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# ON THE STRUCTURAL UNIFORMITY OF SUPERLATIVES: EVIDENCE FROM GEORGIAN, SLOVENE, AND TAMIL

This paper is an exploration of the structure of superlative degree adjectives and the syntactic constructions in which they occur across three very distinct languages. Slovenian, Georgian, and Tamil each represents a typological variant of the superlative construction. Slovenian has synthetic superlatives, built from the *naj*- prefix, while Georgian and Tamil have compositional superlatives, in which the meaning of the superlative is derived compositionally. In this paper, I show that these apparent differences between these constructions is superficial and that the underlying syntax is largely the same.

KEYWORDS: superlative, degree adjective, syntax, morphology, semantics, Tamil, Georgian

V prispevku obravnavam strukturo presežnika pridevnikov in skladenjskih zgradb, v katerih se presežniške zgradbe pojavljajo v treh različnih jezikih. V slovenščini, gruzinščini in tamilščini se pojavljajo tipološke različice presežniških zgradb. Slovenščina ima sintetične presežnike, zgrajene iz predpone *naj*-, v gruzinščini in tamilščini pa so v rabi sestavljeni kompozicionalni presežniki, v katerih je pomen presežnika zastavljen kompozicionalno. V prispevku dokazujem, da so razlike med zgradbami v obravnavanih jezikih samo površinske in da je globinska skladnja večinoma enaka.

KJUČNE BESEDE: presežnik, presežna stopnja, superlativ, stopnjevalni pridevnik, skladnja, oblikoslovje, pomenoslovje, tamilščina, gruzinščina

# **1** INTRODUCTION

The morphological composition of superlative degree adjectives shows surprisingly limited cross-linguistic variation; indeed, it has been observed that despite differences in the surface realization of superlative adjective formation, there are cross-typological uniformities that lend themselves to universal generalizations, perhaps most strikingly that superlatives are morphologically derived from comparative adjectives (Bobaljik 2012). But the question that then inevitably arises is how to reconcile a universal morphological principle, like that proposed by Bobaljik (2012) with the (limited but nevertheless significant) surface morphosyntactic variation we find in the expression of comparatives and superlatives.

Superlative degree adjectives can be classified as either analytic/periphrastic (e.g., most sweet) or synthetic (e.g., sweetest). This does not appear to be a parametric difference, as languages do not necessarily conform to using just one or the other; rather many languages (e.g., English, Slovene) use some combination of the two. Although it is widely acknowledged that degree adjectives alternate between synthetic and analytic morphological realizations, little attention has been given to the *variability* across the construction of periphrastic superlatives. Overall, the syntax of superlatives has largely been ignored in the literature.

The syntactic properties of adjectives, including the syntax of comparative degree adjectives, have been the focus of a great deal of research (notably, for example, Cinque 2010, Aljović 2010, Bresnan 1973, Kennedy 2002). In addition, superlative degree adjectives have been explored extensively in terms of their semantics (e.g., Heim 1999, Gutiérrez-Rexach 2010, Sleeman 2010). And though there has been some recent interest in the syntax of superlative degree constructions (e.g., Loccioni 2020), the focus is centered on an analysis of those constructions that include an overt definiteness marker, as in Romance, to the exclusion of other varieties.

In this paper, I examine the relationship between the morphology of superlative degree adjectives, their semantic composition, and the syntactic environment in which they occur in order to propose a cross-typologically uniform syntax of superlatives.

#### 1.1 BACKGROUND

Bobaljik (2012) illustrates that every superlative degree adjective properly contains the comparative degree adjective (*The Containment Hypothesis*). He offers a number of universally held generalizations to support this claim; perhaps most notably, he shows that in no language is there a comparative degree adjective with a suppletive stem whose superlative counterpart does not also bear a suppletive stem; i.e., the superlative cannot revert to the positive adjectival root once suppletion has occurred for the comparative.

In many languages, such as Slovene (predominantly synthetic) and Tamil (analytic), the compositional nature of the superlative is transparent. Bobaljik offers a compelling argument that even in languages where this embedding is less obvious (e.g., English), it nevertheless obtains. Assuming this is indeed the case, the next step is to investigate the nature of the component parts of the comparative and superlative: does the form relate to the function, and if so, how? As an initial step toward answering this question, let's first examine the semantics of comparative and superlative degree adjectives.<sup>1</sup>

# 1.2 THE DERIVED SEMANTICS OF SUPERLATIVES

The semantic value of the superlative degree adjective is built upon that of the comparative adjective. It is crucial to note that I will be looking strictly at the most prevalent use of the comparative, in which two distinct entities are undergoing comparison with respect to some feature. There are, of course, other ways in which comparatives are used (i.e. "The building is taller than it is wide." or the marginally acceptable distributed reading of "Tony and Nancy are taller than Andy and Kim", in which Andy may be taller than Nancy), but such uses go beyond the scope of this study.

