

ANOTHER LOOK AT PARTICIPLES AND ADJECTIVES IN THE ENGLISH DP

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1. Introduction

In this paper¹ I will address the following main question. Are all the formally participial (verbal) elements modifying NP heads in English adjectives or do they (or any of them) retain their original participial (verbal) category? Interestingly, in recent approaches (cf. Bresnan (1982, to appear), Levin and Rappaport (1986) and Ackerman and Goldberg (1996)), it seems to be a strong tendency to consider these prenominal (and, often, even postnominal) participial modifiers to be adjectives uniformly in English.² In these works, the explicitly stated or tacitly assumed generalization is that participles obligatorily undergo participle → adjective conversion prior to being used as modifiers in NPs.

On the basis of a systematic comparison of the relevant English and Hungarian data, I will challenge this view and I will propose a more articulated analysis of the relevant English phenomena. I will argue that under clearly definable circumstances even prenominal modifiers must be taken to be participles and not adjectives and, consequently, two separate rules are needed: one for capturing the use of participial modifiers in NPs and another for accounting for participle → adjective conversion. Thus, it will be obvious that this whole issue is not merely terminological, because it has consequences for our grammar, as regards the number and actual nature of the relevant rules.

The structure of the paper is as follows. In section 2, I will offer a critical evaluation of Bresnan's (to appear) view on the nature and behaviour of participle-looking words in the English NP. In section 3, I will propose an alternative approach to the English phenomena, based on Laczkó's (2000) analysis of the corresponding Hungarian data. This will be followed by some concluding remarks in section 4.

2. On participle → adjective conversion

Bresnan (to appear) offers a battery of tests for distinguishing between participles and adjectives, and, on these grounds, she argues for obligatory participle → adjective conversion in the NP domain.³ She regards the participle-looking words in the following examples, among others, as adjectives.

- (1) a. a smiling child
- b. a fallen leaf
- c. an opened can

¹ This paper is a revised and extended version of Laczkó (to appear). The extension will deal with the theoretical consequences of the empirical generalizations I will make on the basis of comparing the relevant English and Hungarian phenomena as well as the theoretical implications of the history of *-en* participles in English. I am grateful to Bozena Cetnarowska for very helpful comments on a previous version of this paper, and to Tracy King, David Kovacs, George Seel and Ted Riordan for their grammaticality judgements.

² For a brief terminological overview of the literature, see Cetnarowska (to appear).

³ In actual fact, at least those *-ing* participles derived from transitive verbs that retain the input predicates' object argument must be considered participles (verbs) in her system as well, cf. the discussion below. However, she does not elaborate on this issue.

In this section I will take a closer look at Bresnan's tests and I will comment on them by also comparing the relevant English data with their Hungarian counterparts. She discusses the following five diagnostics.

A) Adjectives but not verbs (including participles) can be negated by *un-* prefixation,⁴ cf.:

- (2) a. happy ~ unhappy; clear ~ unclear
- b. *untouch; *ungo

For instance, given that there is no verb like **unqualify*, we have to assume that in the expression *an unqualified denial* the word *unqualified* is an adjective: the participle *qualified* was first converted into an adjective and then (adjectival) *un-* prefixation took place.⁵ Note, however, that this test can only safely identify certain *un-* prefixed words as adjectives and it does not tell us anything decisive about the categorial status of their "*un-*less" counterparts. It can be argued, for example, that *qualified* is an adjective in (3a) and it is a participle (verb) in (3b).⁶

- (3) a. a qualified tourist guide
- b. a superbly qualified tourist guide

It is also noteworthy that although Bresnan assumes that words like *smiling* in (1a) are adjectives as well, this test, contrary to one's expectations, in a great number of cases cannot be applied to support such an assumption, despite the fact that there seem to be no semantic factors that could be invoked to explain this.

- (4) Yesterday I saw four people in the park. Three men were jogging and a woman was sitting on a bench. I watched one of the jogging men for a while and then I went up to the *unjogging woman.

B) Adjectives but not verbs (including participles) can be prenominal modifiers: *A N* vs. **V N*. The essence of this test is that any participle-looking word must be taken to be an adjective if it premodifies the noun head (cf. all the three examples in (1), for instance). It does not say anything about postmodifying elements. This is all the more surprising, because ordinary (that is, underived) adjectives must also, as a rule, follow the noun head when they take complements. Compare:

- (5) a. the proud mother ~ the mother proud of her daughter
- b. the smiling boy ~ the boy smiling at the girl

Thus, premodification is not a sufficient test even in the case of adjectives. Naturally, one could try to save the test by assuming that if a participle-looking element, without a PP

⁴ In English there are two *un-* prefixes. One of them can only attach to adjectives (as is shown in (2)) and it expresses negation and the other can only combine with verbs and the prefixed verb refers to an action that is the reverse of the action denoted by the input verb, cf. *lock ~ unlock, button ~ unbutton*.

⁵ For a detailed discussion (and the relevance of this to the description of passivization), see Bresnan (1982).

⁶ For details, see section 3.

complement or adjunct, is capable of premodifying a noun head then it has to be taken to be an adjective in this position and also in a postnominal position when it has a PP complement or adjunct. Then we could conclude that *smiling* is an adjective in both examples in (5b). There is, however, a problem with this strategy. Certain participle-looking words have an obligatory PP complement. Therefore, the prenominal test simply cannot be applied to them, cf. (6).

