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DEPARTICIPIAL ADJECTIVES IN POLISH AND ENGLISH

The present paper investigates the lexical process of conversion of verbal participles into adjectives in Polish and English. While Bresnan (1995) treats all premodifying -ing and -ed elements in English as participles converted into adjectives (e.g. sent in the recently sent book), it is argued here (in agreement with Laczkó 2001) that some prenominal -ing and -ed forms in English should be regarded as verbal participles. I show that a similar situation obtains in Polish, where prenominal participle-looking elements are either verbal participles or departicipial adjectives derived through conversion (e.g. dokladnie zmielone mięso '(lit.) carefully minced meat' vs. mielone mięso 'minced meat'). Difficulties are highlighted in delineating borders between verbal participles, departicipial adjectives, and other deverbal adjectives. Formal properties of the process of participle-to-adjective conversion are briefly compared to the characteristics of other conversion processes.

1. Introduction

The main aim of this paper is to study the morphological process of conversion of participles into adjectives, as proposed for English in, among others, Bresnan (1982, 1995), and for Polish in Cetnarowska (2000, 2001). According to the definition given in Bauer (1988:241), conversion is "the change in the part of speech of a form without any overt affix marking the change." Some other terms, which appear in the morphological literature to refer to the phenomenon in question, include "zero derivation" and "functional shift" (see Don 1993 and Valera 1999 for a survey of various theoretical approaches to conversion).

The outline of the paper is as follows. In section 2.1. a summary is given of Bresnan's proposal concerning participle-to-adjective conversion in English. In section 2.2. attention is focused on prenominal participle-looking elements in English. Whereas premodifiers are treated in Bresnan (1985) as obligatorily adjectival, the semantic interpretation of such items indicates that some of them retain the status of verbal participles (as is also argued in Laczkó 2001). Section 3 investigates the status of Polish participle-looking elements occurring prenominally.

Differences and similarities are discussed between semantic and syntactic properties of verbal (inflectional) participles and departicipial adjectives. In section 4 the question is raised whether participle-to-adjective conversion fits within the general theory of conversion, e.g. whether it involves a change of word-class and has a parallel in overt affixation. Section 5 presents a brief overview of analyses of participle-looking adjectives which do not invoke the participle-to-adjective conversion. Conclusions are summarized in section 6.

2.1. Preliminary remarks on participle-to-adjective conversion in English

Bresnan (1982, 1995) emphasizes differences between syntactic and morphological properties of "verbal" and "adjectival" *-ed* and *-ing* forms in English, exemplified (1–4).

- (1) a. The lettuce has wilted.
 - b. The lettuce was too wilted too eat.
- (2) a. The boy was eating popcorn noisily.
 - b. The noisily eating boy was getting on my nerves.
- (3) a. She was despised by everybody in the village.
 - b. However despised she may have been, she did not change her views.
- (4) a. She is breathing regularly now.
 - b. an unbreathing accident victim

The *-ed* and *-ing* forms in (1a, 2a, 3a, 4a) behave syntactically like verbs, hence they are recognized as verbal participles. For instance, they take NP/DP complements and occur with agentive adjunct *by*-phrases. The forms in (1b, 2b, 3b, 4b) exhibit the following properties, identified in Bresnan (1995) as diagnostic of the adjectival status of such forms:

- (5) Diagnostics for adjective-hood in English:1
 - a. They exhibit the attributive function and can occur as premodifiers (cf. 1b, 2b, 3b, 4b).
 - b. They can be modified by too without much (cf. 1b).
 - c. They do not take direct NP complements (cf. 2b vs. *the noisily eating popcorn boy).
 - d. They can head concessive clauses (cf. 3b).
 - e. They can be negated by un-prefixation (cf. 4b).

In view of the data in (1–4), Bresnan (1982, 1995) proposes to derive the adjectives in (b) from the verbal (past, present, or passive) participles in (a), through con-

¹ Some of those diagnostics go back to Wasow (1977). See also Beard (1995:195 ff.) for a discussion of differences between verbal and adjectival passives in English.

version (cf. Levin and Rappaport 1986 and Grimshaw 1990 for similar proposals).² Apart from accounting for the morphological identity of verbal participles and participle-looking adjectives, Bresnan's analysis predicts correctly that complex passives, consisting of a verb and a following preposition, can give rise to adjectival passives in (6). Verbs which are exceptions to complex passivization cannot undergo conversion, as shown in (7):

- (6) a. Each unpaid for item will be returned.
 - b. His was not a well-looked on profession.
- (7) a. *No reason was *left for*. b. *the *left-for* reason (from Bresnan 1995)

Bresnan is also able to account for the Theme-subject condition on adjectival passives and for the fact (observed in Levin and Rappaport 1986) that the adjectival passives in (9) can be derived only from from those passivized ditransitive verbs given in (8) which do not require an NP complement:

