This paper examines the distribution of those Slovene and Serbo-Croatian case forms which in combination with various prepositions participate in messages from which we infer different place relationships. Certain conclusions are drawn on the basis of their comparison.

In the Slovene and Serbo-Croatian grammars the case forms are treated in the traditional manner. Either the cases are listed with the prepositions they co-occur with or we are given an alphabetical list of prepositions with the cases they govern. (Toporišič: 349-59) These combinations of cases and prepositions are said to be appropriate answers to questions asking “Where?,” “Where to?” and “Where from?”

The distribution of cases is thus seen as an instance of grammatical government and no effort is made to introduce the meanings of the case forms as the determining factor in their usage. The rule of government actually implies that the case forms are meaningless since they are automatic, determined only by the presence of a certain preposition in the utterance. The prediction this treatment makes is that the distribution of cases is arbitrary. This is also true for the treatment of the generative grammar.

When we compare the actual uses of cases and prepositions participating in place messages in Slovene and Serbo-Croatian, we can see that these messages fall into three different types. The majority of them are rendered identically, i.e. by the same case and the same preposition in both Slovene and Serbo-Croatian. For example:

1. *Na pokopališču* (Loc.) *okrog cerkve* (Gen.) je nastalo nekaj novih grobov, kamor so *med drugimi* (Inst.) odšli počivat tudi stari Ardev, fužinar Kovs, kandidat Prežvek, ki je neke zime zmrznil v *Mvačnikovem reznaku* (Loc.), ker se je zvečer preveč napil.

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Several new graves were dug in the cemetery around the church where among others were laid to rest old Ardev, the smelter Kovs, candidate Prežvek, who froze to death one winter in Mvačnikov’s nursery because he drank too much one evening.

All place relationships here: ‘in the cemetery,’ ‘around the church,’ ‘among others’ and ‘in Mvačnikov’s nursery’ are expressed with the same combination of case and preposition in the two languages. This is, however, not the case in the following examples in which different cases and prepositions are introduced in the Serbo-Croatian version:

2. Videl je vse njive kolikor jih je bilo pri hiši, vse travnike in loge.

   Video je sve njive kolikogod ih je bilo oko kuće, sve travnjake i lugove.

   He saw all the fields around the house, all the meadows and groves.

3. Mati jo je potisnula čez prag da se je komaj unesla.

   Mati ju je gurnula preko praga da se je skoro spotakla.

   Her mother pushed her over the threshold so that she almost tripped.

In still another category of place messages, we find the same combinations of case in preposition sometimes rendered identically and sometimes differently, from one language to another:

4. Staro telo za mizo začelo je na rahlo drgetati.

   Staro telo za stolom počelo je pomalo drhtati.

   The old body behind the table started to tremble a little.
5. Prikimal sem in se zamaknil v harmonij ki je stal za vrati (Inst.) in se ves svetil.

Klimnuo sam i zagledao se u harmonijum koji je stajao iza vrata (Inst.) i sav sjao.

I nodded and looked at the harmonium which stood behind the door (Sl. Inst., SC Gen.) shining brightly.

6. Sedel sam za mizo (Acc.) in se zamislil.

Seo sam za sto (Acc.) i zamislio se.

I sat at (literally: behind) the table (Sl. SC Acc.) and started to think.

7. Prislonil sem brzostrelko za vrata (Acc.) in spet legel.

Prislonio sam mašinku iza vrata (Gen.) i opet legao.

I placed the machine-gun behind the door (Sl. Acc., SC Gen.) and went back to bed.

A definite pattern emerges here. In all instances in which Slovene differs from Serbo-Croatian (examples 2, 3, 5 and 7), Serbo-Croatian introduces the Genitive.

There is nothing in the grammar of either language to give us a clue why we would expect the kinds of discrepancies we find. The Serbo-Croatian grammars for instance, list the preposition pri ‘near, at’ as co-occurring with the Locative. Why then, in example two, is this combination different in Serbo-Croatian? In example three, we have the preposition čez ‘over’ with the Accusative in Slovene and the preposition preko ‘over’ co-occurring with the Genitive in Serbo-Croatian. Both Slovene and Serbo-Croatian have the preposition prek(o) co-occurring with the Genitive, but Slovene definitely avoids this combination. Both Slovene and Serbo-Croatian have the preposition za ‘behind’ co-occurring with the Instrumental and the Accusative and the preposition izza/iza combining with the Genitive. Still, in the Slovene version of examples 4, 5, 6 and 7, we find the preposition za with the Instrumental and the Accusative, while in the Serbo-Croatian we find the preposition za in examples 4 and 6, and the preposition iza with the Genitive in examples 5 and 7. What motivates Slovene and Serbo-Croatian speakers to exploit these signals differently?
The usual statement that one might provide, that certain combinations of cases and prepositions are more productive in one language than in the other and vice versa, is only stating the problem. What we can ask is: how are Slovene and Serbo-Croatian different? Why is it so that Slovene and Serbo-Croatian speakers sometimes follow the same pattern and, at other times, behave differently? What motivates the distribution of cases?

