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PAST PARTICIPLES IN REDUCED RELATIVES:
A CROSS-LINGUISTIC PERSPECTIVE

This paper discusses the syntax and semantics of Active Past Participles in restrictive reduced relatives (RRs). The distribution of Active Past Participles is compared with respect to verb classes in Bulgarian, English, Italian, Slovenian and Spanish. We see that presumably the same surface participial structure has different distributional properties in these languages: in Bulgarian, Past Participles of all classes of verbs appear in RRs, while in other languages only those of unaccusative verbs do so. The differences in the distribution are accounted for by referring to the syntactic structure of the participle and semantic features on participial heads.

1. Introduction

1.1 The goal

This paper discusses the syntax and semantics of Active Past Participles in restrictive reduced relatives (RRs henceforth). In Section 2 the distribution of Active Past Participles is compared with respect to verb classes in Bulgarian, English, Italian, Slovenian and Spanish. Section 3 summarizes a previous approach to the problem by Iatridou, Anagnostopoulou and Izvorski (2001) and shows that the latter is unable to account for the data in Section 2. In Section 4 the background assumptions that this paper adopts are stated. In Sections 5-7 the proposal as to the availability of Active Past Participles in RRs of the languages in question is presented. Finally, Section 8 deals with some remaining issues.

1.2 Introducing terminology

In this section I wish to state the terminology that will be used throughout the paper. English, Spanish and Italian exhibit only one form traditionally referred to as the Past Participle, used in the Passive Voice (*The house was bought by John*) as well as in the Perfect Tense (*John has bought the house*). Slovenian and Bulgarian, on the other hand, have two morphologically distinct counterpart forms: the Past Participle (ending in -*l*), which is always active and used in the Perfect, and the Passive Participle (ending in -*en/t*), which is used to form the Passive Voice.

This paper focuses on the distribution of the Bulgarian/Slovenian Past Participle in RRs and the active variant of the English/Italian/Spanish Past Participle in RRs. The term that I will use to refer to this form is the Active Past Participle, even if the word 'active' is redundant when the reference is to Bulgarian and Slovenian.

2. The data

Let us first compare English and Bulgarian Past Participles in RRs (1-2).,[1,2]

    (1) **English**
a.	The book bought by John is red.	Passive Past Participle
b.	The leaf fallen from the tree is red.	Active Past Participle-unaccusative
c.	*The man bought the book is John.	Active Past Participle-transitive

In English, RRs with the Past Participle are available only with participles of passive or unaccusative verbs (1a,b), but not transitive active verbs (1c). As observed already in Iatridou, Anagnostopoulou and Izvorski (2001), (IAI henceforth), Bulgarian, on the other hand, shows no such restriction – Past Participles of all classes of active verbs (unaccusative, transitive) as well as the Passive Participle are available in RRs, as in (2).

    (2) **Bulgarian**, IAI (2001)

        a. Vratata   otvorena   ot vjatŭra...   Passive Participle
           door-the   open-Pass.Ptc. by wind-the
           'The door opened by the wind...'

        b. Ženata   došla   navreme...   Past Participle-unaccusative
           woman-the arrive-Past.Ptc. on-time
           'The woman who has arrived on time...'

        c. Zaposnah se   sas žena-ta   napisala   knigata. Past Participle-transitive
           met   refl with woman-the write-Past.Ptc. book-the
           'I met the woman who has written the book.'

If we consider Past Participles in RRs in languages such as Slovenian and Italian, we notice that they pattern with English rather than Bulgarian. In Italian, the Past Participle appears in RRs with passive and unaccusative, but not transitive verbs, as seen in (3).

    (3) **Italian**, IAI (2001)

        a. Un panino   mangiato   da Gianni...   Passive Past Participle
           a sandwich eat-Past.Ptc. by John
           'A sandwich eaten by John...'

        b. Il treno   arrivato   entro le 3...   Active Past Ptc.-unaccusative
           the train arrive-Past.Ptc. by   3
           'The train which had arrived by 3 ...'

        c. *Una donna mangiata/o   un panino...   Active Past Ptc.-transitive
           a   woman eat-Past.Ptc. a   sandwich
           'The woman that ate the sandwich...'

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[1] The question which participles appear in reduced relatives has been discussed by many authors, among them Williams (1975), Pesetsky (1995), Embick (1997), Iatridou, Anagnostopoulou, Izvorski (2001).

[2] The difference between the Past Participle in RRs in English and Bulgarian was first noted and discussed in Iatridou, Anagnostopoulou, Izvorski (2001).

Slovenian and Bulgarian, both Slavic languages, have the same surface forms for Past (*-l*) and Passive (*-en/t*) Participles. However, Slovenian patterns with English and Italian in allowing only the Passive Participle and the Past Participle of perfective unaccusative verbs in RRs, as seen in (4).

(4) **Slovenian**

    a. Juha, skuhana   včeraj,   je v hladilniku.   <u>Passive Participle</u>
       soup cook-Pass.Ptc. yesterday is in fridge
       'The soup made yesterday is in the fridge'

    b. Videl sem žensko,   prispelo   danes zjutraj.   <u>Past Participle-unaccusative</u>
       seen am woman arrive-Past.Ptc. today morning
       'I saw a woman who arrived this morning.'

    c. *Videl sem žensko,   napisalo   knjigo.   <u>Past Participle-transitive</u>
       seen am woman   writte-Past.Ptc. book
       'I saw the woman who wrote the book.'

