On the Order of the Prenominal Participles in Bulgarian

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This paper examines the distribution of Bulgarian participles in prenominal position. The discussion centers around two main arguments. First, it is argued that participial expressions postmodified by adverbs are real verbal participles. We provide data that, in Bulgarian, these participles can occur in prenominal position. The second goal is to show that when co-occurring in prenominal position, participles exhibit certain ordering restrictions, namely, stage-level participles precede individual-level participles. These ordering restrictions conform to what is argued in Larson and Takahashi (in press) and Cinque (2005), who suggest that the adnominal modification area contains two layers—an individual-level layer, closer to the noun, including not only all attributive-only adjectives but also part of the indirect modification adjectives, and a stage-level layer, situated higher up and including the rest of the indirect modification area.

1. Introduction

In languages like English, participial expressions¹ can occur in prenominal position either unmodified or premodified by an adverbial. It has been claimed that the English prenominal participial expressions are not verbal participles but adjectives. Languages like Bulgarian, however, which do not exclude postmodified participial expressions in prenominal position, seem to show, first, that the prenominal position is not reserved

¹. We use the term participal expression to refer to all kinds of participle-looking words. We reserve the term participle for the real verbal participles.

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only for adjectives and, second, that verbal participles occurring in prenominal position display certain ordering restrictions, as predicted by Larson and Takahashi (in press) and Cinque's (2005) theory of adnominal modification.

Unlike the premodified participial expressions, the postmodified ones seem to display verbal and not adjectival properties. In English, postmodified participial expressions cannot be found in front of the noun but appear only in postnominal position. We will provide evidence that postmodified participial expressions, both in English and in Bulgarian, exhibit verbal and not adjectival properties. Occurring in prenominal position in Bulgarian, postmodified participles can combine with transitive participles followed by an object (of which we are sure that they are real verbal participles²). We will show that prenominal participial expressions obey certain ordering restrictions in front of the noun, namely, the stage-level participle must precede the individual-level participle. Neither two stage-level, nor two individual-level participles can form a grammatical noun phrase in Bulgarian.

The paper is organized as follows. In section 2 we introduce the type of participial expressions used in prenominal position in Bulgarian. In section 3 we provide evidence from Bulgarian and English that the postmodified participial expressions are verbal participles and do not have adjectival properties. In section 4 we provide examples in support of Cinque's and Larson and Takahashi's prediction that if two participles occur in prenominal position, it is necessarily the case that the stage-level participle precedes the individual-level participle.

2. Bulgarian prenominal participial expressions

It has been suggested in the literature (Bresnan 1982, 1995) that all prenominal participle-looking words should be considered adjectives. Laczko (2001), however, also working within the Lexical-Functional Grammar, as Bresnan, provides data from Hungarian showing that verbal participles *do* occur in front of the noun. We are also going to advocate this claim. As far as the English prenominal participial expressions are concerned, since only unmodified and premodified participial expressions can occur in front of the noun, we will assume that they are not adjectival but simply ambiguous between the adjectival and the verbal reading and for this reason it is impossible to

². It has been claimed by Wasow (1977) that participles taking a direct object are real verbal participles.

isolate their verbal characteristics. In Bulgarian, however, we can find transitive³ and postmodified participial expressions prenominally. We are going to argue that the last two types of participial expressions are real verbal participles and not adjectives, thus showing that, the prenominal position is not reserved only for adjectival expressions. We will then present data from English which show that postmodified participial expressions behave as verbal participles also in this language the only difference being that, in English, postmodified participles can be found only in postnominal position (for independent reasons). After having shown that Bulgarian makes use of two syntactic types of verbal participles in prenominal position—participles taking a direct object complement and postmodified participles—we will concentrate on the order these participles exhibit when co-occurring in front of the noun.

Bulgarian has the following three types of participial expressions occurring in prenominal position—passive participles (traditionally called past passive participles), past perfect participles (traditionally called past active participles) and what can be called progressive participles or present participles (traditionally named present active participles).

- (1) Otvoreniat vchera magazin (Passive participle)Opened-the yesterday shop'The shop that opened yesterday'
- (2) Pristignaliat vchera turgovets (Past perfect participle)
 Arrived-the yesterday merchant

 'The merchant who arrived yesterday'
- (3) Izuchavashtiat fizika student (Present participle)Studying-the physics student'The student who is studying physics'

The passive participle form is quite common across languages and is widely discussed in the literature. As to the perfect participle, in many languages it has the same form as the passive participle (English, Italian, German, etc.). Bulgarian and Slovenian, for example, have a separate form for this participle, distinct from the form for the passive

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³. We refer to participles taking a direct object as transitive participles.

participle, as reported by Marvin (2002). The progressive participle is not uncommon across languages.

