Delimitative Verbs in Russian, Czech and Slavic[*]

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While variations in aspect usage among the Slavic languages are established fairly easily, variation in the formants and meanings of a given Aktionsart, as well as its status within a language, are much harder to assess on a comparative basis. Complicating the task is the fact that almost any Aktionsart that is productive in one Slavic language can be attested at least minimally in all the others. As Anan'eva (1998:233) has recognized, the essence of the problem is to determine the relative productivity of a given Aktionsart with a given formant in the different languages, as well as any possible stylistic markedness of a given Aktionsart or its formants in the languages under investigation. Thus, we might find that one Slavic language utilizes a given prefix very productively to derive a given kind of procedural verb in the standard language, whereas in others the same prefix is less productive to derive such verbs and/or is stylistically marked, being archaic or substandard.

An example of such variation is the case of ingressive verbs in *za-* (cf. Dickey 2000:222–29). In Russian (Ru), Ukrainian (Uk), Belarusian (BR) and Bulgarian (Bg), *za-* is highly productive as an ingressive prefix. Farther to the west, its productivity decreases, so that Serbian/Croatian (S/Cr), Slovene (Sn) and Polish (Pol) have fewer such verbs, and Czech (Cz) and Slovak (Sk) use *za-* to derive very few specifically ingressive verbs at all (rather, *za-* is primarily a totalizing prefix). The facts of *za-* show that while the Slavic languages dispose of the same inventory of affixes with roughly the same semantic potential, the exact situation regarding the status of a given Aktionsart with a given formant can vary considerably across the Slavic linguistic territory.

This article discusses similar differences which are evident in the derivation of delimitative verbs with *po-*. DELIMITATIVE is the term for perfective procedural verbs that express the occurrence of an activity for some "short" or indefinite period of time, e.g., Ru *поспать* 'sleep a while'. Unlike the prototypical perfective verb, delimitatives are atelic (cf. Flier 1985:42–46), which makes them unique in Slavic aspectual systems.

The springboard for this analysis is Hutcheson's (1999) comparison of delimitative verbs in Ru and Cz. Despite the overall similarity of the Ru and Cz aspectual systems, Hutcheson finds that delimitatives in *po-* are more widespread in Ru than in Cz; dictionary searches for delimitatives in *po-* in the SRJa and the SSJČ yielded a total of 521 in Ru, and only 233 in Cz. In other words, Cz attests only 45% of the number of delimitatives in Ru. The comparative examples given in (1) are representative:

(1)   Ru   Cz
       побесить   —   'rage a while'
       побрякать   —   'clatter, clank a while'
       поговорить   pohovořiti (si) 'talk/converse a while'
       поездить   pojezditi   'travel/drive a while'
       поискать   pohledati   'search for a while'
       попахать   —   'plow a while'
       попеть   pozpívat (si)   'sing a while'
       поруководить   —   'be in charge a while'
       походить   —   'walk a while'

It must be emphasized that Hutcheson's statistics are conservative in favor of Cz. The SSJČ contains 190,000 words, and the SRIa only 90,000;[1] the Cz source used was twice as large as the Ru source. Notably, the Ru Academy Dictionary (120,000 words) contains a higher number of *po-* delimitatives than the SRIa: a search for *po-* delimitatives for source verbs beginning with *b-* alone yielded 16 delimitatives not contained in the SRIa, e.g., *побурчать* 'murmur a while'. This indicates that the 45% figure for the number of Cz delimitatives compared to Ru delimitatives is ultimately too high—a complete search in the Academy Dictionary would lower the Cz percentage. Moreover, Isačenko (1962:391–92) observes that the derivation of delimitatives in Ru "is so productive that even the most comprehensive dictionaries register only a small fraction of the delimitatives that actually occur."

Not only are there fewer delimitative verbs in Cz, but their overall salience in the linguistic system appears to be considerably lower. According to Hutcheson (1999:29), informants consider many delimitatives given in the SSČJ to be uncharacteristic of contemporary spoken Cz. Indeed, many of the delimitative verbs contained in the SSJČ are marked as "rare," e.g., *pozpívat (si)* 'sing a while' (cf. *nonemb*, a completely ordinary verb in Ru). Hutcheson (1999) observes that the SSČJ marks 68, or 29%, of its Cz delimitatives as "rare." Assuming that all these "rare" Cz delimitatives are not part of contemporary spoken Cz, our figure given above of 45% should be revised down to 32%. In other words, a stylistically neutral register of Cz disposes of only 32% of the number of our (conservative) sample of delimitatives in Ru.[2] This fact points to a significant difference in the status of the delimitative Aktionsart in the respective aspectual systems.

