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INHERENT INFLECTION IN POLISH AS INPUT TO MORPHOLOGICAL DERIVATION

The present paper examines the phenomenon of inflection feeding derivation in modern Polish. Although markers of contextual inflection in Polish do not appear word-internally, markers of inherent inflection can be followed by derivational suffixes, especially by highly productive ones. Only a small section of lexemes containing word-internal inflectional morphemes in Polish can be analyzed as derived from lexicalized (irregular) word forms. Inflectional morphemes occurring „inside” derivational morphemes in Polish include stem-forming inflectional morphemes found in comparative or superlative degree forms of adjectives, in past participles, present (active) participles and passive participles. Polish participles are also shown to undergo conversion into adjectives and adverbs.

1. Inflectional categories in Polish

Recent coursebooks for students of Polish morphology (e.g. Laskowski 1984, Strutyński 1996) list the following morphological categories as being inflectional in Polish: case, number, gender, tense, person, mood, voice, aspect¹ and degree. A distinction is drawn between inflectional endings (markers of agreement) and stem-forming inflectional morphemes. The latter are employed to build extended (secondary, derived) stems of lexemes, such as for instance the comparative and superlative degree stems of adjectives. Conjugational paradigms of verbs include, apart from the basic verb stem, four extended stems, namely the imperative verb stem, the past tense stem and two participial stems. Stem-forming inflectional morphemes in Polish can be regarded as markers of inherent inflection (in the sense of the term proposed in Booij 1996). As will be illustrated below, inherent inflection can feed derivation in modern Polish.

2. Markers of comparative and superlative degree occurring word-internally

Derivatives considered in this section exhibit formal and semantic affinity to comparative or superlative forms of adjectives. The morpheme *-sz/-ejsz-* is the regular comparative marker while the prefix *naj-* marks the superlative degree of adjectives. The data in (1-2) demonstrate that irregular inflectional forms (which exhibit stem al-

¹ The status of the category of aspect is controversial. In contrast to Laskowski (1984), Grzegorzczkowska (1997) regards aspect as a lexical category. Consequently, I shall refrain from discussing lexemes which are derived from secondary (derived) imperfectives.

lomorphy or suppletion) can function as input to derivation since they are entered in the lexicon².

(1) deadjectival prefixed verbs

- a. *podwyższyc* 'to heighten' (cf. *wyższy* 'higher' from *wysoki* 'high, tall')
- b. *pogorszyć* 'to worsen' (cf. *gorszy* 'worse' from *zły* 'bad')
- c. *przewyższyc* 'to surpass' (cf. *wyższy* 'higher' from *wysoki*)
- d. *ulepszyc* 'to better, to improve' (cf. *lepszy* 'better' from *dobry* 'good')
- e. *zmniejszyć* 'to lessen' (cf. *mniej* 'smaller' from *mały* 'small, little')
- f. *zwiększyć* 'to increase' (cf. *wiekszy* 'bigger, larger' from *wielki* 'big, large')

(2) *-osc* nouns (names of qualities - Nomina Essendi)

- a. *blizszosc* 'the quality of being closer in time or space' (cf. *blizszy* 'closer' from *bliski* 'close')
- b. *lepszosc* 'the quality of being better' (cf. *lepszy* 'better' from *dobry* 'good')
- c. *mniejzosc* 'minority' (cf. *mniej* 'smaller, minor' in 1e)
- d. *najlepszosc* 'the quality of being the best' (cf. *najlepszy* 'best' from *lepszy* 'better')
- e. *najwyższosc* 'the quality of being the highest in rank or size' (cf. *najwyższy* 'highest' from *wyższy* 'higher' in 1c)
- f. *nizszosc* 'the quality of being lower' (cf. *nizszy* 'lower' from *niski* 'low')
- g. *wiekszosc* 'majority' (cf. *wiekszy* 'larger, major' in 1f)
- h. *wyższosc* 'superiority' (cf. *wyższy* 'higher, superior' in 1c)

The word-form *starszy* 'older, elderly, senior' (the comparative degree of *stary* 'old'), which gives rise to the derivatives given in (3), should also be regarded as lexicalized because it exhibits a semantic shift.