- (6) a. *the belonging boy (to the group)
b. the boy belonging to the group

C) Adjectives can be modified by *too* without *much*:

- (7) *too* (**much*) AP vs. VP *too* *(*much*): *it is too flat* vs. **it is too much flat*

Given that this test, as formulated by Bresnan (cf. (7)), is fundamentally concerned with the predicative use of words, it is not directly relevant to our problem, which is the category of modifying elements within the NP domain. In addition, the test is limited to words (whether adjectives or participles) that are gradable. If, despite these difficulties, one wanted to use this diagnostic then they could, perhaps, try and check the category of *smiling* in (1a) indirectly in the following way.

- (8) a. *The child was too crying last night.
b. The child was crying too much last night.

It should be obvious that the test in this case does not yield conclusive results. On the one hand, (8a) is not felicitous, thus we have no strong evidence for the adjectival status of *crying*. On the other hand, the pattern in (7) and the example in (8b) might formally suggest that *smiling* is in actual fact a participle. However, the most natural analysis of (8b) is not that it contains the combination of the copula and a participle-looking element whose categorial status we are investigating but that it contains a past progressive tense form (and, thus, the participial nature of the *-ing* word is trivial, but this is not an issue we are primarily interested in).

On the basis of these considerations, I think that the following alternative form of the test would be more appropriate in the case of gradable words within the NP domain. If the participle-looking word can be used without any complements then we could check whether it can be intensified by *very* and precede the noun head or it rather combines with *very much* and they postmodify the head. Compare:

- (9) a. *I was woken up by the very crying child.
b. I was woken up by the child crying very much.

The contrast in (9) suggests then that *crying* should rather be taken to be a participle.

D) Adjectives cannot have direct NP complements (as opposed to transitive verbs, including participles), cf.:

- (10) *[A NP]_{AP} vs. [V NP]_{VP}: **supportive my daughter* vs. *support my daughter*

From the perspective of the present paper, the two most important aspects of this diagnostic are as follows. (i) Even in Bresnan's system, postmodifying transitive *-ing* forms must be

regarded as participles. (ii) The test offers us a tool for a proper treatment of participle-looking elements derived from ditransitive verbs. These are two issues I will return to in section 3.2.

E) Adjectives (as opposed to verbs, including participles) can head concessional relative phrases beginning with *however*:

- (11) *however* AP vs. **however* VP: *however supportive of her daughter she may have been*
vs. **however supporting her daughter she may have been*

It appears to me that the nature and the applicability of this test are very similar to those of Test C) (the *too* vs. *too much* diagnostic). Here, too, the predicative function of the participle-looking elements is involved, which is not directly related to their pre- or postmodifying use in the NP domain. In several cases this diagnostic does not seem to provide even indirect evidence for the alleged adjectival status of a participle-looking element, either. Consider:

- (12) **However crying the baby was, I refused to give her another bottle of tea.*

Partially on the basis of the tests above and partially on the basis of some further assumptions and considerations, the most important aspects of Bresnan's (to appear) view on participle-looking words in the NP domain are as follows.⁷ Below, I summarize these points and I also comment on them.

1) *All premodifying participle-looking elements are adjectives in English.* This assumption is so pervasive that it has been made a diagnostic (cf. Test B)). I am not convinced that this is a well-founded assumption for the reasons I mentioned in the discussion of Test B) above. My fundamental problem is that non-derived adjectives are not confined to a prenominal position in English. For the details see the next point.

2) *Some postmodifying participle-looking elements are also adjectives and some others are participles.* Consider the following examples.

- (13) a. feathers still unstuffed into their pillows
b. the boy eating popcorn noisily
c. the boy shouting (angrily) at the girl

(13a) is Bresnan's example. On the basis of Test A) *unstuffed* can only be taken to be an adjective. In (13b), however, *eating* has a direct NP complement and, thus, it must be regarded as a participle in accordance with Test D). We cannot immediately apply either of these tests to *shouting* in (13c), because it does not contain the *un-* prefix and, being used intransitively, it has no direct NP complement. So as a first approximation we could conclude that the categorial status of this participle-looking word is neutral between participle and adjective. Then we could attempt to use some of the diagnostics discussed above. First of all, we could try *un-* prefixation (Test A). This might be considered the most direct and most

⁷ It is important to note that this view is quite dominant in the literature, whether generative or non-generative. For instance, Levin and Rappaport (1986) appear to share Bresnan's empirical generalizations, but in their GB framework they offer an analysis different from Bresnan's LFG approach. (Here I cannot discuss and compare these two accounts.) In addition, Ackerman and Goldberg (1996) also consistently talk about English "deverbal adjectives based on past participles and used attributively".

reliable test, because it leaves the entire constituent headed by the participle-looking word in its original postmodifying position. Consider:

(14) *the boy unshouting (angrily) at the girl

Thus, on the basis of this test, our conclusion could be that the participle-looking word in (13c) is not an adjective because it does not admit *un-* prefixation.⁸ For the reason mentioned above, Test D) cannot be applied at all. Test B) is not really applicable because a participle-looking word with a complement (just like any non-derived adjective with its complement) cannot be used prenominaly. Consider:

(15) a. *the (angrily) shouting at the girl boy
b. *the shouting (angrily) at the girl boy

As regards Test C) and Test E), it appears that they lend some support to the participial interpretation of *shouting* in (13c), cf.:

(16) a. *Yesterday the boy was too shouting (angrily) at the girl.
b. *However shouting at the girl the boy was, I decided not to intervene.

On the basis of all these considerations we may conclude that *shouting* is a participle in (13c) just like *eating* in (13b).