Cz delimitatives have other characteristics indicating that they are not a "neutral" means of expressing the temporal delimitation of an activity. In contrast to Ru, Cz delimitatives have a strong tendency to co-occur with the dative reflexive clitic *si*, e.g., *poležeti si* 'lie a while' or *potančit si* 'dance a while'; according to Petrukhina (2000:159–66), all Cz delimitatives in *po-* combine freely with *si* (161). In combination with *si*, delimitatives have a meaning of 'doing something to one's satisfaction'. In this regard, Petrukhina notes that Cz linguists "do not single out delimitative semantics as an independent modification meaning or

even as an important semantic element of the meaning of verbs prefixed with *po-*." For instance, Kopečný (1962:24) observes that the primary meaning of verbs in *po- + si* is the satisfactive meaning, regardless of the duration, and considers all verbs prefixed in *po-* denoting the "small amount" (in terms of time or otherwise) of an action to be expressive (130).

Moreover, Ru delimitatives arguably play a more integral role in its aspectual system than their Cz counterparts do in the aspectual system of Cz. Though *po-* delimitatives are traditionally considered unpaired procedural verbs and thus *perfectiva tantum*, in texts they function as perfective "partners" of imperfective (imperfective) verbs that are construed atelically. This view is argued convincingly by Lehmann (1988), which develops a theory of functional aspectual pairs in Ru. Accordingly, a delimitative such as *почитать* 'read a while' "functions" as a perfective partner of *читать* when the latter is construed as an atelic activity; in order to express the notion 'read' in a context in which Ru requires a perfective verb, e.g., in narrative sequences of events. Lehmann (1988:177) suggests that in a given context requiring the perfective, a Ru speaker chooses the perfective verb that "most closely approximates his intentions, even if that verb expresses additional semantic elements"; accordingly, Lehmann suggests, the additional meaning of "short duration" associated with Ru delimitatives is "taken in the bargain" if a perfective verb is needed for a sequence of events.

In this respect, it should be emphasized that, as Isačenko (1962:391) observes, Ru delimitatives do not necessarily denote "short duration" at all; rather, the delimitation is relative to the temporal scope of the discourse, cf. ex. (2).[3]

(2)   Он поработал над книгой несколько лет. [Ru]
       'He worked on the book for a few years.'

We follow Flier's (1985:50) view that Ru delimitatives in *po-* do not specifically express short duration, but only an abstract, indefinite temporal delimitation. Thus, it is not clear that Ru delimitatives necessarily add any semantic content beyond perfectivity. In fact, in Ru there is likely a continuum between "grammaticalized" *po-* perfectives and delimitatives in *po-*.[4] Petrukhina (2000:190) arrives at a compatible comparative conclusion, suggesting that Ru is on the way to establishing delimitatives in *po-* as perfective "partners" of their atelic imperfective source verbs; this is in contrast to West Slavic, where the facts of aspect usage "have not created an impetus" for delimitatives as a class to enter into aspectual partner relationships.

The importance of contexts of sequentiality in an assessment of the differing functional status of delimitatives in Ru and Cz should not be underestimated. Unlike Ru, Cz allows imperfective verbs frequently in narrative sequences of events (Ivanchev 1961, Stunová 1993); the term adopted here for such imperfective usage is the "contextually conditioned imperfective past," or CCIP. Though the CCIP often corresponds to ingressive constructions in Ru, Cz linguists agree that it does not entail ingressivity; what the CCIP does is present a situation occurring in a sequence of events from an internal perspective (cf. Křížková

1963:287). Stunová (1993:117) observes that the Cz CCIP occasionally corresponds to Ru delimitative verbs, as shown in (3):

(3) a.   Uložil se pěkně jako nebožtík, chvilku *uvažoval*_{IF} o různych obchodech a
         usnul. [Cz]
         'He lay down in bed, comfortable as a corpse, *reflected* for a while on his
         various affairs, and fell asleep.'

    b.   [...] улегся удобенько, словно покойничек, *поразмышлял*_{PF} маленько о
         своей торговле и заснул. [Ru]

Petrukhina (2000:180) likewise gives similar examples showing this correspondence:[5]

(4) a.   V peci chvíli *hořelo*_{IF}, pak v ní zhaslo. [Cz]
         '[The fire] *burned* a while in the oven, and then went out.'

    b.   Печка *погрела*_{PF} и погасла. [Ru]

The strong preference for the perfective in sequences of events in Ru is well known (Dickey 2000:18–23, with references). The Cz tolerance for the imperfective in sequential contexts allows us to make sense of the lower productivity of delimitatives in *po-* there, as well as of the fact that they tend to be associated with other semantic elements (the satisfactive meaning).

