SLAVIC PERFECTIVE PREFIXES: ARE THEY TELICITY MARKERS?

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The complexity of the Slavic aspectual system has long captured linguists' attention. The present paper is yet another attempt to determine the status of Slavic aspectual prefixes. Throughout the paper, I will argue that these prefixes are telicity markers, contrary to the claim advocated by Borik 2002, Stoll 2003 and Pereltsvaig 2005, Filip 2005, Slabakova 2005.

1.   Slavic aspectual system

Slavic languages have two so-called grammatical aspects: imperfective and perfective. Morphologically, the aspectual distinction between imperfective and perfective forms can be encoded in many different ways. This paper is dedicated to perfective verbal forms that are derived from their imperfective correspondents by the process of perfectivization by prefixation, i.e., by a morphological process, whereby morphologically simple imperfective verbs combine with perfective prefixes/preverbs to form their perfective correspondents. For example, the imperfective form of the verbs *čitat'*-IMP 'to read' becomes perfective if we add the prefix *pro-* to it: ***pro**čitat'*-PERF.[1]

Perfective verbs derived by prefixation are grouped by Slavic linguists into three groups/types:

(1) completive verbs – verbs that encode the end-point (telos) of an event, e.g., ***pro**čitat'*-PERF 'to read (until the end)', ***vy**pit'*-PERF 'to drink (until the end)'.

(2) inceptive/ingressive verbs - verbs that emphasize the beginning-point of an event: ***za**pet'*-PERF 'start to sing', ***za**smejat'sja*-PERF 'start to laugh', ***u**znat'*-PERF 'come/get to know' ***po**ljubit'*-PERF 'come to love/fall in love'.

(3) delimitative verbs – verbs that describe short but not momentary events that went on for some time (for a while, if the prefix *po-* is used, or for as long as specified by the adverbial modifier, if the prefix *pro-* is used), e.g., ***po**spat'*-PERF 'to sleep for a while'; ***pro**spat'*-PERF *2 dnja* 'to sleep for 2 days'; ***po**plakat'*-PERF 'to cry for a while'; ***pro**plakat'*-PERF *nedelju* 'to cry for a week'.

An analysis of Slavic perfective verbs suggests that preverbs are morphological markers of perfectivity, as all verbs that carry a preverb (and have not been inflected by the secondary imperfective suffix *–va*) are perfective.[2]

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[1] All examples are from Russian.

[2] Apart from perfectivization by prefixation, there exist other processes of perfective formation in Slavic, a discussion of which is beyond the scope of the present paper. The existence of these processes suggests that Slavic languages have more than one morphological marker of perfectivity.

The question that I would like to raise in this paper is what is the semantic function of preverbs?

In the literature we find two conflicting views, when it comes to preverbs' semantic function. Some linguists view them as telicity markers (Schoorlemmer 1995, Paslavska & von Stechow 2001, Slabakova 2001) while others oppose such a view (Borik 2002, Stoll 2003 and Pereltsvaig 2005). One of the most recent claims sustains that although the majority of Slavic preverbs indicates telicity, not all of them do (Filip 2005, Slabakova 2005). Under this view, Slavic delimitative prefixes constitute an exception, as they do not make the verbs they attach to telic. The proponents of this view heavily rely on telicity diagnostics to support their claim. Before we verify whether these telicity diagnostics indeed assign an exceptional status to Slavic delimitative verbs, let us first consider the temporal schema of all three types of Slavic perfective verbs derived by prefixation.

**2.   Temporal schema of Slavic perfective verbs derived by prefixation**

As we have seen in the previous section, Slavic completive perfective verbs signal the end-point of an event. More precisely, these verbs emphasize that the event described by the imperfective root has reached its end-point. In other words, these verbs encode a transition from the source state to the target state, where the source state is positive and the target state is negative.
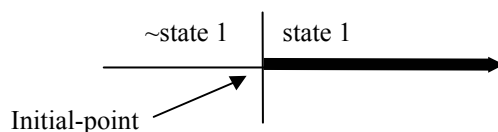
(4)   Temporal schema of completive verbs:

state 1 | ~state 1

End-point
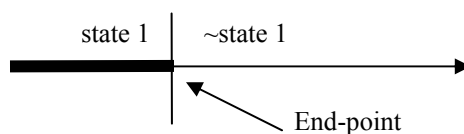
(5)   Petja **pro**čital   knigi.
       Petja *pro*-read-PERF   books
       'Petja read the books.'