3. *All premodifying participle-looking words in English* (whether derived by *-en* or *-ing*) and *those postmodifying ones that are taken to be adjectives* (cf. Test B and (13a)) are *stative*. Bresnan (to appear) puts this in the following way. "It is clear that adjective conversion in general denotes a state derived from the semantics of the base verb. This seems to be true for all types of conversion, including the present participles (*a smiling woman*)" (p. 12). This assumption, again, is wide-spread in the literature (whether generative or non-generative). For instance, in his theory-neutral, typological survey, Haspelmath (1994) expresses a similar idea: "Both past passive participles (as in *the abused child*) and past unaccusative participles (as in *the wilted dandelion*) characterize their head by expressing a state that results from a previous event. The fact that they express a state has to do with the fact that they are adjectives" (p. 159)... "Habitual situations are realis, non-past, non-future and dynamic (non-stative) but nevertheless so time-stable that it is worthwhile for languages to have verb-derived adjectives that characterize things in terms of them: **active participles**, e. g. English *traveling salesman*, *running water*, etc... It is probably only secondarily that present participles are used for current events, like *flying planes*, *a crying baby* ... because current events are not very time-stable" (p. 164). As regards their views on English *-ed* participle-looking words in the NP domain, Bresnan (to appear) and Haspelmath (1994) are fully identical. As for *-ing* participle-looking words, Bresnan (to appear) simply makes the claim cited above, but she does not elaborate at all on the sense in which these forms are to be considered stative. Haspelmath (1994) assumes that the fundamental (primary) function of *-ing* "adjectives" in the NP domain is the expression of habituality. Habituality can be regarded as a general property attributed to the entity expressed by the NP (head) and, thus, this

⁸ Note that there is no general ban on participle → adjective conversion and then *un-* prefixation in the case of *-ing* participles: *uninteresting*, *untiring*, *unrelenting*, etc.

characterization is stative. According to him the "current" use of *-ing* "adjectives" is only a secondary development.⁹

Now I would like to claim (contra Bresnan (to appear) and Haspelmath (1994)) that true participles are not stative. Consider (1) again, repeated below for convenience.

- (1) a. a smiling child
b. a fallen leaf
c. an opened can

I think the participle-looking words in (1), which I consider to be true participles (as opposed to Bresnan (to appear) and Haspelmath (1994)), do not, by themselves, express states. In my view, these participles are as dynamic as their input verbs.

Naturally, (1b) and (1c) denote entities that are in a state preceded by a certain change of state. However, I believe that this semantics is composed of the following two major elements: *a*) the meaning of the participle, which only expresses a change of state and *b*) the meaning of the entity. From these two components the "present" state of the entity denoted by the NP (head) directly follows, but, strictly speaking, this is not the semantic function of the participle itself. The following simple argument can be invoked to support my claim. If we took seriously the idea that the participles in (1b) and (1c) are stative, then, by the very same token, we could be forced to assume that the predicates in (17a) and (17b) are also stative, because they also imply that the leaf and the can are now in a particular state.

- (17) a. Another leaf has fallen.
d. This can was opened an hour ago.

I find the stative interpretation of the participle in (1a) even more counter-intuitive. Consider the following example.

- (18) When I entered, one of the children started smiling. I went up to the smiling child.

The only feasible way of defending the stative *-ing* participle assumption, I think, would be to claim that the *-ing* word expresses a state in an extended sense: 'the child in a smiling state'. However, this would directly lead us to the possibility of assuming that the past progressive tense form in (19) also expresses a state in this sense.

- (19) When I entered, the child was smiling.

In addition, in the case of *-ing* participle-looking words, I find Haspelmath's (1994) "habitual" → "current" directionality both counter-intuitive and, at least as regards the Hungarian counterparts, historically incorrect. On the basis of Károly (1956), among other sources, it appears that "present" participles were originally and primarily used in the "current" sense and then this use was extended to a habitual function.

In my opinion, Bresnan's (to appear) generalized adjectival approach to participle-looking words in the NP domain would receive some general theoretical motivation and

⁹ I think it is appropriate to compare Haspelmath's (1994) notions of "habitual" and "current" to the following two uses of the non-derived adjective *polite*:

- (i) You are (always) polite.
(ii) (Now) You are only being polite.

justification if it could be applied to cover all these words. However, this is not the case, because, as has been pointed out above, participle-looking words in *-ing* taking a direct NP complement are regarded as participles in her system, too.

3. An alternative proposal

In this section, first I will present a brief analysis of the relevant Hungarian facts on the basis of Komlósy (1994), as far as the participle vs. adjective distinction is concerned, and (fundamentally) on the basis of Laczkó (2000): 3.1. Then, motivated by this account, I will offer a novel approach to the English phenomena,: 3.2. This will be followed by the discussion of some major theoretical aspects and consequences of this approach supplemented by my speculation related to the historical development of *-en* participles in English: section 3.3.

3.1. A brief look at Hungarian

In Hungarian NPs, both adjectival and participial constituents, whether with or without complements, precede the noun head. Compare (5a) with (20) and (5b) with (21).

- (20) a. a büszke anya
the proud mother
'the proud mother'
- b. a lány-á-ra büszke anya
the daughter-her-onto proud mother
'the mother proud of her daughter'
- (21) a. a mosolyg-ó fiú
the smile-ing boy
'the smiling boy'
- b. a lány-on mosolyg-ó fiú
the girl-on smile-ing boy
'the boy smiling at the girl'

Obviously, this means that the prenominal position in Hungarian NPs is not available as a diagnostic for the adjectival status of a constituent (cf. Bresnan's Test B)). Komlósy (1994) proposes a battery of tests for distinguishing adjectives from participles in this language.¹⁰ The most important ones, for our present purposes, are as follows.