The approach in terms of government cannot help us when we try to answer these questions. The rule of government tells us only which cases co-occur with which prepositions. However, what we are primarily concerned with here is not what cases co-occur with what prepositions, but why particular combinations of case and preposition appear where they do.

The approach we shall adopt here is that the distribution of cases and prepositions is motivated by their semantic import, their meanings. In this analysis the case forms are looked upon as signals which have meanings. When the meanings associated with a set of signals classify a semantic domain, then these elements are said to form a grammatical system. The Slovene and the Serbo-Croatian case forms traditionally known as the Accusative, the Instrumental, the Locative and the Genitive form such a system. These elements combine with various prepositions, which offer refinement to their meanings by providing lexical material which lists explicit place relationships. Together they classify the semantic domain of place, and from utterances in which they occur we can infer different messages associated with place relationships.

In what follows we are going to examine the Serbo-Croatian place system in more detail. This will illuminate the discrepancies displayed between the two languages better than if we approached them from the point of view of the Slovene system.

In the Serbo-Croatian place system presented graphically (Figure I), the substance of place is divided by the meanings of the four case forms. PLACE TO WHICH is signalled by the Accusative.

```
PLACE
Gen.

PLACE TO WHICH
Acc.

PLACE WHERE
Loc.

PLACE AT CARDINAL POINTS
Inst.

other (‘place from which’)
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Figure I
The Locative signals PLACE WHERE and the Instrumental PLACE AT CARDINAL POINTS. By 'cardinal points' we understand the five strategic locations with reference to an entity: under, above, before, behind and between. The Genitive signals PLACE in general. This much is also true for the corresponding Slovene meanings.

Two types of semantic oppositions are found in this system. There is an opposition of exclusion between the three included members of the system, PLACE TO WHICH, PLACE WHERE and PLACE AT CARDINAL POINTS. These meanings are mutually contrastive and if one is true, the other is not. In the second type of opposition, opposition of inclusion, we usually find that one meaning is less precise than the other meanings and is including them within it. Here, the Genitive is an including member. In contrast to the Accusative, the Instrumental and the Locative it signals a less specified meaning, allowing all three inferences: 'place to which,' 'place where' and 'place at cardinal points.' This aspect of the Serbo-Croatian system can be illustrated with a simple example. If we compare:

8. Ja sam na mostu. (Loc.)
   I am on the bridge.

9. Ja sam kod mosta. (Gen.)
   I am at the bridge.

it is not difficult to notice that the reference to place is more precise in example 8, in which the Locative occurs. The place message conveyed with the Genitive allows more possibilities.

The Genitive also allows an inference 'other,' other than 'place to which,' 'place where' and 'place at cardinal points.' Most often that is 'place from which.' There is not a signal that exclusively covers this part of the semantic substance and by signalling PLACE in general, the Genitive also covers the residual part of the substance not covered by the three included members of the system. However, 'other' is not a true meaning. That is indicated by glossing it in small letters, in contrast to true meanings which are indicated in capital letters.

If observed alone, the distributions of the Accusative, the Instrumental and the Locative are pretty much straightforward and do not present any particular analytical problem. From all the messages in which the Locative occurs, we infer only a well defined place within an entity: inside it, over it, on the surface of it. No other inference is possible. The same may be said for the meanings PLACE TO WHICH and PLACE AT CARDINAL POINTS.
The situation is different with the overlap between the Serbo-Croatian Genitive and the included members of the system. This area presents certain analytical problems. In particular, the overlap between the Genitive and the Accusative on one hand and the Genitive and the Instrumental on the other has been matter of controversy in Serbo-Croatian linguistics and the subject of a debate among scholars (Belić, Vuković, Stevanović, Stevović, etc.). When the Genitive combines with *ispod, iznad, iza, ispred* and *izmedju* to allow the inference ‘place to cardinal points’ or ‘place at cardinal points,’ to a traditional analyst it appears in environments in which one would expect the Accusative or the Instrumental with *pod, nad, pred, za* and *medju*. The analysis of these messages has eluded scholars and while some have treated them as synonyms, others have ignored them altogether. Native speakers of Serbo-Croatian do not feel any contrast in meanings in examples such as:

11. Našao je Loputnika *pred kolibom*. (Inst.)
   He found Loputnik in front of his hut.

12. Još *ispred sela* (Gen.) Matić je našao ljude koji su bežali.
    Before the village Matić found people fleeing.

13. Baci kamen *pod točkove* (Acc.) da kola ne krenu natrag!
    Throw a rock under the wheels so that the cart does not move backward!

14. Povremeno bi zavlačio ruku *ispod jastuka* (Gen.) i opipavao pištolj.
    From time to time he would glide his hand under the pillow to feel the gun.