(6)   Temporal schema of ***pro**čital*:

was reading | wasn't reading
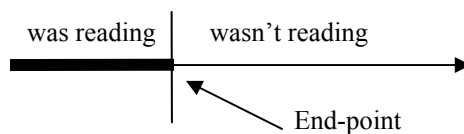
End-point

Inceptive/ingressive perfective verbs, similarly to completive verbs, encode a transition form a source state to a target state. However, given that they emphasize the beginning rather than the end-point of an event, their source state is negative while their target state is positive.

(7)   Temporal schema of inceptive/ingressive verbs:
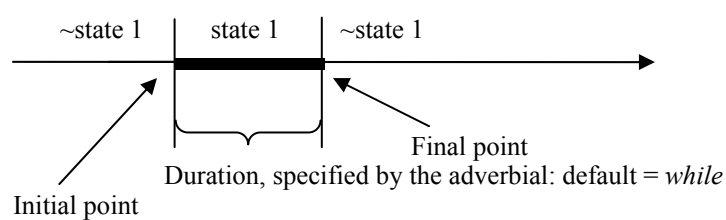
~state 1   state 1

Initial-point

(8)   Petja **za**smejalsja.
        Petja *za*-laugh-PERF.
        'Petja started to laugh.'

(9)   Temporal schema of ***za****smejalsja*:

wasn't laughing   was laughing

Initial-point
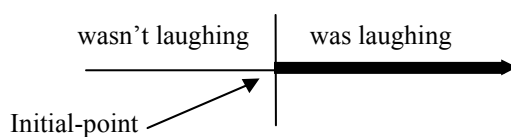
     The last group of perfective verbs formed by prefixation, namely, Slavic delimitative perfective verbs, describe short but not momentary events that went on for some time. Hence, these verbs signal two transitions: one from the negative source state to the positive target state and the other from the target state back to the negative source state.

(10) Temporal schema of delimitative verbs:

~state 1   state 1   ~state 1

Final point

Duration, specified by the adverbial: default = *while*

Initial point

     The duration of the target state is specified by an overt adverbial, if the delimitative verb carries the prefix *pro-*, or is set to the default value, i.e., *while*, if the delimitative verbs carries the prefix *po-*.

(11)   Petja **pro**sidel   v tjur'me   10 mesjacev.
        Petja *pro*-sat-PERF   in prison   10 months.
        'Petja stayed in prison for 10 months.'

(12)   Temporal schema of **pro**sidel:[3]

| wasn't in prison | was in prison | wasn't in prison |

10 months now
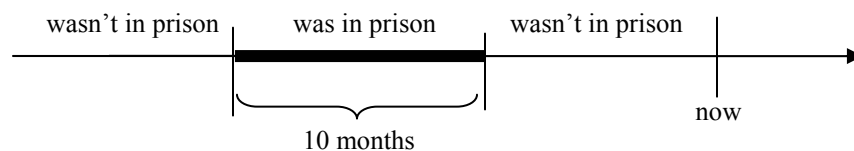
The prefix *pro-* requires the presence of an overt durational adverbial. Thus, if we remove the overt adverbial from (11), we obtain the ungrammatical sentence in (13). Hence, *pro-* subcategorizes for an overt durational adverbial of type *for*-x-time.

(13)   *Petja   **pro**sidel   v tjur'me.
       Petja *pro*-sat-PERF   in prison.
       'Petja stayed in prison.'

Unlike *pro-*, *po-* subcategorizes for a covert durative adverbial *for a while*, given that the events described by delimitative verbs with *po-* are interpreted as lasting for a while.

(14)   Petja **po**čital   gazety.
       Petja *po*-read-PERF   newspapers.
       'Petja read the newspapers for a while.'

(15)   Temporal schema of **po**čital:

| wasn't reading | was reading | wasn't reading |

a while now
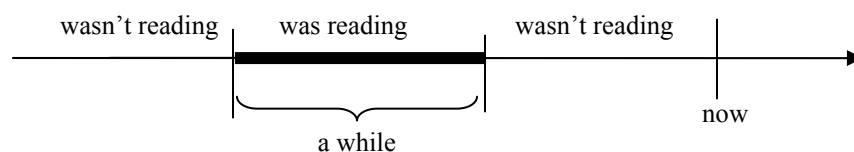
Hence, both delimitative preverbs subcategorize for durative adverbials of the *for* x-time type. These adverbials provide an event with a beginning and an end-point. Put differently, durative adverbials measure out the event (Smith 1997) or render it telic.[4]

In sum, temporal schemas of all three types of Slavic prefixed perfective verbs reveal that these verbs describe telic events. Thus, all of these verbs encode at least one transition, which is an exclusive property of telic verbs (Pustejovsky 1991).