Abstracting away from the Passive Participle, a summary of the data is given in Table 1.

Table 1: Active Past Participles in RRs

	Transitive verbs	Unaccusative verbs
English	No	Yes
Bulgarian	Yes	Yes
Italian	No	Yes
Slovenian	No	Yes

2.1 The questions

The questions that this paper addresses with respect to the distribution of Active Past Participles in RRs are the following:

1. In what way does Bulgarian differ from other languages considered in this paper? And, consequently, what is the role of unaccusativity in the distribution of the Active Past Participle in RRs in these languages?
2. Do English, Italian and Slovenian form a homogenous group with respect to Active Past Participles in RRs?

This paper will argue for the following answers:

1. First, Bulgarian is the only language (of the four) in which the Active Past Participle in RRs expresses the meaning of the Perfect Tense. In other three languages the participles in question express a temporal-aspectual meaning, but not the meaning related to the Perfect Tense. And second, unaccusativity plays only a superficial role in determining the distribution of Active Past Participles in RRs – i.e., the property of unaccusativity is not the determining factor, but rather derivable from syntactico-semantic properties of the participles.

2. English, Italian, Slovenian do not form a homogenous group with respect to Active Past Participles in RRs, their participles crucially differing in syntactic structure and semantics. They fall in two groups: Slovenian and Italian versus English (and Spanish).

3. Previous accounts: Iatridou, Anagnostopoulou and Izvorski (2001)

IAI (2001) propose the generalization in (5) as following from the fact that the ability to form a RR containing a Perfect (and therefore the Past Participle) correlates with the type of auxiliary this participle takes in a full sentence. That, according to them, holds throughout Indo-European languages.

> (5) a. A Reduced Relative can contain a Perfect if the missing auxiliary is *be*.
> b. A Reduced Relative cannot contain a Perfect if the missing auxiliary is *have*.

Let us assume that the generalization in (5) can be applied to the data in (1-4). Then we notice the following. Bulgarian is well behaved with respect to (5); with BE as its only auxiliary, the Past Participles of all classes of verbs are acceptable in RRs, as seen in (2). Italian, an auxiliary-selecting language, is also well behaved. RRs containing Past Participles are possible in the BE-Perfect (unaccusatives), but not in the HAVE-Perfect (transitives, unergatives). The generalization does not say anything about Slovenian, a BE–only language, i.e. it is not clear why BE can be omitted only with unaccusative verbs and consequently why Slovenian should differ from Bulgarian. Spanish and English are exceptions to the generalization in (5). As HAVE-only languages, they are not expected to allow RRs with the participle appearing in the Perfect. However, as noted by IAI (2001), Spanish allows for RRs with some unaccusative verbs when these are premodified by adverbs, such as *recently*, *lately*, *just*, etc. The same is true of English.[3]

> (6) Las chicas recién llegadas a la estación son mis hermanas.
> the girls recently arrived at the station are my sisters.   IAI (2001)

> (7) The leaf fallen from the tree is red.

3.1 Why is the generalization in (5) insufficient?

There are several reasons why the generalization in (5) cannot be the end of the story about Past Participles in RRs. First, if correct, the generalization in (5) does not account for the existence of languages such as Slovenian, which like Bulgarian, use BE as the only auxiliary in the Perfect, but have RRs only with unaccusative (and passive) verbs, thus patterning with English/Spanish, and with auxiliary selecting languages, but not with Bulgarian.

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[3] Building on Kayne (1993), IAI (2001) offers an account for this problem. Since in the proposal I shall put forward in this paper the facts in (6-7) are not a problem, I shall not present the details of their analysis.

Second, the above analysis crucially relies on the assumption that the Past Participles in question express the Present Perfect Tense. What I will try to show is that this assumption cannot be maintained in view of a more detailed analysis of the data. That is, even if we are dealing with superficially the same morphology (i.e., the Past Participle morpheme) the latter does not always realize the same syntactic head contrary to the claim in IAI (2001) that participial morphology in Bulgarian RRs realizes the same syntactic head with the "Present Perfect" semantics as the participial morphology in English or Italian RRs. Therefore the availability of a Past Participle in RRs may, but need not be linked to the auxiliary selection in the formation of the Perfect.

4. Background assumptions
In this part I would like to state the background assumptions this paper is couched in; specifically the theory of morphology adopted and the background on the functional head 'little *v*'.

4.1 Distributed Morphology
This work adopts the framework of Distributed Morphology (DM), Halle and Marantz (1993), Marantz (1997). The aspect of DM that is relevant for this paper is a novel treatment of roots and syntactic categories. In previous approaches to word formation syntactic categories such as V, N, A are properties of roots (stems) and affixes. In Marantz's theory roots and affixes have no category per se, but are merged in the syntax with category-forming functional heads such as the 'little' *n*, *v*, *a* to form nouns, verbs and adjectives, respectively. These heads are typically realized by derivational affixes, i.e. the affixes determining the category of the word, or zero derivational affixes. For example, a simple noun *dog* has the syntactic structure as in (8), while a category-free root $\sqrt{}$ is turned into what we traditional call 'a verb' by the functional head *v*, as exemplified in (9) below.