- A) Only adjectives can be used predicatively.
- B) Only adjectives can serve as input to adverb-formation by *-An* '-ly'.
- C) Only adjectives can have comparative and superlative forms.
- D) Only participles can retain the input verb's arguments (except for the unexpressed subject argument of the participle, which is understood as being controlled by the NP head).

¹⁰ For examples and discussion, see Komlósy (1992: 386–8).

Diagnostic A) means that when a participle-looking word in Hungarian corresponding to either *-ing* or *-en* words in English is combined with the copula and is predicated about a subject, it is an adjective, because participles of such forms cannot be used in this predicative way.

- (22) a. A kudarc kiábrándít-otta János-t.
the failure disappoint-Past.3sg.def John-acc
'The failure disappointed John.'
- b. A kudarc kiábrándít-ó volt.
the failure disappoint-ing was
'The failure was disappointing.'
- c. *A kudarc János-t kiábrándít-ó volt.
the failure John-acc disappoint-ing was
'The failure was disappointing John.'

Naturally, this diagnostic cannot have a real English counterpart, because *-ing* participles and passive *-en* participles do combine with the copula and they together make up progressive tense forms and passive predicates, respectively. In a sense, Bresnan's Test B) would be a mirror image of this diagnostic; however, I have already pointed out some of its problematic aspects.

Diagnostic B) is applicable to the English data as well, cf.:

- (23) *A bíráló János-t kiábrándít-ó-an reális volt.
the criticism John-acc disappoint-ing-ly realistic was
'*The criticism was realistic disappointingly John.'

Diagnostic C) can also be applied to the corresponding English data, cf.:

- (24) *The boy more liking music than Mary has bought a guitar.¹¹

The examples in (25) illustrate Diagnostic C) and Diagnostic D) for Hungarian.

- (25) a. a tavaly-i-nál is kiábrándít-ó-bb kudarc
the last.year-AFF-at even disappoint-ing-COMP failure
'the failure even more disappointing than last year's'
- b. *a János-t a tavaly-i-nál is kiábrándít-ó-bb kudarc
the John-acc the last.year-AFF-at even disappoint-ing-COMP failure
'*the failure even more disappointing John than last year's'¹²

¹¹ In this example, *more* is used as the comparative marker for adjectives. It should not be confused with adverbial *more*, meaning to a greater extent, cf.:

(i) The boy liking music more than Mary has bought a guitar.

¹² Cf. Footnote 11.

(25a) is grammatical, because it contains a participial adjective in a comparative form without any argument other than its unexpressed subject. By contrast, (25b) is unacceptable, because the very same adjective has another argument.¹³ It seems that Diagnostic D) does not have a full English counterpart, because, at least in certain cases, the unquestionably adjectival *-ed* forms can preserve arguments other than the subject, cf. (13a), repeated here for convenience.

(13) a. feathers still unstuffed into their pillows

Komlósy (1994) proposes the following condition on participle → adjective conversion from *-Ó* 'ing' ('present') participles. The *-Ó* participle has to have a theme subject and an experiencer object, cf. *kiábrándító* 'disappointing' in (22b) and (25a), and the examples in (26).

(26)	fáraszt-ó,	bosszant-ó,	felháborít-ó,	szórakoztat-ó
	make.tired-ing	annoy-ing	appal-ing	amuse-ing
	'tiresome/tiring'	'annoying'	'appalling'	'amusing'

As far as the function of the *-(V)(t)t* 'en' participial suffix and the conditions on participle → adjective conversion are concerned, Laczkó (2000) makes the following generalizations.

A) The *-(V)(t)t* affix cannot attach to unergative verbs (see (27)), hence no participle → adjective conversion can take place either.

(27) a. *a keményen dolgoz-ott fiú
the hard work-(V)(t)t boy
'*the hard worked boy'

b. cf. the boy who has worked hard

B) In the case of unaccusative verbs, there are three main possibilities.

Ba) If the verb is atelic without a telic counterpart, then no participle formation (see (28)) and, hence, no participle → adjective conversion can take place.

(28) *az áraml-ott víz
the flow-(V)(t)t water
'*the flowed water'

Bb) If the verb is telic and it has no atelic counterpart, both *-(V)(t)t* participle formation and participle → adjective conversion are possible.

(29) a. a kudarc-on felháborod-ott játékos (participle)
the failure-on become.indignant-(V)(t)t player
cca. 'the player (who has become) indignant at the failure'

b. az edző-nél is felháborod-ott-abb játékos (adjective)

¹³ In this case the argument is a direct NP complement, but oblique complements are also disallowed in combination with Hungarian participial adjectives.

the coach-at even become.indignant-(V)(t)t-COMP player
'the player even more indignant than the coach'

Clearly, (29a) contains a *-(V)(t)t* participle, because it has retained a non-subject argument, cf. Diagnostic D), and (29b) contains an adjective converted from this participle, because it is in its comparative form.¹⁴

Bc) If there is an unaccusative verb pair, one of them with a perfectivizing preverb and the other without it, then the possibilities are as follows.

Bci) The version with the preverb always has a telic interpretation. It can combine with *-(V)(t)t*; however, the participle derived in this way cannot serve as input to participle → adjective conversion.

Bcii) The version without the preverb has both telic and atelic uses. It can combine with *-(V)(t)t* only in its telic use. Participle → adjective conversion is also possible.

