

Distributive Verbs in Serbian and Croatian

0. Introduction

The prefix *po-* has been productive to varying degrees in the derivation of a special class of distributive verbs in almost all the Slavic languages (the only exception being Sorbian; *cf.* Schuster-Šewc 1968). Distributives in *po-* are particularly common in Serbian (Sb) and Croatian (Cr); they are frequently encountered in all stylistic registers—colloquial speech as well as the press and *belles lettres*.¹

Distributive verbs may be broadly defined as verbs which profile the distribution of a predicate over every member of a plural object (or subject; henceforth **participant distribution**), often (though not necessarily) with an added sense of the distribution of the predicate over the objects (or subjects) in time, *i.e.*, ‘one after the other’ (henceforth **temporal distribution**). This article presents a description of distributive verbs in Sb and Cr with respect to participant and temporal distribution. Then, the fact that Sb and Cr distributive verbs that seem to directly express only participant distribution tend nevertheless to have temporal distribution as a default interpretation is explained in terms of the theory of the processing of predicates offered by Langacker (1990).

1. Cognitive Grammar, Scanning and Subjective Motion

The theoretical analysis of distributive verbs presented here utilizes constructs of Cognitive Grammar (CG), a theory of language developed primarily by Ronald Langacker (*cf.*, *e.g.*, Langacker 1990). As a version of the recent wave of cognitive linguistics, CG assumes that meaning is in fact the driving force behind all aspects of linguistic structure, and thus devotes considerable effort to developing accounts of the content of all kinds of linguistic units, from morphemes to syntactic constructions. Particularly relevant for the present discussion (this relevance will perhaps become clear only in *Section 3*) is

¹ Thus, the situation regarding distributives in Sb and Cr differs from that in Russian, where such verbs are characteristic of colloquial speech as opposed to the literary language (*cf.* Šeljakin 1980); on the other hand, Polish is similar to Sb and Cr, as distributives are quite common in all registers of the language (*cf.* Śmiech 1986:19).

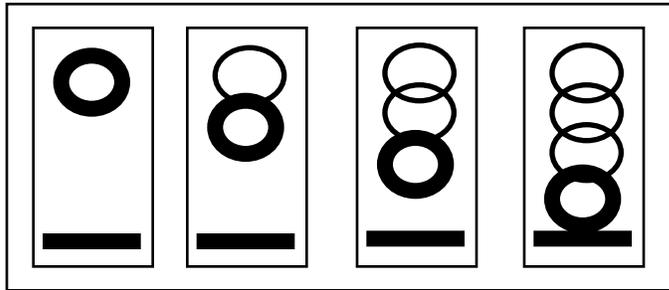
Langacker's theory of the abstract content of parts of speech (such as nouns and verbs), which is based on the notion of **scanning**.

Central to Langacker's definition of the content of verbs as opposed to other parts of speech is a distinction in the way their content is accessed, which involves two kinds of scanning: summary scanning and sequential scanning. In the case of a finite verb, sequential scanning is the method used by the speaker/listener to process the change expressed by the verb. Consider an ordinary finite clause:

- (1) Knjiga **je pala** na pod.
'The book *fell* onto the floor.'

In (1), a finite verb profiles the path of a trajector (the book) relative to a landmark (the floor). According to Langacker (1990: 78–85, 152–54), the changes of position of the trajector, *i.e.*, the sequential component states of the verbal process, are scanned **sequentially** in time. This is shown in (2):

- (2) Sequential scanning of *Knjiga je pala na pod*.



The very aspect of change which is characteristic of verbs and especially finite verbs is the product of the speaker/listener comparing the position of the trajector in each "frame."² The figure in (2) actually shows a kind of additive version of sequential scanning, in which the successive states are added together to form a final composite image of the entire event. Importantly, in this account of the processing of verbal predicates, two kinds of time must be distinguished: **conceived** time and **processing** time (Langacker 1990: 78). Langacker defines conceived time as the time involved in the change expressed by the predicate *as the object of the speaker's conceptualization*, and processing time as *the time required (short though it may be) to scan a*

² Langacker's full theory of scanning raises many interesting questions and problems, none of which is directly relevant to the analysis contained in this paper. The basic hypothesis that the change expressed by verbs is processed in a sequential series of images seems to me intuitively correct and unaffected by other issues that arise.

predicate sequentially. Thus, while most predicates (especially those explicitly profiling some kind of change) entail a span of conceived time, the processing of all verbal predicates involves a span of processing time (this is true even for stative verbal predicates involving no change, as the only way a lack of change is established is by multiple instances of comparing the position of the trajector relative to that of the landmark).