(8)　　　　　*n*P

　　　　n　　　　√P

　　　　|　　　　△
　　　　ø　　　　*dog*
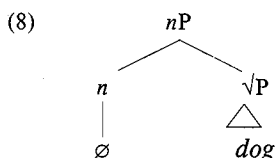
4.2 Background on the functional head 'little *v*'
The motivation for positing the verbal functional head *v* comes from different lines of research within the field of linguistics. The original insight with respect to the semantics of agentivity and external arguments is first found in Marantz (1984) and Kratzer (1993). The conclusion that Marantz (1984) draws is that external arguments, unlike direct objects, are not true arguments of their verbs, but rather the arguments of the predicate VP. The asymmetry between the two types of arguments

145

follows from the manner in which they combine semantically with the verb. A direct object combines with the verb by direct composition, while an external argument combines with the verb only with the assistance of a licensing head, the semantics of which allows an external DP to combine as an argument of the VP. The assumption that external arguments are introduced by syntactic heads is taken up in Kratzer (1993), where an explicit semantic account of this combination is provided. The external argument introducing head is usually given as the 'light-verb' *v*. The content of this head is an element AG, introducing the meaning of agentivity. The role of *v* is to license an external argument by providing the agentive semantics that then allows the external argument to be composed with the predicate. Syntactically, the external argument is introduced in the Spec, *v*P position.

(9)   *v*P
      ⟨
  Ext   *v*'
        ⟨
      v   √P
            ⟨
          √   DO
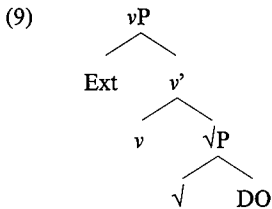
Taking into account the subsequent work on 'little *v*', Chomsky (1995), Harley (1995), Embick (1997), the properties of functional head *v* can be summarized as follows

'Little *v*':
- Introduces external argument. Kratzer (1993)
- Has case feature for the object. Kratzer (1993), Chomsky (1995) etc.
- Has features relating to eventivity and stativity. Harley (1995), Embick (1997)
- Morphosyntactically it defines the category of category-free roots, i.e., it gives a √P the category 'verb'. Marantz (1997)

As to the relationship between the functional head *v* and type of verb (i.e. transitive, unaccusative, passive), I shall adopt the view by Embick (2000), which holds that all types of verbs have the functional and verbalizing head *v* and in which the properties of verbs are reflected in different features on this head. Unaccusatives are in his approach specified –AG for the feature introducing agentivity, while passives are specified for +AG, which reflects their possibility of expressing an implicit agent. On the other hand, the difference between transitive verbs and other verbs is that only the former have +ACC feature for assigning the case to the object and the feature +EXT, which is responsible for introducing external arguments. The three classes of little *v* are schematized below.

	TRANSITIVE UNERGATIVE	PASSIVE	UNACCUSATIVE
FEATURES ON v	+AG +Ext	+AG -Ext	-AG -Ext

5. The outline of the proposal

We now proceed to the proposal as to the availability of Active Past Participles in RRs as presented in (1-4). The proposal will be executed in two steps.

5.1 Step 1: Bulgarian versus English/Italian/Slovenian/Spanish

In Step 1, I will try to show that Bulgarian crucially differs from the other four languages in the fact that its Past Participle in RRs is a true Perfect Participle, while this is not the case in English, Italian, Slovenian and Spanish, where these participles are temporal-aspectual phrases other than the temporal-aspectual phrase expressing the meaning of the Perfect Tense (Perf). The proposed structures are given in Table 2.

Table 2: Active Past Participles in RRs

Bulgarian	English, Italian, Slovenian, Spanish
PerfP ⟋＼ Perf vP | ⟋＼ features v √P	AspP/T_2P ⟋＼ Asp/T_2 (vP) | ⟋＼ features v √P

5.2 Step 2: English/Spanish versus Italian/Slovenian

Differences in the height of attachment of the temporal-aspectual morpheme, Kratzer (1993), Marantz (2000), Embick (2000a), and differences in the content of the temporal-aspectual heads result into two different structures that Past Participles in restrictive RRs can have. In English and Spanish the temporal-aspectual head, which I term *Asp* and which carries the feature [Stative], is attached to the root, while in Slovenian and Italian RRs as in (3, 4) the temporal-aspectual head, which following Giorgi and Pianesi (1997) I term T_2, is attached to vP and carries the temporal features related to S, R, E in the sense of Reichenbach (1947).

Table 3: Active Past Participles in RRs

Structure 1: English/Spanish	Structure 2: Italian/Slovenian
AspP Asp √P │ features	T₂P T₂ vP │ ／＼ features v √P

A further claim that will be defended is that the structure in which the Past Particip-le morphology realizes the head Asp with the feature [Stative] is identical to the structure proposed by Embick (2000b) for the adjectival reading (11b) of (10).[4]

(10) The door was closed.

(11) a. Eventive ('verbal') reading: Someone closed the door.
    b. Stative ('adjectival') reading: The door was in the state of being closed.