In its typical usage, a comparative degree adjective denotes a function that selects one member of binary set, namely the one with the higher value with respect to some specified gradable feature F (denoted by the positive adjective). The member of the set selected by the degree adjective (A) has F greater than the other member (B), so  $(F_A > F_{B,} \{A, B\})$ . For a concrete example, let's consider the following sentence.

(1) Gaia is taller than Angelika.

The comparative applies to two entities, in this case Gaia and Angelika. Both Gaia and Angelika bear a height feature ( $F_{height}$ ). The comparative selects the one entity whose  $F_{height}$  exceeds that of the other. In essence, the generic sentence model for a comparative in (2) can be paraphrased as (3).

(2) X is Z-er than Y

(3) "X exceeds Y in Z, where Z is a gradable property."<sup>2</sup> (Chidambaram 2008)

<sup>&</sup>lt;sup>1</sup> Note that I will be looking strictly at the most prevalent use of the comparative, in which two distinct entities are undergoing comparison with respect to some feature. There are other ways in which comparatives are used (i.e. "The building is taller than it is wide." or the marginally acceptable distributed reading of "Tony and Nancy are taller than Andy and Kim", in which Andy may be taller than Nancy), but such uses go beyond the scope of this study.

<sup>&</sup>lt;sup>2</sup> This follows directly from Christopher Kennedy's (1997) analysis of comparative degree adjective semantics.

The fundamental difference between a comparative adjective and a superlative adjective is the inclusion in the latter of either an explicit or implicit domain restriction as well as a universal quantifier taking scope over that domain. For example, in (4) we have an explicit domain restriction, which is the bracketed PP. And the meaning of the sentence is paraphrased in (5).

(4) Gaia is the silliest kid [PP in the class].

(5) For every kid in the same class as Gaia but who is not Gaia, Gaia exceeds them in silliness.

Just as the definition of the comparative can be generalized, the definition of the superlative can also be generalized, as in (6).

(6) "For every Y, where Y represents any individual term within the specified domain that also includes X, and Y is not X, X exceeds Y in Z, where Z is a gradable property." (Chidambaram 2008)

The relationship between (3) and (6) is quite plain to see. (6) in fact properly contains (3), but furthermore specifies the existence of a domain and includes a quantifier. In some languages, this relationship is grammatically transparent, as in Tamil. I will call this a *compositional superlative*.

# **2** Compositional Superlatives

As mentioned earlier, periphrasis of superlatives is not cross-linguistically uniform. While the majority of work on the topic has focused on the "most" variety of periphrastic superlatives, very little attention has been dedicated to examining other syntactically complex expressions of superlative degree. The compositional superlative is one such overlooked construction.

Compositional superlatives are transparently derived from comparatives, and thus adhere quite visibly to Bobaljik's *Containment Hypothesis*. In addition to the inclusion of the comparative, compositional superlatives also include a quantifier and a domain restriction (which could be either explicit or implicit (Stanley, Szabó 2000)). Consider examples (7) and (8) from Tamil:

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(7)				
Ra:mu	Mohanai-vida	oyarama:navan		
Ramu <sub>NOM.SG.MASC.</sub>	Mohan <sub>ACC.SG.MASC.</sub> -than	tall <sub>MASC.SG. PRED.ADJ.</sub>		
'Ramu is taller than Mohan.				
(Chidambaram 2008)				

(8)
Ra:mu ella:raiyum -vida oyarama:navan
Ramu<sub>NOM.SG.MASC.</sub> everyone<sub>ACC.</sub> -than tall<sub>MASC.SG. PRED.ADJ.</sub>
'Ramu is the tallest.' / lit. 'Ramu is taller than everyone."
(Chidambaram 2008)

Sentence (7) illustrates the expression of the comparative in Tamil. The subject is marked nominative and agrees in number and gender with the predicate adjective. The post-positive comparative marker *vida* ("than") requires that the comparand be assigned accusative case. Sentence (8), containing the superlative, is identical to (7) in all but one respect; namely, that the accusative case-marked comparand is a universal quantifier.

Bobaljik (2012) suggests that languages which form the superlative in this manner in fact lack a grammatical superlative, which I assume to mean that their syntax is fundamentally different from the syntax of languages with synthetic superlatives. I would like to suggest an alternative to this assessment and entertain the possibility that these are indeed true superlatives and that languages with synthetic superlatives are not syntactically so different.

#### 2.1 VARIATION IN COMPOSITIONAL SUPERLATIVES

There are, in fact, two ways in which a compositional superlative can be formed, reflecting two discrete perspectives. If the function of a superlative is to identify an individual within a domain, then the focal point can either be (1) the individuation of one entity or (2) the extent of the domain.

In Romance languages, the superlative is formed using a definite article and the comparative adjective, thus focusing on the individuation of a unique entity, as in the Italian example below. We might term these *individuating compositional superlatives*.

