoy <sub>acc</sub>	read
	b.	Lava	TOLSTOJA	čitam.
	c.	LAVA	TOLSTOJA	čitam.

A focalized first name can thus pied-pipe the last name even when extraction of the first name is an option. On the other hand, with an intervening clitic, only the first or the last name can be focalized. Focalizing the whole complex name is not possible in this case.

(15)	a.	LAVA	sam	Tolstoja	čitala.
		Leo <sub>acc</sub>	am	Tolstoy <sub>acc</sub>	read
		'I read L	leo To	olstoy.'	
	b.	Lava	sam	TOLSTOJA	čitala.
	c.	*LAVA	sam	TOLSTOJA	čitala.

As discussed in Bošković (2001), these facts are also problematic for the PI analysis, since nothing prevents the usual PI derivation, where the clitic precedes the focalized subject and then undergoes PI after the first stressed word for all the examples in (15).

(16) Syntax: sam Lava Tolstoja... PF: Lava sam Tolstoja...

On the other hand, these facts can be easily accounted for under the syntactic movement analysis. Under this analysis, the two names in (15c) would have to undergo independent focus movements to different positions, which is not possible. As discussed in Bošković 2001, although SC has two different focus positions in the preverbal field, one below and one above the auxiliary, it is not possible to activate both of them at the same time.<sup>5</sup>

Turning to the first name uninflected pattern, on this pattern the last name can stay in situ.

(17)	Čitam	Lav	Tolstoja.
	read	Leonom	Tolstoy <sub>acc</sub>

The reason for this is that, in contrast to the last name uninflected pat-tern, on the first name uninflected pattern the inflected name does not have to be focalized. In fact, when the name undergoes focus movement on this pattern, either the last name or the whole complex name can be focalized. (Recall that the latter is not an option under the last name uninflected pattern.) It is,

<sup>&</sup>lt;sup>5</sup>Alternatively, (15) can be accounted for by Takahashi's (1994) ban on movement out of moved elements. The ban is relevant to (15c), which involves two instances of focus movement, but not (15a-b), where one "movement" can be scrambling, which is treated as base-generation, not movement, in Bošković and Takahashi 1998.

however, not possible to focalize only the first name. Apparently, there is an independent requirement that one name can be focalized only if the name is inflected (see also footnote 11).

(18)	a.	*LAV	Tolstoja	čitam.
		Leono	m Tolstoy <sub>acc</sub>	read
	b.	Lav	TOLSTOJA	čitam.
	c.	LAV	TOLSTOJA	čitam.

### 2. The Structure of Complex Names

We have seen above that the first name uninflected pattern and the last name uninflected pattern differ with respect to focalization. Another difference between the two uninflected patterns arises with respect to modification. On the uninflected name pattern it is possible to modify a complex name with an adjective only if the last name is inflected. The first name uninflected pattern in this respect patterns with the inflected pattern.<sup>6</sup>

(19)	a. Odličnog	Lava	Tolstoja	čitam.
	excellent <sub>acc</sub>	Leo <sub>acc</sub>	Tolstoy <sub>acc</sub>	read
	'I read excellent	Leo Tols	stoy.'	
	b. *Odličnog	Lava	Tolstoj	čitam.
	excellent <sub>acc</sub>	Leo <sub>acc</sub>	Tolstoy <sub>nom</sub>	read
	c. Odličnog	Lav	Tolstoja	čitam.
	excellent <sub>acc</sub>	Leonom	Tolstoy <sub>acc</sub>	read

These facts can help us determine the internal structure of complex names. I propose the following structure for the three patterns:<sup>7</sup>

(20) a.	[ <sub>XP</sub> Lava [ <sub>X'</sub> Tolstoja]]	Pattern 1 (inflected pattern)
b.	[ <sub>XP</sub> Lava [ <sub>X'</sub> Tolstoj]]	Pattern 2 (last name uninflected pattern)
с.	[ <sub>XP</sub> [ <sub>X'</sub> [ <sub>X<sup>0</sup></sub> Lav Tolstoja]]	Pattern 3 (first name uninflected pattern)

In patterns 1 and 2 the first name is in the Spec of the last name. In pattern 3, the complex name does not have internal syntactic structure.