6. Step 1: Bulgarian versus the rest

6.1 Bulgarian Past Participles in reduced relatives

In this section I would like to argue that Bulgarian crucially differs from other lan-guages discussed in that its Past Participle in RRs is a true Perfect Participle, con-veying a Present Perfect meaning. I propose that Past Participles in Bulgarian RRs have the structure in (12).[5]

(12)   PerfP

        Perf   vP
         │   ／＼
      features v   VP
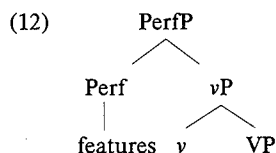
The Perf head is the head realized by past participial morphology that has the fea-tures relating the eventuality as a whole to the temporal domain of the Perfect Tense.[6] Without committing to any of the specific proposals about the content of the Perf at this point, I shall claim that whatever features there are on the PerfP participle in a full Present Perfect clause, the same features are found in the reduced relative PerfP participle in Bulgarian. Another property of the Perf head is that it does not select

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[4] The idea that the adjectival reading of the Passive Participle is derived from a 'lower' attachment of the passive morpheme is found also in Kratzer (1994) and Marantz (2000). Embick (2000) takes up this idea and proposes a specific structure as in Table 3, Structure 1, which is then taken up in this work and extend-ed to the so-called unaccusative Past Participles in RRs.

[5] In this paper I do not consider the aspectual phrases realized by perfective prefixes, perfective suffixes and imperfective suffixes (Secondary Imperfectivization).

[6] See Giorgi and Pianesi (1997), Ippolito (1997), IAI (2001) for a possible content of the Perf.

for any particular type of *v*, neither in a full clause nor in a reduced relative clause. The consequence is that if the PerfP participle appears in RRs, it will be possible with all classes of verbs, as is indeed the case in Bulgarian.

Let me now present the relevant data that supports the above proposal. In Bulgarian, all aspects of the Perfect meaning that are available in full clauses are also available in RRs, as shown in IAI (2001). Consider (13) and (14). In (13a) and (14a), the Past Participle is found in full sentences, which have the Existential Present Perfect (ExPP) meaning and the Universal Present Perfect (UPP) meaning, respectively. In (13b) and (14b), the Past Participles appear in RRs, retaining the meaning of the respective full clauses.

(13) a. Ženata   e   pročela   knigata.   <u>ExPP – full clause</u>
     woman-the be-3sg   read-Past.Ptc.Pf   book-the
     'The woman has read the book.'

   b. Ženata   pročela   knigata...   <u>ExPP in a RR</u>
     woman-the   read-Past.Ptc.Pf.   book-the
     'The woman who has read the book...'   IAI (2001)

(14) a. Ženata   e celuvala   Ivan   ot   sutrinta nasam.   <u>UPP – full clause</u>
     woman-the is kiss-Past.Ptc.Imp. Ivan   from morning-the till-now
     'The woman has been kissing Ivan since this morning.'

   b. Ženata   celuvala   Ivan   ot   sutrinta nasam... <u>UPP in a RR</u>
     woman-the   kiss-Past.Ptc.Imp   Ivan   from morning-the till-now
     'The woman who has been kissing Ivan since this morning....' IAI (2001)

Also, as shown in IAI (2001), in Bulgarian RRs the same restrictions apply to the Universal Perfect as in full clauses - it can only be found with verbs of imperfective aspect, as seen in (15).

(15) a. Ženata   čela   knigata   ot   sutrinta nasam...
     woman-the   read-Past.Ptc.Imp book-the   from   morning till now
     'The woman who has been reading the book since this morning ...'

   b. *Ženata   pročela   knigata   ot   sutrinta nasam...
     woman-the   read-Past.Ptc.Pf. book-the   from   morning till now
     'The woman who has read the book since this morning ...'   IAI (2001)

Based on the data above and IAI's (2001) analysis, I conclude that the Past Participial morphology in Bulgarian full clauses as well as in RRs realizes a participial head with features relating the eventuality as a whole to the temporal domain of the "Perfect Tense".

6.2 Bulgarian versus Slovenian/Italian

In this section I shall provide the data showing that Slovenian/Italian Active Past Participles in RRs are not Perfect Participles, i.e. that the participial head realized by the participial morphology is not a head expressing the meaning of the "Perfect Tense". But first, some words on the semantics of the Present Perfect in full clauses.

The Present Perfect in Slovenian/Italian full clauses is vague in its meaning; it can either express the temporal meaning of the Present Perfect (modification with adverbs such as *now, finally*) or the temporal meaning of the Past Tense (modification with adverbs such as *yesterday*), see Toporišič (2000) for Slovenian and Giorgi and Pianesi (1997) for Italian. This property of the Present Perfect is shown in examples (16, 17).

(16) a. Zdaj/Končno sem   pojedel   dovolj.   *Present Perfect reading*
      Now/Finally   be-Pres.1sg   eat-Past.Ptc. enough
      'Now/Finally I have eaten enough.'

      b. Včeraj   sem   pojedel   dovolj.   *Past Tense reading*
       yesterday   be-Pres.1sg   eat-Past.Ptc.   enough
       'Yesterday I ate enough.'

(17) a. Adesso/Finalmente ho mangiato abbastanza.   *Present Perfect reading*
      'Now/Finally I have eaten enough.'

      b. Ieri ho mangiato abbastanza.   *Past Tense reading*
       'Yesterday I ate enough.'

                                      Giorgi and Pianesi (1997)

In RRs, where the same surface form of the participle is used, however, only the Past Tense reading of the Past Participle is possible. The examples in (18a, 19a) with Present Perfect adverbials, such as *finally* or *now*, are ungrammatical; RRs with Past Tense adverbials, such as *yesterday*, are grammatical, (18b, 19b).