$(\mathcal{I})$					
La	ragazza	più	forte	e	Gaia.
The	girl	more	strong	is	Gaia.
'The strongest girl is Gaia.'					

In languages like Tamil, on the other hand, the focus seems to be the extent of the domain. We can call these *domain-extent compositional superlatives*. Domain-extent compositional superlatives are characterized by the presence of the universal quantifier; shown in Tamil example (10), *ella:* 'all':

#### (10)

Georgian, too, forms superlatives in a similar manner, as illustrated in (11),<sup>3</sup> in which the universal quantifier is *qvela* 'all'.

(11)

Gaia qvelaze upro p'at'ara st'udent'ia. Gaia  $all_{LOC}$  more small student-is. 'Gaia is the smallest student.'

In this paper, I will restrict my investigation to the domain-extent compositional superlatives, as found in Tamil and Georgian (i.e., those who instantiate the superlative explicitly using a universal quantifier). That said, I do not rule out the possibility that an extension of the analysis I propose applies to Romance and other languages, as well.

(0)

<sup>&</sup>lt;sup>3</sup> It should be noted that Georgian additionally has a synthetic form of the superlative, which is formed with the circumfix *u*--*es*: (1) p'at'ari– upro p'at'ar-i– u-p'at'ar-es-i  $\rightarrow$ small– smaller– smallest.

But from what I have understood from my Georgian informants, these are actually absolute superlatives, which contrast significantly from relative superlatives in terms of their semantics. Absolute superlatives have the meaning of a strong intensifier (e.g., Italian *bellissima*), whereas relative superlatives really choose the highest ranked member of an ordered set. It could be significant that one finds synthetic absolute superlatives in languages that that have not only analytic but *compositional* relative superlatives (of the two different types). But this idea requires further research that goes beyond the scope of this paper.

# 3 THE SIGNIFICANCE OF THE UNIVERSAL QUANTIFIER

In many languages, we find the pattern that we find in Georgian and Tamil; they combine a universal quantifier with the comparative adjective to form the superlative. This inclusion of the universal quantifier has clear consequences on the semantics of the entire phrase. For one thing, it produces a downward entailing environment. Downward entailment is the property of a statement X, e.g. "I love all cheese", such that X entails every statement that includes a subset of X, e.g. "I love all *French cheese*". One interesting property of downward entailing environments is that they allow the inclusion of Negative Polarity Items (NPIs) (Ladusaw 1980), e.g. "I love all cheese that I  $ever_{NPI}$  tasted". We see that NPIs are possible within superlative clauses in languages like Georgian, which overtly include a universal quantifier: both *k'i* and *odesme* are NPIs in Georgian (Chutkerashvili 2009) and are permitted in superlative clauses. Consider the Georgian example in (12):

(12)Zaza qvelaze k'et'ili adamiani-a upro Zaza allLOC nice person-is more (mat šoris) visac ševxvedrivar k'i odesme (them<sub>DAT.PL</sub> among) I-met whom<sub>ACC</sub> ever ever 'Zaza is the nicest person whom I ever met.'

In general, NPIs are not licensed in relative clauses following positive adjectives nor in *than*-clauses following comparatives, as shown in (13) and (14).

(13) \* Gaia is a sweet person that I ever knew.

(14) \*/? Gaia is a sweeter person than I ever knew.<sup>4</sup>

This suggests that there is something special about the superlative cross-linguistically that provides a downward entailing environment. In Georgian, this is unmistakably the work of the universal quantifier. The universal quantifier creates a downward entailing environment, licensing an NPI, otherwise

<sup>&</sup>lt;sup>4</sup> This sentence could be good if it is interpreted as containing some instantiation of the universal quantifier within the *than*-clause. If we were to interpret the sentence as truly comparative, as in "Gaia is a sweeter person than the one I ever knew", it would be infelicitous if not outright ungrammatical.

unlicensed by an adjective (positive or comparative). In English and other languages, however, the source of the licensing is less evident, but nevertheless, we see that NPIs are indeed licensed in clauses within the scope of a superlative degree adjective, as demonstrated in (15), which supports the notion of a hidden universal quantifier in the superlative:

(15) Gaia is the sweetest person that I've ever known.

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4 THE SLOVENE KAR-PHRASE
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Slovene, unlike Tamil and Georgian, forms relative superlatives synthetically with the prefix *naj*-. The degree adjectival series is exemplified in (16):

(16) lep – lep-š-i – naj-lep-š-i beautiful – more beautiful – most beautiful

In this series, we see the transparent nesting of the comparative (and more deeply, positive) degree adjective within the superlative: a perfect illustration of Bobaljik's (2012) *Containment Hypothesis*. This manner of forming superlatives is far from unique; indeed, it is the most common way of forming superlatives in Slavic languages (Russian, Macedonian, and Bulgarian being exceptional).