- (8) a. New skills were taught (to the children).
 - b. The prisoners were spared (execution).
 - c. A medal was recently given (to the winner).
 - d. The winner was recently given *(a medal).
- (9) a. untaught skills c. a recently given medal
 - b. the spared prisoners d. *a recently given winner

Following the lines of Bresnan (1982, 1995) and Levin and Rappaport (1986), participle-to-adjective conversion has been postulated to occur, among others, in German (Wunderlich 1987), in Dutch (Hoekstra 1984), in Greek (Markantonatou 1995), in Hungarian (Laczkó 2001, Kiefer 2002), and in Polish (Cetnarowska 2000, 2001). In the next sections I will look more closely at the border-line delineated between verbal participles and departicipial adjectives, focusing on participle-looking premodifiers in Polish and English.

2.2. Prenominal participle-looking elements in English

Bresnan (1995), Parsons (1990), and Ackerman and Goldberg (1996), treat all premodifying *-ing* and *-ed* elements in English noun phrases as departicipial adjectives. Only when verbal participles have undergone conversion into adjectives, are

² Levin and Rappaport (1986) modify Bresnan's (1982) analysis. They postulate that conversion of verbal passives into adjectival passives is a morphological process which involves rebracketing, i.e. relabelling passive participles as adjectives. The rebracketing is accompanied by the externalization of an internal argument. Yet another version of the conversion hypothesis for English participles is formulated in Grimshaw (1990), who argues that conversion operates on verbs whose external argument has been suppressed and it adds a new external argument, represented as R. The R argument is identified with (i.e. binds) the internal argument of the base.

they regarded as able to occur in the prenominal position. Bresnan (1995:12) asserts that "adjectival 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).³

Laczkó (2001) rightly points out a problem with Bresnan's claim of the obligatorily stative reading for all prenominal participle-looking elements in English. Both the prenominal and postnominal -ing forms in (10) exhibit a "current" (i.e. eventive) reading, i.e. they denote an event co-occurring with another event.⁴ Therefore participial-looking -ing elements in (10) should be regarded as verbal participles.⁵

- (10) a. The angrily shouting boy used to be my friend.
 - b. The boy shouting angrily at that girl used to be my friend. (from Laczkó 2001)

Haspelmath (1994) argues that the "current" reading of -ing participles is a less-commonly occurring extension of the "habitual" (i.e. "stative") reading, exemplified in (11) below:

- (11) a. running water, travelling fans, a working mum,
 - b. a lying, cheating and murdering coward (Bresnan 1995:16)

This claim does not seem to be correct. Some examples of prenominal modifiers with the "current" reading, culled from contemporary newspapers, are provided in (12). Many more could be gathered by a search through computerized data-bases.

- (12) a. ... the politely *smiling* Japanese girl at the desk (Independent)
 - b. Clusters of *cheering* Somali men, women and children stand by the road. (Time)
 - c. ... moving pictures of a weeping President... (Time)
 - d. ... a collision with an unidentified floating object (Telegraph)

³ Bresnan's claim that prenominal participial modifiers denote states is reminiscent of the observations made in, among others, Quirk et al. (1985), regarding the difference in the interpretation of adjectives, such as *navigable*, *present*, *late*, when used prenominally and postnominally. Quirk et al. (1985) note also syntactic restrictions on prenominal adjectives.

⁴ Parsons (1990:237), who regards all prenominal participles in English as adjectives, hence as lexemes denoting states, proposes the following formula to capture the semantic interpretation of prenominal -ing forms: "PresP-Adj(Verb) is true of state s if and only if s is the In-progress state of the event of which Verb is true". However, the distinction he draws between the eventive interpretation of present participles in compound tense forms, e.g. They are sleeping, and the stative interpretation of prenominal "participles used as adjectives", as in the sleeping boy, is very elusive. It seems to boils down mainly to a difference in the semantic formulas employed, or in different paraphrases provided for both types of -ing items.

⁵ The lack of complement DPs is interpreted in Sleeman and Verheugd (2000) as showing that the occurrence in the prenominal position involves a reduction of argument structure on the part of verbal participles in English (accompanied by the retention of their eventive meaning).

Sleeman and Verheugd (2000) and Laczkó (2001) assert that prenominal *-ing* forms in English generally have an eventive meaning (hence are verbal participles). Some are adjectival and denote pure properties, as those in (11) and (13).