Let us see how these structures account for the facts noted above. First, extraction: the first name is in principle only extractable with internal structure patterns, hence not pattern 3. In pattern 1 the extraction proceeds without problems: we are dealing here with pretty much the standard left-branch extraction, which is otherwise productively allowed in SC. I suggest that the reason why the extraction is blocked in pattern 2, where the first name is also a Spec, is the agreement requirement on left-branch extraction discussed above: left-branch extraction requires case agreement between the extracted element and the remnant. The condition is satisfied in pattern 1, but not pattern 2. The focus data also receive a straightforward explanation given the requirement that only a case inflected element can be focalized. Since both names are inflected in pattern 1, it is possible to focalize each name individually, as well as the whole complex name.

<sup>&</sup>lt;sup>6</sup>Note that it is not possible to extract an adjective+first name sequence, as in \**Odličnog Lava čitam Tolstoja*, which is not surprising given that the two do not form a constituent, as should be clear from the discussion below.

 $<sup>^{7}</sup>$ X in (20) is likely N, given the impoverished NP structure of SC (see Bošković 2007, Despić in press). Its exact identity, however, is not important for our purposes.

Since only the first name is inflected in pattern 2, only the first name can be focalized. Finally, since due to the lack of internal structure the whole name is a single head, pretty much one lexical item, and this head/lexical item itself is inflected, it is possible to focalize the whole name. It is also possible to focalize the subpart of the name that is case-inflected, but not the subpart which is not case inflected. Finally, the modification data. We are dealing here with traditional concord, which I assume requires the adjective to agree in case with what it modifies. The requirement is satisfied in pattern 3 (cf. (19c)), where the complex head that adjective modifies agrees with it in case. It is also clearly satisfied in pattern 1 (cf. (19a)), but not pattern 2 (cf. (19c)), since there the adjective does not agree in case with the head of the complex name.

Another interesting paradigm involves inherent case contexts. The verb in (21) assigns inherent, dative case. Significantly, the inflected and the uninflected first name patterns are possible in this context, while the uninflected last name pattern is not. Compare (21b) with accusative (3a):

(21)	a.	Lav	Tolstoju	pomaže.
		Leonom	Tolstoy <sub>dat</sub>	helps
		'He helps Leo Tolstoy.'		
	b.	*Lavu	Tolstoj	pomaže.
		Leo <sub>dat</sub>	Tolstoy <sub>nom</sub>	helps
	c.	Lavu	Tolstoju	pomaže.
		Leo <sub>dat</sub>	Tolstoy <sub>dat</sub>	helps

These data also receive a straightforward account. It is well-known that inherent case contexts require the complement of an inherent-case marking verb to bear the inherent case in question.<sup>8</sup> Thus, while genitive of quantification, where the nominal bears genitive, is possible in structural case contexts, it is not possible in inherent case contexts (see Franks 1994, 1995, Bošković 2006a, 2008, and Wechsler and Zlatić 2003, among others). This is shown in (22a) and (22b), where *buy* assigns accusative and *help* assigns dative, as in (23):<sup>9</sup>

(22)	a.	Ivan	kupuje	pet	fabrika.
		Ivan	buys	five	factories <sub>gen</sub>
	b.	*Ivan	pomaže	pet	fabrika.
		Ivan	helps	five	factories <sub>gen</sub>
	c.	*Ivan	pomaže	pet	fabrikama.
		Ivan	helps	five	factories <sub>dat</sub>
(23)	cf.	Ivan p	omaže f	fabrika	ma.
		Ivan h	elps f	factorie	Sdat

<sup>&</sup>lt;sup>8</sup>This follows from theta theory under Chomsky's (1986) approach to inherent case, in which an inherent case assigning verb cannot theta-mark its object unless it assigns it the inherent case in question (see Bošković 2006b for relevant discussion of Slavic genitive of quantification).