Langacker (1990: 149–63) outlines a theory of the perception and processing of **motion** as well, which is interrelated with scanning and which plays an important role in the CG analysis of verbal predicates. According to this theory, there are three types of motion: **objective, abstract** and **subjective** motion.³ Objective motion is basically physical motion, exemplified in (1). Abstract motion may for the purpose at hand be considered “metaphorical” motion, as in (3):

- (3) **Prošao je** kroz cijelu abecedu za sedam sekundi.
 ‘He *went through* the entire alphabet in seven seconds.’

The analysis of (3) is very similar to that of (1). Here there is a trajector (or mover; in this case the subject ‘he’), which moves relative to a landmark (the alphabet). However, this case illustrates more exactly the mechanism of processing: the mover makes (mental) contact with individual components of the landmark at successive points in processing time. Thus, the action of reciting the alphabet is processed in the following way, where *m* is the mover, *a*, *b*, *c* are letters of the alphabet, *t* is a point in conceived time, and *T* is a point in processing time (parentheses are used to mark points in processing time).

- (4) ([[m]a]_{t1})T₁ > ([[m]b]_{t2})T₂ > ([[m]c]_{t3})T₃ > ...

Langacker suggests that objective, *i.e.*, physical, motion is a special (though prototypical) case of such highly schematic abstract motion which involves sequential scanning of a mover making contact with different entities or different points on a single entity.

Subjective motion, which is particularly relevant for the analysis of distributives, is even farther removed from objective, physical motion. In this case there is arguably not even “metaphorical” motion, as the entities involved are static and no change occurs over time. Examples are (5a–b):

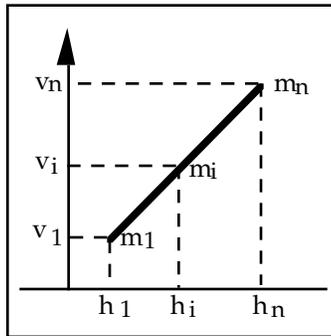
- (5) a. Krov je nakošen prema gore.
 ‘The roof slopes upward.’
 b. Krov nakošen prema dolje.
 ‘The roof slopes downward.’

³ Note that motion is the prototypical case of verbal change.

Langacker (1990: 158) points out that despite the lack of any real, objective motion in these situations, they do contain a certain amount of directionality. Indicative of this is the fact that both these sentences can refer to the same roof, contrasting only by their “opposite directions.”

Langacker explains this sense of directionality as a consequence of the seriality of the processing involved. He suggests that as the roof is an elongated object, the configurations in (5a–b) have a certain amount of “internal complexity.” The directionality results from an incremental build-up of the image—the speaker processes the configuration of the roof beginning from one end, incrementally, ending with a single composite image, in a manner similar to the scanning of the fall of the book in (2). However, in this case, the speaker’s attention (Langacker calls it the “conceptualizer”) is the trajector, which moves along the roof (which is the landmark). He employs the same kind of additive sequential scanning in constructing the image of the roof. This is shown graphically and notationally in (6–7).