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[3] Note that when the "now" point comes somewhere in the middle of the target state or coincides with its right boundary, we obtain the perfect reading of perfective delimitative verbs.

[4] There are three homophonous forms of the prefix *po-* in Russian: completive, delimitative and distributive. The completive and delimitative *po*-indicate telicity. The distributive form, though, has nothing to do with telicity. It, thus, can attach itself onto perfective verbs already containing a perfective prefix.

The question to ask at this point is why the standard telicity diagnostics fail to recognize delimitative verbs as telic. To answer this question let us have a closer look at the three most commonly used telicity diagnostics: the Adverbial modification, Homogeneity and Conjunction diagnostics.

3. Telicity diagnostics

In this section we will see how each group of Slavic perfective verbs derived by prefixation behaves under various telicity diagnostics.

3.1 Adverbial modification diagnostic

One of the most widely used telicity diagnostics is the Adverbial modification diagnostic, according to which telic predicates can only be modify by frame adverbials of the *in X-time* type, e.g., *in* an hour as in (16a), whereas atelic predicates can only be modify by durative adverbials of the *for X-time* type, e.g., *for an hour* as in (16b):

(16) a. Peter ran for an hour/*in an hour.　　　　　- *atelic*
　　　 b. Peter ran a mile *for an hour/ in an hour　　- *telic*

Let us apply this diagnostic to three types of Slavic perfective verbs derived by prefixation.

(17) Completive verbs:
　　 a. Petja　　čital　　　　gazetu　　odin čas/*za odin čas.　– *atelic*
　　　　 Petja　　read-IMP　　newspaper　one hour/*in one hour.
　　　　 'Petja was reading a/the newspaper for an hour/*in an hour.'

　　 b. Petja　　**pro**čital　　　　gazety　　　*odin čas/za odin čas.　– *telic*
　　　　 Petja　　*pro*-read-PERF　　newspapers　*one hour/in one hour.
　　　　 'Petja read the newspapers *for an hour/in an hour.'
　　　　 Lit: 'It took Petja one hour to finish reading the newspapers.'

(18) Inceptive verbs:
　　 a. Kompjuter　　rabotal　　　　　odin čas/*za odin čas.　– *atelic*
　　　　 Computer　　worked-IMP　　　one hour/*in one hour.
　　　　 'The computer was working for an hour/*in an hour.'

　　 b. Kompjuter　　**za**rabotal　　　*odin čas/?za odin čas.[5]　– *telic*
　　　　 Computer　　*za*-worked-PERF　*one hour/?in one hour.
　　　　 'The computer started to work *for an hour/?in an hour.'
　　　　 Lit: 'It took one hour for the computer to start working.'

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[5] The majority of inceptive verbs are incompatible with both durative and frame adverbials. This might be because the initial point of these events is achievement-like, in that it signals an instantaneous change of state. Achievements, being virtually timeless, are incompatible with any kind of time adverbials.

(19) <u>Delimitative verbs with **pro-**</u>:
    a. ?Petja   sidel   v tjur'me 10 mesjacev/*za 10 mesjacev.   - *atelic*
        Petja   sat-IMP   in prison   10 months/*in 10 months.
        'Petja stayed in prison for 10 months/*in 10 months.'

    b. Petja **pro**sidel   v tjur'me 10 mesjacev/*za 10 mesjacev. -*atelic*
        Petja *pro*-sat-PERF in prison 10 months/*in 10 months.
        'Petja stayed in prison for 10 months/*in 10 months.' (from Borik 2002)