- (13) a. a travelling salesman, a wandering minstrel, a weeping willow b. the very astonished man, a more boring film, a very moving story
- Sleeman and Verheugd (2000) treat participle-looking adjectives, such as those in (13), as lexicalized participles. Laczkó (2001) regards the -ing forms in (13) as participles converted into adjectives. He refers to the forms in (13a) as "kind-denoting" departicipial adjectives and argues that they can be analyzed as forming compounds with the head nouns they modify. The forms in (13b) are labelled as "ordinary" departicipial adjectives. These adjectives, related to causative psychological predicates, i.e. to Experiencer-Object verbs such as amuse, surprise etc, occur in the comparative degree and can be modified by very. This is not true of "kind-denoting" departicipial adjectives in (13a), e.g. *a very weeping willow.

With respect to English passive participles, as well as past participles of unaccusative verbs, it is generally acknowledged that, when used prenominally, such forms denote a state resulting from the event denoted by the verb (cf. Bresnan 1995, Haspelmath 1994, Parsons 1990). Consequently, they can be treated as a subclass of adjectives, since adjectives denote properties and states. However, Sleeman and Verheugd (2000) argue that *sent* in *the recently sent letter* has an eventive meaning, i.e. it denotes a transition from an event into a property. Even Parsons (1990), who regards all prenominal participle-looking elements in English as adjectives, emphasizes the difference between the semantic interpretation of "participles used as adjectives" (i.e. prenominal participles), such as *opened* or *broken*, and "autonomous" adjectives (e.g. *open*, *broken* 'in pieces'). "Participles used as adjectives" denote transitory states, while "autonomous" adjectives denote permanent states. Laczkó (2001) analyzes *-ed* forms denoting pure properties (i.e. permanent states) as derived from passive participles by means of conversion. The latter may often be "kind-denoting" adjectives, as in (14):

(14) salted peanuts, granulated sugar, minced meat

Laczkó (2001) includes also the "ordinary" -ed adjectives, given in (15), into the class of departicipial adjectives. They denote properties, are gradable, and can be preceded by the modifier *very* or *too*.

⁶ Laczkó (2001) suggests that the semantics of prenominal past participles is composed of the two elements, namely the meaning of the participle (which expresses a change of state) and the meaning of the entity. He proposes that "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." (Laczkó 2001:8)

(15) too exhausted to work, very amused, more disappointed

While this is a viable proposal, let us note that it is also possible to treat the participle-looking forms in (15), related to Experiencer-Object verbs, as adjectives derived from non-passive verbal bases by *-ed* affixation (cf. Grimshaw 1990).

3. Participle-looking elements in Polish

Laczkó's (2001) distinction between the eventive meaning of English "verbal" prenominal participles and the stative (habitual or "kind-denoting") interpretation of departicipial adjectives is compatible with the analysis of participle-looking formations in Polish, as discussed in Cetnarowska (2000, 2001). Present participles in Polish contain the morpheme -qc. The form terminating in -qca in (16) shows a "current" reading, i.e. it denotes an event occurring simultaneously with another event. It also exhibits a verb-like complementation, since it is followed directly by an object NP/DP.⁷

(16) Czytająca gazetę sprzedawczyni reading.NomSgFem newspaper.Gen shop-assistant.Nom.Fem nie zwracała uwagi na klientów. not paid.3SgFem attention.Gen customers.Acc on 'The shop-assistant, who was reading a newspaper, was paying no attention to the customers '

When the form terminating in -qcy shows a potential or 'modal' reading 'such that can V', as in (17), it is regarded in Bartnicka (1970) and Cetnarowska (2001) as having undergone conversion into an adjective.

- (17) a. wybielająca zęby pasta whitening.NomSgFem teeth.Acc paste.Nom 'a whitening tooth paste'
 - b. napoje chłodzące drinks.Nom cooling.NomPl 'cool drinks'
 - c. tabletki łagodzace bóle głowy pills.Nom relieving.NomPl aches.Acc head.Gen 'pills relieving headaches'

The participle-looking elements in (18) below are also regarded in Cetnarowska (2001) as (deverbal) adjectives, since they do not denote an event co-occurring with another event. Furthermore, the form in (18b) does not show close semantic relatedness to its base verb (hence it can be treated as a lexicalized formation).

⁷ Polish differs from English in allowing heavily modified participles or adjectives in the prenominal position (cf. Szymańska 2000).

- (18) a. zadziwiająca zwinność 'surprising agility'
 - b. celująca ocena 'excellent grade' (cf. celować 'to aim')

Passive participles are formed in Polish by means of the morpheme -n- (which can occur in its allomorph shape -t-; for details see Cetnarowska 2000). (19) contains an inflectional (verbal) passive, as is confirmed by the occurrence of the copula verb zostać 'become' (cf. Laskowski 1984:137). In contrast, the -n-/-t- forms in (20), in spite of exhibiting the shape of passive participles, are analyzed in Cetnarowska (2001) as departicipial adjectives. They do not maintain the aspectual properties of their verbal bases.⁸ Although they are related formally to imperfective (prefixless) verbs, they require the perfective interpretation (i.e. they denote completion of the event denoted by the verb).