The differences outlined above between Ru and Cz are not accidental, but symptomatic of an overall east-west division regarding delimitatives in *po-*. Petrukhina (2000:170–73) observes that the situation in Sk corresponds largely to that in Cz: Sk delimitatives in *po-* either "express a relatively short duration or make no determination in this respect"; Sk delimitatives also freely combine with the dative reflexive clitic *si* to express the satisfactive meaning. She notes, however, that they are slightly more productive in Sk than in Cz; this was confirmed by a search in the SSJ (120,000 words, roughly equivalent to the SRIa), which yielded 277 delimitatives in *po-* (44 more than in Cz). Thus, Sk attests 53% of the Ru sample. While very few of the Sk delimitatives are marked as "rare," 75 (27%) are marked as "expressive."

The productivity of delimitative *po-* in Pol is significantly higher than in Cz or Sk (cf. Petrukhina 2000:185). Piernikarski (1969:117) observes that *po-* forms delimitatives from "a great majority of [imperfective] verbs"; cf., e.g., *pojarzyć się* 'glow a while', *popisać* 'write a while', and *popracować* 'work a while'. But, like Cz, Pol has a "satisfactive" construction formed with its dative reflexive pronoun *sobie*. Piernikarski (1969:130–32) gives examples such as *pośpiewać sobie* 'sing a while to one's satisfaction'.

Uk and BR pattern almost identically to Ru. Regarding Uk, Pugh and Press (1999:262) observe that prefixation with *po-* to form delimitatives is "very common," cf., e.g., *посидіти* 'sit a while', *поговорити* 'talk a while' and *номігати* 'twinkle a while'. Atrakhovich and Bulakhaŭ (1962:399–400) note the high productivity of *pa-* as a delimitative prefix in BR; cf., e.g., *паараць* 'plow a while', *пагарачыцца* 'be worked up a while' and *наспаць* 'sleep a while'.

With the inclusion of South Slavic into the picture, the overall east-west division becomes evident. Deianova (1976:464–65) observes a sharp difference be-

tween the number of delimitative verbs in Bg and S/Cr. She counts 472 delimitatives in *po-*, almost as many as Hutcheson's (1999) findings for Ru.[6] Stoianov (1983:221) confirms that *po-* with delimitative meaning is productive in contemporary Bg. As for Macedonian, Galton (1962:41) notes that it derives many more delimitatives than Serbian (cf., e.g., Mac *поработи* 'work a while', *nonee* 'sing a while', *поразгледа* 'look at a while').

Indeed, Deianova finds very few delimitative verbs in S/Cr—a total of 35. (In my experience with written and spoken S/Cr, delimitatives occur rarely, save for a few exceptions such as *poležati* 'lie a while', *posjediti* 'sit a while', and *popričati* 'converse a while'.) Sn also has a low number of delimitatives relative to Ru and Bg. A search in the SSKJ (120,000 words) yielded 108 delimitatives in *po-*. This number is indeed higher than Deianova's figure for S/Cr, but lower than the number in Cz. Sn delimitatives are largely limited to a stative verbs and few other lexical classes, such as verbs of sound phenomena (e.g., *pozvoniti* 'ring a while'), and a few verbs of intellectual activity (e.g., *pofilozofirati* 'philosophize a while'—such verbs have an ironic feel). No delimitatives exist for many basic notions such as 'work' or 'read'. Thus, Sn and S/Cr share a low productivity of delimitatives in *po-* with Cz and Sk, in contrast to Bg and Ru.

To recapitulate: in East Slavic and Bg, *po-* productively derives delimitatives, as evidenced by the high numbers of such verbs; a group of western languages (Cz, Sk, Sn and S/Cr) are jointly characterized by a relatively low productivity of *po-* as a delimitative prefix (with Sk attesting the most), as well as a lower degree of usage of such verbs. Pol patterns closer to the east, with a high number of delimitatives. At this point it should be emphasized that the inverse correlation between the imperfective in sequences of events and the productivity of delimitatives in *po-* is generally true for Slavic as a whole: Ivanchev (1961) establishes that the CCIP is primarily a phenomenon of Cz, Sk and Sorbian, occurring less frequently in Pol and Sn, even less in S/Cr, and reaching a minimum in East Slavic and Bg.