- (30) a. A meg-sül-t hús-t be-te-ttem a hûtõ-be. (participle)
the PERF-get.roasted-(V)(t)t meat-acc in-put-Past.1sg.def the fridge-into
cca. 'I put the meat that had got roasted into the fridge.'¹⁵
- b. *A meg-sül-t-ebb hús-t kér-em.¹⁶ (participle)
the PERF-get.roasted-(V)(t)t-COMP meat-acc want-Pres.1sg.def
cca. 'I want the meat that has got more roasted.'
- c. A sül-t-ebb hús-t kér-em. (adjective)
the get.roasted-(V)(t)t-COMP meat-acc want-Pres.1sg.def
cca. 'I want the meat that has got more roasted.'
- d. A hosszú nyárs-on sül-t hús-t be-te-ttem a hûtõ-be. (participle)
the long spit-on get.roasted-(V)(t)t meat-acc in-put-Past.1sg.def the fridge-into
cca. 'I put the meat that had got roasted on the long spit into the fridge.'
- e. *Tegnap az étterem-ben meg-sül-t hús-t rendel-tem. (adjective)
yesterday the restaurant-in PERF-get.roasted-(V)(t)t meat-acc order-Past.1sg.def
'Yesterday I ordered roast meat in the restaurant.'
- f. Tegnap az étterem-ben sül-t hús-t rendel-tem. (adjective)
yesterday the restaurant-in get.roasted-(V)(t)t meat-acc order-Past.1sg.def

¹⁴ The constituent *az edzõnél* 'than the coach' is an argument, but such an element is the typical argument of any adjective in a comparative form, and it has nothing to do with the input verb.

¹⁵ *(Meg-)sül* 'PERF-get.roasted' is a middle verb in Hungarian and it has no simplex verbal counterpart in English, that is why in (30a) I can only give a periphrastic English translation. Of course, *the roasted meat* would be a possibility to consider, but it would be interpreted as containing a passive participle derived from a transitive verb, as opposed to the Hungarian unaccusative participle.

¹⁶ It is possible to express the same meaning with a participle in the following way:

- (i) A jobb-an meg-sül-t hús-t kér-em. (participle)
the better-ly PERF-get.roasted-(V)(t)t meat-acc want-Pres.1sg
cca. 'I want the meat that has got roasted to a greater extent.'

In this example the participle is modified by a constituent (*jobban* 'to a greater extent') which can be used with verbal predicates to express a comparative meaning.

'Yesterday I ordered roast meat in the restaurant.'

(30a) exemplifies the participial use of the preverbed version. In such cases the participle expresses anteriority. (30b) and (30e) show that this form cannot be converted into an adjective. In (30b) the comparative form clearly suggests that we are dealing with an adjective, and in (30e) the intended adjectival meaning is to denote a kind of meat.¹⁷ In both cases, it is only the participial form without the preverb that can be input to participle → adjective conversion, see (30c) and (30f). Finally, (30d) illustrates the fact that even the preverbless form can be used as a participle with a telic reading if it has a complement or adjunct.¹⁸

C) In the case of transitive verb stems there are also three major possibilities, which correspond to but are not fully identical with the unaccusative possibilities.

Ca) If an atelic verb with no preverb has no preverbed (telic) counterpart, it can combine with $-(V)(t)t$, and participle → adjective conversion is also possible. Consider:

- (31) a. a mindenki által kedvel-t sorozat (participle)
the everybody by like-(V)(t)t series
'the series liked by everybody'
- b. a Dallas-nál is kedvel-t-ebb sorozat (adjective)
the Dallas-at even like-(V)(t)t-COMP series
'the series even more liked than Dallas'

(31a) contains a participle, because it is modified by a *by*-phrase, while (31b) contains an adjective, because it is in its comparative form.

Cb) If the verb is telic (often containing a preverb) and it has no atelic counterpart, then $-(V)(t)t$ can attach to it and participle → adjective conversion is also possible. Consider:

- (32) a. az áruház által becsap-ott vásárló (participle)
the store by deceive-(V)(t)t customer
'the customer deceived by the store'
- b. a János-nál is becsap-ott-abb vásárló (adjective)
the John-at even deceive-(V)(t)t-COMP customer
'the customer even more deceived than John'

¹⁷ In Hungarian certain (obligatorily unmodified) adjectives make up compound-like constituents with their noun heads, and they denote the kind of the entity expressed by the head. One of the indications of the compound-like nature of this combination is that it follows a stress pattern typical of compounds (the noun head loses its word-initial stress). When a participle-looking form is used in such a construction, then this provides evidence that it has undergone participle → adjective conversion.

¹⁸ It is not entirely clear to me why this modification is necessary when we want to use the preverbless form as a participle with a telic interpretation, but I think part of the explanation can be sought along the following lines. It seems that the preverbed and preverbless forms tend to be in complementary distribution when there are no additional (modifying) elements involved: a preverbed form can only be a participle and a preverbless form can only be an adjective, cf. (30a) and (30f).

(32a) contains a participle, because it is modified by a *by*-phrase, while (32b) contains an adjective, because it is in its comparative form.

Cc) If there is a transitive verb pair, one of them with a perfectivizing preverb and the other without it, then the possibilities are as follows.

Cci) The version with the preverb always has a telic interpretation. It can combine with $-(V)(t)t$; however, the participle derived in this way cannot serve as input to participle → adjective conversion.

Ccii) The version without the preverb has both telic and atelic uses. It can combine with $-(V)(t)t$ in both its uses (as opposed to the corresponding accusative verbs). Participle → adjective conversion based on the telic use is also possible.