- (19) Tomek został pobity przez ojca.

 Tom.dim became.3SgM beaten.Nom.SgM by father.Gen

 'Tom was beaten up by (his) father.'
- (20) a. *mielone mięso* 'minced meat' c. *malowane jajka* 'painted eggs' b. *kiszone ogórki* 'pickled cucumbers' d. *myte owoce* 'fruit washed clean'

The adjectival status of the forms in (20) is further supported by the fact that they are "kind-denoting" (i.e. classificatory). Combinations of "kind-denoting" adjectives and the head nouns in (15) do not represent compounds proper in Polish. Their constituents do not form one inflectional stem, linked by the vowel -o-, as is the case with the compound *parostatek* 'steamboat' (consisting of the elements *para* 'steam' and *statek* 'boat'). Nevertheless, the combinations of nouns and adjectives in (15) are referred to as "A+N complexes" in Willim (2001). Szymańska (2000) and Willim (2001) show that classificatory adjectives in Polish (including departicipial ones) usually follow their head nouns, while qualifying adjectives precede the head noun, as in (21):

(21) a. mała bomba burząca b. nowe kompresy żelowe small bomb demolishing new compresses gel-adj 'a small demolition bomb' 'new gel compresses'

They also observe that the position of an adjective with respect to its nominal head does not automatically determine the interpretation of an adjective. Firstly, the same "kind-denoting" adjective can occur either prenominally or postnominally, as in (22). Secondly, if there are two classificatory adjectives, as in (23), one of them must appear prenominally:

(22) a. lampa naftowa or b. naftowa lampa lamp oil-adj 'oil lamp' oil-adj lamp 'oil lamp'

⁸ Van der Putten (1997) regards the maintenance of aspectual properties of the base as indicative of the syntactic derivation of *ge*-adjectives in Dutch (which correspond to passive participles in English or in Polish).

(23) a. mrożone paluszki rybne b. żelowe kompresy chłodzące frozen fingers fish-adj gel-adj compresses cooling 'frozen fish fingers' 'gel cold compresses'

In Cetnarowska (2000) I discuss resultative acjectives in Polish (i.e. -l- adjectives), which are equivalents of English prenominal perfect participles, such as withered and escaped, i.e. they denote a state resulting from the eventuality denoted by the base verb.

- (24) a. zwiędłe kwiaty 'withered flowers'
 - b. zbiegły więzień 'escaped prisoner'
 - c. posiwiały mężczyzna 'man whose hair grew more grey (lit. greyed man)'

The -*l*- adjectives in (24) are analyzed in Cetnarowska (2000) as derived from corresponding past participles through conversion. The non-adjectivized past participles occur in compound tense forms, e.g. past tense forms (where they are followed by person-number affixes, such as - \acute{s} , - $\acute{s}my$ or - $\acute{s}cie$), future tense forms (where they follow the finite form of the copula verb $by\acute{c}$ 'to be'), and conditional forms (accompanied by the conditional particle by, to which person-number affixes are added).

(25) a. zwiędł-, zbiegł-, in zwiędłyście 'faded-3PlFem', zbiegłam 'escaped-1SgFem',
 b. zwiędł-, zbiegł- in zwiędłyby 'fade-cond.3PlFem', zbiegłbyś 'escape-cond. 2SgM'

Some of the adjectives in (24) are gradable, and can be premodified by *bardzo* 'very' (cf. *bardziej posiwiały* 'that grew more grey' vs. **bardziej zbiegły* 'more escaped'). Similarly to corresponding converted past (perfect) participles in English, they denote a change of state (or location) and can be formed from unaccusative verbs (cf. Cetnarowska 2000).

4. Formal properties of conversion processes

4.1. "Full" vs. "partial" conversion

The recognition of participle-to-adjective conversion in English and in Polish presents some problems for the characterization of conversion processes. It is generally acknowledged that conversion involves a change in the part of speech, as is shown by the definitions of conversion provided by, among others, Bauer (1988), Beard (1995), Crystal (1985), and Don (1993). Quirk et al. (1972:1009) assert that "[c]onversion is the derivational process whereby an item is adapted or converted to a new word-class without the addition of an affix". For instance, adjectives convert in English into verbs (*dirty*, *dry*, *empty*), nouns convert into verbs (*bottle*, *brake*, *hammer*), and verbs convert into nouns (*cook*, *hit*).