To use the traditional analysis both examples 11 and 12 answer to the question ‘where?’ and both examples 13 and 14 to the question ‘where to?’

According to our analysis this distribution is motivated by competition of less precise meaning, signalled by the Genitive, and the more precise meanings, signalled by the Instrumental and the Accusative. Our analysis predicts that from the messages in which the Genitive occurs, we should infer a less precise place relationship and, that from the messages in which the Accusative and the Instrumental occur, we should infer a more precise place relationship.

If we look back at examples 11, 12, 13 and 14 we can see why the forms occurring in them were actually chosen. In example 11, Loputnik is sitting in front of his hut. In example 12, Matić is
directed to go to a village but before he reaches it, he meets the village people fleeing. The relationship between Matić and the village is less defined, both in terms of distance and precision, than the one existing between Loputnik and his hut.

In both examples 13 and 14 the inference one makes is the goal of a directive motion: 'under the wheels' and 'under the pillow.' However, the rock has to be placed in a precise spot in order to prevent the cart from moving while the hand slides repeatedly to different spots underneath the pillow to feel and touch the gun. Consequently, the Accusative shows up in example 13 where a precise goal is implied and the Genitive appears in example 14 where that goal is less precise.

It is important to note the following, however. Since the opposition between the Genitive and the included members of the system is one of inclusion and not of contrast, we can only predict that there are going to be consistent tendencies in a certain direction. To illustrate this point we performed statistical counts on the Genitive and the Instrumental in combination with the five cardinal point prepositions.

Our analysis emphasizes the difference in precision in meanings between the Genitive and the other members of the system. We can expect that this difference in meaning will be realized as a difference in distribution. One signal will be used more frequently in a context with which its meaning is more compatible and vice versa. On the basis of this we were able to predict what contextual factors are going to be relevant and to perform the following frequency counts.

PREDICTION I: Based on the meanings of the Genitive and the Instrumental, we can predict that the Instrumental should be used more often than the Genitive to refer to a location in proximity. The Genitive should be more compatible with the messages in which the place referred to is at a distance. This prediction is based on the simple fact that humans can be more precise about something that is more obvious, more visible, than about something that is invisible or at a distance. Table I below gives the relative frequency of the 'near' vs 'far' count:

<table>
<thead>
<tr>
<th></th>
<th>Near</th>
<th>Far</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrumental</td>
<td>76% (94)</td>
<td>24% (30)</td>
<td>100% (124)</td>
</tr>
<tr>
<td>Genitive</td>
<td>33% (42)</td>
<td>67% (85)</td>
<td>100% (127)</td>
</tr>
</tbody>
</table>

The count clearly supports our prediction.
PREDICTION II: It should be consistent with the meanings of the Instrumental and the Genitive that the former should avoid co-occurrence with plural entities, because plurality of entities contradicts, in a certain sense, the precision of location. Each entity occupies its own spot. The Genitive should not skew in that direction. Table II below indicates the relative incompatibility of the Instrumental with plurals.

Table II

<table>
<thead>
<tr>
<th></th>
<th>Singulars</th>
<th>Plurals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrumental</td>
<td>76% (87)</td>
<td>24% (28)</td>
<td>100% (115)</td>
</tr>
<tr>
<td>Genitive</td>
<td>50% (71)</td>
<td>50% (70)</td>
<td>100% (141)</td>
</tr>
</tbody>
</table>

The skewing went according to our prediction.

By the same token, we can expect that the Accusative, being an included member in the same way the Instrumental is, will behave similarly with respect to those instances of the Genitive which allow an inference 'place to which.' A separate count was made and the same pattern emerged. The Accusative favored the singular entities 67% of the times and the entities in proximity 70% of the times.

Looking at these numbers and the others that were not presented here we concluded that if the Instrumental and the Genitive in combination with the cardinal point prepositions were truly synonymous, as some scholars and native speakers appear to suggest, we would find them to be distributed arbitrarily and not to correlate with any contextual factors. The counts we performed proved that this is not the case. The Genitive and the Instrumental appeared where they did because their meanings were relevant to the message being communicated.

Another thing became apparent from the observation of these skewings. The more the meaning of the Genitive interacts with the meanings of the Instrumental and the Accusative, the more intensely it competes with them for the communication of place messages. This fact is recognized in the statements one finds that the Serbo-Croatian Genitive is encroaching on the semantic domain of other cases.

The Slovene place system presents an altogether different situation in this respect. We have seen earlier that in all instances in which Slovene differs from Serbo-Croatian, Serbo-Croatian has introduced the Genitive. This in itself might suggest that the Slovene Genitive does not play as active a role in communicating place messages as does the Serbo-Croatian Genitive.