(6) Graphic representation of the configuration of the roof:



[M]L

M = [m₁, m₂, m₃, ... m_n]

L = [l₁, l₂, l₃, ... l_n]

where l_i = (h_i, v_i)

The physical configuration of the roof (M) in space (L) is given in (6). The points of the roof are m₁, m₂, m₃, ... m_n; the points of the roof are correspondingly located at the points in space l₁, l₂, l₃, ... l_n, where each point in space may be viewed as a pair of horizontal and vertical coordinates (h_i, v_i). Thus, the sequential processing of the configuration of the roof proceeds in the manner shown in (7):

$$(7) \begin{bmatrix} [m_1]l_1 \\ C \end{bmatrix}_{T_1} > \begin{bmatrix} [m_1]l_1 \\ [m_2]l_2 \\ C \end{bmatrix}_{T_2} > \begin{bmatrix} [m_1]l_1 \\ [m_2]l_2 \\ [m_3]l_3 \\ C \end{bmatrix}_{T_3} > \dots > \begin{bmatrix} [m_1]l_1 \\ [m_2]l_2 \\ [m_3]l_3 \\ \dots \\ [m_n]l_n \\ C \end{bmatrix}_{T_n}$$

Thus, the physical configuration of the roof is built up gradually: the conceptualizer *C* first activates the subconfiguration $[m_1]l_1$, then $[m_2]l_2$, etc. until at T_n in processing time the configuration of the entire roof is simultaneously available. Importantly, there is no conceived time (*t*) involved in this process, only processing time (*T*). Langacker (159) adds that he assumes that “every conception involving directionality at the experiential level implies some kind of seriality at the processing level.” Getting back to Langacker’s term *subjective motion*, the “motion” is in fact the change produced by the incremental, sequential scanning of the image. Subjective motion is an interesting case of change, because change (for which time is necessary) is usually conceptualized as a function of conceived time *t*, as opposed to entering a conceptualization as a result of some processing time *T*. Thus, processing time can, as it were, produce effects very similar to those associated with conceived time.

The above formalization of the scanning process of the configuration of the roof in (5a), if it appears to be unnecessarily complex and tedious, nevertheless allows a straightforward analysis of some properties of distributive verbs, which is given in *Section 3*. But let us first examine the properties of distributive verbs in Sb and Cr.

2. Distributive Verbs in Sb and Cr

In Sb and Cr (data are from Cr unless otherwise noted; I am unaware of any differences between Sb and Cr in this respect), distributive verbs are derived by means of prefixation with *po-*. Such verbs, which are perfective (pf), express distribution of the predicate either over an entire set of objects (e.g., *pokupiti* ‘pick up [all of]’) or an entire set of subjects (e.g., *poskakati* ‘jump [of all the members of a group]’). There are a number of variations on such prefixation, according to the stem to which *po-* is added. A particularly common type in Sb and Cr is prefixation of *po-* directly to a simplex imperfective (impf), e.g., *pobiti* ‘kill [all of].’ Another common type is prefixation of a derived unprefixated *a*-stem impf verb, e.g., *pobacati* ‘throw out [all of]’ from *bacati* (derived from *baciti*). Prefixation may also occur with derived prefixed impf verbs, e.g., *porazbijati* ‘smash [all of]’ from *razbijati* (derived from *razbiti*). Only infrequently in Sb and Cr are *po-* distributives created from prefixed pf verbs, e.g., *pozapakirati* ‘pack [all of].’ Representative examples of the various types of distributive verbs are given in (8):

(8) a. *Prefixation of simplex impf verbs:*

<i>pobiti</i> [sve ljude u selu]	‘kill [all the people in a village]’
<i>pobrisati</i> [svu prašinu na polici]	‘wipe away [all the dust on a shelf]’