It is natural at this point to consider the nature of the prefix *naj*-: what does it contribute semantically and where does it fit syntactically? The historical origins of this morpheme have been disputed, but recently Wandl (2022) provided a strong argument for the development of *naj*-, suggesting that it arose through composition of the excessive/intensifying adverbial prefix *na*- (occurring on verbs like *napiti se* 'to get drunk' formed from *piti* 'to drink') and *-j* which developed from an enclitic pronoun and appeared on adjectives in early Slavic to denote definiteness. For example in Old Church Slavonic, the morphemes *nova* 'new' + *ja* 'it<sub>NOM.SG.FEM.PRON.</sub>' results in the word *novaja* 'the new (one<sub>NOM.SG.FEM.PRON.</sub>') (Wandl 2022). This diachronic analysis of the superlative morpheme *naj*-, which includes a definiteness marker, closely resembles that of a type of superlative we have discussed previously: the individuating compositional superlative, which we see in some Romance languages (see example (9) for Italian).

There is evidence, however, that the synchronic analysis of *naj*-, i.e., the manner in which contemporary speakers interpret the morpheme, may have diverged somewhat from its historical origins. Specifically, there are some facts from contemporary Slovene that shed some light on the specialized function and properties of *naj*-. Before we examine those data, let's first consider some background on positive and comparative degree adjectives and the types of CP that follow them.

4.1 A BRIEF BUT NECESSARY DIGRESSION ON RELATIVE CLAUSES AND THAN-CLAUSES

Any NP can be modified by a relative clause, whether or not there is an adjectival modifier present.

- (17) Jozef is the philosopher [ $_{RC}$  that I'm married to].
- (18) Jozef is the  $[_{NP} [_{AP} brilliant]$  philosopher]  $[_{RC}$  that I'm married to].

The relative clauses in (17) and (18) are identical; the inclusion of an additional modifier in (18) has no consequence on either the interpretation or structure of the relative clause. But this is perhaps not the case when the modifying adjective is a comparative.

(19) #Jozef is the [NP [compAP more brilliant] philosopher] [RC that I'm married to].

The meaning of sentence (19) can be paraphrased as follows: I am married to two different philosophers, of whom Jozef is the more brilliant. So the question is whether the phrase is truly interpreted as just a plain old relative clause. I will leave this as an open question for the moment and return to it in \$4.3.

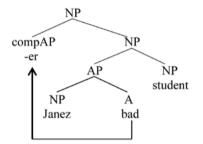
Typically, comparatives are followed not by relative clauses but by *than*-clauses, which occur as a function of the comparative itself. In Slovene, this can be instantiated phrasally (as a PP) or clausally (headed by the  $C^0$  kot) (Pancheva 2006). In both, the *than*-clause serves to denote the *comparand*, i.e. the lower-ranking member of the ordered set.

(20)

(a) Janez is a worse student [than Maja].

(b) Janez je slabši študent [PP od Maje] / [CP kot (je) Maja (slaba študentka)]. Janez is worse student [PP from Maja] / [CP than (is) Maja (bad student)].

The syntax of (20b) is complicated; there are several requirements that need to be met. One crucial consideration is that it be derived it in a way that reflects the requisite morphological nesting of the positive adjective within the comparative. In Bobaljik (2012), this boils down to a direct selection relation between compA<sup>0</sup> and the AP, but I suggest that it must be more complex than that, simply because there is more to the compAP. On one hand, the structure should convey the functional similarity between a comparative degree adjective phrase and a positive degree adjective phrase: both are adjunct NP-modifiers. This can be achieved as in the following derivation, in which A<sup>0</sup> raises to adjoin to compA<sup>0</sup> to form the comparative adjective, and both AP and compAP are NP-adjuncts:

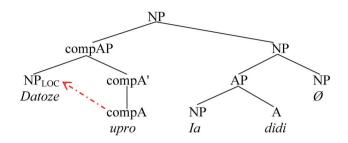


On the other hand, the structure must also reflect idiosyncratic properties of the comparative; notably, the close relationship between the comparative morpheme and the *than*-clause. Georgian provides an interesting clue as to how this condition may be satisfied.

(21)

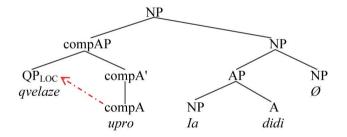
Ia	Datoze	(upro) didi-a.	
Ia <sub>NOM.SG.FEM.</sub>	Dato <sub>LOC.SG.MASC.</sub>	(more) big-is.	
'Ia is bigger than Dato.'			

Here we see that the comparand in a phrasal comparative occurs in an oblique Case. In Georgian, there is no indication of a preposition assigning/ licensing/checking Case, rather it seems that the comparative itself is responsible for the Case, thus suggesting the possibility of the following structure for the Comparative Adjective Phrase in (21):



The comparand is merged as the Specifier of compA, where its Case is checked by the compA head.