- (33) a. A meg-darál-t hús-t be-te-ttem a hûtõ-be. (participle)
 the PERF-mince-(V)(t)t meat-acc in-put-Past.1sg.def the fridge-into
 cca. 'I put the minced meat (=the meat that had been minced) into the fridge.'
- b. Tegnap a bolt-ban ve-ttem egy kis (*meg-)darál-t hús-t. (adjective)
 yesterday the store-in buy-Past.1sg.def a little PERF-mince-(V)(t)t meat-acc
 'Yesterday I bought a little minced meat in the store.'
- c. Jó illat-a van a János által darál-t hús-nak. (participle)
 good smell-its is the John by mince-(V)(t)t meat-dat
 'The meat minced/being minced by John has a good smell.'
- d. Jó illat-a van a darál-t hús-nak. (adjective, ?participle)
 good smell-its is the John by mince-(V)(t)t meat-dat
 'The minced meat/The meet being minced has a good smell.'

(33a) exemplifies the participial use of the preverbed version. In such cases the participle expresses anteriority. (33b) shows that this form cannot be converted into an adjective, and the preverbless version must be used for conversion purposes. The intended adjectival meaning is to denote a kind of meat.¹⁹ (33c) illustrates the fact that a preverbless participle, when it is modified, can be compatible with either anteriority or simultaneity (as opposed to the obligatorily anterior reading of the corresponding unaccusative participle).²⁰ In (33d) the much more natural interpretation of the $-(V)(t)t$ form is adjectival. On the far more marked participial reading it can only express simultaneity.²¹

As should be clear from the discussion above, conversion from $-(V)(t)t$ participles derives two types of adjectives. One of them belongs to ordinary (non-derived) adjectives: this type can be used in the comparative and superlative forms, it can be modified by adverbs

¹⁹ Cf. Footnote 17. It is also noteworthy that *darált* 'minced' as a kind-denoting adjective does not have comparative and superlative forms, so this test cannot be applied here as opposed to (30c).

²⁰ The semantics of the modifier may restrict the relative temporal interpretation of these constructions. Consider:

- (i) Jó illat-a van a tegnap darál-t hús-nak. (participle, anteriority)
 good smell-its is the yesterday grind-(V)(t)t meat-dat
 'The meat ground yesterday has a good smell.'

²¹ For some speculation on why the preferred interpretation of unmodified preverbless forms is adjectival, see Footnote 15.

capable of modifying adjectives in general and usually it can be used predicatively. This type is exemplified in (29b), (31b) and (32b). The other type normally lacks these adjectival features²² and it makes up a compound with the noun head and it specifies the kind of the entity expressed by the noun. Such adjectives can be found in (30f) and (33b).

3.2. Participle-looking words in English NPs revisited

On the basis of the discussion in sections 2 and 3.1, I would like to make the following assumptions and generalizations.

A) Prenominal modifiers are not necessarily adjectives: they can also be participles; and certain postmodifying participle-looking words must be taken to be participles in any analysis.

B) Thus, it is not possible to capture the use of all prenominal participle-looking words in NPs by the help of a single general rule (contra Bresnan's (to appear) adjectival and stative generalization). We need two (sets of) rules: one for the use of *-ing* and *-en* participles and another for participle → adjective conversion.

C) The relevant generalizations for *-ing* forms are as follows.

Ca) Participles derived from any one of the three major verb types (unaccusative, unergative and transitive) can be used in NPs, cf.:

- (34) a. I couldn't catch the tile falling from the roof.
b. I couldn't catch the falling tile.
c. The boy shouting at that girl used to be my friend.
d. The shouting boy used to be my friend.
e. The boy reading a newspaper used to be my friend.

This participial usage cannot be appropriately characterized as 'stative' (whether a result or non-result state is posited).

Cb) Participles ending in *-ing* can serve as input to participle → adjective conversion:

- (35) a. a surprising fact, an amusing story, etc.
b. a travelling salesman, a wandering minstrel, etc.

It seems that in English, just like in Hungarian, two kinds of adjectives can be derived: ordinary, see (35a), and kind-denoting, see (35b).

D) The relevant generalizations for *-en* forms are as follows.

Da) When passivizing *-en* attaches to transitive verbs, it passivizes them and, when they are used in NPs, both atelic and simultaneous interpretations are available, depending on the (a)telicity of the input verb.

- (36) a. The photograph taken by my friend is a real masterpiece.
b. The teacher respected by all his students is going to resign.
c. The highly respected teacher is going to resign.

²² Although some deparicipial adjectives of this sort can occasionally take a comparative form, see (30c).

Db) Perfectivizing *-en* can attach to all the three major verb types (unaccusative, unergative and transitive) and in clauses it combines with the perfect auxiliary *have*. However, it is only perfect *-en* participles derived from unaccusative verbs that can be used in NPs.

- (37) a. The river frozen last night is still dangerous.
b. The (recently) frozen river is still dangerous.
c. *The man worked a lot at the office is tired.
d. *The man discovered the murder notified the police.

Dc) It is only in the case of this participle type that the "result state" condition (generalized to all kinds of participle-looking words in numerous works) really holds. The reason for this is simple. It is only in this instance that both perfect *-en* and present *-ing* can attach to the same stem and the derived form can be used in fundamentally the same ("active") function in NPs.²³ As their functions are the same (they both have a theme subject), their relative time features come into play, and the *-ing* forms typically express simultaneity and the perfect *-en* forms express anteriority, cf.:

- (38) a. We couldn't catch the falling tiles.
b. We picked up the fallen tiles.

Dd) Although unaccusative perfect *-en* participles can occasionally serve as input to participle → adjective conversion (*fallen angels*), this is not as frequent as in the case of the corresponding Hungarian participles derived by *-(V)(t)t*. Passive *-en* participles, by contrast, are much more often a source for such a conversion, and both "ordinary" and "kind-denoting" adjectives can be derived, see (39a) and (39b), respectively.