<sup>&</sup>lt;sup>9</sup>(22c) shows that the requirement does not hold only for the nominal head: all parts of the complex object, including the numeral, must bear dative case. Since the numeral is a caseless form which does not decline (see Bošković 2006a, 2008 and Franks 1994, 1995), the structure cannot yield a legitimate output. Note incidentally that we have here a potential argument against an optimality account, where something should be good enough. That is, under such an account it appears that one of the examples in (22b-c) should be acceptable in spite of a violation, since the optimality framework crucially allows violable constraints.

Returning to (21), the contrast in (21b-c) can be easily accounted for since the obligatory inherent case assignment requirement is satisfied in (21c), but not in (21b). The requirement is also satisfied in (21a), since the complex head (basically a single lexical item) is inflected for dative (so, in contrast to (21b), (21a) does not have a fully non-dative structural position).

#### **3. Inverted Names**

I now turn to what I will call inverted names. What happens when the order of the names is inverted? As shown in (24), the inversion is in principle possible with patterns 1 and 3 (though there is some speaker variation for pattern 1).

(24)	a.	%Tolstoja	Lava	čitam.
		Tolstoy <sub>acc</sub>	Leo <sub>acc</sub>	read
	b.	*Tolstoja	Lav	čitam.
		Tolstoy <sub>acc</sub>	Leonom	read
	c.	Tolstoj	Lava	čitam.
		Tolstoy <sub>nom</sub>	Leo <sub>acc</sub>	read

Where the inversion is possible, the inverted pattern behaves like the non-inverted pattern with respect to extraction, focusing, adjectival modification, and inherent case contexts. Compare (25), where both names are inflected, with (1), (19a), (21c), and (14); and compare (26), where the initial name is uninflected, with (4b), (19c), (21a), and (18), where the initial name is also uninflected:

(25)	a.	Tolstoja	čitam La	va.	
		Tolstoy <sub>acc</sub>	read Le	Dacc	
	b.	Odličnog	Tolstoja	Lava	čitam.
		excellent <sub>acc</sub>	Tolstoya	cc Leo <sub>acc</sub>	read
	c.	Tolstoju	Lavu p	omaže.	
		Tolstoy <sub>dat</sub>	Leo <sub>dat</sub> h	elps	
		'He helps Le	eo Tolstoy'		
	d.	TOLSTOJA	Lava	čitam.	
		Tolstoy <sub>acc</sub>	Leo <sub>acc</sub>	read	
	e.	Tolstoja	LAVA č	itam.	
	f.	TOLSTOJA	LAVA č	itam.	
(26)	a.	*Tolstoj	čitam L	lava.	
		Tolstoy <sub>nom</sub>	read L	eo <sub>acc</sub>	
	b.	Odličnog	Tolstoj	Lava	čitam.
		excellent <sub>acc</sub>	Tolstoy <sub>n</sub>	om Leo <sub>acc</sub>	read
	c.	Tolstoj	Lavu	pomaže.	
		Tolstoy <sub>nom</sub>	Leo <sub>dat</sub>	helps	
		'He helps Le	o Tolstoy.		
	d.	*TOLSTOJ	Lava	čitam.	
		Tolstoy <sub>nom</sub>	Leo <sub>acc</sub>	read	
	e.	Tolstoj	LAVA	čitam.	
	f.	TOLSTOJ	LAVA	čitam.	

I therefore suggest inverted names have the same structure as non-inverted names: they form a complex head in pattern 3, only the forename is now second; and they are in a Spec-head relation in pattern 1, with the surname being the Spec (this pattern is not available for all speakers).

(27) a. $[_{XP}$ Tolstoja $[_{X'}$ Lava]]	Pattern 1
b. [ <sub>XP</sub> [ <sub>X'</sub> [ <sub>X<sup>0</sup></sub> Tolstoj Lava]]	Pattern 3

The data in (25)-(26) can then be accounted for in the same way as the non-inverted names data discussed above.