It is critical to note that both in Georgian and in Tamil, it is a quick (and superficially simple) step from the comparative to the superlative: it is achieved by replacing the DP-comparand with a universal quantifier. So eventually, one would hope the superlative would be derived as shown here, where *qvela*, the universal quantifier meaning 'all', occurs in the canonical position of the comparand:

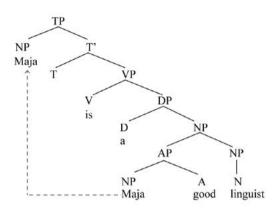


This structure represents only the final, surface/PF form; in SECTION 6, we address the operations that are necessary to derive it.

#### 4.2 The structure of synthetic comparatives

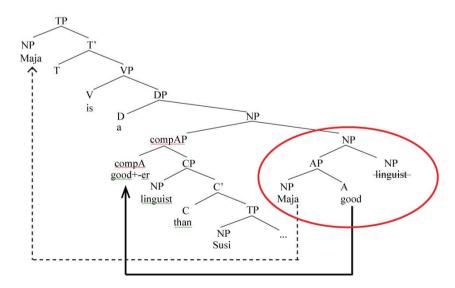
As a preliminary step toward understanding the syntax of superlatives, we must explore the structures of positive and comparative degree adjectival constructions.

A simplified derivation of the sentence *Maja is a good linguist* is shown below.



Note that the matrix subject originates as Specifier of the adjective, in accordance with a small clause analysis of predicate adjectives (Stowell 1980). It then raises to matrix subject, perhaps via intermediary cyclic steps (e.g. Spec-vP, in an expanded derivation).<sup>5</sup>

The syntax of a comparative includes the positive degree adjective but additionally includes movement of the  $A^0$  to merge with the comparative morpheme *-er* and the *than*-CP comparand clause. Consider the following derivation of Maja is a better linguist than Susi.



<sup>&</sup>lt;sup>5</sup> In the absence of an adjective, the matrix subject would first merge into Spec-vP.

Note that the circled part of the derivation is identical to what we find in the derivation of *Maja is a good linguist*. Just as in the previous derivation, the Spec-AP *Maja* raises to matrix subject. In addition, the positive adjective  $A^0$  raises to merge with the comparative morpheme. The morphological merger of the adjectival head *good* and *-er* triggers stem suppletion, giving rise to the form *better*. The final step is the deletion of the NP *linguist* on identity with the embedded Spec-CP. One could, alternatively, analyze this as a movement operation; that is, the NP *linguist* might move from its original position to the Specifier of the than-clause CP. This, however, would constitute a sideward movement, whose status in generative syntax is contentious.

#### 4.3 BACK TO SUPERLATIVES IN SLOVENE

Now that we have considered the structure of a comparative, we are much better situated to understand the superlative. Let us recall the data on relative clauses adjoined to AP examples (17), (18), and (19), repeated here as (22), (23) and (24).

- (22) Jozef is the philosopher [RC that I'm married to].
- (23) Jozef is the [NP [AP brilliant] philosopher] [RC that I'm married to].
- (24) #Jozef is the [NP [compAP more brilliant] philosopher] [RC that I'm married to].
- (25) #Jozef is the [NP [supAP most brilliant] philosopher] [RC that I'm married to].

From the sentence in (25), it appears that I am married to  $\geq$  3 different philosophers. So, again, we must wonder whether the bracketed *RC* in this sentence is really a typical N<sup>0</sup>-modifying relative clause. If it were, we wouldn't expect it to render the sentence infelicitous. Data from Slovene suggest that this bracketed RC phrase in (25), which bears superficial similarity to a relative clause, perhaps is something quite different.

#### 4.3.1 RELATIVE CLAUSES AND RESUMPTION IN SLOVENE

There are various ways to form a relative clause in Slovene, but one of the most frequently attested (especially when the relative head within the relative clause, or *internal relative head*, is assigned either Accusative or Dative Case) is a CP that is headed by the invariant complementizer *ki* and that contains a resumptive pronoun. The resumptive pronoun receives its case within the RC.

#### (26)

Maja je ta jezikoslovka, [<sub>RC</sub> **ki** sem **jo** spoznala včeraj]. Maja is the linguist<sub>NOM.SG.FEM.</sub>,[<sub>RC</sub> **that** AUX **her**<sub>ACC.SG.FEM.</sub> met yesterday]. 'Maja is the linguist that I met yesterday.'

What we see in (26) closely resembles what we find in the clauses that follow superlatives; however, there are two significant points where the two clausal constructions diverge. First, and perhaps most noticeably, the complementizer itself is different: kar, rather than ki. And second, the resumptive pronoun does not necessarily match the relative head in number.

# (27)

Oni so najpametnejši jezikoslovci, [ $_{CP}$  kar sem jih spoznala včeraj]. They are the smartest linguists<sub>NOM.PL</sub> that AUX them<sub>ACC.PL</sub> met yesterday. 'They are the smartest linguists that I met yesterday.'