As can be seen from the examples above, the Adverbial modification diagnostic classifies the completive ***pro**čital* along with the inceptive ***za**rabotal* as telic and the delimitative ***pro**sidel* as atelic. Yet, a thorough analysis of delimitative verbs points to the conclusion that in (19b) the adverbial modification diagnostic is not applied properly. Thus, recall that, as has been established in the previous section, the prefix *pro-* selects for an overt durative adverbial. If so, then in (19b) the adverbial *for 10 months* is part of the event structure of the verb and not of the diagnostic itself. If we add an additional adverbial, as required by the Adverbial modification diagnostic, we will see that this second adverbial is a frame adverbial of *in X-time* type which suggests that the delimitative verb ***pro**sidel* is telic:

(20)   *Poslednie 3 goda/ za poslednie 3 goda   Petja **pro**sidel   - *telic*
         *Last   3 years/ in last   3 years   Petja *pro*-sat-PERF
         v   tjur'me 10 mesjacev.
         in prison   10 months.
         '*For the last 3 years/in the last 3 years Petja stayed in prison for 10 months.'

Unfortunately, delimitative verbs with *po-* are incompatible with two adverbials, so we cannot test these verbs using the Adverbial modification diagnostic:

(21) <u>Delimitative verbs with **po-**</u>:
        *Za poslednij čas/ *poslednij čas   Petja **po**čital   gazety
        *In last hour/   *last hour,   Petja *po*-read-PERF newspapers
        ?10 minut.
        ?10 minutes.
        '*In the last hour/*for the last hour, Petja read the newspapers for 10 minutes.'

To recap, according to the Adverbial modification diagnostic, completive, inceptive and delimitative verbs with *pro-* are telic, but the status of delimitative verbs with *po-* is undetermined. Let us now turn to the Homogeneity diagnostic.

3.2   Homogeneity diagnostic

This telicity diagnostic states that a homogenous (atelic) predicate that holds true for a given temporal interval will also hold true for any subinterval of this

interval. This behaviour of homogenous predicates is contrasted with the behaviour of telic predicates, where the mentioned entailment relation is disrupted.

(22)   a. Peter ran for 1 hour. → Peter ran for ½ hour.[6]   - *atelic*
       b. Peter ran a mile in 1 hour. -/→ Peter ran a mile in ½ hour.   - *telic*

Thus, in (22a), where the entailment relation under consideration holds true, we have an atelic event of *running*, while in (22b), where the entailment relation does not holds, we have a telic event of *running a mile*.

Let us apply this diagnostic to three types of Slavic perfective verbs derived by prefixation.

(23) Completive verbs:
  a.   Petja čital gazetu 1 čas. → Petja čital gazetu ½ časa.   – *atelic*
       Petja read-IMP newspaper 1 hour → Petja read-IMP newspaper ½ hour
       'Petja was reading a/the newspapers for an hour' → 'Petja was reading a/the newspapers for half an hour.'

  b.   Petja **pro**čital gazetu za 1 čas. -/→ Petja **pro**čital gazetu za ½ časa. -*telic*
       Petja *pro*-read-PERF newspaper in 1 hour. -/→ Petja *pro*-read-PERF newspaper in ½ hour
       'Petja read the newspaper in an hour.' -/→ 'Petja read the newspaper in half an hour.'

(24) Inceptive verbs:
  a.   Kompjuter rabotal 1 čas. → Kompjuter rabotal ½ časa.   – *atelic*
       Computer worked-IMP 1 hour. → Computer worked-IMP ½ hour
       'The computer was working for an hour.' → 'The computer was working for half an hour'.

  b.   Kompjuter **za**rabotal za 1 čas. -/→ Kompjuter **za**rabotal za ½ časa.   -*telic*
       Computer *za*-work-PERF in 1 hour. -/→ Computer *za*-work-PERF in ½ hour.
       'The computer started to work in an hour.' -/→ 'The computer started to work in half an hour.'

(25) Delimitative verbs with ***pro*-**:
  a.   Petja sidel v tjur'me 10 mesjacev. → Petja sidel v tjur'me 5 mesjacev.
                                                                     - *atelic*
       Petja sat-IMP in prison 10 months → Petja sat-IMP   in prison   5 months
       'Petja stayed in prison for 10 months.' → 'Petja stayed in prison for 5 months.'

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[6] The sign → indicates the presence of an entailment relation, while the sign -/→ signals the lack of such a relation.

b. Za poslednie 3 goda Petja **pro**sidel-PERF v tjur'me10 mesjacev. /→ Za poslednie 2 goda Petja **pro**sidel-PERF v tjur'me 10 mesjacev.   - *telic*
In last 3 years, Petja *pro*-sat-PERF in prison 10 months /→ In last 2 years, Petja *pro*-sat-   PERF in prison 10 months
'In the last 3 years, Petja stayed in prison for 10 months. /→ In the last 2 years, Petja stayed in prison for 10 months.'