As for pattern 2, as noted above, the inverse is not possible with this pattern.

 $(28) * [x_P \text{ Tolstoja } [x' \text{ Lav}]]$ Pattern 2

Apparently, in an internal structure pattern the forename simply must be inflected. Note that the uninflected name pattern is very limited: most names disallow it. Thus, the pattern is disallowed with *Ivo Andrić*.

(29) \*Ivo Andrića čitam. Ivo<sub>nom</sub> Andrić<sub>acc</sub> read 'I read Ivo Andrić.'

Having stipulatory constraints regarding the productivity of the uninflected pattern is thus necessary. Some names do not allow it at all, and the forename quite generally has to be inflected if it is an independent item (see footnote 11 for a suggestion about why this is the case). In a no internal structure pattern the forename does not have to be inflected. However, on this pattern the forename is not an independent element—it is a part of a complex name head.

### 4. Case of the Uninflected Pattern

The analysis presented above, which relies on the structures in (20), accounts for all the data discussed above. However, it is necessary to become more precise regarding some of the mechanisms discussed above once another uninflected pattern, discussed in Bošković 2006a and Wechsler and Zlatić 2003, is taken into consideration.

It was argued in Bošković 2006a that an adjective that modifies a noun and agrees with it in phi-features and case gets its case directly from the verb rather than through agreement with the noun. The conclusion is based on the genitive of quantification paradigm. As noted briefly above, higher numerals like *five* assign the so-called genitive of quantification. The numeral itself is a caseless, frozen form. As a result, a higher numeral noun phrase cannot occur in an inherent case context (22b-c): such contexts require the whole object to bear inherent case, but the numeral itself cannot bear it. Like higher numerals, some fe-male lone names that do not end in *-a* do not decline in SC. Thus, while *Nada* declines, *Meri* does not—it has only one form.

(30) a. Nada

Nominative: Nad-a Accusative: Nad-u Genitive: Nad-e b. Meri

Dative/Locative: Nad-i Instrumental: Nad-om Vocative: Nad-o

In Bošković 2006a I argue that undeclined names are completely caseless. From this perspective, the following pattern, noted by Wechsler and Zlatić (2003), is not surprising:

(31) a. Uzgajač konja je kupio Meri. breeder horses<sub>gen</sub> is bought Meri 'The horse breeder bought Meri.'
b. \*Džokej je ovladao Meri. jockey is conquered Meri 'The jockey conquered Meri.'

Like caseless higher numeral phrases, undeclined nouns can function as objects of verbs that normally assign accusative, as in (31a), but not as objects of verbs that assign instrumental, as in (31b). This can be straightforwardly accounted for if such nouns are caseless, given that only inherent case-assigning verbs must assign their case, as discussed above. There is, however, a way of rescuing (31b), noted by Wechsler and Zlatić (2003) and Bošković (2006a). The example becomes acceptable if the noun is modified by an adjective bearing instrumental case.<sup>10</sup>

(32) Džokej je pokušao ovladati našom/neukrotivom Meri. jockey is tried conquer<sub>inf</sub> our<sub>inst</sub>/untamable<sub>inst</sub> Meri 'The jockey tried to conquer our/untamable Meri.'

The presence of an instrumental-marked adjective makes it possible for the verb to check its instrumental case in (32). A question, however, arises as to how the adjective is case-marked. It is often assumed that case-marked adjectives get their case through agreement with the noun, which is case-licensed from outside of the NP. I argue that (32) provides evidence against this assumption. Since the noun is caseless, the adjective in (32) cannot get case through agreement with the noun. Rather, it must be directly case-marked by the verb. This conclusion is, however, relevant for the examples with modified complex names.