(18) **Slovenian**
      a. *Vlak, zdaj prispel   na postajo,   je Mimara.   *Pres. Perf. reading, cf. (44)*
       train   now arrived-pf   at station,   is Mimara
       'The train that has now arrived at the station is (called) Mimara.'

      b. Vlak, prispel   na postajo včeraj   ob petih, je Mimara.   *Past Tense reading*
       train   arrived-pF at station   yesterday at five,   is Mimara
       'The train that arrived at the station yesterday at five is Mimara.'

(19) **Italian**
      a. *Il treno finalmente arrivato a Milano...   *Present Perfect reading*
       'The train finally arrived at Milano....'

      b. Il treno arrivato alle cinque.   *Past Tense reading*
       'The train arrived at five....'

From these data I conclude that the Active Past Participles in Slovenian and Italian reduced relatives do not express the meaning of the Present Perfect and are therefore not Perfect Participles.

6.3 Bulgarian versus English/Spanish

In this section I present the data showing that English and Spanish Active Past Participles are not Perfect Participles. The main argument is the fact that these participles do not express events in the first place. First, if they were eventive, then the

event could be potentially modified by adverbs. However, English and Spanish Active Past Participles in RRs cannot be modified by an adverbial referring either to the manner or the time of the event, as shown in (20, 21).

(20) **English**
    a. *The leaf fallen from the tree at five o'clock/since last Sunday is red.
    b. *The leaf slowly fallen from the tree is red.

(21) **Spanish**
    *Las chicas llegadas a las cuatro/rápido
    the girls   arrived at   four/quickly

Another argument for saying that post-nominal participles do not imply an event is found in (22), Embick (1997).

(22) a. The leaf [fallen from the tree] when we arrived.
    b. The man [arrested by the police] when we arrived.

The RR in (22a) cannot be interpreted in the way where the event in the temporal clause *arriving* follows the event in the participle *falling* as the passive RR in (22b) can. The participle in (22a) can only express the state in which the leaf was at the time of our arrival.

7. Step 2: Active Past Participles in RRs: English/Spanish versus Slovenian/Italian

In Section 6 (Step 1) we saw that Bulgarian crucially differs from English, Italian, Slovenian and Spanish in the fact that its Past Participles in RRs have a true Present Perfect reading. A natural question arises: If Active Past Participles in RRs in English/Italian/Slovenian/Spanish are not Perfect Participles, what are they? In the section that follows I shall provide an answer to this question. Given the background assumptions presented in Section 4, I propose that as to the distribution of Past Participles in RRs in English/Italian/Slovenian/Spanish, English patterns with Spanish, while Italian patterns with Slovenian, both in terms of the structure of the participle and the semantic content of the participial head.

7.1 English/Spanish Active Past Participles in RRs

In this section I would like to argue that the so-called unaccusative Past Participles in English and Spanish RRs, repeated in (23) and (24), are instances of AspP participles where the Asp head with the feature [Stative] is attached directly to the root, as in (25). In addition, I would like to claim that the structure and the meaning of these participles equals to the structure and the meaning proposed for the so-called adjectival Passive Participles by Marantz (2000) and Embick (2000b), exemplified in (10, 11) above.
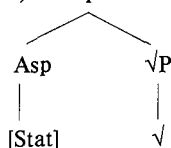
(23) **English**
    The leaves fallen from the tree are all red.

151

(24) **Spanish**

      Las chicas [recién   llegadas a la estación]   son mis hermanas.

      the girls   [recently arrived   at the station] are my sisters.   IAI (2000)

(25)   AspP

       Asp   √P

      [Stat]   √

We already saw in Section (6.3) that these participles do not express an event; since they cannot be modified by adverbs referring to the manner or time of the event, see examples (20-22). Moreover, these participles express states as part of their meaning. In (23), *the leaf fallen from the tree* does not have the same meaning as *the leaf that has fallen from the tree*. Rather, it means that the leaf is in the state of 'being fallen', i.e. is lying on the ground. Of course, we know from our extra-linguistic knowledge that a falling event must have occurred prior to the leaf reaching its target state, but that event is not expressed linguistically.

Also, some restrictions referring to the state can be observed: the state expressed by the Past Participle in RR has to hold at the topic time in the sense of Klein (1994). The sentence in (26), where the topic time is the time of the utterance, is a contradiction because at the utterance time, the apples are no longer in the state described by the participle in the RR.[7]

    (26)   *The apples fallen from the table are back on the table.

Like English, Spanish also has a restriction on the meaning of the participle in (24). One can only utter a sentence such as (24) if the people or things that the participle refers to are in the state that the participle describes. So, one can talk about *people recently arrived* only if these people show some characteristics of being in the state of having just arrived, for example, if they look very tired or lost. Again, like in English, the state expressed by the Past Participle in Spanish RRs has to hold at the topic time. Consider (27).

    (27) a. *Las chicas recién llegadas al hotel se mudaron a una hostería
           the girls   recently arrived at hotel *se* moved   to an inn.

        b. Las chicas recién llegadas al hotel bajaron   a cenar
          the girls   recently arrived to hotel went down to have dinner

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[7] Compare (27) to the grammatical (ia), where the Past Participle is a PerfP participle in the Perfect Tense (thus eventive by definition), and (ib), where the Past Participle is an eventive Passive Participle.
  (i) a. The apples that have fallen from the table twice are back on the table.
    b. The apples placed on the table this morning are no longer on the table.

The sentence in (27a) is not acceptable, because the main clause predicate (*moved to an inn*) changes the state, i.e. the property of the girls, expressed by the participle in the RR (*arrived at the hotel*). We can, however say (27b), because the main clause predicate (*went down to have dinner*) does not change the state/property expressed by the participle in the RR – the girls are still recently arrived to the hotel if they go for dinner, but not if they move to an inn.