počistiti [sve sobe]	‘clean [all the rooms]’
počupati [sve žice]	‘pull out [all the wires]’
podijeliti [svu humanitarnu pomoć]	‘distribute [all the relief aid]’
pohvatati [sve razbojнике]	‘catch [all the robbers]’
pokidati [sve stranice u knjizi]	‘tear [all the pages from a book]’
poklati [cijelo selo]	‘slaughter [the entire village]’
pokokati [sve koji su pružali otpor]	‘blow away [all who put up a fight]’
pokositi [svu travu]	‘mow [all the grass]’
pomaljati [sve zidove u kući]	‘paint [all walls in a house]’
popaliti [sve kuće u selu]	‘torch [all the houses in a village]’
popamtiti [sva imena]	‘memorize [all the names]’
popisati [sve birače]	‘inventory, record [all the voters]’
porezati [sve cvijeće u vrtu]	‘cut [all flowers in the garden]’
poštucati [sve voćke]	‘prune [all the fruit trees]’
potamaniti [svu gamad u kući]	‘destroy [all pests in a house]’
повадити [sve čepove iz flaša]	‘pull out [all corks from the bottles]’
povaljati [sve zarobljenike u blatu]	‘roll [all the prisoners in the mud]’
povezati [sve niti u nekoj priči]	‘connect [all the threads of a story]’
povješati [sve kapute]	‘hang up [all the coats]’
b. <i>Prefixation of derived a-stem impf verbs:</i>	
pobacati [sve stare cipele]	‘throw out [all the old shoes]’
pokupovati [svu robu u trgovini]	‘buy [all the goods in a store]’
poplačati [sve račune]	‘pay [all the bills]’
postavljati [sve stvari na svoje mjesto]	‘put [everything in its place]’
c. <i>Prefixation of prefixed derived impf verbs:</i>	
pootključavati [sve učionice u školi]	‘unlock [all the rooms in a school]’
pootvarati [sva vrata]	‘open [all the doors]’
porazbijati [sve prozore na kući]	‘smash [all the windows]’
porazmještati [sav namještaj po kući]	‘arrange [all the furniture in a house]’

poskidati [sve slike sa zidova]	‘remove [all the pictures from the walls]’
poubijati [sve muškarce u ulici]	‘kill [all the men in a street]’
pozaključavati [sve ormare u sobi]	‘lock [all the cupboards in a room]’
pozatvarati [sva vrata]	‘close [all the doors]’
d. <i>Prefixation of prefixed pf verbs:</i>	
pozapakirati [sve kofere]	‘pack [all the suitcases]’
pozapamtiti [sva imena]	‘memorize [all the names]’
pozauzeti [sva mjesta]	‘occupy [all the towns]’

As was observed, distributive verbs are as a rule pf, though isolated impf partners may be found in dictionaries, *e.g.*, *pozauzimati* ‘occupy [all of],’ which is apparently the impf partner of the pf *pozauzeti*.

Distributive verbs in Sb and Cr (as well as in the other Slavic languages) distribute the predicate over a complete set of participants. Thus, they almost invariably cooccur with the universal quantifiers *sav* ‘all’ or *cijeli* ‘whole,’ *e.g.*, *pootvarati sve prozore* ‘open all the windows’ or *počistiti cijeli stan* ‘clean the whole apartment.’ The adjective *cijeli* can occur in a singular noun phrase when it is understood as a collective consisting of several subcomponents, *e.g.*, *počistiti cijeli stan* ‘clean the entire apartment [= all the rooms/surfaces].’ As most distributives are transitive,⁴ the participants are usually the object. (All the verbs in (8) are transitive.) Thus, typical occurrences of distributive verbs distribute the predicate over the object, as shown in (9):

- (9) a. **Popamtio** sam sva imena.
‘I *memorized* all the names.’
- b. Prvo su sve zarobljenike **povaljali** u blatu a onda su ih izudarali nogama.
‘First they *pushed* all the prisoners around in the mud and then kicked them.’
- c. **Pootvarali** su sve prozore.
‘They *opened* all the windows.’

However, intransitive distributives do exist. Three examples are given in (10).

⁴ This is undoubtedly connected to the fact that they are almost always perfective. The correlation between perfectivity and transitivity is well known.

- (10) pocrkati 'die' [colloquial]
 popucati 'break, burst'
 poskakati 'jump'

These verbs distribute the predicate over the subject, as shown in (11):

- (11) a. Svi u selu su **pocrkali**.
 'Everyone in the village *died*.'
 b. Zbog zvona svi đaci **poskakaše** na noge.
 'Because of the bell all the pupils *jumped [up]*.'