The east-west difference in the productivity of *po-* as a delimitative prefix discussed above parallels several other east-west differences in Slavic aspect analyzed in Dickey (2000) on the basis of data from eight Slavic languages (Cz, Sk, Sn, Pol, S/Cr, Bg, Ru and Uk), which include variations in aspectual usage in habitual contexts, the general-factual, the historical present, performatives and other cases of coincidence, as well as differences in the derivation of verbal nouns. The result is an overall division of Slavic into two distinct aspectual types: an eastern type (Ru, Uk, BR, Bg) and a western type (Cz, Sk, Sn). Pol and S/Cr are transitional zones between these two groups; however, Pol tends to pattern more like the east and S/Cr more like the west. On the basis of the observed differences, Dickey (2000) constructs a theory of the meanings of the perfective and imperfective aspects in each group (for convenience referred to here as the EAST-WEST ASPECT THEORY), according to which the meaning of the perfective aspect in the western group is TOTALITY, whereas the meaning of the perfective in the eastern group is a concept labeled TEMPORAL DEFINITENESS. Totality, which is familiar from the aspectological literature (e.g., Comrie 1976), refers to the view of a situation as an indivisible whole. Temporal definiteness, however, requires some explanation. A situation is temporally definite if it is

unique in the temporal fact structure of a discourse, i.e., if it is viewed as both (a) a complete whole and (b) qualitatively different from preceding and subsequent states of affairs. This notion has theoretical motivations which need not concern us here (for details, see Leinonen 1982 and Dickey 2000); of primary relevance for the present discussion is the fact that the temporal definiteness has as a practical effect the limitation of perfective verbs in the eastern languages to contexts of (*explicit* or *implicit*) sequentiality.

Space considerations preclude a detailed explanation of how the hypothesized meanings for the perfective aspect in the respective groups motivate the differing aspectual usage in the parameters considered in Dickey (2000); As an illustration, let us briefly consider two of them, taking Ru and Cz as representative of the eastern and western languages (respectively). The first parameter is habituality: as shown in (5), the eastern languages strongly prefer the imperfective in habitual utterances, whereas the perfective is quite common in the western languages.

(5) a. Каждый день он *выпьет$_{PF}$/выпивает$_{IF}$ по одной рюмке водки. [Ru]
  b. *Vypije*$_{PF}$ jednu skleničku vodky denně. [Cz]
    'He *drinks* a glass of vodka every day.'

The analysis is fairly simple: in the west, a habitual situation viewed on the basis of a single representative instance event can be coded perfective if that situation is viewed in its totality (as a complete whole); in (5) the quantification of the object facilitates the total view of the situation. In contrast, the temporal definiteness of the Ru perfective renders it unacceptable in cases of habituality, because a habitually repeated situation cannot be viewed as uniquely locatable in time; nor is there any sequentiality present on the level of the single representative instance. This analysis is supported by the fact that the perfective in all the eastern languages is generally acceptable in the expression of habitual *sequences* of events

(6) Он всегда так — выпьет$_{PF}$ кофе и пойдет$_{PF}$ на работу. [Ru]
    'He's always like that—drinks his coffee and goes to work.'

In (6), the drinking situation is presented as the first of two sequential situations on the level of the representative instance. This fulfills the uniqueness condition (b), and the perfective is acceptable.

Another illustrative parameter involves the imperfective general-factual. Although the imperfective aspect occurs in the general-factual function in all Slavic languages, differences do exist: one is that in the western languages, the imperfective is unacceptable in the denotation of a single achievement in the past; in the eastern languages, however, it is acceptable. Compare the examples in (7–8):

(7) a. Jednou už *dostal*$_{PF}$/*dostával*$_{IF}$ napomenuti za zpoždění. [Cz]
    'He has already once *received* a reprimand for being late.'
  b. Однажды он уже получал$_{IF}$ выговор за опоздание. [Ru]

(8) a. *Utknul*$_{PF}$/*Utkával*$_{IF}$ ses někdy na ulici? [Cz]
    'Have you ever *stumbled* on the street?'
  b. Ты когда-нибудь спотыкался$_{IF}$ на улице? [Ru]

In the west, the totality of the perfective renders it acceptable in the denotation of a single achievement, which is necessarily a totality, regardless of the overall context. As for Ru, the general-factual function is inherently incompatible with the temporal definiteness of the perfective aspect, as the situation in question cannot be viewed as unique in the fact structure of the discourse; note also the lack of any explicit sequentiality to motivate the perfective in (7b) and (8b).