7.1.1 Unaccusativity in English and Spanish Past Participles

I proposed that in English and Spanish, Active Past Participles in RRs are instances of a low Asp head with the feature [Stative] attaching to the root. Now, one might say that this Asp has to care about unaccusativity, since eventually all the participles that appear in RRs are presumably unaccusative (*fallen, arrived, risen*, etc.). However, if we look at other instances of the Asp head attaching to the root, we see that the Asp head does not care about whether a verb is unaccusative, which is only expected, since these participles do not have a little *v* at all. Consider the Stative reading of the presumably adjectival Passive Past Participle in (10), repeated here as (28), found also in RRs, as in (29) and for which the structure in (25) has been proposed by Marantz (2000) and Embick (2000b).
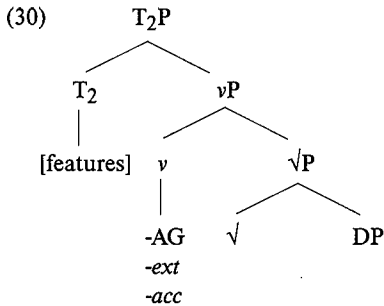
(28) The door was closed.
(29) The door closed because of the cold when we got there...

If we had to define the verb class of close in (29), we would say it is transitive in the same way as we say that *fallen* in *the apples fallen from the tree* is unaccusative. However, given the structure in (25) it is impossible to talk about the verb class of *close* or *fallen* in these two examples, because these participles do not contain a verbalizing head little *v* at all – the Asp head in these formations is attached directly to the verb root. In many ways these participles are the same as 'simple' adjectives, such as *white* or *green*, the difference being that the participles do contain an aspectual component that simple adjectives do not. Therefore, the fact that we think of the participles *fallen* and *closed* on their stative (adjectival) reading (as in 23, 29) as unaccusative and transitive, respectively, is only an illusion resulting from having confused the participial head semantics with the actual vocabulary item realizing the head. Namely, with some roots the vocabulary items /-ed/, /-en/ realize the participial heads in both the adjectival and verbal readings of their Past Participles, as is the case with the root *close*, exemplified in (10, 11). With other roots, such as the root *fall*, the form traditionally called the Past Participle exhibits one reading only – the adjectival reading, (23).

7.2 Slovenian/Italian Active Past Participles in RRs

In this section I examine Active Past Participles of unaccusative verbs that appear in RRs in (3, 4) in Slovenian and Italian. I would like to claim that this participle is not

a Perfect Participle, but some other temporal-aspectual phrase T_2, where T_2 head attaches above the little v, which consequently means that the participle expresses an event. Giving a precise semantics for the head T_2 goes beyond the scope of this work. The important fact that this paper tries to show is that the English examples such as (2) differ crucially from Slovenian/Italian ones in (3,4) in terms of their structure and meaning: the former contain only the Asp head attached directly to the root, while the latter contain the little v head as well. The structure that I propose for the participles in (3,4) is (30).[8]

(30)

```
            T₂P
          /      \
       T₂          vP
        |        /    \
   [features]   v       √P
                |      /    \
               -AG    √      DP
              -ext
              -acc
```

What are the arguments for positing the structure in (30)? First, the presence of the little v is justified, since unlike in English and Spanish, the Active Past Participles in Slovenian and Italian express an event that can be modified by time or manner adverbials, as shown in (31) and (32).

(31) **Slovenian**
Vlak, prispel   ob petih popoldne/s svetlobno hitrostjo ...
train arrived-pf at five afternoon/with light   speed
'The train that arrived at five in the afternoon/very fast...'

(32) **Italian**
Il treno arrivato alle cinque...
the train arrived   at   five
'The train that arrived at five...'

Unlike in English, Active Past Participles in RRs in Slovenian and Italian do not (necessarily) express states.[9] Consider (33) and (34). The Past Participle 'fallen' in (33, 34) does not express a state but rather an event which can be either simultaneous with or immediately follows the event in the when-clause.

(33) **Slovenian**
Sneg, padel,   ko   smo   prispeli...
snow fallen-pf when be-1/pl arrived
'The snow that fell when we arrived...'

---

[8] See Marvin (2002) for a possible characterization of T_2 in terms of Reichenbachian entities E, R, S.

[9] See Section 8.2 for Past Participles that express states in Slovenian.

(34) **Italian**

Il bambino caduto quando ha suonato il telefono.
The child fallen when has rang the phone
'The child that fell when the phone rang...'

### 7.2.1 Unaccusativity in Italian and Slovenian Past Participles

In this section I wish to put forward a proposal concerning the unaccusative status of Italian/Slovenian Past Partciples in RRs. We proposed that in Italian and Slovenian, T_2 in the Past Participles in RRs is attached above the vP and that consequently these participles display certain verbal characteristics. On the other hand, these participles also exhibit adjectival properties. First, Past Participles in RRs carry the same agreement as is generally carried by adjectives, agreeing with the head noun in number, gender and case, as shown in (35).

(35) a. Videl sem žensko, prispelo danes zjutraj.
seen be-Pres.1sg woman-**fem/sg/acc** arrived-**fem/sg/acc** today morning
'I saw a woman who arrived this morning.'

b. Pomahal sem ženski, prispeli danes zjutraj.
Waived be-Pres.1sg woman-**fem/sg/dat** arrived-**fem/sg/dat** today morning
'I waived to the woman who arrived this morning.'