It is only in the case of the so-called "partial conversion" (recognized in Quirk et al. 1972) that a given lexical item only temporarily "takes over" the syntactic func-

tion of another word-class while retaining the inflectional markers of its "basic" word-class. Examples of partial conversion in English include the adjectival use of nouns in phrases such as *virus infection* and *stone walls*, or the nominal use of adjectives in *the good and the bad*, or *the wealthy and the homeless*. As is observed in Valera (1999:187), partial conversion represents a sort of limited overlapping of word classes, resulting in the blurring of the limits between the functional potential of diverse word classes. It is often regarded as a purely syntactic phenomenon (e.g. in Marchand 1969).⁹

4.2. The syntactic category of participles

There is no agreement in the literature on whether adjectives and participles belong to different parts of speech, and so whether one could postulate a rule of participle-to-adjective conversion (i.e. $V \to Adj$ or Part $\to Adj$). In the present paper, as in Bresnan (1982, 1995), Levin and Rappaport (1986) or Laczkó (2001), participles are regarded as non-finite verbs. In

In contrast, Haspelmath (1994) regards all participles as verbal adjectives. ¹² He points out that Crystal (1985) defines a participle as "a word derived from a verb and used as an adjective". Parsons (1990:236) quotes a similar entry for the term *participle* from the *American Heritage Dictionary*:

(26) participle: A nominal form of a verb that is used with an auxiliary verb to indicate certain tenses, and that can also function independently as an adjective. In the expressions a glowing coal and a beaten dog, glowing and beaten are participles.

The affinity between adjectives and participles led some researchers to analyze participles as representing a mixed category¹³ (V/Adj), or a neutralized category [+V] (see Laczkó 2001 and Sleeman and Verheugd 2000 for a brief overview). For in-

⁹ Instances of partial conversion in Polish include the nominal use of participles in Polish, e.g. *chodzący* '(lit. walking) patient that can walk'. This is referred to as "sporadic conversion" in Jodłowski (1971).

¹⁰ In a detailed study of conversion in Dutch, Don (1993:52) remarks that there are no zero-derived adjectives in Dutch and English. The same conclusion is drawn, with respect to English, in Beard (1995) (contra Bresnan 1982, 1995, or Hoekstra 1984).

¹¹ This is in agreement with the treatment of participles in Polish in Laskowski (1984). In contrast, Kallas (1984) regards Polish participles as deverbal adjectives.

¹² Haspelmath (1996) asserts that participle-formation is an instance of category-changing inflection, since verbal adjectives (i.e. participles) belong to the inflectional paradigm of related verbs.

¹³ Laczkó (2001) argues that, at least in English or Hungarian, participles do not exhibit adjectival features strong enough to be classified as representing a "mixed" or "neutralized" category. However, in Polish, German or Dutch, participles are more "adjectival" since they are inflected like adjectives.

stance, Wunderlich (1987) postulates that German participles convert from the category [+V, -N] into the category [+V, +N]. Toman (1986), in contrast, asserts that past participles in German are derived from the base verb by a word-formation process that changes the category of the base (i.e. [+V, -N]) into [+V]. The resulting derivative, which belongs to the neutralized category [+V], is allowed to be inserted into syntactic positions typical of [+V, +N] forms, i.e. into positions characteristic of adjectives.

Neither in English nor in Polish do the putative departicipial adjectives differ in their inflectional properties from verbal participles. This is to be expected in English, given the impoverishment of English morphology. Polish, however, has a well developed system of inflectional morphemes. And yet the inflectional endings attached to passive or present adjectives are the same as the inflectional endings of adjectives, as shown in (27):

- (27) a. -a 'NomSgFem' płacząca 'crying.NomSgFem', płacząca kobieta 'crying woman' przeczytana 'read.PF.NomSgFem', przeczytana książka 'read book' mała 'little.NomSgFem', mała dziewczynka 'little girl.DIM'
 - b. -ymi 'InstrPl' płaczącymi 'crying.InstrPl' in z płaczącymi mężczyznami 'with crying men' przeczytanymi 'read.PF.InstrPl' in z przeczytanymi książkami 'with read books' małymi 'little.InstrPl' in z małymi dziewczynkami 'with little girls.DIM'

The data in (27) above could be taken as indicating that all participles (including more verbal and less verbal ones) are adjectives in Polish. Further support for such a conclusion could be provided by the traditional convention of refering to the Polish participles discussed here as "adjectival participles" (Pol. *imieslowy przymiotnikowe*). They are set apart in this way from the so-called "adverbial participles" (Pol. *imieslowy przysłówkowe*) in (28), which resemble adverbs in not being inflected for case, gender or person/number.

- (28)a. *Przeczytawszy* instrukcję, zabrałem się do rozwiązania zadania. having-read instruction. Acc set-upon. Past. 1SgM r.cl. to solving task 'Having read the instruction, I set upon solving the task.'
 - b. *Czytając* gazety, oglądałam telewizję. reading newspapers.Acc watched.1SgFem television.Acc 'When reading newspapers, I was watching TV.'