# (28)

Maja je najpametnejša	jezikoslovka,	[CP kar sem jih	spoznala
			včeraj].
Main is the smartest	linguist	that AUX them	mot voctorda

Maja is the smartest linguist<sub>NOM.SG.FEM.</sub> that AUX **them**<sub>ACC.PL.</sub> met yesterday. 'Maja is the smartest linguist that I met yesterday.'

When the modified N<sup>0</sup> is plural, as in (27) *jezikoslovci* 'linguists', the resumptive pronoun embedded in the *kar*-phrase will match it for number. But this apparent feature "matching" turns out to be an artefact of the invariant<sup>6</sup> plurality of the *kar*-phrase resumptive, which is evident from (28), in which the modified N<sup>0</sup> (*jezikoslovka* 'linguist'), is singular, and the resumptive pronoun is nonetheless plural and obligatorily so.

The *kar*-phrase is certainly some kind of CP, but it differs from a typical *ki*-relative clause in 3 related ways: (1) it is not adjunct-like, (2) much like the *than*-clause, it seems to have a close relationship to a degree adjective, and (3) it serves to denote a quantifier domain restriction.

Let's first consider the source of the plural number feature on the embedded clause internal pronoun. Within analyses of anaphora, resumptive pronouns

<sup>&</sup>lt;sup>6</sup> Nearly invariant. We will return to the point later in the section.

are always presented as something of an outlier. Whereas pronouns generally do not require any sort of sentence-internal antecedent, resumptive pronouns obligatorily have a local antecedent. And of course, it is a definitional requirement that the pronoun match its antecedent in all  $\varphi$ -features. The pronoun *jih* in (28) doesn't appear to have anything that could potentially serve as an antecedent. And indeed, if you ask any Slovenian what the *jih* stands for in (28), they will invariably respond *jezikoslovci* ('linguists'), which doesn't correspond to any overt lexical item in PF. But of course, that doesn't mean it isn't there in the syntax at all.

Interestingly, we can see parallels to this phenomenon cross-linguistically and cross-typologically. If we look back at Georgian, which is a Kartvelian language and has compositional superlatives (as opposed to Slovene synthetic superlatives), we see a striking similarity to the Slovene *kar*-phrase. Consider example (12), repeated here as (29):

(29)				
Zaza	qvelaze	upro	k'et'ili	adamiani-a
Zaza	$all_{LOC}$	more	nice	person-is
[ <sub>CP</sub> (mat šoris)	visac	k'i	ševxvedrivar].	
[ <sub>CP</sub> (them <sub>DAT.PL</sub> among)	whom <sub>ACC.</sub>	ever	I-met].	
'Zaza is the nicest person whom I ever met.'				

The Postpositional Phrase [PP *mat šoris*] contains a plural pronoun with no overt antecedent, although it is interpreted as "people".

This supports the notion that the CP following a superlative, regardless of the superlative's morphological structure, is in fact *not* a CP-adjunct of an N<sup>0</sup> (i.e., a relative clause) but rather a specialized quantifier-domain-restricting clause that relates directly to the superlative adjective. The particular quantifier whose domain is being restricted is evident in Georgian: *qvela* 'all'. And there is evidence that it is the same in Slovene. As it turns out, the superlative degree adjective is not unique in its ability to license a *kar*-phrase.

(30)

**Vsi** jezikoslovci, [CP **kar sem jih včeraj spoznala**], so bili prijazni. **All** linguists **that AUX them yesterday met**, AUX were kind. 'All the linguists I met yesterday were kind.' I suggest that the plural feature of the resumptive pronoun is a direct consequence of the universal quantifier, not only in (30) but also in (28), where that universal quantifier is not overt but rather incorporated into the superlative degree adjective. This may seem like an unjustified theoretical leap; however, there is clear empirical evidence to support it. Let's consider the effect of quantification on mass nouns.

(31)

Vsa(različna)vinasobilaizvrstna.All\_NOM.PL.NEUT.(different)wines\_NOM.PL.NEUT.AUXwereexcellent.'All the (different) wines [i.e, wine varietals] were excellent.'

(32)

Vse(\*različno)vinojebilopokvarjeno.All<sub>NOM.SG.NEUT.</sub>(\*different)wine<sub>NOM.SG.NEUT.</sub>AUXwasspoiled.'All the (\*different) wine was spoiled.'

The contrast we find between (31) and (32) is restricted to mass nouns, as count nouns are obligatorily plural when they occur within the scope of universal quantification (this is also why we find obligatory plurality of the *kar*-phrase pronoun, i.e. due to its position within the scope of a universal quantifier). As expected, the quantified plural mass noun in (31) receives the *type*-reading (thereby allowing differentiation), whereas the quantified singular mass noun in (32) simply receives the collective reading (thereby precluding differentiation). Interestingly, we find a parallel to this in the *kar*-phrase.

The resumptive pronoun in a *kar*-phrase is obligatorily plural when the superlative modified  $N^0$  is a count noun, as in (33).