As for the semantic meaning of such distributive verbs, dictionaries tend to be inexact and even inconsistent. For instance, Anić (1991) defines *pobiti* as *lišiti života više jedinki* 'take the life of several individuals,' whereas a more typical definition of such verbs is exemplified by his definition of *popaliti*, which is *spaliti sve redom* 'burn all, one after the other.' However, dictionaries tend to define such distributives in terms of temporal distributivity as opposed to simple participant distributivity, as in the definition of *popaliti*. In fact, there are three possible interpretations of a distributive verb: (1) seriality ('one after the other'), (2) simultaneity ('all at the same time'), or (3) unordered non-simultaneity (*i.e.*, not simultaneous but also not sequentially ordered). In the examples in (12), the first, (12a), exemplifies the most common interpretation, which is temporal distributivity; (12b-c) contain contexts forcing a simultaneous interpretation; (9b), repeated here as (12d), contains a context that easily allows the unordered interpretation—all the prisoners were pushed around in the mud, but not 'one by one.'

- (12) a. **Povješao** je sve kapute.
 'He *hung up* all the coats.'
 b. Jaki nalet vjetra **porazbijao** je sva stakla.
 'A strong gust of wind *broke* all the windowpanes.'
 c. Od eksplozije su sva stakla **popucala**.
 'All the windowpanes *broke* from the blast.'
 d. Prvo su sve zarobljenike **povaljali** u blatu a onda su ih izudarali nogama.
 'First they *pushed* all the prisoners around in the mud and then kicked them.'

Various factors can affect the kind of interpretation. A single human agent tends to force an interpretation of temporal distributivity, as in (12a). However, if a single momentary event, in the form of a verbal noun, is

included as the cause of the action, this will force the simultaneous interpretation (12b-c). The unordered non-simultaneous interpretation, *e.g.*, (12d), occurs when the likelihood of either a strict one-by-one ordering or strict simultaneity is precluded by real-world knowledge. For instance, in (12d) it is unlikely that several guards would push all the prisoners around in the mud at the same time or push them around one by one.

These facts support Merrill's (1985) view that "multiplicity of arguments" must not be equated with "multiplicity of temporal occasions." In other words, participant distribution does not entail temporal distribution. Indeed, in one and the same sentence, more than one interpretation is possible. Consider (9c), repeated here as (13):

- (13) **Pootvarali** su sve prozore.
'They *opened* all the windows.'

Informants note that such examples in principle allow an interpretation of either temporal distributivity or simultaneity. However, informants also point out that temporal distributivity is the default interpretation. Thus, while participant distribution does not entail temporal distributivity, everything else being equal, the interpretation of temporal distributivity will arise. Why should this be the case? The next section suggests an answer to this question.

3. Distributive Verbs, Temporal Distributivity and Scanning

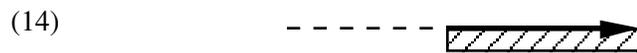
As noted in the previous section, contextual factors can influence the interpretation of a distributive verb with regard to temporal distributivity. For this reason it might seem tempting to reduce the preferred interpretation in a given case to the effects of real-world knowledge. However, examples such as (13), which contain no contextual elements forcing one or the other interpretation, nevertheless receive a default interpretation of temporal distributivity.⁵ In my view this is a strong indication that something other than pragmatic knowledge is at work. In this section I argue that the temporally distributive default interpretation of examples such as (13) is an epiphenomenon of the scanning process. Before continuing on to this analysis, however, the meaning of the prefix *po-* in distributive verbs deserves comment.

I know of no detailed analysis of the meaning of the prefix *po-* in Slavic other than Němec 1954. Němec's purpose is to arrive at the original meanings

⁵ Note that the issue is one of interpretation, *i.e.*, it is hearer-oriented. If a speaker is reporting witnessed events, the original, primary image he has of the event will determine his interpretation of the event structure of the utterance. Thus, the image that the hearer constructs from the linguistic material is what is interesting in this case.