(3) miscellaneous nouns and adjectives derived from *starszy* 'older, senior'

- a. *starszawy* 'elderly'
- b. *starszak* 'older child in kindergarten'
- c. *starszeństwo* 'seniority'
- d. *starszosc* 'the quality of being older'
- e. *starszyzna* 'the seniors, the officers of high rank'

The data in (4) show that highly productive derivational suffixes, e.g. *-osc*, can attach to regular comparative forms and produce names of qualities (NE).

² All the examples from Polish given below occur in a slightly simplified spelling since Polish diacritic marks indicating palatalization of consonants and nasalization of vowels are not available in the international version of the word processor employed here. In accordance with standard Polish orthography, I use the digraph 'ch' to represent a velar fricative. The digraphs 'cz', 'dz' stand for post-alveolar affricates while 'sz' is a post-alveolar fricative.

(4) *-osc* Nomina Essendi (NE)

- a. *bielszosc* 'the quality of being whiter' (cf. *bielszy* 'whiter')
- b. *jasniejszosc* 'the quality of being fairer or clearer' (cf. *jasniejszy* 'fairer, clearer')
- c. *młodszość* 'the quality of being younger' (cf. *młodszy* 'younger')
- d. *piekniejszosc* 'the quality of being more beautiful' (cf. *piekniejszy* 'more beautiful')
- e. *wczesniejszosc* 'the quality of being earlier' (cf. *wczesniejszy* 'earlier')
- f. *weselszosc* 'the quality of being more cheerful' (cf. *weselszy* 'more cheerful')
- g. *wrazliwzosc* 'the quality of being more sensitive' (cf. *wrazliwszy* 'more sensitive')
- h. *zywszosc* 'the quality of being more agile' (cf. *zywszy* 'more agile')

Some of the names of qualities in (4) are felt to be non-institutionalized³ (e.g. 4e) and the list of NE can be easily extended with novel formations.

3. Derivatives from past tense forms (or past tense stems)

The lexemes discussed in this section appear to contain the past tense marker *-l-*. The nouns in (5) belong to the realm of expressive morphology. Creation of nonce-formations exemplifying the patterns in (5) is highly probable, especially when such nouns denote people.

(5) *-ak, -uch, -ek, -ec* nouns

- a. *opuchlak* 'swelling' (*opuchl* '(he/it) became swollen' and *opuchly* 'swollen')
- b. *spróchnialec* 'one that has grown rotten or carious' (cf. *spróchnial* '(it) decayed, grew carious' and *spróchnialy* 'rotten, carious')
- c. *umarlak* (colloq.) 'dead fellow' (cf. *umarl* '(he) died' and *umarly* 'dead')
- d. *zdechlak* (colloq.) 'weakling' (cf. *zdechl* '(it) died' and *zdechly* '(of animals) dead')
- e. *zmarzłak* (colloq.) 'chilly fellow' (cf. *zmarzł* '(he) felt chilly' and *zmarzły* 'chilly')
- f. *zmarzłuch* (colloq.) 'chilly person' (cf. 5a above)
- g. *zgnilek* (colloq.) 'rascal' (cf. *zgnil* '(he/it) decayed, went rotten, putrid' and *zgnily* 'rotten, decayed, putrid')
- h. *zgnilec* '(of bees) foul brood')
- i. *zgnilki* (pl.) 'rotten fruit'
- j. *zgorzknialec* 'sour person' (cf. *zgorzknial* '(he/it) went sour' and *zgorzknialy* 'sour, bitter')
- k. *zniewieszialec* 'one that has grown effeminate' (cf. *zniewiescial* '(he) grew effeminate' and *zniewiescialy* 'effeminate')

³ I follow Bauer (1983) in distinguishing between nonce-formations, non-institutionalized lexemes and lexicalized formations.

The nouns in (6) below are best analyzed as lexicalized (as there are few derivatives exemplifying such patterns and some of them are obsolete). The formations in (7), in contrast, represent productive patterns of derivation and many of them may be felt to be nonce-formations.