As can be seen from the examples (23) - (25), according to the Homogeneity diagnostic, Slavic completive, inceptive and delimitative verbs with *pro*- are telic. Note that the Homogeneity diagnostics cannot be applied to delimitative verbs with *po*-, given that these verbs are incompatible with the two adverbials required to accurately determine a verb's telicity status (cf. 21).

3.3   Conjunction diagnostic

The last diagnostic that we will look at in this section is the Conjunction diagnostic, according to which only atelic verbs allow for continuation of the event that they describe. As atelic verbs only consist of what may be though of as a source state, we can state that the Conjunction diagnostic claims that if interpretation of an event allows for continuation of the source state, then that event is atelic, as in (26a). If, however, the continuation of the source state is impossible, then we are dealing with a telic event, as in (26b):

(26)   a. Peter ran and is still running.   – *atelic*
          b. *Peter drank a glass of wine and is still drinking it.   – *telic*

Let us apply this diagnostic to Slavic prefixed perfective verbs:

(27) Completive verbs:
    a.   Vo vremja obedennogo pereryva Petja   čital   gazety
          During lunch time,   Petja   read-IMP newspapers
          i daže   sejčas   vsjo ečo   prodolžaet ix   čitat'. – *atelic*
          and   even   now still   continues   them   to-read .
          'During lunchtime Petja was reading the newspapers and he is still reading them even now.'

    b.   *Vo vremja obedennogo pereryva Petja **pro**čital   gazety
          During lunch time,   Petja *pro*-read-PERF newspapers
          i   daže   sejčas   vsjo ečo   prodolžaet ix   čitat'. – *telic*
          and even   now   still   continues   them to-read .
          'During lunchtime Petja read the newspapers and he is still reading them even now.'

(28) Inceptive verbs:
    a.   10 minut nazad   kompjuter   rabotal   i   vsjo eš'o
          10 minutes ago   computer   worked- IMP   and   still
          prodolžaet   rabotat'.   - *atelic*
          continues   to-work.
          '10 minutes ago, the computer was working and it is still working.'

    b.   *10 minut nazad   kompjuter   **za**rabotal   i   vsjo eš'o
            10 minutes ago   computer   *za*-work-PERF and still
            prodolžaet   **ne** rabotat'.[7]   *- telic*
            continues   not to-work.
            '10 minutes ago, the computer started to work and it is still not working.'

(29) <u>Delimitative verbs with *pro*-</u>
    a.   3 dnja nazad   Petja   sidel   v tjur'me   i   vsjo eš'o
            3 days ago   Petja   sat-IMP   in prison   and still
            prodolžaet   tam   sidet'.   *- atelic*
            continues   there to-sit.
            '3 days ago Petja was in prison and he is still there.'

    b.   *Petja   **pro**sidel   v tjur'me   pjat' let   i   vsjo eš'o
            *Petja   sat-PERF   in prison   5 years   and still
            prodolžaet tam   sidet'.[8]   *- telic*
            continues there   to-sit.
            '*Petja stayed in prison for 5 years and he is still there.'

(30) <u>Delimitative verbs with *po*-</u>
    a.   Vo vremja obedennogo pereryva   Petja   čital   gazety
            During lunch time,   Petja   read-IMP   newspapers
            i   daže sejčas   vsjo ečo   prodolžaet ix   čitat'.– *atelic*
            and   even now   still   continues   them   to-read.
            'During lunchtime Petja was reading the newspapers and he is still reading them even now.'

    b. *Vo vremja obedennogo pereryva Petja   **po**čital   gazety
            During lunch time,   Petja   *po*-read-PERF newspapers
            i   daže   sejčas   vsjo ečo prodolžaet ix   čitat'.   – *telic*
            and even now   still   continues   them to-read .
            'During lunchtime Petja read the newspapers for a while and he is still reading them even now.'

    According to the conjunction diagnostic, the ungrammaticality of sentences (27b), (28b), (29b) and (30b) supports the claim that completive, inceptive and delimitative verbs are all telic, as in these examples the perfective verbs do not allow for continuation of their source state.