An important peculiarity of the Bulgarian perfect and progressive participles is that they can take a direct object also in prenominal position, as shown bellow.

(4) Zashtitiloto sestra si momche (Perfect)

Defended-the sister his boy

'The boy who defended his sister'

(5) Chetiashtiat doklada professor (Progressive)

Reading-the report-the professor

'The professor who is reading the report'

There is a group of verbs in Bulgarian which obligatorily require a direct object complement.

(6) Skrivam *(tsennite predmeti)Hide precious-the objects'Hide the precious objects'

(7) Nabezhdavam *(priatelkata si)

Accuse (falsely) friend-the my

'Accuse (falsely) my friend'

The participles deriving from such verbs also require a direct object complement (of course we exclude the group of passive participles, which cannot have a direct object complement).

(8) Izprazniliat * (kasata) sluzhitel (Perfect)

Emptied-the cash-box-the man

'The man who emptied the cash box'

(9) Vlacheshtata *(chergata) zhena (Progressive)

Hauling-the rug-the woman

'The woman hauling the rug'

There are verbs which, apart from being obligatorily transitive, could also be used as intransitive (unaccusative or unergative) verbs:

(10) a. Izkliuchiliat naprezhenieto mehanizum (Perfect - Transitive)

Switched off the tension-the mechanism

'The mechanism that switched off the tension'

b. Izkliuchiliat mehanizum (Perfect - Unaccusative)

Swiched off the mechanis

'The mechanism that switched off'

(11) a. Izpulniavashtiat ariata tenor (Progressive - Transitive)

Performing-the area-the tenor

'The tenor singing this area'

b. Izpulniavashtiat tenor (Progressive - Unergative)

Performing-the tenor

'The performing tenor'

We would like to keep apart the cases in which a verb is realized as transitive and those in which it is intransitive. We will attribute this phenomenon to the lexical ambiguity of the verb.

Another group of participles are those deriving from verbs which are unambiguously intransitive.

(12) Padnaliat snoshti sniag (Perfect - Unaccusative)

Fallen-the yesterday night snow

'The snow that fell down yesterday'

As was mentioned above, those participial expressions that preserve the direct object of the verb will be considered verbal participles. The "bare" or unmodified participial forms, we will consider ambiguous between the participial and the adjectival reading. We will suggest the same about the premodified participial forms. As to the postmodified participial expressions, we will try to show that they exhibit verbal and not adjectival properties.

3. Tests showing the verbal character of the postmodified participial expressions

In this section, we use a number of very well-known tests for distinguishing between participles and adjectives, in order to show that the postmodified participial expressions share common properties with verbs and not with adjectives. We present data from Bulgarian and from English.

3.1. Bulgarian

As was stated in the introduction, we will focus mainly on the prenominal use of the participial expressions in Bulgarian. Many authors (among them Wasow 1977 and Bresnan 1982, 1995), analyzing mainly data from English, claim that the participlelooking words found in front of the noun are nothing else but adjectives. There are also opponents to this idea. Laczkó (2000, 2001) provides data from Hungarian showing that verbal participial forms *are* allowed in prenominal position. In this subsection, we are going to provide further evidence in support of this claim. Particularly, we will argue in favour of the verbal status of those Bulgarian participial expressions which are postmodified by adverbs⁴.

The degree quantifier.

One of the tests for adjectivality is the compatibility of an expression with the degree quantifier. Since the latter combines only with adjectives and never with verbs, whatever participle-looking expression is compatible with it, it must be considered an adjective (of course, this test applies only to expressions which are gradable.)

The example below shows that some unmodified participial expressions are compatible with the degree quantifier.

(13) Nai-nadrastkanata tetradka e tazi na Petia. (Unmodified participial expression) Most scribbled-the notebook is that of Petia.

'Petia has the most scribbled notebook'

⁴. We consider relevant only those adverbs which can never be used with adjectives. Therefore, we will restrict ourselves to using only manner adverbs like carefully and politely and their Bulgarian analogues.

Bulgarian transitive participles (which are verbal participles) are never compatible with the degree modifier.