Let us now turn to the imperfective aspect. According to the east-west aspect theory, the imperfective in each group has its own distinct (positive) meaning. In the west, the imperfective expresses QUANTITATIVE TEMPORAL INDEFINITENESS: the assignability of a situation to more than one conceptual point in time in the fact structure of a discourse. In (7a) and (8a), this meaning contradicts the context of a single achievement, which must be assigned to a single (conceptual) point in time, with the result that the imperfective is unacceptable in Cz. The meaning of the eastern imperfective is QUALITATIVE TEMPORAL INDEFINITENESS: the inability of a situation to be assigned to a single, unique point in time relative to other states of affairs. Habitual events obviously cannot be located at a single, unique point in time and are thus qualitatively temporal indefinite, hence the acceptability of the eastern imperfective in (5) above. General-factual contexts such as (7b) and (8b), in which a single achievement is not uniquely located relative to other states of affairs, also sanction the qualitative temporal indefiniteness of the eastern imperfective. (This sketch has been necessarily abbreviated, intending to give only the flavor of the analysis; for details, see Dickey 2000.)

Let us now consider the facts of Slavic delimitative *po-* in light of the east-west aspect theory. As pointed out above, the east-west division regarding the productivity of delimitative *po-* resembles the other east-west aspect divisions analyzed in Dickey (2000): high productivity in the east (Ru, Uk, BR and Bg), low productivity in the west (Cz, Sk, Sn), with the transitional languages patterning as expected (Pol closer to the east, S/Cr like the west). But how can the semantic meanings hypothesized by the east-west aspect theory account for the increased productivity of *po-* in the east? A corollary of the east-west aspect theory is that the eastern perfective is less tied to telic situation types: though accomplishments and achievements are meaningfully conceptualized only by including their endpoints (with the result that they are viewed as totalities), they are not *inherently* temporally definite. On the other hand, states are the only *inherently* temporally indefinite situation type; activities can easily be viewed as completely occurring at a specific, unique juncture in the fact structure of a discourse. Thus, if temporal definiteness is the central meaning of the eastern perfective aspect, there is a compelling reason for deriving perfective verbs of atelic activity predicates in order to present them as temporally definite (e.g., as occurring in sequences of events) in the eastern languages. In the western languages, where the perfective aspect is not *de rigeur* in cases of narrative sequencing and

where the perfective aspect, as a totality category, is more closely tied to telicity (cf. Stunová's 1993:193 suggestion that Cz aspect has a "more lexical character" than Ru aspect), there is little systemic necessity to derive perfective partners for imperfective activity verbs, and still less for them to occur consistently in sequences of events. Further, if delimitatives in *po-* fulfill no essential systemic function in the structure of narratives in the western languages, we should not be surprised if they have become associated primarily with elements of non-temporal meaning, such as "satisfactivity" or various expressive nuances.

There is one interesting difference in the distribution of delimitatives in the eastern and western languages that can be explained in terms of the east-west aspect theory. Petrukhina (2000:186) observes that in Ru delimitatives, "as a rule, cannot be used in a context indicating a further continuation of the situation in question", as in (9a):

(9)   a.   Мы *посидели в приемной час и в пять часов еще продолжали здесь сидеть. [Ru]
             'We sat in the waiting room for an hour and at five o'clock still continued sitting here.'
       b.   *Poseděli* jsme hodinu v recepci a ještě o páté jsme tam seděli. [Cz]
       c.   *Posiedzieliśmy* godzinę i o piątej jeszcze tutaj siedzieliśmy. [Pol]

In Cz and Pol, however, such sentences are acceptable ((9b, 9c)). This difference is explained easily by assuming that temporal definiteness is the meaning of the eastern perfective: If the eastern perfective communicates that a situation is uniquely locatable in the fact structure of a discourse, then a perfective verb should be inappropriate in a context indicating that a *qualitatively identical situation* continued beyond the juncture/time interval covered by that perfective verb. Applying this concretely to example (9a), the uniqueness condition of the Ru perfective aspect means that the 'sitting' denoted by *посидеть* must be qualitatively different from any temporally adjacent (i.e., prior or subsequent) situations. But (9a) indicates that the 'sitting' continued essentially unchanged beyond the 'sitting' expressed by *посидели час* 'sat for an hour'; thus, the uniqueness condition is violated, and Ru *посидеть* is inappropriate.

On the other hand, the east-west aspect theory predicts that delimitatives in the western languages (e.g., Cz) should be more acceptable in such contexts, because the western perfective expresses not temporal definiteness but totality. Accordingly, Cz delimitatives are not subject to the uniqueness condition. In (9b) *poseděli hodinu* merely presents 'sitting for an hour' as a totality; the qualitative identity or non-identity of temporally adjacent situations is irrelevant. As for Pol, its western-like behavior in this case is due to its transitional status, a detailed discussion of which cannot be undertaken here. Suffice it to say that Pol behaves in some ways like the east, i.e., by productively deriving delimitatives, and in others like the west, i.e., by allowing the usage in (9c).