Participles in Dutch resemble Polish participles in being able to occur with adjectival endings. Van der Putten (1997) concludes that all such forms are adjectives, even when they exhibit a clearly eventive meaning e.g. *huilende* 'crying' in *het huilende kind* 'the crying child' (but see Sleeman and Verheugd 2000 for an opposite conclusion).

Valera (1999:185) emphasizes the importance of a change in inflectional properties of the base for the recognition of the occurrence of the conversion process. For instance, the adoption of inflections typical of another word-class is a clear signal

that the full conversion has taken place, as in the case of the deadjectival verbs *cool* or *dry* in English (cf. *cools* and *drying*). If such a signal is lacking, as in the case of the putative participle-to-adjective conversion in Polish, ¹⁴ it can be construed as suggesting that no process of conversion has occurred.

Such a conclusion may, however, be too rash. Quirk et al. (1972) postulate conversion involving a change of syntactic subcategory in order to account for, among others, countable use of uncountable nouns in English (in 29a), gradation of non-gradable adjectives (in 29b), the dynamic use of stative adjectives (in 29c), or the transitive usage of intransitive verbs (cf. Bauer 1988, Valera 1999:183):

- (29) a. they were escorted back into international waters
 - b. ...transferred to somewhere more *metropolitan*, where robbery with violence might occur... (from Valera 1999)
 - c. Martha is being *desirable* this evening (from Quirk et al. 1985)
 - d. The officer marched the troops to the barracks.

Consequently, even if participles are recognized as adjectives, it is possible to analyze the change from the participle *mielony* '(that is being) ground or minced' into *mielony* 'minced' as an instance of conversion, namely a change of secondary word-class¹⁵ (e.g. from "verbal adjective" into "regular adjective").

4.3. Overt affixation analogues to conversion

Let us mention yet another property which differentiates participle \rightarrow adjective conversion from other ("prototypical") instances of conversion. Marchand (1969) asserts that the occurrence of a zero affix must be justified by the existence of an overt affix which induces the same type of semantico-syntactic change. For instance, support for the postulation of zero-derivation as relating the verb-noun pair (to) cook: (a) cook in English comes from the existence of the suffixes -er, -ant, -or, -ist, which attach to verbs and derive agentive nouns, cf. write \rightarrow writer, correspond \rightarrow correspondent, visit \rightarrow visitor, type \rightarrow typist. This requirement is not met in the case of participle \rightarrow adjective conversion in English, Polish or Russian, since there exist no affixes in those languages which can be appended to verbal participles to turn them into participial adjectives (see Schoorlemmer 1995 for such criticism of the conversion analysis for adjectival passives in Russian). However, there are some ways of countering this sort of objections.

¹⁴ It is only in the case of the derivation of resultative adjectives that a difference between the inflectional properties of bases and derivatives can be pinpointed. Non-adjectival past participles are inflected for gender only (cf. *zwiędłabym* 'fade.cond.1SgFem' vs. *zwiędłbym* 'fade.cond.1SgM'), while adjectivized past participles (i.e. resultative adjectives in Polish) are inflected for case, gender and number.

¹⁵ The verb-like internal syntax of participles provides, however, support for the view of participles as non-finite verbs (i.e. the view espoused in the present paper).

Firstly, if conversion of verbal participles into adjectives involves a change of syntactic subcategory (from "verbal adjective" to "regular adjective"), then the lack of an overt affixation analogue seems to be the norm rather than the exception. For instance, the change of English non-gradable adjectives into gradable ones has no affixal expression either. On the other hand, if the conversion from *broken* 'that is being broken' into *broken* 'in pieces' is regarded as a change from Verb into Adjective, then a similar categorial change results from the attachment of the suffixes *-able*, *-ible* in English (e.g. *readable*, *shrinkable*, *acceptable*, *permissible*).

Secondly, even in noncontroversial cases of zero-derivation, e.g. $N \rightarrow V$ conversion in English, the requirement of the overt affix parallel seems occasionally to be too strong. Stein (1977), for instance, shows that there is no overt affix which derives deverbal verbs paraphrasable as 'to put into X' (cf. the zero-derived verb *to bottle*), or as 'to act as X' (cf. *to pilot*, *to captain*). ¹⁶

In short, the postulation of participle \rightarrow adjective conversion is a tenable proposal, ¹⁷ even in the case of languages in which participles are fairly "adjectival" in their inflectional properties (e.g. in Polish). As usual, it needs to be borne in mind that there exist potential alternatives to the "conversion analysis" of the data discussed in the present paper. They will be given some brief consideration in the next section.

5. Alternatives to participle \rightarrow adjective conversion

One of such analyses, adopted in Sleeman and Verheugd (2000), regards property-denoting participial adjectives (e.g. *touched* 'feeling grateful', *curved* 'not straight') as lexicalized participles. There are two disadvantages of their proposal.