(33)
To je najhitrejši računalnik [kar jih /\*ga lahko kupiš].
That is fastest computer [that them/\*it can you-buy].
'That is the fastest computer that you can buy (them/\*it).'

But an alternative emerges when the modified  $N^0$  is a mass noun, as in (34).

### (34)

То naikisleiše pivo [kar sem iih / ga kdai ie pila]. That is [that AUX them / it I-drank]. sourest beer ever - With *iih*: 'That is the sourest variety of beer I have ever drunk' (That particular beer may not be the sourest, but that variety (e.g., Sour Ale) is the sourest I ever drank.)

- With *ga*: 'That is the sourest beer that I have ever drunk' (I have never had any beer that is sourer.)

I submit this as further evidence that the superlative in Slovene contains universal quantifier, which is additonally supported by the licensing of an NPI in *kar*-phrases following superlatives (refer to SECTION 3 above).

### (35)

Maja je najboljša jezikoslovka, kdaj kar sem iih spoznala. Maja is best linguist AUX that them ever met. 'Maja is the best linguist that I ever met.'

# **5** The Syntax of Superlatives

Thus far, I have argued that the following three and a half facts need to be represented in some way in the syntax of superlative degree adjectives, irrespective of the morphological composition (i.e., synthetic vs. compositional) of the superlative:

(1) The superlative must contain the comparative (Bobaljik's (2012) Containment Hypothesis),

(2) superlatives co-occur with domain restricting clauses whose semantics (and in some cases, whose surface syntactic structures) are unmistakably distinct from those of an ordinary NP-modifying relative clause, and

(3) superlatives bear properties of universal quantifiers; in domain-extent compositional superlatives, this is morphologically transparent.

(a) In languages with transparent inclusion of the universal quantifier in the superlative, the UQ appears as the comparand.

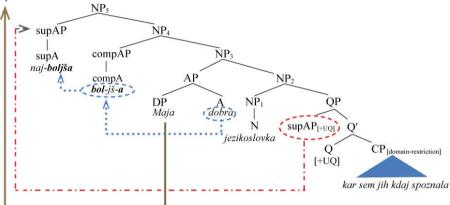
Again, these requirements taken together are somewhat difficult to satisfy structurally, however, they can indeed be integrated, as illustrated in §5.1 and 5.2.

#### **5.1 SLOVENE SUPERLATIVES**

#### (36)

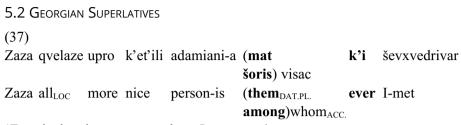
Maja je jezikoslovka, najboljša kar jih kdaj spoznala. sem best Maia is linguist that AUX them met. ever 'Maia is the best linguist that I ever met.'



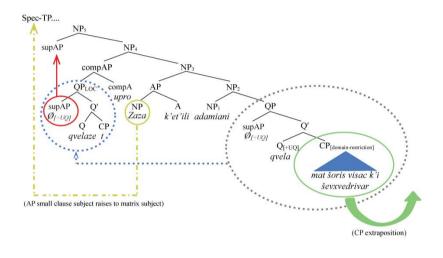


We begin with the Quantifier Phrase (QP), of which the Superlative Adjective Phrase (SupAP) is the Specifier, selected by the null universal quantifier in  $Q^0$ . The SupAP is headed by the affix *naj*-, whose universal quantification [+UQ] feature percolates up to the phrasal node. In this Spec-QP position, the SupAP can check its ([+UQ]) feature against the null  $Q^0$ .

The Q<sup>0</sup> additionally takes a complement, namely the *kar*-phrase CP, which is the domain restriction of the universal quantifier. The entire QP is an adjunct of the NP<sub>1</sub>, headed by N<sup>0</sup> *jezikoslovka* ('linguist'). NP<sub>2</sub> is modified by an adjunct AP, which is a small clause, containing a subject (which eventually raises to matrix Subject position, i.e., Spec-TP) and the head adjective. NP<sub>3</sub> is modified by the Comparative Adjective Phrase (compAP), which is headed by the affix *-jš*-. This brings us to NP<sub>4</sub>. The SupAP must raise to a position where it c-commands the comparative, so it adjoins to NP<sub>4</sub>. This allows the compA<sup>0</sup> *boljša*, which itself is derived from the raising of the A<sup>0</sup> dobra, to raise and adjoin to the affix supA<sup>0</sup> *naj*-, thereby deriving the synthetic morphological superlative, *najboljša*.



'Zaza is the nicest person whom I ever met.'



On the face of it, the derivation of (37) may seem considerably different from the Slovene one, but in fact, they are quite identical in their skeletal phrasal structure. It is the particulars of lexical items and movement operations that distinguish them. Here are the differences:

(1) Georgian is an SOV language, and there is an abundance of evidence to show that Relative Clauses in SOV language undergo extraposition (they appear to the right of V). The same appears to be true for the domain restricting CP (i.e., it, too, appears to the right of V, so seemingly has undergone extraposition).