(6) *-izna, -ina* nouns

- a. *odumarlina* (obsolete) 'possessions of a man who died leaving no successors' (cf. *odumarl* (rare) '(he) died and left someone behind' and *odumarly* (rare) 'left behind at someone's death')
- b. *opuchlizna, opuchlina* 'swelling' (cf. *opuchl* in 5a)
- c. *padlina* 'carcass, the body of a dead animal' (cf. *padl* '(he/it) fell, died' and *padly* 'fallen, dead')
- d. *stechlizna* 'fustiness, mustiness' (cf. *stechl* '(it) grew fusty or musty' and *stechly* 'fusty, musty, frowsty')
- e. *zgnilizna* 'rot, putridity' (cf. *zgnil* in 5g)
- f. *zmarzlina* 'frozen layer of earth in the Far North that unfreezes during a short summer' (cf. *zmarzl* in 5e)

(7) *-osc* derivatives (Nomina Essendi) and *-awy* attenuative adjectives

- a. *dojrzalosc* 'ripeness, maturity' (cf. *dojrzal* '(he/it) grew ripe or mature' and *dojrzaly* 'ripe, mature')
- b. *sflaczalosc, sflaczenie* 'flabbiness, limpness' (cf. *sflaczal* '(he/it) became flabby or limb' and *sflaczaly* 'falby, limp, flaccid')
- c. *sprochnialosc* 'rot, decay' (cf. *sprochnial* in 5b)
- d. *stezalosc* '(of solutions) solidification, concentration' (cf. *stezal* '(it) concentrated, coagulated' and *stezaly* 'concentrated, solidified')
- e. *zdziczalosc* 'savageness' (cf. *zdziczal* '(he) grew wild, savage' and *zdziczaly* 'savage')
- f. *zgnilosc* 'rot, putridness' (cf. *zgnil* in 5g)
- g. *zgorzknialosc* 'bitterness, acrimony' (cf. *zgorzknial* in 5j)
- h. *zmurszalosc* 'mustiness' (cf. *zmurszal* '(it) mouldered' and *zmurszaly* 'mouldy, musty')
- i. *zniewiescialosc* 'effeminacy' (cf. *zniewiescial* in 5k)
- j. *zwiedlosc* 'fadedness, withered state' (cf. *zwiedl* '(it) withered' and *zwiedly* 'faded, withered')
- k. *sprochnialawy* 'somewhat rotten, decayed' (cf. *sprochnial* in 5b)
- l. *stechlawy* 'somewhat fusty' (cf. *stechl* in 6d)
- m. *zgnilawy* 'somewhat rotten' (cf. *zgnil* in 5g)

The formations listed in (5-7) above cannot be derived directly from past tense verb forms since the suffixes *-ak, -uch, -ek, -ec, -osc, -izna, -ina* and *-awy* are subcategorized to attach to adjectival, not to verbal, bases. Consequently, it is the adjectives terminating in the sequence *-ly* which must serve as the immediate input to the suffixation processes in question. However, I shall argue below that the data in (5-7) instantiate the

phenomenon of inflection feeding derivation since the resultative *-l* - adjectives in question are derived from past tense stems through conversion (adjectivization).

An argument supporting such an analysis is the formal identity of past tense stems and corresponding resultative adjectives. When past tense forms are morphologically irregular, resultative adjectives exhibit the same kind of allomorphy. This happens in the case of the verb *opuchnac* 'to swell, inf.' - *opuchnie* '(it) swell-FUTURE' - *opuchl* '(it) swelled' - *opuchly* 'swollen' (note the lack of the thematic suffix *-na-* in past tense forms and in the resultative adjective) or the verb *umrzec* 'to die, inf.' - *umiera* '(it) dies' - *umarl* '(he/it) died' - *umarly* 'dead' (observe that the quality of the root vowel is the same in the past tense form and the resultative adjective).

It can be argued, moreover, that resultative *-ly* adjectives show semantic affinity to past tense forms and exhibit the internal syntax of finite verb forms.