I suggested above in the discussion of (19) that an adjective must agree in case with the nominal element it modifies. While the requirement is satisfied in patterns 1 and 3 (cf. (19a,c)), I suggested above that (19b) is ruled out because the adjective fails to undergo agreement with the nominal element it modifies. I interpreted the requirement to mean that the adjective must agree in case with the nominal head, which is *Tolstoj*, the head of the complex name, in (19b). Why then is (32) not ruled out on a par with (19b)? Obviously, we have to make a distinction between these two cases. There is an easy way to make a principled distinction between them. In contrast to *Meri, Tolstoj* does inflect for case. What I have called an uninflected form in the case of *Tolstoj* is simply a nominative case form. True, in examples like (3a) there is no plausible source for nominative case assignment to *Tolstoj*. What is going on here is that *Tolstoj* receives default case, which is nominative in SC (see Bošković 2005a for relevant tests).<sup>11</sup> In contrast to *Tolstoj*,

<sup>&</sup>lt;sup>10</sup>Note that possessives are morphologically and syntactically adjectives in SC, see Zlatić 1997 and Bošković 2005a, 2007. I will not be making a distinction between adjectives and possessives below.

<sup>&</sup>lt;sup>11</sup>Since, as is well-known, crosslinguistically default case cannot be assigned in just any context, restrictions on default case assignment could be what is behind the restrictions on when (what have I called) the uninflected pattern

*Meri* is simply caseless—it has no case at all. This is a natural conclusion given that, in contrast to *Tolstoj*, *Meri* **never** changes its form depending on a case context. The relevant case concord re-quirement should then be stated as follows: an adjective cannot disagree in case with (i.e., have a distinct case form from) the noun it modifies. The condition is trivially satisfied in (32), given that the noun is caseless. However, it is not met in (19b), since *Tolstoj* bears default nominative and the adjective bears accusative.<sup>12</sup>

Note that left-branch extraction is also possible with adjectives modifying caseless nouns:

(33) Neukrotivu on trenira Meri. untamable<sub>acc</sub> he trains Meri 'He trains untamable Mary.'

This means that the agreement condition on left-branch extraction, discussed above, also has to be stated in terms of case disagreement/distinctness.<sup>13</sup>

(i) \*Odličan Lava Tolstoj čitam.
 excellent<sub>nom</sub> Leo<sub>acc</sub> Tolstoy<sub>nom</sub> read
 'I read excellent Leo Tolstoy.'

<sup>13</sup> Whether this is all we need to assume regarding agreement with left-branch extraction depends on examples like (i), due to Zlatić (1997). In contrast to the adjective in (33), the adjective (i) does not inflect. It has only one form in all environments, namely *braun* (in other words, *braun* is an adjectival counterpart of *Meri*).

(i) (\*)Braun je kupila haljinu.
 brown is bought dress<sub>acc</sub>
 'She bought a brown dress.'

Zlatić finds (i) unacceptable, which would indicate the extracted part has to be inflected (for a possible explanation why this would be the case, see Bošković 2005b). My informants, on the other hand, find (i) acceptable (especially with contrastive focus on *braun*, as in *Braun je kupila haljinu, ne roze* 'She bought a brown dress, not a pink one', due to Sandra Stjepanović). If (i) is acceptable, it is not necessary to assume the extracted part has to be inflected.

Notice also that if (i) is considered unacceptable, a question arises regarding the contrast between (i) and (ii). (ii) shows that numeral extraction is possible in the genitive of quantification context, although the numeral here is a caseless frozen form that does not inflect, as discussed above.

(ii) Deset je kupio haljina.

ten is bought dresses<sub>gen</sub> 'He bought ten dresses.'

What could be the difference between (i) and (ii) (assuming (i) is unacceptable)? In Bošković 2006b, 2008, I argue the numeral in (ii) is located in the Spec of a functional head that assigns genitive of quantification (see also Franks 1994), the functional projection in question being located above NP. On other hand, Bošković (2005a) and Despić (in press) argue that APs are dominated (or at least adjoined to) the NP in SC. In light of this, we could make a distinction between (i) and (ii) by restricting the agreement requirement to extraction out of NPs. Alternatively, the potential for case agreement might matter here. The adjective in (i) is in a position that normally agrees in case with

is available. This would mean that a forename as an independent lexical item cannot receive default case (cf. (28); note that the requirement is met in (20).)