(2) In Georgian, it is the sup $A^0$  that is null while the  $Q^0$  is overt (the opposite of what we find in Slovene). But crucially, they still are in a checking relation.

(3) While in Slovene, only the SupAP raises, in Georgian, the entire QP raises. It raises into the Specifier of compAP, where it is assigned locative

case by the comp $A^0$ . The locative case is realized on the only overt lexical item in the phrase, *qvela* 'all'.<sup>7</sup>

(4) The null SupAP is sub-extracted from the QP to raise to a position c-commanding compAP (which is the landing site of the SupAP in Slovene, as well).

# 6 CONCLUSION

In this paper, I have explored a variety of the superlative construction that, though widely attested across languages, has largely been ignored in the literature: the compositional superlative; specifically, I provided an analysis of the domain-extent compositional superlative, which overtly contains a universal quantifier. This type of superlative appears in Tamil and Georgian. Subsequently, I illustrated that even in languages where a universal quantifier is not apparent, such as in Slovene, it may nevertheless be present: the two phenomena supporting this analysis are (1) the licensing of NPIs under the scope of superlatives and (2) the inclusion of a singular resumptive pronoun in kar-phrases modifying a mass noun, both of which are explained by the presence of a universal quantifier. Building on the analysis in which the universal quantifier is inherent in the superlative degree adjective, I suggest that both domain-extent compositional superlatives and synthetic superlatives select a domain-restricting clausal complement. In Slovene, this complement clause is overtly similar to what we find in domain-restricting clauses following bare universal quantifiers, i.e., the kar-phrase, which further supports the universal quantifier analysis. Having drawn this parallel between domain-extent compositional superlatives and synthetic superlatives, I suggest a syntactic frame that can be used to derive both.

While there are obvious superficial differences between languages with synthetic superlatives and those with compositional superlatives, I would suggest that the basic structures are the same, which given the semantic overlap, is

<sup>&</sup>lt;sup>7</sup> This QP-raising is easily the most objectionable aspect of this derivation, because what I am proposing here involves sideward movement. While there are analyses that make use of such movement (e.g., Nunes's (2004) analysis of parasitic gapping), and while, quite frankly, I don't know of compelling arguments against it, I recognize that any movement that fails to extend the structure is generally frowned upon. That said, given the 3.5 structural criteria listed at the start of this section, this derivation appears to be the most parsimonious possible.

entirely unsurprising. If we are to suggest that syntax and semantics bear a relationship, and if ambiguous semantics suggests distinct syntactic structures, then it should also be the case that synonymy (or near synonymy) reflects syntactic similarity. There are, of course, many outstanding questions with respect to the variety of uses and forms related to both comparative and superlative degree adjectives, but this is one small step toward a uniform analysis of superlatives.

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# SUMMARY

# On the structural uniformity of superlatives: evidence from Georgian, Slovene, and Tamil

This article explores the structural basis for two morphosyntactically distinct expressions of the superlative: those that are semantically compositional and syntactically analytic and those that are synthetic. Slovenian falls into the latter category while Georgian and Tamil are placed the former. Through careful examination of superlative adjective data in all three languages, one finds evidence of a universal quantifier (UQ), essentially meaning 'all', in each of the three languages. In Tamil and Georgian, the UQ is overtly present, and in combination with the comparative degree adjective, it creates (compositionally) the semantics of the superlative. In this paper I argue, using data from Slovenian, that the same compositional structure exists in languages with synthetic superlative degree adjective, although the UQ is unpronounced. The paper aims to provide a single basic structure that allows for multiple surface realizations of superlativity.

# O STRUKTURNI ENAKOSTI PRIDEVNIŠKIH PRESEŽNIKOV: DOKAZI IZ GRUZINŠČINE, SLOVENŠČINE IN TAMILŠČINE

Prispevek obravnava strukturno osnovo dveh oblikoskladenjsko različnih zgradb pri tvorjenju presežnika: prve so pomensko kompozicionalne in skladenjsko analitične (sestavljene), druge pa so sintetične. V slovenščini so v rabi sintetične zgradbe, v gruzinščini in tamilščini pa sestavljene. Natančna analiza podatkov o rabi presežnika v treh jezikih kaže na obstoj univerzalnega kvantifikatorja (UK) s pomenom 'vse' v vseh treh jezikih. V tamilščini in gruzinščini je univerzalni kvantifikator izražen in v kombinaciji s primernikom pridevnikov izraža semantiko presežnika. V prispevku na podlagi podatkov iz slovenščine trdim, da enaka struktura obstaja tudi v jezikih s sintetičnim izražanjem presežnika, čeprav univerzalni kvantifikator ni površinsko izražen. Namen prispevka je podati enotno osnovno strukturo, ki združuje več površinsko različnih načinov tvorjenja presežnika.