(14) *Nai-nadraskaloto tetradkata si momche. Most scribbled-the notebook-the his boy

As we see below, the same holds true for the post-modified participial expressions. Examples (15)-(17) show that unmodified participial expressions can be compatible either with the degree quantifier or with a post-modifying adverb, but never with both of them at the same time

- (15) Po-natocheniat nozh rezhe po-dobre. More grinded-the knife cuts better 'The more grinded knife cuts better'
- (16) Natocheniat vnimatelno nozh se postavia varhu...

 Grinded-the carefully knife should be placed upon the...

 'The carefully grinded knife should be placed upon the...'
- (17) *Po-natocheniat vnimatelno nozh se postavia varhu...

 More grinded-the carefully knife should be placed upon the...

If an expression is compatible both with the degree quantifier and with a postmodifying adverb but never with both of them at the same time, there must be a difference in the grammatical status of these two combinations. The tests applied below seem to further support this conclusion.

Complements of some verbs.

Another test used in the literature is the possibility of an English adjective to appear as a complement of verbs like *seem*, *remain*, *look*, *sound*, *act and become*. The examples are taken from Wasow (1977).

- (18) John looked eager to win.
- (19) John remained happy.

It seems that the Bulgarian analogue of the verb *remain—ostavam* requires an adjectival complement as well.

The examples from Bulgarian show that premodified and unmodified participial expressions can occur in this position but participles taking a direct object complement and postmodified participial expressions cannot. We see here that, as we suggested above, the premodified participial expressions behave like adjectives.

Unmodified participial expression

(20) Trite ostanali nepochisteni sled partito pomeshtenia
Three-the remained uncleaned after party-the rooms
'The three rooms that remained uncleaned after the party'

Premodified participial expression

- (21) Ostanalite vnimatelno podredeni vurhu biuroto dokumenti ⁵
 Remained-the carefully ordered on bureau-the documents.

 'The documents that remained carefully ordered on the bureau'
- (22) Ostanaloto vnimatelno razpechatano sled proverkata pismo.⁶
 Remained-the carefully unsealed after examination-the letter
 'The letter that remained carefully unsealed after the examination'

Transitive participles

(23) *Ostanaliat podrezhdasht dokumentite sluzhitel.

Remained-the ordering documents-the attendant

'The attendant that remained ordering the documents'

⁵. Examples (21) and (22) sound a bit odd because of the slight semantic incompatibility of the adverb "carefully", which we use in order to be consistent, and the verb *ostavam/remain*. We aim at showing that, in this environment, an adverb in postposition with respect to the participle sounds worse than an adverb in preposition with respect to the participle. We see in (27) that, in a predicative use, the same premodified participle sounds better (since it is easier to insert the context).

⁶. See footnote 5.

Postmodified participial expression

(24) ???*Ostanalite podredeni vnimatelno varhu biuroto dokumenti Remained-the ordered carefully on bureau-the documents 'The documents that remained carefully ordered on the bureau'

(The relevant meaning of the participle *ostanalite* has to be distinguished from the meanings: "remained at that place" and "the rest")

(25) *Ostanaloto razpechatano vnimatelno sled proverkata pismo Remained-the unsealed carefully after examination-the letter 'The letter that remained carefully unsealed after the examination'

Predicative use:

Unmodified participial expression

(26) Knigata ostana neprochetena.

Book-the remained unread

'The book remained unread'

Premodified participial expression

(27) Dori sled obiska dokumentite na biuroto i ostanaha vnimatelno podređeni. Even after perquisition-the documents-the on bureau-the her remained carefully ordered

'Even after the perquisition, the documents on her bureau remained carefully ordered'

Transitive participle

(28) *Sluzhiteliat ostana podrezhdasht dokumentite.

Attendant-the remained ordering documents-the

'The attendant remained ordering the documents'

Post-modified participle

(29) *Dokumentite na biuroto i ostanaha podređeni vnimatelno.

Documents-the on bureau-the her remained ordered carefully 'The documents on her bureau remained carefully ordered'

Concessional relative phrases with 'however'.

Bresnan (1995), claims that only adjectives, and not verbs, can head concessional relative phrases beginning with 'however'.

however AP vs. *however VP: however supportive of her daughter she may have been vs. however supporting her daughter she may have been...
(Bresnan, 1995)

Indeed, neither the Bulgarian analogues of the English concessional phrases with *however* can be headed by a verb. Thus, we can make the prediction that only unmodified and premodified participial expressions but not postmodified ones can head concessional phrases like *kolkoto i...da .../however....* The examples below show that this expectation seems to be correct.