It should be pointed out that Ru perfective perdurative verbs are acceptable in such contexts:

(10)   Несколько недель он уже в больнице *пролежал*_{PF} и еще день-другой полежит. [Ru]
       'He's already *spent* several weeks *lying* in the hospital, he'll [be able to] lie there another day or two.'

The contrasting acceptability of Ru perduratives in *pro-* in such contexts does not contradict the analysis of delimitatives in the east given above. As is well known, perdurative verbs govern an accusative NP indicating the time interval involved (cf., e.g., Flier 1985). Unlike delimitatives in *po-*, they are thus *accomplishment* predicates, i.e., *пролежать две недели* 'spend two weeks lying' is an accomplishment which can only be said to have occurred once the two-week point has been reached. As such, *пролежать две недели* is viewed as qualitatively different from *лежать* 'lie' in precisely the same way that *walk a mile* is not necessarily true whenever someone has *walked*. Thus, in (10) 'spending several weeks lying' is qualitatively different from 'lying' or 'lying another day or two', and the uniqueness condition is not violated.

Example (10) calls to mind another difference between delimitatives in the east and west noted by Petrukhina (2000:164): Cz, Sk and Pol delimitatives in *po-* commonly occur when a long duration is emphasized, comparable to Ru perduratives.[7] Compare the following Ru and Cz examples:

(11)   a.   Они *посидели/просидели целый вечер, пока не зазвонил колокол, оповещая о полуночной мессе. [Ru]
             'They *sat* through whole evening, until the bell rang for the midnight mass.'
       b.   Celý večer *poseděli*, až zvonili na půlnoční. [Cz]

Petrukhina (2000:176) also cites the following Pol example:

(12)   Oj *posiedzialem* [sobie] ciałą noc. [Pol]
       'Oh, I *sat* up the whole night.'

We believe that this variation is a consequence of the varying status of delimitatives in the eastern and western languages as "functional aspectual partners" of their imperfective source verbs (cf. Lehmann's view discussed above). The duration expressed by Ru delimitatives in *po-* is highly indefinite, and does not comprise their semantic focus; cf. in this regard Flier's (1985:50) observation that the difference between delimitatives and perduratives is not one of *short* vs. *long* duration, but one of *neutral/indefinite* vs. *intensive/long* duration. Langacker (1990:93) emphasizes that atelic activities "*typically* occur in 'bounded episodes'" (our emphasis); this is why Langacker ultimately includes activities in his class of "perfectives"). Inasmuch as such encyclopedic knowledge often becomes a part of the meaning of a linguistic unit, we have another reason for characterizing Ru delimitatives as expressing some indefinite yet typical duration (e.g., relatively long for *поработать* 'work a while', but fairly short for *поикать* 'hiccup a while'), which is incompatible with the foregrounding of abnormally long duration. Moreover, since Ru delimitatives act as "functional perfectives" of activity predicates in sequences of events, they foreground events viewed in their totality. From a cognitive standpoint, foregrounded events, as

figures, must be perceptually smaller than the background; this is why "proto-typical" telic perfective verbs cannot stress the long duration of an event (cf. the incompatibility of ordinary perfective partner verbs, e.g., *написать* 'write', with *долго* 'a long time' in Ru and the other Slavic languages). If eastern delimitatives function as perfective partner verbs of imperfective activity verbs, then we should expect them likewise to be ill-suited to foreground the (abnormally) long duration of an activity, and it makes sense that Ru has created a special lexical means to express the long duration of a situation—perduratives in *pro-*.

Turning to the western languages (and ignoring Pol as a transitional zone), their delimitatives do not appear to function systematically to foreground activity situations (recall, for instance, that in the west imperfective verbs occur much more frequently in sequences of events). Thus, they are less tied to a "typical" duration of an activity (cf. in this regard their tendency to express the satisfactive meaning) and there is no obvious reason why they should be unable to occur in contexts in which the long duration of an event is stressed. As far as strictly temporal parameters are concerned, the meaning of western delimitatives seems to be simply the extension of a predicate over an indicated span of time, be it short or long, which resembles a metaphorization of the spatial meaning of *po-* which is still productive in the western languages, cf., e.g., Cz *pochromovat* '[completely] cover a surface with chrome'.