Restrictions on default case assignment could also be responsible for at least some of the restrictions regarding focalization of complex names noted in section 1. Thus, it is possible that a name as an independent lexical item cannot get default case if focalized (cf. (13c)) and/or that one name alone can be focalized only if it does not bear default case (cf. (18a) and (26d)).

<sup>&</sup>lt;sup>12</sup>As indicated by (i), default nominative assignment is then either not available for the adjective here or, possibly, it is possible that it would cause a conflict with the accusative case on the first name. (Default case is also not available for the whole complex name, as in  $*Lav_{nom}$  Tolstoj<sub>nom</sub> čitam 'I read Leo Tolstoy'.)

#### 5. Female Names

Another context where potential for inflection matters concerns female names. As noted in footnote 2, most female names, even native ones, quite generally allow only pattern 2 from (20), which means there is no possibility for inflection of the last name.<sup>14</sup> A relevant example is given in (34), which gives the only possible case combination for this name in the context in question.

(34) Desanku Maksimović čitam. Desanka<sub>acc</sub> Maksimović read 'I read Desanka Maksimović.'

I interpret this to indicate that the last name is caseless here. The last name here is then treated differently from the last name in the *Leo Tolstoy* case. That this is on the right track is confirmed by the fact that, in inherent case contexts, *Tolstoy* must be inflected (cf. (21)), while this is not the case with the last name from (34). The contrast between (21b) and (35) can be captured if, in contrast to *Tolstoy* in (21b), the last name in (35) is indeed caseles, provided that the inherent case assignment requirement is also stated in terms of case non-distinctness.<sup>15</sup>

(35) Desanki Maksimović pomaže.
 Desanka<sub>dat</sub> Maksimović help
 'He helps Desanka Maksimović.'

Left-branch extraction is also acceptable with female names, which is not surprising given (33).

(36) Desanku	čitam	Maksimović.		
Desanka	read	Maksimović		
'I read Desanka Maksimović.'				

Notice that (36) differs from pattern 2 male names, where left-branch extraction is disallowed; cf. (4a). This is expected under the above formulation of the agreement condition on left-branch extraction in terms of case non-distinctness, given the claim that the last name has case in (4a) but not in (36).

the noun. This is not the case with the numeral in (ii), which is in a position that is normally assigned accusative case by the verb (I argue in Bošković 2006b that the numeral may indeed be assigned accusative in Russian in this context; this is not possible in SC since SC higher numerals have only caseless forms.) In other words, the numeral is not located in a case-agreeing position at all. It is then possible that the agreement condition holds only for extraction from potentially agreeing positions. Ex-ample (39a) below, where it will be argued that the left-branch extracted name is caseless, additionally complicates the approach that treats (i) as unacceptable since it is not clear how to make a principled distinction between (i) and (39a). None of these con-cerns arises however if (i) is treated as unacceptable; (i), (ii), and (39a) can then all be taken to indicate that there is no requirement that the extracted part be inflected, which means that the only relevant condition on left-branch extraction is the case disagreement/distinctness condition, which also holds for concord and inherent case assignment (see section 5 regarding the latter).

<sup>&</sup>lt;sup>14</sup>This is not always the case, cf., e.g., On čita Sonju Samokovliju 'He reads Sonja<sub>acc</sub> Samokovlija<sub>acc</sub>'.

<sup>&</sup>lt;sup>15</sup>There is still the issue of the contrast between (22b-c) and (35). Since, like *Maksimović*, *pet* is caseless, what may be going on here is that the inherent case assignment requirement forces *factories* to bear dative, while the presence of *pet* forces assignment of genitive of quantification to the following noun. The problem does not arise in (35).

There are actually a number of other differences between male names where the last name is uninflected and the female name under consideration. These warrant considering the latter a separate pattern. Two such differences were already illustrated in (35)-(36). Examples (37a-d), all of which are unacceptable with pattern 2 male names, illustrate additional differences.