Unmodified participial expressions

(30) Kolkoto i nadraskana da e tetradkata, pak shte mi svurshi rabota. However and scribbled DA is notebook-the still will to me serve 'However scribbled the notebook is, it could serve me'

Premodified participial expressions

(31) Kolkoto I vnimatelno podbrani da sa sustavkite ...

However and carefully selected DA are ingredients...

'However carefully selected the ingredients...'

Post-modified participial expression

(32) *Kolkoto i nadraskana nevnimatelno da e tetradkata, pak shte mi svurshi rabota. However and scribbled carelessly DA is notebook-the still will to me serve 'However carelessly scribbled the notebook is, it could serve me'

Transitive participle

(33) *Kolkoto I podbral sustavkite da e...

However and selected (masc.) ingredients DA is ...

In prenominal position:

Unmodified participial expression

(34) Kolkoto i nadraskana tetradka da ima Ivan...

However and scribbled notebook DA has Ivan...

'However scribbled Ivan's notebook...'

Premodified participial expression

(35) Kolkoto I vnimatelno podbrani sustavki da izpolzvat...

However and carefully selected ingredients they use...

'No matter how carefully selected ingredients they use...'

Postmodified participle

(36) *Kolkoto i podbrani vnimatelno sustavki da izpolzvat...

However and selected carefully ingredients they use

'No matter how carefully selected ingredients they use...'

The examples above clearly show that the postmodified participial expressions cannot fill the slot of the adjectives. The premodified and the unmodified ones, on the other hand, qualify as adjectives.

In the next subsection, we will see that Bulgarian is not the only language in which the postmodified participles display verbal participles. English seems to pattern with Bulgarian in this respect. We present below some tests in support of this view.

3.2. English⁷

According to the literature, the negative *un*- prefix can only attach to adjectives. It never attaches to verbs. (The negative prefix under consideration here is not to be confused with the verbal reversative prefix attaching to verbs as in *undo*).

(37) unaccepted *to unaccept

⁷. I thank Steven Franks for the very helpful observations, opinions and suggestions concerning the subsection on English participles.

(38) unquestioned *to unquestion

Since there are no verbal forms corresponding to the negative participal forms in (38) and (39), these forms are considered adjectival. What is of interest for us here is that passives like these can be pre-modified but not post-modified by adverbs. (The examples were pointed out to me by Megan Linke, p. c.)

- (39) The invitations, politely unaccepted, lay strewn upon the table.
- (40) *The invitations, **unaccepted politely**, lay strewn upon the table.
- (41) The king's argument, **respectfully unquestioned**, rang throughout the room.
- (42) *The king's argument, **unquestioned respectfully**, rang throughout the room.

The fact that adjectival passives cannot be postmodified by adverbs points to the conclusion that, also in English, the postmodification of participial expressions is characteristic only of the verbal participles and not of the adjectival forms.

Our claim is further confirmed by the following observation. Only pre-modified and not post-modified participial expressions can appear after the verb *seem*. A widespread assumption is that *seem* can be followed only by adjectives and never by verbal expressions. It has not been noticed, however, at least as far as I know, that postmodified and premodified participial expressions differ in this respect. We present the data below. (The data was pointed out to me by Megan Linke, p. c.)

- (43) The floor has not been waxed and the curtains are still dirty, but the silver, at least, seems **carefully polished**.
- (44) *The floor has not been waxed and the curtains are still dirty, but the silver, at least, seems polished carefully.

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⁸. I would like to thank Megan Linke for the various examples she pointed out to me, for the pleasant discussions and for her helpful comments on my data.

- (45) The red lentils still have pieces of dirt and stone in them, but the green ones seem carefully sorted.
- (46) *The red lentils still have pieces of dirt and stone in them, but the green ones seem sorted carefully.
- (47) The present seems carefully wrapped up.
- (48) *The present seems wrapped up carefully.
- (49) The room seems carefully cleaned.
- (50) *The room seems cleaned carefully.
- (51) The issue seems **carefully explained.** (in a suitable context it sounds fine)
- (52) *The issue seems explained carefully.

Another way to test the verbal character of the postmodified participial expressions is to see whether they can head concessional phrases with *however*. Unmodified participial expressions clearly can head such a phrase, as we show below.

(53) However **polished** the floor was, it didn't seem completely clean.

The same holds true for the premodified participial expressions:

(54) However carefully polished the floor was, it didn't seem completely clean.

It is, however, completely impossible to place a postmodified participial expression in this environment.

(55) *However **polished carefully** the floor was, it didn't seem completely clean.