Looking back at example 2, we can see that it is appropriate for a Slovene speaker to say *pri hiši* ‘around, near the house.’ The Serbo-Croatian speaker uses the Genitive and the preposition *oko* ‘around.’ While the Serbo-Croatian Locative signals a place relationship within an entity, the Slovene Locative is appropriate for another message, not inside, over or on the surface of an entity but also for near by it. This difference in meanings between the Slovene and the Serbo-Croatian Locative can be illustrated with Figure II:

![Figure II](image)

In both Slovene and Serbo-Croatian, the Locative and the Genitive together refer to the same range of place relationships. However, the meaning of the Slovene Locative covers a larger area with respect to the Genitive than its Serbo-Croatian counterpart.

When we consider examples 6 and 7, we can see that in both examples Slovene has the Accusative and the preposition *za*, allowing an inference ‘place behind the table’ and ‘place behind the door,’ Serbo-Croatian has the Accusative in example 6 and the Genitive with the preposition *iza* in example 7. Slovene exploits exclusively the Accusative with *pod, nad, pred, za* and *med* to signal PLACE TO WHICH. Unlike Serbo-Croatian, the Genitive in Slovene cannot be used with the cardinal point prepositions to allow an inference ‘place to which.’ The Serbo-Croatian Genitive in example 7 allows such an inference. The Slovene Accusative competes with the Genitive more successfully than the Serbo-Croatian Accusative. The difference between the Slovene and the Serbo-Croatian Accusative is illustrated in Figure III:

![Figure III](image)
There is only a very small overlap between the Accusative and the Genitive in Slovene. The Slovene speaker has a choice in conveying place messages such as:

15. Prišel je do vasi. (Gen.)
   He came to the village.

16. Prišel je v vas. (Acc.)
   He came into the village.

using the Genitive and the preposition do ‘up to, as far as’ in example 15 and the Accusative with v ‘in, inside’ in example 16.

The Slovene Instrumental does an even better job in competing with the Genitive than the Accusative. Consider examples 4 and 5, in which the inferences we make are: ‘place behind the table’ and ‘place behind the door.’ In the Slovene version of both 4 and 5 we find the Instrumental. Serbo-Croatian has the Instrumental in example 4 and the Genitive in example 5. In fact, the Slovene Instrumental indicates the meaning PLACE AT CARDINAL POINTS exclusively. The Genitive cannot be exploited for such an inference. The only inference that the Slovene Genitive in combination with the cardinal point prepositions can allow is ‘place from which.’ Slovene therefore does not present the same analytical problem as does Serbo-Croatian.

The relationship between the Slovene Instrumental and the Genitive, as well as the comparison with the Serbo-Croatian situation, is illustrated in Figure IV:

![Figure IV](image_url)

The semantic areas of the Slovene Instrumental and the Genitive are clearly divided. In Serbo-Croatian again the Genitive includes within it the semantic area of the Instrumental.

Example 3 also illustrates, in a different way, the rather weak position of the Slovene Genitive with respect to the other cases, when viewed against the existing Serbo-Croatian situation. While the
Serbo-Croatian speaker uses always the Genitive and the preposition *preko* 'over' to convey a place message such as *preko praga* 'over the threshold,' the Slovene speaker has a choice between the Accusative and the Genitive. He clearly favors the Accusative and avoids the Genitive.

What emerges from this comparison of Slovene and Serbo-Croatian examples is that the distribution of cases and prepositions is semantically motivated. Particular pairs of case and preposition turn up where they do because their meanings contribute to the message the language user wishes to convey.

The distribution of cases vis-à-vis prepositions is equally motivated. All through this analysis we have considered case forms in combination with prepositions which by their lexical meanings pin-point more exactly the place relationship. If the resulting combination of case and preposition is to be coherent, the grammatical meaning of the case form and the lexical meaning of the preposition have to be compatible.

The prepositions one case combines with or avoids combining with are an indication of its semantic character. We have seen that the combination of the Locative and the preposition *pri*, so frequent in Slovene, is avoided in Serbo-Croatian. This is not by accident. The meaning of the Serbo-Croatian Locative is no longer compatible with the lexical meaning of the preposition which implies a place outside of an entity.

Equally, it is not by accident that the Genitive combines with the greatest number of prepositions. Compared with the relatively narrow meanings of the Instrumental, the Accusative and the Locative, combining with a few prepositions each, the meaning of the Genitive is the most suitable to express the multitude of possibilities in the real world.

The semantic analysis we have performed made it possible to capture certain similarities and certain differences between Slovene and Serbo-Croatian with respect to signalling place relationships. The two languages are similar in terms of the semantic substance in which they invest their meanings and in the manner they divide that substance. They differ in the precision of these meanings relative to each other.

Columbia University