- (39) a. satisfied, exhausted, disappointed
b. salted peanuts, minced meat, granulated sugar

3.3. Theoretical considerations

From the foregoing discussion it should be obvious that the status of participle-looking *-(V)(t)t* and *-Ó* words in Hungarian and their possible LFG-style treatment, once the necessary empirical generalizations have been correctly made, is straightforward and unproblematic. There are two main reasons for this. On the one hand, these words can only be used within NPs as participles (they cannot be combined with various auxiliaries, unlike their English counterparts), thus, the question of whether participle-looking words ending in *-(V)(t)t* and *-Ó* can occur in NPs as participles at all simply does not arise, and, on the other hand, there are very reliable tests even within the NP domain to tell the participial and the adjectival uses apart. In English, by contrast, *-en* and *-ing* participles can be combined with auxiliaries, and the categorial status of a number of participle-looking words within NPs is far from being easy to decide. I hope to have been able to demonstrate in this paper that a relatively clearly definable set of English participle-looking words in the NP domain are true participles and

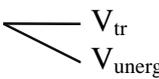
²³ Although both can attach to unergatives and transitives as well in the same "active" function, the *-en* version, as has been pointed out above, cannot occur in NPs; and although both passive *-en* and (active) *-ing* can attach to transitive verbs, the meanings of the derived forms are radically different.

the complementary set is made up by adjectives converted from *-en* and *-ing* adjectives. I have suggested that the rules of this conversion are fundamentally similar to the Hungarian pattern described in section 3.1. Below, I would like to discuss some theoretical issues related to the use of the participles in question in the two languages.

In Laczkó (2000) I propose that *-Ó* participle formation follows the ordinary active pattern: the suffix can attach to all the three major types of verbal predicates (transitives, unaccusatives and unergatives) and it follows the same mapping procedure as the input verbs. By contrast, *-(V)(t)t* is "semi-ergative": as a rule, it maps the [-r] argument of the predicate onto SUBJ: it attaches to unaccusatives, transitives (obligatorily passivizing them) and it cannot combine with unergatives (that is, there is no elsewhere case, that is why the pattern is semi-ergative).

If we take the view I have argued for in this paper for granted as regards the use of the English counterparts of these Hungarian participles, then the following generalizations can be made about the present state of affairs. Active *-ing* participles can be used either predicatively, in combination with *be* in progressive tense forms, or as modifiers within NPs without any restriction. "Passive" *-en* can only attach to transitive predicates and it passivizes them and it can combine with *be* to form passive constructions and perfect *-en*, just like *-ing*, can attach to the three major types of verbs and the output combines with perfective *have*. The crucial point for our present purposes (in the context of the foregoing discussion in general and the Hungarian–English comparison in particular) is that, as a first approximation, we can claim that when *-en* participles are used as modifiers in NPs, they "jointly" follow the semi-ergative pattern manifested by Hungarian *-(V)(t)t*. A very obvious way of capturing this would be the adoption of Bresnan's (1982) rule for participle → adjective conversion, except that here her general conditions on conversion would be applied to describe the rules regulating the use of *-en* participles in the NP domain.²⁴ Naturally, then we would need another rule for participle → adjective conversion in the same spirit. This is one possible way of accounting for the relevant facts. One of its most salient aspects is that it has to refer to two different *-en* participles: passive *-en* attaching to transitive verbs and perfective *-en* attaching to unaccusatives. Below, I will sketch an alternative by the help of which a single generalization (reference to only one *-en* participle type) can be applied.

On the basis of the historical development of *-en* participles, I would like to speculate that in the Old English and in the Middle English periods even their predicative use in combination with the auxiliaries *have* and *be* showed striking similarity to the present day pattern followed by Hungarian *-(V)(t)t* in NPs described in section 3.1. In OE and ME, after the perfect auxiliary use of *have* and *be* had developed, there was a well-attested, very strong tendency in the division of labour between them.²⁵ Its essence was as follows: *have* was used in combination with participles derived from transitive and unergative verbs and *be* was combined with unaccusatives. Later on *have* ousted *be* even from the unaccusative domain. In addition, *be* as a passive auxiliary was compatible with participles derived from intransitive verbs. This state of affairs is typically characterized along the following lines in historical and traditional descriptive work.

(40)	<i>have</i> +		<i>-en</i>
		<i>V_{tr}</i>	<i>-en</i>
		<i>V_{unerg}</i>	<i>-en</i>
	<i>be</i> (perf) +	<i>V_{unacc}</i>	<i>-en</i>

²⁴ Of course, Bresnan's (1982) *theme* condition has to be translated into my [-r] condition in the context of LMT.

²⁵ For discussion and references, see Traugott (1992), Fischer (1992), and Rissanen (1999).

be (pass) + V_{tr} *-en*

That is, one (past) participle is postulated and its combination with the auxiliaries in various functions yields the required perfect or passive meanings. By contrast, Bresnan (1982), for instance, assumes the following system of *-en* participles.

(41)

perf	$\left\langle\right.$	V_{tr}	$-en_1$
		V_{unerg}	$-en_1$
		V_{unacc}	$-en_1$
pass	—	V_{tr}	$-en_2$

If we adopt this fundamental perfect vs. passive distinction and at the same time wish to account for the distributional facts in (40), characterizing the OE and ME periods, then I think the following solution naturally suggests itself.