However seems to be compatible with other adjectival participial forms like the unmodified ones. This is shown below. (The examples below were pointed out to me by Megan Linke, p. c.)

- (56) A very promising extension, **however untouched**, is that of defining strategies that decide which presentation forms of the selectors to use, or even defining strategies that define such a strategy depending of e. g. the speed of the underlying hardware, the size of targeted display, etc., as indicated on p. 58. http://www.cs.kuleuven.ac.be/publicaties/doctoraten/cw/CW2001_1.pdf
- (57) People have a psychological sense that a used object is worth much less, **however untouched** it is.

http://www.palminfocenter.com/view_story.asp?ID=4323

So far, we have provided evidence that postmodified participial expressions display verbal properties in behaving differently with respect to the premodified and the unmodified participial expressions. As to the last two types, we assume that they are rather ambiguous between the participial and the adjectival reading. The adverb in preposition, unlike the adverb in postposition, is not a signal of the verbal character of the participle.

We have already seen above that premodified participial expressions do not pattern with verbal participles. We present below some more examples from Bulgarian in support of this claim.

- (58) a. Dobre slozhen chovek
 Well-built person (= has a fine physique)
 - b. *Slozhen dobre chovek Built-well person
- (59) a. Silno zamursena dreha
 Strongly daubed piece of clothing
 - b. *Zamursena silno drehaDaubed strongly piece of clothing'The strongly daubed piece of clothing'

What the examples above show is that, with premodified participles, it is possible to form fixed expressions. The meaning which emerges in these examples is not a real combination of the meaning of the verb and that of the participle-looking word. In examples like (59), the participial expression does not convey the real meaning of the verb it derives from. What has happened is that the verb has been adjectivalized. As we can see, once we place the adverb in postposition, the original meaning of the verb reemerges and the example no longer sounds acceptable. This observation comes in support of the claim that the premodified participial expressions can be adjectival while the postmodified ones are only verbal. We mentioned, however, that the premodified participial expressions are actually ambiguous, which means that they can also be verbal. In other words, the premodifying adverb does not necessarily signal the verbal status of the expression it modifies but it does not necessarily signal its adjectival status either. This can be seen in the following example, in which the real verbal participles can also be premodified by an adverb.

(60) Vnimatelno obrabotiliat dannite sluzhitel
Carefully processed-the data-the attendant
'The attendant who carefully processed the data'

4. The order of the prenominal participles

We have seen so far that, apart from the transitive participles, there is another group of participial expressions which behave as verbal elements. In this section, we will take it for granted that the postmodified participial expressions are verbal participles and will try to see how two verbal participles combine in prenominal position in Bulgarian⁹. What we will notice is that not all orders between the prenominal participles are allowed. We will try to explain this phenomenon in terms of Cinque's (2005) theory of adnominal modification.

We provide below some examples of two participles occurring in prenominal position.

⁹. It seems impossible to place two transitive participles in prenominal position in Bulgarian. The examples sound too heavy and a long pause between the two participles is required. One transitive and one postmodified participle, however, can co-occur in front of the noun.

- (61) Vkliucheniat vnimatelno izmervasht naprezhenieto ured pokaza, che ... Swiched on-the carefully measuring voltage-the device showed that... 'The carefully switched on voltage measuring device showed that...'
- (62) Nanesenoto vnimatelno raztvariashto maznini veshtestvo, ne dopuska pronikvaneto na...
 Impasted-the carefully solving fat substance not allows penetration-the of...
 'The carefully impasted, fat solving substance does not allow the penetration of...'

Notice that once we change the places of the participles, the examples become ungrammatical.

- (63) *Izmervashtiat naprezhenieto vkliuchen vnimatelno ured Measuring-the voltage-the swiched on carefully device 'The device that measures the voltage that has been carefully switched on'
- (64) *Raztvatiashtoto maznini naneseno vnimatelno veshtestvo...

 Solving-the fat impasted carefully substance

 'The carefully impasted substance that solves fat'

Examples like (64) and (65) suggest that not all orders between the participles in prenominal position are allowed. How to account for this phenomenon?

One component of the semantic meaning of these participles is particularly relevant to our discussion. Notice that the participles which come first in each of the examples express a telic event, an action which has been performed once. The participles coming in second position, instead, express either a quality of the entity or an activity habitually performed by that entity. We would like to express this difference in terms of the stage-level/individual-level distinction. We could assume that the participles expressing a telic event are stage-level participles and the ones expressing an activity are individual-level participles. With this distinction in mind we could turn to the theory developed by Cinque (2005) and Larson and Takahash (in press), about the order of the prenominal reduced relative clauses.