(37) a. Čitam Desanku Maksimović. read Desanka<sub>acc</sub> Maksimović
'I read Desanka Maksimović.'
b. Desanku MAKSIMOVIĆ čitam.
c. DESANKU MAKSIMOVIĆ čitam.
d. Odličnu Desanku Maksimović čitam. excellent<sub>acc</sub> Desanka<sub>acc</sub> Maksimović read

Desanku Maksimović can be left in situ, the last name and the whole name can be focalized when the whole name is fronted, and the name can be modified by an adjective. As discussed above, all of these are impossible with pattern 2 male names. Recall also that Desanku Maksimović can occur in inherent case contexts and allows left-branch extraction of Desanku, both of which are also impossible with pattern 2 male names. I suggest that what is responsible for all these differences is that the last name has case (in particular, default case) with the male name, but not with the female name. We have already seen above how this difference explains the contrast between (35)-(36) and (21b), (4a). The explanation easily extends to the contrast between (37d) and (19b), given the case-non-distinctness formulation of the concord case agreement requirement, the requirement being violated in (19b) but not (37d). As for the other examples in (37), all the differences between *Desanku Maksimović* and pattern 2 male names concern focalization; compare (37a-c) with (12a) and (13).<sup>16</sup> As discussed above, with pattern 2 male names, the inflected name has to be focalized (which forces focus movement of the whole name) and what appears to be an uninflected name cannot be focalized. The requirements are apparently waived when the last name is caseless, as in the case of Desanku Maksimović. It is worth recalling here that what may be responsible for some of the restrictions regarding focalization with pattern 2 male names are in fact restrictions on default case assignment (see footnote 11), which are irrelevant with Desanku Maksimović since the last name does not bear default case.

Given that there are independent, non-structural explanations for all the differences between *Desanku Maksimović* and pattern 2 male names (see footnote 19 for another difference), I conclude that there is no need to posit a separate structure for *Desanku Maksimović*: we are dealing here with the same structure as with pattern 2 male names, i.e., (20b). The differences between *Desanku Maksimović* and male names from this pattern noted above follow from a difference in the case properties of the last name, the last name bearing default nominative with male names and being caseless with *Desanku Maksimović*. In fact, recall that the inflected male name pattern and the uninflected last male name pattern are structurally non-distinct; they share a single structure, as (20a-b) show. As in the case of *Desanku Maksimović* and pattern 2 male names, the differences between pattern 1 and pattern 2 male names discussed above have non-structural explanations. Then, although superficially we have four distinct patterns in the behavior of complex names regarding the tests conducted here, we actually have only two

<sup>&</sup>lt;sup>16</sup> Note that *DESANKU Maksimović čitam* is acceptable.

different structures, many of the differences between different patterns receiving non-structural explanations where the case status of a name (caseless or bearing default case) is of crucial importance.<sup>17</sup>

Consider finally the inverse of Desanku Maksimović.

- (38) Maksimović Desanku čitam. Maksimović Desanka<sub>acc</sub> read
- (39) a. Maksimović čitam Desanku.
  b. Odličnu Maksimović Desanku čitam. excellent<sub>acc</sub> Maksimović Desanka<sub>acc</sub> read
  c. Maksimović Desanki pomaže. Maksimović Desanka<sub>dat</sub> helps
  'He helps Desanka Maksimović.'
  d. MAKSIMOVIĆ Desanku čitam
  e. Maksimović DESANKU čitam.
  f. MAKSIMOVIĆ DESANKU čitam.