Let us now turn to the history of delimitative *po-* in Slavic. Prefixation with *po-* to form delimitatives has not always been as productive in Ru and the eastern languages as it is today. Sigalov (1975:163) observes that before the sixteenth century, Ru delimitatives in *po-* were derived primarily from a small class of stative verbs, e.g., *побыти* 'be a while', *полежати* 'lie a while', *поспати* 'sleep a while'. It was only in the sixteenth through eighteenth centuries that *po-* acquired widespread productivity as a delimitative prefix, deriving delimitatives from other activity verbs such as indeterminate verbs of motion, verbs of sound phenomena, *verba dicendi*, verbs of mental activity and verbs of physical activity. Likewise, Lilov (1964:145–48) establishes that the delimitative (his term is *деминутивна*) function of *po-* in Bg was a "relatively late phenomenon"; it was uncommon in OCS and Middle Bg, and became widespread only in texts of the eighteenth century (e.g., in the *Damaskins*). Given Sigalov's and Lilov's concurring accounts, we are justified in concluding that the productivity of *po-* as a delimitative prefix in the eastern languages is a post-sixteenth-century innovation.

One may safely assume that Common Slavic knew delimitatives in *po-* for a small set of stative activity verbs such as 'lie', 'sit' and 'stand', as they are attested in all the contemporary Slavic languages (including Sorbian), as well as in OCS (*полежати, посѣдѣти, постояти*), ORu (*полежати, посѣдѣти / поси дѣти, постояти*) and OCz (*poležěti, posedětí, postáti*). Sigalov (1975: 146) also notes that Lithuanian has a number of delimitative verbs prefixed with the cognate *pa-*, e.g., *pamiegoti* 'sleep a while', as does Latvian, e.g., *pagulēt* 'lie a while'. Thus, a delimitative Aktionsart in **pa-* can be assumed to have

existed as early as the Balto-Slavic period but, as Sigalov suggests, only in an "embryonic form."

As for Czech, Šlosar (1981:75–78) observes in OCz a period of "high" productivity of the category of the "mensural" (*měrová*) function of *po-* followed by its slow growth. However, Šlosar (following Cz linguistic tradition) lumps both spatial and temporal delimitation into the mensural function, giving few examples of specifically *temporal* delimitatives in OCz (e.g., *počekati* 'wait a while') in this initial period of high productivity, so it is unclear exactly how much this assessment applies to *po-* as a temporally delimitative prefix. It seems likely that in Slavic as a whole, the embryonic delimitative Aktionsart was largely limited to stative verbs, and expanded slowly to other classes of verbs after the eleventh century, until it acquired high productivity in the eastern languages in the sixteenth and especially the seventeenth and eighteenth centuries.

Sigalov (1975) admits that in ORu *po-* could exceptionally have delimitative meaning with non-stative verbs (e.g., *pobesědovati* 'discuss a while', thirteenth century). Given that Šlosar (1981) also gives isolated examples of delimitative *po-* with non-stative verbs (e.g., *pojhráti* 'play a while', thirteenth century); it is probably more accurate to say that in Slavic before the sixteenth century delimitativity was not strictly limited to stative verbs, but was increasingly available as part of the *metaphorical potential* of the spatial meanings of the prefix *po-*. Here we understand "delimitativity" as the extension of a predicate over a span of time, just as in its spatial meaning *po-* signals that a predicate completely covers a surface. Circumstantial evidence for this view is the fact that Sigalov (1975: 147) and Lilov (1964:146) observe that in contrast to the modern Ru and Bg, in ORu and OCS/Middle Bg "delimitatives" could stress long duration (like delimitatives in modern Cz, Sk, Sn and Pol):

(13)   a.   Иона три дни въ китѣ *поживѣ*. ' [ORu]
            'Jonah *lived* for three days in the whale.
       b.   ... въ монастырь *пожи* лѣт ... [Middle Bg]
            '... he *lived* 8 years in the monastery...'

This view is consistent with the view of Bybee, Perkins and Pagliuca (1994) that metaphorization occurs early in grammaticalization. We suggest that *po-* became increasingly lexicalized as a delimitative prefix in Slavic, and that its post-sixteenth-century productivity in the east is evidence of a process of grammaticalization of the prefix as a perfectivizer in those languages. According to Chertkova (1996:123–24), *po-* is statistically the single most productive perfectivizing prefix in contemporary Ru. It is thus quite possible that Ru has been slowly generalizing *po-* as a major, if not the major perfectivizing prefix. This is not to say that the generalization of *po-* will be completed soon or even at all (*pro-*, *za-*, and *s-* also enjoy considerable productivity at present); compare the situation in Bg, where secondary imperfectivization affects "empty" perfectivizing prefixation, and the currently most productive perfectivizing prefix is *iz-* (cf. Ivanova 1974:64).