Firstly, they convey the idea of the past, which is emphasized by the presence of time expressions such as *wczoraj* 'yesterday', *przed chwila* 'a moment ago' or *jesienia* 'in autumn' in the phrases *rozkwitl wczoraj kwiaty* 'the flowers that opened yesterday', *przybyl przed chwila czlowiek* 'the man that arrived a moment ago', and *opadle jesienia liscie* 'leaves that fell down in autumn'. This is not possible with other deverbal adjectives, as shown in **interesujacy wczoraj wyklad* 'interesting yesterday lecture' or **ozywsze przed chwila powietrze* 'refreshing a moment ago (breath of) air'.

Secondly, resultative adjectives resemble finite verb forms in allowing modifiers denoting reason (cause), e.g. *opuchle z glodu nogi* 'legs swollen from hunger', *pozolkle ze starosci listy* 'letters turned yellow with age'.

Thirdly, the negative particle *nie-* does not attach to *-ly* adjectives (as happens in the case of other adjectives, e.g. *niemily* 'not nice' or *nieuprzejmy* 'impolite') but is spelled as a separate word, e.g. *nie sprochnialy* 'not rotten' and *nie rozkwitly* 'that has not blossomed yet'. Consequently, the rules of Polish orthography interpret *-ly* adjectives as verb forms. Tokarski (1951) analyzes such adjectives as representing the category of 'participium staticum'.

Finally, there is some cross-linguistic evidence suggesting that Polish resultative adjectives derive from past tense stems (which are analyzed as past participles in Tokarski 1951). It is only unaccusative (ergative) verbs in Polish which have related resultative *-ly* adjectives. Hoekstra (1984) postulates the participle-adjective conversion as one of the tests employed to distinguish ergative and unergative verbs. Ergative verbs in Dutch allow their past participles to be used as adjectives. The same phenomenon can be observed in English, where the past participles *fallen* and *withered* (but not *come* or *swum*) can modify nouns. Markantonatou (1995) demonstrates that also in Modern Greek past participles of ergative verbs convert to adjectives.

4. Suffixal derivatives from passive participles

This section of the paper deals with derivatives of passive participles in Polish, i.e. with forms containing word-internally the inflectional affix *-an-* or its phonologically conditioned allomorphs *-on-* and *-t-*.

The nouns listed in (8-9) exhibit vivid semantic (and formal) affinity to passive participles since they denote personal Patients and, less commonly, inanimate affected ob-

jects. Their semantic interpretation contains an element of passivity. The deparicipial formations in (8-9) terminate in productive nominalizing affixes, although novel formations of this type cannot be formed as freely as Nomina Essendi in *-osc*.

(8) *-ec, -nik, -ek, -ka* names of Patients

- a. *obrzezaniec* 'circumcised man' (from *obrzezany* 'circumcised')
- b. *opetaniec* 'one possessed of evil' (from *opetany* 'possessed of evil')
- c. *pomazaniec* 'annointed man' (from *pomazany* 'annointed, smeared')
- d. *przesiedleniec* 'emigrant, displaced person' (from *przesiedlony* 'displaced, rehoused')
- e. *skazaniec* 'man condemned to death' (from *skazany* 'condemned')
- f. *wybraniec* 'the privileged man' (from *wybrany* 'chosen')
- g. *wybranka* 'the girl of one's choice' (from *wybrany* 'chosen')
- h. *wygnaniec* 'exile, outcast' (from *wygnany* 'expelled, banished')
- i. *wyzwoleniec* 'freedman' (from *wyzwolony* 'freed, liberated')
- j. *wychowanek* 'alumnus', *wychowanka* (fem.) (from *wychowany* 'brought up')

(9) *-ec, -ek, -ka* object nouns

- a. *nabytek* 'acquisition' (from *nabyty* 'acquired')
- b. *odbitka* (phot.) 'proof' (from *odbity* 'reflected')
- c. *roztrzepaniec* 'sour milk that has been beaten up' (from *roztrzepany* 'beaten up')
- d. *wyjatek* 'exception, excerpt' (from *wyjety* 'extracted, removed')
- e. *wziatka* (colloq.) 'trick (in cards)' (from *wziety* 'taken')

Formations listed in (10) below exemplify a very productive pattern of coining names of objects, typical of specialized vocabulary.