(42)

<i>have</i> +	$\left\langle\right.$	V_{tr}	$-en_1$
		V_{unerg}	$-en_1$
<i>be</i> (perf) +		V_{unacc}	$-en_2$
<i>be</i> (pass) +		V_{tr}	$-en_2$

The basic generalization here is that $-en_2$, just like Hungarian $-(V)(t)t$ even today, is passive in an extended sense: it attaches to transitive verbs, obligatorily passivizing them, and it can also combine with unaccusatives. As regards the compatibility of the two auxiliaries with these two participles, the natural conclusion is that *have* is active (V_{tr} and V_{unerg}), while *be*, in its dual function, is passive (V_{tr} and V_{unacc}).

As is well known, after the ME period *have* ousted perfect *be* even from the domain unaccusatives. However, I envisage this as a process resulting in an instance of functional overlap between $-en_1$ and $-en_2$ in the case of unaccusatives.²⁶ My motivation for this approach is that in this way I can capture the use of *-en* participles in the two distinct domains in present-day English in a simpler and, perhaps, more principled way. Consider:

(43)

<i>have</i> +	$\left\langle\right.$	V_{tr}	$-en_1$	
		V_{unerg}	$-en_1$	
		V_{unacc}	$-en_1$	
			$-en_2$	} modifier of NP head
<i>be</i> (pass) +		V_{tr}	$-en_2$	

The picture that (43) depicts is as follows. In present-day English, perfect *have* combines with $-en_1$ and it is $-en_2$ participles that can modify noun heads.

4. Concluding remarks

In this paper I have challenged the quite general view that the overwhelming majority of participle-looking words in English NPs (including all the prenominal ones) are adjectives and claimed that they are participles (non-finite verb forms). I have also compared Bresnan's

²⁶ In Laczkó (2000), I assume exactly the same kind of overlap between active $-\acute{O}$ and (extended) passive $-(V)(t)t$ in precisely the same unaccusative domain in Hungarian.

(to appear) participle vs. adjective tests for English and Komlósy's (1992) participle vs. adjective diagnostics for Hungarian. In addition, I have argued against the generalized (result) state approach to all pronominal participle-looking words and proposed instead that two separate (sets of) rules are needed: one for the description of the use of *-ing* and *-en* participles in the NP domain and another for participle → adjective conversion.

It is to be noted that in addition to the differences discussed in section 3.1, there are further rather systematic contrasts between English and Hungarian. Compare:

- (44) a. *the arrived guests
b. the newly arrived guests
- (45) a. *the built house
b. the recently built house
- (46) a. *az érkez-ett vendég-ek
the arrive-(V)(t)t guest-pl
'*the arrived guests'
- b. a meg-érkez-ett vendég-ek
the PERF-arrive-(V)(t)t guest-pl
'*the arrived guests' cf.
cca. 'the guests who have arrived'
- c. az újonnan (meg-)érkez-ett vendég-ek
the newly PERF-arrive-(V)(t)t guest-pl
'the newly arrived guests'
- (47) a. *az épít-ett ház
the build-(V)(t)t house
'*the built house' or:
'the house being built'
- b. a fel-épít-ett ház
the PERF-build-(V)(t)t house
'*the built house' cf.
cca. 'the house that has been built'
- c. a nemrég (fel-)épít-ett ház
the recently PERF-build-(V)(t)t house
'the recently built house'

My explanation for these facts is as follows. As I pointed out in section 3.1, in Hungarian there are a great number of *-(V)(t)t* participles²⁷ derived from morphologically distinct verb pairs whose members only differ in one respect: whether they contain a perfectivizing preverb or not. The preverbed version is always telic and it can only be used as a participle, see

²⁷ Recall that *-(V)(t)t* can only attach to unaccusative and transitive verbs, typically passivizing the latter (there is a systematic exception to this passivizing effect, see Laczkó (2000), but this does not concern us here).

(46b,c) and (47b,c). The preverbless version of unaccusatives can only be used in a telic sense and the (passive) preverbless version derived from transitive verbs can be used in either a telic or an atelic sense, and (in its telic sense) it can be input to participle → adjective conversion.²⁸ It is interesting to note that although the preverbless participle can also have a telic interpretation, it cannot be used on its own (without any modification) in this sense. Compare (46a) and (47a) with (46c) and (47c). My observation is that this is because there is a very strong tendency to interpret bare participle-looking words as adjectives (the output of participle → adjective conversion). The problem with (46a) and (47a) is that in the case of these participles no conversion can take place. Participle → adjective conversion is governed, among other things, by certain pragmatic conditions which have been argued for in English in a detailed fashion by Ackerman – Goldberg (1996). Thus, in Hungarian there are no adjectives like **érkezett* '*arrived' and **épített* '*built'. In addition, I claim that participle → adjective conversion has fundamentally similar aspects in English as well including the tendency to interpret single (unmodified) participle-looking words as adjectives. That is why (44a) and (45a) are ungrammatical. The participle-looking words in them are not interpreted as participles because they stand there by themselves, although their inherently telic interpretation would suffice for a participial use, if that use was available. The difference between English and Hungarian is that in the former there are no pairs like the preverbed and preverbless pairs in the latter.²⁹ As (46b) and (47b) show, in Hungarian the preverbed version (which is obligatorily taken to be a participle) can be used by itself. In the case of English participle-looking words and in the case of Hungarian preverbless participle-looking words some modification (characteristic of verbal predicates) is required for the participial interpretation to be available. If this condition is satisfied then the relevant forms in both languages can be used as participles, see (44b), (45b), (46c) and (47c).

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²⁸ See the relevant examples in: (31c,d,f) and (34b,c,d).

²⁹ Cetnarowska (to appear) reports similar contrasts between Polish adjectival past participles derived from preverbed and preverbless verbs. It is interesting, however, that according to her all these forms in Polish formally behave like adjectives, contra my claim about Hungarian and English.

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