And second, these participles can in Slovenian appear also pre-nominally and with the same temporal modification as their RR counterparts, as seen in (36b).

(36) a. vlak, prispel ob petih
train arrive-Past.Ptc. at five
'The train that arrived at five...'

b. ob petih prispeli vlak
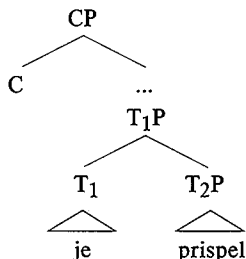at five arrive-Past.Ptc. train
'The train that arrived at five...'

We can therefore see that the temporal head dominating the little v head is further dominated by an adjectivizing head little a as schematized in (37).

(37)
$$aP$$

a T_2P

T_2 vP

v $\sqrt{}$P

$\sqrt{}$
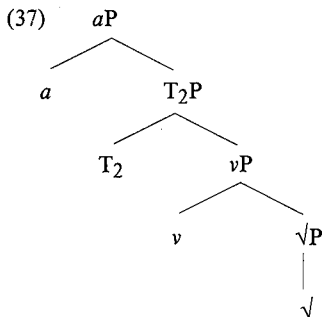
On the other hand, if a T_2 participle appears in a full sentence expressing the Past Tense such as (38), then the T_2 is dominated by an Auxiliary head T_1, (itself dominated by C) and not by the adjectivizing head a. In fact, such a participle agrees with

the subject only in number and gender, lacking agreement in case, and therefore cannot be a 'full' adjective.

(38) Vlak je prispel na postajo.

```
            CP
          /    \
        C        ...
                T₁P
              /    \
           T₁        T₂P
          /\         /\
         je        prispel
```

Given the general properties of T_2 participles described above, I wish to propose that unaccusativity is derived from the properties of the T_2 head by selection. Namely, the attaching T_2 selects for a particular type of v, depending what head it is dominated by. If T_2 dominated by a is attached to a vP to form a RR Active Past Participle, it will select an unaccusative little v (*-acc, -ext*, -AG). If this participle is part of the sentence, i.e., if its participial head is dominated by T_1 and consequently by C, then no such restriction is observed. This relation is expressed in terms of Selection.[10]

(39) Selection in Slovenian/Italian:
Eventive Active Past Participle: T_2 requires v [-ext] if dominated by a. T_2 shows no such requirement when dominated by T_1.

8. Remaining issues

8.1 Grammatical aspect in Slovenian RRs.
Slovenian shows an interesting restriction as to the availability of Past Participles in RRs: the Past Participle that occurs in RRs has to be a participle of a perfective verb, as shown in (40).[11]

(40) a. Amanda je videla sneg, padel   na polje.
        Amanda is seen   snow fallen-pf on field
        'Amanda saw the snow that fell on the field.'

     b. *Amanda je videla sneg, padal   na polje.
        Amanda is seen   snow fallen-imp on field
        'Amanda saw the snow that was falling on the field.'

---

[10] See also Embick (2000a) for selection in Latin participial constructions.
[11] In Italian, the Active Past Participle is perfective by default; the imperfective form of the Past Participle does not exist.

There is no restriction as to the aspect of the verb when the Past Participle occurs in main clauses – both perfective and imperfective verbs can form a Past Participle.

(41) a. Sneg je padel   na polje.
       snow is fallen-pf on field
       'The snow fell on the field.'

   b. Sneg je padal   na polje.
       snow is fallen-imp on field
       'The snow was falling on the field.'

At this point I can offer no account of this property. Perhaps one could argue that the potential imperfective Past Participles in RRs (i.e. participles dominated by an adjectivizing head) are blocked by the existence of the Present Participle. The Present Participle in Slovenian is a participle that is now only adjectival in nature and does not form any compound tense. A few examples of its use are given in (42) below. It is interesting to note that the colour adjective *rdeč* 'red' is in fact a Present Participle in form (42c), but is not felt as such by native speakers, who perceive no difference between *rdeč* 'red' (literally 'becoming/being red'), and *bel*, 'white', which is a simple adjective.

(42) a. čakajoča   gospa
       wait-Pres.Ptc. lady
       'a waiting lady '

   b. gospa, čakajoča na svojega moža...
       lady wait-Pres.Ptc. on her husband
       'a lady waiting for her husband'

   c. rdeča   zvezda
       become red-Pres.Ptc. star
       'a red star'

8.2 *Asp* Past Participles in Slovenian RRs

Up to this point this paper has only been concerned with Past Participles in restrictive RRs as exemplified in (1-4). We saw in Sections 6.3 and 7.1 that English and Spanish do not allow cases where Past Participle morphology realizes participial heads Perf and T_2, while Slovenian and Italian allow such cases with T_2 (Section 7.2) but not Perf (Section 6.2). The question that I wish to address now is whether Slovenian RRs allow Past Participles in which participial morphology realizes the Asp head. In principle, nothing would prevent both combinations within one language. A language could have the possibility of both Asp and T_2 structure, while these two heads could be realized either by one or two different vocabulary items.

In this part I would like to show that Slovenian exhibits Asp Past Participles in RRs, where the vocabulary item realizing the Asp head is the same vocabulary item realizing T_2, i.e., /-l/. We saw that the T_2 Past Participle in RRs can only have the Past Tense reading and not the Present Perfect reading, repeated here in (43a, b).