Firstly, the process of lexicalization of morphologically complex lexemes involves idiosyncratic changes in their phonological shape, morphosyntactic properties, and/or their semantic interpretation (cf. Bauer 1988). It is true that some participle-looking adjectives depart radically in meaning from their interpretation as participles, as is the case with the Polish *celujący* 'excellent' in (18b), or the adjective *standing* in the compound *standing ovation*. However, many other participle-looking adjectives in Polish and English exhibit a vivid semantic relatedness to corresponding verbs, and differ from inflectional participles only in having a non-eventive (i.e. stative) meaning.

 $^{^{16}}$ She also points out that cases of semantic conversion (including metonymy, e.g. *London* 'a name of a place' \rightarrow *London* 'the name of people who live in London') should be given parallel treatment to zero-derivation.

¹⁷ For lack of space, I do not present here any potential diachronic evidence supporting the hypothesis of participle-to-adjective conversion. See Parsons (1990) for the discussion of the historical oscillation between adjectives and inflectional participles in English, and Bartnic-ka (1970) for a detailed survey of the diachronic development of participles in Polish.

Secondly, some participle-looking adjectives have no corresponding verbal participles. Grimshaw (1990) claims that the causative psychological predicates, e.g. surprise, amaze, amuse, do not give rise to verbal present participles. Consequently, the adjectives surprising, amazing, or amusing cannot be treated as having arisen through lexicalization of participles. Another instance of such a situation (i.e. the lack of verbal participles) can be found in Polish. Unaccusative intransitive verbs in Polish serve as bases for deriving resultative -l- adjectives, exemplified in (24) above. Intransitive verbs which occur with the reflexive clitic siq derive (non-passive) resultative adjectives terminating in -n-/-t-, as shown in (30) (cf. Cetnarowska 2000 for more examples):

- (30) a. zwariowany 'that has gone mad' (from zwariować 'to go mad')
 - b. nawalony (coll.) 'drunk' (from nawalić się (coll.) 'to get drunk')
 - c. wypoczęty 'rested' (from wypocząć 'to have some rest')

Although the forms in (30) have the morphological shape of passive participles, they cannot be regarded as lexicalized passives. No passive participles can be formed from intransitive verbs.

Researchers who adopt the theory of Parallel Morphology (e.g. Schoorlemmer 1995) attempt to account for the occurrence of participle-looking adjectives, along-side participles proper, in a different way. They assume that the same affix (e.g. -en in English) can attach to a given verbal base either in the syntactic component (giving rise to verbal participles) or in the lexical component (to derive participial adjectives).

Within the framework of Distributed Morphology (cf. Marantz 1997) both verbal participles and participial adjectives are derived in the syntactic component, but the affix involved can attach to different structures, i.e. to a Root or a little 'x'. Neither Distributed Morphology nor Parallel Morphology respects the Lexicalist Hypothesis, since syntactic rules are allowed to build word-internal structures. Moreover, some additional theoretical apparatus needs to be invoked to account for the restrictions on adjectival passive formation in English, noted in Bresnan (1982, 1995) and mentioned in section 2.1. above.

Let us finally mention an analysis which involves the recognition of homonymous affixes, e.g. the passive participle-forming $-en_1$ in English and $-en_2$ deriving deverbal adjectives (or participle-forming $-qc_1$ - and adjective-forming $-qc_2$ - in Polish). The adjective broken 'in pieces' would contain the suffix $-en_2$, while the participle broken (in I have broken my leg) would be treated as containing the suffix $-en_1$. Bresnan (1982, 1995) criticizes the "homonymy approach" for failing to account for the morphological identity of irregular passive participles and corresponding participial adjectives (e.g. spoilt 'that has been or is being spoilt' vs. spoilt 'corrupted'). These failings can be avoided if one adopts the Separation Hypothesis (cf. Beard 1995, Don 1993). It divorces the phonological aspect of derivation (performed by the so-called rules of affixation) from the semantic and categorial change involved in word-formation processes (which are stated as rules of L-derivation) or in inflectional processes (stated as I-derivation). Within such an approach, it is possible to link the

rule of -ing affixation in English to the rule of L-derivation deriving deverbal adjectives (such as trying, touching, startling, searching) as well as to the inflectional operation of present participle formation. Instead of "homonymous" -ing affixes, there will be a single polyfunctional affix. This is a particularly welcome result in Polish (where the -n-/-t- affix occurs both in passive participles and in non-passive resultative adjectives).