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[7] Given that the source state of inceptive verbs is negative, we have to add a negation while testing the continuation of the source state.

[8] One must be careful not to confuse this perfective reading with the perfect reading that this sentence also has, whereby Petja has been in prison for 5 years *already* and is still there. Not only is the latter reading grammatical, but it is also the more salient one. In the perfect reading, however, the adverbial *5 years* represent only a part of the entire time of Petja's stay in prison, while in the perfective reading it represents the entire time.

Concluding this section we can state that, contrary to recent claims by Filip (2005), Slabakova (2005), telicity diagnostics classify Slavic prefixed verbs as telic, suggesting that preverbs' semantic function is that of telicity markers.

4.   Definition of telicity

The question that I would like to address next is whether Slavic prefixed perfective verbs conform to the formal definition of telicity. To answer this question, I will adopt Borer's (2005) definition of *quantity*:

> P is **homogenous** iff P is *cumulative* and *divisive*:
> i. P is *divisive* iff $\forall x\ [P(x) \to \exists y\ (P(y) \land y < x)] \land \forall x,y\ [P(x) \land P(y) \land y < x \to P(x\text{-}y)]$
> ii. P is *cumulative* iff $\forall x\ [P(x) \land P(y) \to P\ (x \cup y)]$

> P is **quantity** iff P is not homogenous.

According to Borer's definition the predicate P is that of quantity if and only if it contains at least one subpart y which, when subtracted from x, gives rise to a proper part of x, which does not have the property P.
Does Borer's definition capture our conclusion that all Slavic prefixed perfective verbs are telic? Let us consider some examples.

(31)   Completive verb ***pro**čital* 'read until the end':
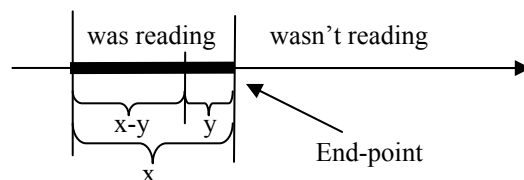
From (31) we can see that the completive verb ***pro**čital* is quantity, since if we subtract the subpart y from x, we obtain the subpart of x, i.e., x-y, which does not have the property of the predicate ***pro**čital*, as it lacks the end-point. Thus, the completive verb ***pro**čital*, requiring the end-point in its temporal structure, is incompatible with the x-y subpart. In fact, the x-y subpart is only compatible with the imperfective counterpart of the verb ***pro**čital*, i.e., *čital* 'was reading'. How about inceptive verbs?
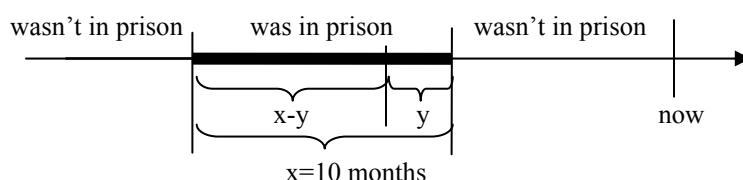
(32)   Inceptive verb ***za**smejalsja* 'start to laugh':
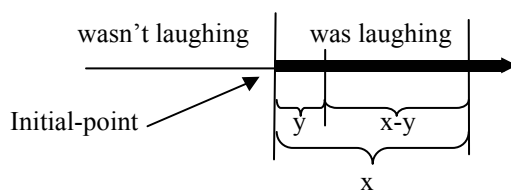
As can be seen from (32), the inceptive verb *zasmejalsja*, similarly to the completive verb *pročital* is quantity. Thus, if we subtract the subpart y from x, we obtain the subpart of x-y which does not have the property of the predicate *zasmejalsja*, as it lacks the initial-point. Only the imperfective form of the verb *zasmejalsja*, i.e., *smejalsja* 'was-laughing', is compatible with the x-y subpart.

Turning now to delimitative verbs, recall that in the literature these verbs have been claimed to be atelic. While analyzing these verbs, the crucial point to remember is that they contain an adverbial in their temporal structure.