Another issue is the grammaticalization of the perfective-imperfective opposition itself. Following the standard view of generality as a criterion for grammaticalization (cf., e.g., Bybee, Perkins and Pagliuca 1994) means that a fully grammaticalized aspectual system is one in which the perfective-imperfective opposition is subject to the fewest lexical restrictions. Thus, full grammaticalization of a Slavic aspectual system will extend the presence of the perfective-imperfective opposition to all situation types. However, as true states are logically incompatible with the totalization of the perfective aspect, we may consider maximal generality in this respect to be the presence of the perfective-imperfective opposition in the other three: achievements, accomplishments and activities. Following the hypothesis that delimitatives in *po-* in Ru (and the east) currently function as the perfective partners of imperfective activity verbs, we suggest that the rise of *po-* as a delimitative prefix in the east in the sixteenth through eighteenth centuries represents the systematic spread of the perfective-imperfective opposition to a majority of activity predicates, and was thus a major step towards the full grammaticalization of the aspect opposition in the eastern languages.

This hypothesis accords well with recent theories of the grammaticalization of Ru aspect. Bermel (1997) argues convincingly that early ORu did not have a fully developed aspectual system; rather, aspect became grammaticalized later, towards the sixteenth century. Nørgård-Sørensen (1997:19), examining the history of derived imperfectives, comes to the specific conclusion that Ru aspect was "established as a grammatical category within about 100 years starting from the beginning of the seventeenth century," i.e., *at the exact same time* that delimitative *po-* came into full bloom. This can hardly be a coincidence. Again, this is not a claim that *po-* was the sole agent in the grammaticalization of Ru aspect, which was certainly the result of coalescing circumstances. It should be pointed out that the rise of delimitative *po-* in Ru (and Bg) coincides roughly with several innovations that have occurred in eastern aspect approximately since the eighteenth century involving the elimination of the perfective aspect from certain utterance types such as habituals and the historical present; note also that the CCIP has been lost from Ru and Bg since the time of ORu and OCS. In a brief discussion, Dickey (2000:282–87) suggests that these changes, e.g., the large-scale elimination of the perfective from habitual contexts, were consequences of a shift in the meaning of the eastern perfective from totality to temporal definiteness (cf. the analysis of the habitual examples in (5) given above). If the aforementioned changes indicate such a shift, it makes sense that they coincided with the rise of delimitatives as a way of marking atelic activities temporally definite.

Implicit in this hypothesis is the idea that eastern aspect has in fact been grammaticalized to a higher degree than western aspect (cf. Stunová's 1993:193 suggestion about the lexical nature of Cz aspect). As counterintuitive as it might seem at first glance, this claim is simultaneously both intriguing and somewhat trivial. For if eastern aspect can be said to have progressed farther along on the scale of grammaticalization, the difference may nevertheless be considered an epiphenomenon of the "grammaticalization" of different concepts as the mean-

ing of the perfective aspect in the western and eastern groups. Where totality stabilized as the meaning of the perfective, *po-* has been lexicalized to some degree as a delimitative prefix; where the meaning of the perfective aspect evolved to temporal definiteness, delimitative *po-* has found its grammatical niche in the extension of the perfective-imperfective opposition to atelic activity predicates.[8]

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NOTES

* We wish to thank Tomáš Samek for help with Czech examples.
[1] The SRIa was chosen as a comprehensive dictionary of contemporary spoken Ru. The SSJČ was chosen by necessity, as no Cz equivalent to the SRIa was available.
[2] Cz (and Sk) also derive a number of delimitatives with *za-*. However, they are not universally productive and have their own semantic properties that make them irrelevant for this discussion (for a description, see Petrukhina 2000:166–69, 171–74).
[3] This point is argued convincingly by Brüggemann (2001) on the basis of extensive questionnaire data.
[4] This idea was suggested to us by Volkmar Lehmann.
[5] Petrukhina's examples show that, unlike Ru, Cz (and Sk) derive very few non-agentive delimitatives.
[6] According to Deianova's number, delimitatives are somewhat less productive in Bg than in Ru. But it is perhaps more interesting that Bg derives delimitatives at all: According to Stankov (1969:64–65), the Bg imperfective aorist occurs frequently to denote actions of short and long duration, cf. the following example:

(i)   Той *се вслушва₁* една-две минути, па завря ключа...
       'He *eavesdropped* for one or two minutes, then inserted the key... [Bg]

Stankov observes that such use is particularly widespread; thus, the Bg resemblance to Ru is all the more striking.
[7] Majda Merše (personal communication) confirms that such use is also possible in Sn.
[8] As for the transitional patterning of Pol, the high productivity of delimitatives can be interpreted as indicating that *po-* has been *productively lexicalized*, whereas their western-like use in texts indicates that delimitative *po-* has not been *grammaticalized* as a marker of perfectivity (in contrast to Ru).

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