It could be argued, as in Beard (1995), that the need for participle \rightarrow adjective conversion disappears once there is another explanation available for the formal identity of participles and adjectives, such as *trying* 'that tries' and *trying* 'difficult'. However, even within a framework that adopts the Separation Hypothesis, the recognition of participle \rightarrow adjective conversion has some advantages. Morphological conversion can be now reinterpreted as an instance of a rule of semantic derivation (L-derivation) which happens not to be linked to any rule of affixation (cf. Don 1993). If stative adjectives in Polish, such as *zalany* 'flooded, covered with water', or *kiszony* 'pickled, sour' in (31a, b) are derived through conversion from corresponding passive participles *zalany* 'that was flooded' and *kiszony* '(that is being) pickled', while participle-looking non-passive resultative adjectives, such as *zwariowany* 'that has gone mad' in (31c) are treated as deverbal adjectives, it can be predicted that the former (but not the latter) have a passive interpretation, and exhibit some similarities in their complementation to non-finite passive verbs.

- (31)a. Kiszone przez mamę ogórki smakują mi najbardziej. pickled.NomPl by mother cucumbers.Nom taste.3Pl me.Dat most 'Cucumbers pickled by your mother are the most tasty for me.'
 - b. Pola były zalane wodą. fields.Nom were.3Pl flooded.NomPl water.Instr 'The fields were flooded with water.'
 - c. *zwariowany modą vs. zwariowany na punkcie mody gone-mad fashion.Instr gone-mad on point fashion.Gen 'fashion-crazy'

When present participles are converted into adjectives, they give rise to classificatory adjectives, which differ from other adjectives in allowing direct NP complements.¹⁸

(32)a. wybielająca zęby pasta whitening.NomSgFem teeth.Acc paste.Nom 'whitening tooth-paste (lit. paste whitening teeth)'

¹⁸ The syntactic behaviour of Polish participles converted into adjectives differs from the behaviour of departicipial adjectives in Hungarian, as described in Laczkó (2001). Consequently, some of the diagnostics for adjectivehood, proposed in Laczkó (2001), seem to be too restrictive when applied to Polish. The issue of diagnostic tests, and the exact delineation of the boundary between verbal participles and departicipial adjectives, needs further investigation.

b. łagodzące bóle głowy tabletki relieving.NomPl pains.Acc head.Gen pills.Nom 'pills that (can) relieve headaches'

Since departicipial adjectives can retain the internal syntax of correspoding verbal participles in Polish, the detection of a change in semantic interpretation (from 'eventive' to 'stative') is the clearest indication that the conversion has taken place.

In some theories of conversion, e.g. in the onomasiological theory of conversion in Štekauer (1996), or in the framework of cognitive grammar espoused in Twardzisz (1997), the primary aspect of conversion is the recategorisation of the base in terms of conceptual categories, such as Substance, Action, Quality, or Circumstance. The shift from the "eventive" meaning of verbal participles to the "stative" meaning of departicipial adjectives could be interpreted as an instance of the Action being reinterpreted as the Quality. In the case of conversion of past and passive participles, the Quality corresponds to the result of the Action. As far as present participles converted into adjectives are concerned, the Quality denotes a characteristic behaviour or disposition of a person or thing (as in *a murdering coward*), or the intended purpose of a thing (as in *bomba burząca* 'demolition bomb).

6. Conclusion

The present paper has studied the phenomenon of participle-to-adjective conversion in English and Polish. It has been suggested that neither their position in a clause nor the choice of complements and modifiers provide the best clues for the identification of participle-looking forms in Polish and English as verbal participles or departicipial adjectives. Both participles and adjectives occur as prenominal modifiers in English and Polish. As far as the complementation possibilities are concerned, neither participles nor departicipial adjectives are allowed in the prenominal position in English if they are accompanied by complements and postmodifiers. In contrast, there are no constraints on the formal complexity of prenominal modifiers in Polish. Polish departicipial adjectives require a stative (i.e. non-eventive reading) but can (optionally) retain the internal syntax of verbal participles. For instance, present participles converted into adjectives can occur with direct object NPs, as in *lagodzące bóle glowy tabletki* 'pills that relieve headaches' in (32b).

Therefore, the semantic effect of the conversion process (i.e. the shift from the eventive meaning to the stative meaning) is the best indication of the status of a given form as a verbal participle or a departicipial adjective.

This conclusion is compatible with the view of conversion as a process of semantic derivation (or L-derivation) which is not linked to any rule of affixation (cf. Don 1993). Given the controversy surrounding the part of speech assigned to participles, participle-to-adjective conversion can in principle be regarded either as an instance of a change of syntactic category (Verb \rightarrow Adj, or Participle \rightarrow Adjective), or a change of syntactic subcategory (e.g. from "verbal adjective" to "regular adjective"). The lack

of an overt affixation, which could result in a semantico-categorial change parallel to that of participle-to-adjective conversion, does not disprove the tenability of the conversion analysis, either. Finally, it has been argued that the adoption of the Separation Hypothesis (which allows a single affix to spell out several processes of derivation) does not remove the need for the recognition of participle-to-adjective conversion.

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