(33)   Delimitative verb *prosidel 10 mesjacev* 'stayed for 10 month':
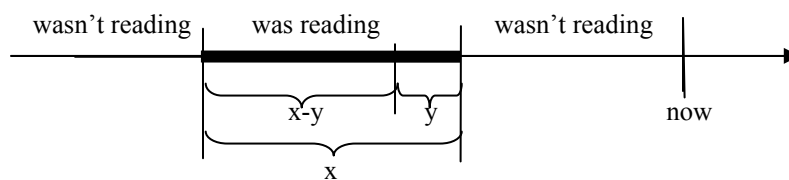
```
wasn't in prison |      was in prison      | wasn't in prison  |
————————————————————████████████████████————————————————————————▶
                    |        x-y        |  y  |               now
                    |                 x=10 months             |
```

If we assume that y=2 months, then x-y = 8 months.   As we can see the subpart x-y does not have property of x, since:

(34)   Petja **pro**sidel v tjur'me 8 mesjacev ≠ Petja **pro**sidel v tjur'me 10 mesjacev.
         'Petja stayed in prison for 8 months.' ≠ 'Petja stayed in prison for 10 months.'

Hence, the delimitative verbs with the preverb *pro-* are quantities. It is somewhat trickier to determine the status of the delimitative verbs with *po-*, given that the adverbial *while* does not have definite boundaries.

(35)   Delimitative verb *počital* 'read for a while':

```
wasn't reading |      was reading      | wasn't reading  |
————————————————████████████████████————————————————————————▶
               |        x-y        | y  |               now
               |               x               |
```

Thus, if we subtract *a while* from *a while*, we will still end up with *a while*. Yet, as can be seen from the diagram above, the temporal interval x-y is not equal to the temporal interval x. Technically, the event that lasts for an interval x is not equal to the event that only lasts for an interval x-y (assuming y is non-null). Hence, the delimitative predicate *počital* is also quantity.

To sum up, according to Borer's definition of quantity (derived on independent grounds), Slavic completive, inceptive and delimitative verbs are telic.

5.   **Conclusion**

    In the present paper, we have examined Slavic prefixed perfective verbs from three different perspectives. First, we have seen the temporal schemas of these verbs. Then, having established that all these verbs are telic, we have checked whether they conform to Borer's definition of telicity, which they do. Lastly, we have applied the most common telicity diagnostics to Slavic prefixed perfective verbs to determine whether these verbs are indeed telic. The conclusion that we have reached is that, once we take a durative adverbial to be the part of the delimitative verbs' temporal structure, the telicity diagnostics properly classify them, along with completive and inceptive verbs, as telic.

    Hence, a thorough investigation of Slavic preverbs reveals that they not only morphologically mark verbs as perfective, but also semantically mark them as telic. This finding supports the view advanced by Schoorlemmer 1995, Paslavska & von Stechow 2001, Slabakova 2001 and argues against the view advanced by Borik 2002, Stoll 2003 and Pereltsvaig 2005, Filip 2005, Slabakova 2005.

References

Borer, Hagit. 2005. *Structuring sense*. v. 1. *In name only* -- v. 2. *The normal course of events*. Oxford ; New York : Oxford University Press

Borik, Olga. 2002. Aspect and Reference time. Doctoral Dissertation, Utrecht University.

Filip, Hana. 2005. The telicity parameter revised. In *Semantics and Linguistic Theory (SALT) XIV*. Ithaca: CLC Publications, Department of Linguistics, Cornell University.

Paslawska, Alla and Arnim von Stechow. 2001, Perfect redings in Russian. http://vivaldi.sfs.nphil.uni-tuebingen.de/~arnim10/Aufsaetze/

Pereltsvaig, Asya. 2005. Aspect Lost, Aspect Regained: Restructuring of aspectual marking in American Russian. In *Aspectual Inquiries*. P. Kempchinsky and R. Slabakova (eds.) Dordrecht: Kluwer. Pp. 369-395.

Pustejovsky, James. 1991. The syntax of event structure. *Cognition* 41: 47 -81.

Schoorlemmer, M. 1995. Participial Passive and Aspect in Russian. Ph.D. Thesis, Universiteit Utrecht.

Slabakova, Roumyana. 2005. "What is so difficult about telicity marking in L2 Russian?" *Language and Cognition* 8(1): 63-77.

Slabakova, Roumyana. 2001. *Telicity in Second Language*. Amsterdam: John Benjamins.

Smith, Carlotta S. 1997. *The parameter of aspect*. Kluwer Academic Publishers.

Stoll, Sabine. 2003. The Acquisition of Russian Aspect. Doctoral Dissertation, University of California, Berkeley