Discussing data from Japanese, Korean, Chinese and Turkish, Larson and Takahashi (in press) suggest that the adnominal modification area is divided into two large layers—an individual-level layer, closer to the noun, governed by a generic operator and

a stage-level layer, higher than the previous one and governed by an existential operator. Cinque (2005) develops a theory of adnominal modification, adopting this analysis and predicting that if the noun phrase contains more than one participles in prenominal position, there would be one participle belonging to the stage-level layer and one to the individual-level layer. This is, actually, what the Bulgarian data seem to show. Apart from the impossibility to obtain the inverted order: individual-level > stage-level, we can notice also the impossibility to place two individual-level or two stage-level participles in the same phrase. This is show in the following examples.

Compare the correct (62) with the not so well-sounding (66).

(65) ???Izkliucheniat vnimatelno izmeril naprezhenieto ured...

Switched off-the carefully measured (perfect participle) voltage-the device...

'The device that has measured the voltage, that has been switched off...'

In example (65), two telic event participles are used. Therefore the phrase no longer sounds good. One could try to save the example by leaving a very long pause between the two participles but, still, it does not sound better.

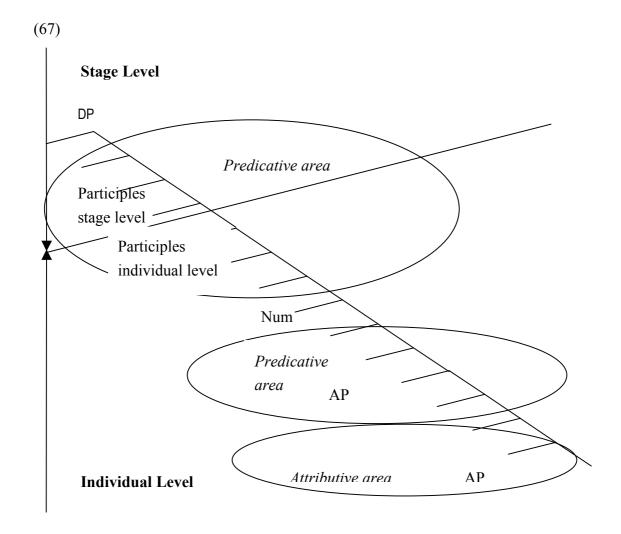
Equally bad are examples containing two individual-level participles.

(66) *Izsledvashtiat Iupiter izuchavasht astronomia uchen... Examinig-the Jobe studying astronomy scientist... 'The scientist studying chemistry who studies Jobe...'

The examples above suggest that participles seem to follow a certain order in prenominal position¹⁰. The order of the prenominal participles is shown on the tree-diagram in (67).

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¹⁰. It is generally not so easy to place two verbal participles in prenominal position in Bulgarian. What we claim is that it is possible and easier in the cases in which the higher participle displays stage-level properties and the participles following it displays individual-level properties.



5. Conclusion

In this paper, we have provided data suggesting that verbal participles can really appear in prenominal position. We argued against the assumption that all prenominal participle-looking words are adjectives and suggested, instead, that the prenominal participial expressions in English are rather ambiguous between the participial and the adjectival reading. It is not that real participles cannot occur in prenominal position in English, as has been argued in the literature. What we suggest is that, English, for independent reasons, does not allow for right modification of prenominal elements. Since the unmodified and the premodified participial expressions are ambiguous the verbal character of these elements is not so visible. Bulgarian, however, as well as Hungarian, as shown by Laczkó (2001), do not display any ban on verbal participial elements in

prenominal position. These languages clearly show that verbal participles *can* occur in front of the noun.

Another interesting observation was that postmodified participial expressions actually do not pattern with the premodified and the unmodified ones. Both in Bulgarian and in English, these elements display verbal properties. The two languages differ only in terms of the position these participles occupy with respect to the noun—in Bulgarian they can be prenominal while in English they can only be postnominal.

The conclusions concerning the verbal status of the postmodified participial expressions served as a possibility to explore the co-occurrence of two participles in prenominal position. We have seen that it is possible to combine one transitive participle and one postmodified participle in front of the noun in Bulgarian. We have also observed that two participles can co-occur in prenominal position only if they obey the following semantic restriction: the higher participle has to display stage-level properties and the lower participle has to display individual-level properties, a restriction discussed in the works of Larson and Takahashi (in press) and Cinque (2005).

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