of *po-* in Common Slavic, but he nevertheless offers useful insights into the meanings of the prefix in the contemporary languages. One of the prominent meanings that the prefix/preposition *po* has expressed in Slavic languages is that of location or motion ‘along a surface,’ e.g., *po ulici* ‘along the street’ or *po stolu* ‘on [all over] the table.’⁶ Note that *po* specifies that the location or motion has contact with all points on the landmark; this is why in Sb and Cr there is a strong tendency for it to cooccur with *svuda* ‘everywhere,’ e.g., *svuda po stolu* ‘everywhere on the table.’ And here we see a direct parallel to distributive verbs prefixed with *po-*, which, as pointed out in *Section 2*, cooccur with the universal quantifiers *sav* ‘all’ or *cijeli* ‘whole.’ In my view, this suggests that distributive verbs may be analyzed as applying the meaning of ‘along a surface’ to an entire set of objects, so that the element *po-* in *pootvarati sve prozore* ‘open all the windows’ arranges the predicate along the “surface” of the set of windows.

Another meaning that Němec discusses is that of the “complete affectedness of the object by the action in question” (which he naturally associates with the perfective aspect), though he does not specifically link this to distributive verbs. Of course, Němec worked prior to the advent of cognitive linguistics, but his spatial image for this notion is very compatible with the theoretical constructs of CG. Namely, there is a trajector (the action) which passes along the entire surface of a landmark (the object). So that this is clear, I reproduce below Němec’s (1954: 17) figure in (14):



Complete affectedness of the object by the action in question

Němec links such complete affectedness of the object with the meanings of *po-* that involve ‘after’ and ‘motion towards a goal,’ and in this case the goal would be the end limit of the object/set of objects. Be that as it may, I also think that the aforementioned meaning of location ‘along a surface’ may be involved here as well—this ought to be fairly clear from the above figure.

Thus, inasmuch as in a system of grammatical time the object may be considered to be a landmark transversed by a trajector (the predicate),⁷ the

⁶ As for the case assignment involved, as Němec points out, the prepositions arose after the prefixes and not the other way around, so that the dative (or locative) government of *po* in this meaning need not be considered in this analysis of the meanings of the preposition itself. Němec cites verbs such as OCS *postojati* or *poseděti* as examples of the locative or “adessive” meaning of the prefix. For details, see Němec 1954. In this respect it should also be pointed out that the distributive “preposition” *po* in Sb and Cr assigns no case (cf. Dickey 1997).

⁷ This is an explicit claim in Němec’s analysis and is in fact in accordance with current views in CG.

notion of motion ‘along a surface’ is entirely applicable. Indeed, if a conceptualizer is to extend a predicate to a number of objects and include the “endpoint” of the action entailed by the perfective aspect in the image, conceptualizing the object as a linear landmark seems to be the easiest way to organize the image. In the case of a plurality of objects, which is usually the case with distributives, the objects may be thought of as “in a line,” forming the same kind of linear landmark, as in (15).⁸

(15) 

Complete affectedness of a series of objects by the action in question

Let us now consider what might give rise to temporal distributivity as a default interpretation. If, as Langacker suggests, the configuration of a static concrete entity can nevertheless involve enough internal complexity to require the kind of sequential scanning outlined in *Section 1*, it is entirely reasonable to assume that the interpretation of a predicate applied to several direct objects will not occur completely simultaneously (*i.e.*, summarily) but can also require the same kind of sequential scanning, especially if the prefix *po-* retains its meaning of ‘along a surface.’ (Recall Langacker’s suggestion that “directionality at the experiential level implies some kind of seriality at the processing level.”)

If we assume that (15) is in some way a representation of the grammatical meaning of a distributive verb in *po-*, then the processing of the predicate via sequential scanning unfolds in a manner analogous to the processing of the configuration of the roof given in (7), as shown in (16):

$$(16) \begin{bmatrix} [w_1]O \\ C \end{bmatrix}_{T_1} > \begin{bmatrix} [w_1]o \\ [w_2]O \\ C \end{bmatrix}_{T_2} > \begin{bmatrix} [w_1]o \\ [w_2]o \\ [w_3]O \\ C \end{bmatrix}_{T_3} > \dots > \begin{bmatrix} [w_1]o \\ [w_2]o \\ [w_3]o \\ \dots \\ [w_n]O \\ C \end{bmatrix}_{T_n}$$

w = a window, O = the predicate ‘open’; o = the state of being open

Thus, for n windows there will be a certain amount of processing time T consisting of n points in time. (The time for processing each image is of course very brief, but this is irrelevant: some amount of processing time is involved.)