Note that the adjunct of place compatible with the only available reading can only be *na postajo* 'to the station', expressing direction, and not *na postaji* 'at the station', expressing position in space, as can be seen from the grammaticality of (43b) and ungrammaticality of (43c). This difference is in Slovenian expressed with the difference in case: the adjunct of direction takes the accusative case, (43a), while the adjunct expressing a position in space takes the locative, (43c).

(43) **Slovenian**
    a. *Vlak, zdaj prispel   na postajo,   je Mimara.   *Pres. Perf. reading*
       train   now arrived-pf at station-acc, is Mimara
       'The train that has now arrived at the station is (called) Mimara.'

    b. Vlak, prispel   na postajo   včeraj ob petih, je Mimara.   *Past Tense reading*
       train arrived-pf at station-acc yesterday at five, is Mimara
       'The train that arrived at the station yesterday at five is Mimara.'

    c. *Vlak, prispel   na postaji   včeraj ob petih, je Mimara.   *Past Tense reading*
       train arrived-pf at station-loc yesterday at five, is Mimara

Consider now the grammatical (44a, b) with an adjunct of place expressing a point in space.[12]

(44) a. Vlak, zdaj prispel na postaji...
       train now arrived at the station
       train that is now in the state of having arrived at the station."

    b. Vlak, včeraj   prispel na postaji...
       train yesterday arrived at the station
       "The train that was yesterday in the state of having arrived at the station."

The Past Participle in (44) is the same in its surface form as the Past Participles in (43), however, its meaning is crucially different. The adjunct *na postaji* 'at the station' precludes any eventive reading, i.e. the Past Tense reading found in (43b) and a possible Present Perfect reading. In (44), the adjunct of place expressing a point in space forces the stative (adjectival) reading of the participle. The only reading available for the examples (44a, b) is that 'now/yesterday at the train station the train was in the state of having arrived'. It does not follow, however, that the train arrived now or yesterday – the train might have arrived a month ago.

There are two properties that point to the stative (adjectival) nature of the participles in (44). First, the participles in (44) are incompatible with adjuncts of manner, modifying the event of arriving, as seen from the ungrammatical status of (45a). And second, such participles can be replaced by non-derived adjectives such as *lep* 'beautiful' and *čist* 'clean', as shown in (45b).

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[12] A similar example is as in (i).
    (i)   Ta gospod, obnemogel na sredi ceste, me je prosil za pomoč.
        This gentleman, exhausted in the middle of the street, asked me for help.

(45) a. *Vlak, hitro prispel na postaji
     train quickly arrived at station

    b. Vlak, zdaj ves lep in čist na postaji...
      train now all nice and clean at station

The properties of the participles in (44-45) force us to conclude that these participles are not T$_2$ phrases, but rather Asp phrases (such as English and Spanish examples in (1) and (6), respectively) and that Slovenian allows for both Asp and T$_2$ Past Participles in RRs. But the question about how many different Past Participles are allowed in RRs by individual languages and how their distribution is determined goes beyond the scope of this paper.

9. Conclusion

In this paper I discussed the distribution of Active Past Participles of type (1-4) in restrictive reduced relatives in Bulgarian, English, Italian, Slovenian and Spanish. The paper started with the common observation in the literature that in Bulgarian, Active Past Participles of all classes of verbs appear in RRs, while in English, Italian, Slovenian and Spanish only Active Past Participles of unaccusative verbs are possible in RRs. First, I argued that despite an apparent similarity in their surface forms, Past Participles in RRs are not Perfect Participles in all the languages discussed and therefore their availability in RRs is not necessarily linked to auxiliary selection. I proposed that the data in (1-4) follow from the structure and the semantics of the participles in RRs and not from the type of the auxiliary that the same surface Active Past Participle would take in the Perfect. Second, I argued that if it seemed that unaccusativity had to do with the distribution of Active Past Participles in these languages, then that was either an illusion (English, Spanish) or derivative of the properties of participial heads realized by the participial morphology (Bulgarian, Italian, Slovenian). The structures proposed for Active Past Participles in RRs are summarized in the table below.

Stative: En/Sp	Eventive: Sl/It	Perfect: Bulg
AspP	T$_2$P	PerfP
Asp VP	T$_2$ vP	Perf vP
[Stat]	[f] v VP -AG -ext -acc	v VP
no v	T$_2$ selects -AG v	any kind of v

159

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Povzetek

SKLADENJSKE LASTNOSTI PRETEKLEGA DELEŽNIKA V DELEŽNIŠKIH POLSTAVKIH

Članek obravnava skladenjske in pomenske lastnosti preteklega deležnika v deležniških polstavkih. Podana je primerjava preteklih deležnikov v deležniških polstavkih v bolgarščini, angleščini, italijanščini, slovenščini ter španščini glede na vrsto glagola, ki nastopa v deležniški obliki. Domnevno ista površinska oblika se v naštetih jezikih pojavlja z različnimi vrstami glagolov. V bolgarščini je v deležniških polstavkih sprejemljiv pretekli deležnik vseh vrst glagolov, v ostalih štirih jezikih pa samo deležnik netožilniških glagolov. Članek razlaga naštete razlike s sklicevanjem na različne skladenjske zgradbe in različne pomenske lastnosti oblike "pretekli deležnik" v teh jezikih.