These data can be easily captured if the inverse has the structure in (40). Notice that no problems arise with respect to the case agreement requirements on concord (cf. (39b)) and left-branch extraction (cf. (39a)) or the case assignment requirement on inherent case (cf. (39c)), given that *Maksimović* is caseless, hence non-distinct from accusative and dative case forms.<sup>18</sup>

(40)  $[_{XP}$  Maksimović  $[_{X'}$  Desanku]]

Since with the inverted name the initial name is uninflected and the second name is inflected the counterpart of *Maksimović Desanku* with male names is the pattern 3 inverse. The behavior of this pattern was illustrated in (26), and its structure was argued above to be (27b). There are two differences between (26) and (39), namely (26a,d) and (39a,d). The extraction difference follows from the internal structure/no internal structure difference between (40) and (27b). There is actually an additional difference here: since the initial name is not caseless with the male name, left-branch extraction with the male name, but not with the female name, leads to a violation of the case agreement requirement on left-branch extraction. In light of this, a potentially viable possibility is to treat (39a) and (26a) as arising from the non-inverted structure, where *Desanku/Lava* is the Spec and *Maksimović/Tolstoj* the head, assuming X' extraction is allowed (or additional structure could be posited so that the first name and the second name are not in the same phrase). This would make such examples irrelevant to the issue of inverse, i.e., it would not prevent treatment of the *Maksimović Desanku* inverse in terms of a complex head.<sup>19</sup> We would then be left with the difference between (26d) and (39d). Recall that one of the reasons why the inverse *Tolstoj Lava* was treated as the structural counterpart of (20c) rather then (20b) was in

<sup>&</sup>lt;sup>17</sup>Superficially, *Desanku Maksimović* is actually much more similar to pattern 1 male names than pattern 2 male names, the only difference between the former male name pattern and *Desanku Maksimović* in fact being case. What is important with respect to the other tests conducted above is that *Desanku Maksimović* and pattern 1 male names are in a way less different than pattern 1 and pattern 2 male names with respect to case, since they do not display a case form conflict (the difference is caseless/cased vs. two different case forms).

<sup>&</sup>lt;sup>18</sup> Note also that (39a) patterns with example (ii) in footnote 13, where the extracted part is also caseless.

<sup>&</sup>lt;sup>19</sup>The examples would, however, then be another source of difference between *Desanku Maksimović* and non-inverted pattern 2 male names, which would also receive a non-structural explanation.

fact focalization: (26d-e) pattern in the relevant respect with (18) (non-inverted pattern 3) rather than (13) (non-inverted pattern 2).<sup>20</sup> However, there may be an independent non-structural explanation for the difference between (26d) and (39d). It was suggested in footnote 11 that (26d) may be ruled out because one name alone can be focalized only if it does not bear default case. The requirement is irrelevant to (39d) given that *Maksimović* is caseless. The upshot of all of this is that it is actually not clear whether the inverse of *Maksimović Desanku* should receive the structure in (40) or a single lexical item structure like the one in (27b). The latter would, however, only be viable if (39a) is considered to arise from a non-inverted structure, which would require either allowing X'-movement or positing additional structure so that the names in the internal structure pattern are not located in the same phrase. In light of this, treating the inverse of *Maksimović Desanku* in terms of the structure in (40) may be simpler.

## 6. Conclusion

In conclusion, I have discussed three distinct case patterns for complex names which have turned out to show four distinct patterns of behavior with respect to the tests conducted in this paper, namely left-branch extraction, focalization, name inversion, modification by adjectives, case morphology, and occurrence in inherent case contexts. I have accounted for all these differences by positing two different structures for complex names, with many of the differences between complex names receiving non-structural explanations. I have also provided additional evidence against the Prosodic Inversion analysis of SC cliticization and given a precise formulation of the case agreement condition on concord and left-branch extraction as well as a condition on inherent case assignment, all of which should be stated in terms of case non-distinctness. Finally, I have provided ways of teasing apart default case and caseless options for various nominal elements. Whether a name is caseless or has default case has been shown to be responsible for distinct behavior of names with respect to a number of phenomena.

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 $<sup>^{20}</sup>$ The other reason is (26c), which patterns with (21a) rather than (21b). The explanation given above for the difference between (21a) and (21b) was in terms of a case conflict ((21b) but not (21a) has a fully non-dative structural position, namely the Spec of the name) and is irrelevant to (39c), the surname being caseless.

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