⁸ This should not be understood as a claim that the grammatical meaning of a verb is a mental picture. Langacker (1990:147, fn. 7) distinguishes between imagery as a heuristic device and mental pictures. (Though given the prominent spatial meanings of the prefix involved, visual imagery is not an impossibility in this case.)

My suggestion is in the end simple: the default interpretation of temporal distributivity occurring with distributive verbs in utterances such as (13) is in fact another case of subjective motion. The difference between the case of the directionality expressed in *The roof slopes upward* and the case of temporal distributivity as a default interpretation of distributive verbs is primarily one of the *cognitive domain* involved with each entity. The cognitive domain of the configuration of the roof is space, whereas the cognitive domain of verbs is (conceived) time. The fact that conceived time is the cognitive domain of verbs surely contributes to the interpretation of the directionality/change in the scanning of the images involved with distributive verbs as change in conceived time, *i.e.*, ‘one window after the other.’ Thus, in the default interpretation of temporal distributivity arising from the change occurring in the sequential scanning, the *processing time T* is reinterpreted as *conceived time t*. Naturally, the effects of the sequential scanning of the predicate of a distributive verb can be canceled if specific contextual factors entail the simultaneity of the subevents. I think this is to be expected if the interpretation of temporal distributivity is a by-product of the interpretation process.

4. Conclusion

This article has given a brief description of distributive verbs in Serbian and Croatian and analyzed the semantic meaning of such verbs. In particular, an analysis has been offered within the framework of Cognitive Grammar that can account for the default (but not obligatory) interpretation of temporal distributivity (‘one after the other’) given to predicates expressed with distributive verbs in *po-*. According to the analysis, the interpretation of temporal distributivity results from the sequential scanning of the image and is an effect of the processing time involved in the scanning. This analysis has the advantage of providing a formalized explanation of the default interpretation of temporal distributivity which utilizes theoretical devices that have been independently motivated in CG.

References

- Anić, Vladimir. 1991. *Rječnik hrvatskoga jezika*. Zagreb: Novi liber.
- Dickey, Stephen M. 1997. “Serbo-Croatian Distributive PO,” *Neka mu e večna slavata: Studies Dedicated to the Memory of Zbigniew Gołąb*, Friedman, Victor A., Masha Belyavki-Frank, Mark Pisaro and David Testen (eds), Wilkes-Barre, PA: Design Systems Printing (= *Balkanistica* 10), pp. 21–31.
- Langacker, Ronald. 1990. *Concept, Image and Symbol: The Cognitive Basis of Grammar*. Berlin: Mouton de Gruyter.

- Merrill, Peter. 1985. "Universal Quantification and Aspect," *Russian Morphosyntax*, Flier, Michael S., and Richard D. Brecht (eds), Columbus, OH: Slavica, pp. 58–72.
- Němec, Igor. 1954. "O slovanské předponě *po-* slovesné," *Slavia* 23, pp. 1–22.
- Schuster-Šewc, H. 1968. "Die 'perfektiven Iterativa' im Sorbischen," *Sorabistische Přinoški k VI. mezinárodnímu kongresu slavistů v Praze 1968*, Michalk, Frido, et al. (eds), Budyšin: Ludowe nakładnistwo domowina, pp. 65–75.
- Šeljakin, M.A. 1980. "Distributivno-summarnyj sposob dejstvija ruskogo glagola," *Problemy vnutristrukturnogo i funkcional'nogo opisanija jazyka* (= *Učenyje zapiski Tartuskogo gosudarstvennogo universiteta, vypusk 524, Trudy porusskoj i slavjanskoj filologii* 33), pp. 43–53.
- Śmiech, Witold. 1986. *Derywacja prefiksalna czasowników polskich*. Wrocław: Zakład Narodowy im. Ossolińskich.

Dept. of Slavic Languages & Literatures
University of Virginia
Charlottesville, VA 22903 USA
smd6n@virginia.edu