(10) *-ka* derivatives

- a. *bitka* 'cutlet' (cf. *bity* 'beaten, crushed')
- b. *dlubanka* 'canoe' (cf. *dluony* 'hollowed out')
- c. *kiszonka* 'silage' (cf. *kiszony* 'fermented, pickled')
- d. *krajanka* 'a kind of cake, pasta or cheese (sold sliced or cut into portions)' (cf. *krajany* 'cut, sliced')
- e. *kraszanka* '(dial.) Easter egg' (cf. *kraszany* (dial.) 'painted')
- f. *lepianka* 'mud-built cabin' (cf. *lepiony* 'moulded, built out of sth')
- g. *mieszanka* 'mixture' (cf. *mieszany* 'mixed')
- h. *malowanka* 'painted figure, folkloric ornament' (cf. *malowany* 'painted')
- i. *mrozonka* 'chilled fruit, vegetables or other food products' (cf. *mrozony* 'frozen, chilled')
- j. *palonka* '(in ceramics) grog' (cf. *palony* 'burnt')
- k. *prazonka* 'roasted ore' (cf. *prazonny* 'roasted')
- l. *warzonka* 'table salt' (cf. *warzony* 'vaporized (in order to get rid of dross)')
- m. *wedzonka* 'smoked bacon' (cf. *wedzony* 'smoked')

- n. *wycinanka* 'decorative paper cut-out adorning walls of peasant cottages' (cf. *wycinany* 'cut out')
- o. *zapiekanka* 'dish baked in oven' (cf. *zapiekany* 'baked')

There is a notable difference between the nouns in (8-9) and those in (10). The formations in (8) are formally and semantically related to passive participles derived from perfective (prefixed) verbs. The nouns in (10), although exhibiting a resultative (telic) interpretation, are formally related to passives of imperfective verbs. I would like to suggest that the names of objects in (10) are derived from adjectival passives. Adjectival passives are, in turn, derived through conversion from verbal passives⁴. Participial passive *any/-ony/-ty* adjectives given in (10) in brackets can be characterized as stative, resultative and perfective, no matter whether they are derived from imperfective or from perfective verb forms.

5. Conversion of participles into nouns or adverbs

Both passive participles and present (active) participles in Polish can undergo conversion into nouns (i.e. substantivization), as shown in (11-12) below. Active (present) participles can be formed from imperfective verb stems only and they contain the inflectional morpheme *-ac-*. The formations given in (11) are semantically lexicalized.

- (11) a. *chowany* 'hide and seek' (cf. *chowany* 'hidden-impf.')
- b. *dane* (pl.) 'data' (cf. *dany* 'given-pf.')
- c. *oskarzony* 'accused' (cf. *oskarzony* 'accused-pf.')
- d. *przewodniczący* 'chairman' (cf. *przewodniczący* 'presiding (over sth)')
- e. *sluzacy* 'servant' (cf. *sluzacy* 'serving')
- f. *smazone* 'fried food' (cf. *smazony* 'fried - impf.')
- g. *wygrana* 'winnings' (cf. *wygrany* 'won-pf.')

Substantivized passive and active (present) participles in (12) can be formed in a fairly productive manner and they have exclusively human reference. They preserve the internal syntax of verbs and can occur with complements and adjuncts characteristic of finite verb form and verbal participles.

- (12) a. *pokrzywdzony przez los* 'one who suffered a bad fate' (cf. *pokrzywdzony* 'wronged')
- b. *powracający z zagranicy* 'one who is returning (or has returned) from abroad' (cf. *powracający* 'returning')
- c. *uczacy języka angielskiego* 'one who teaches English' (cf. *uczacy* 'teaching')
- d. *umierający z głodu i pragnienia* 'one who is dying out of starvation and thirst' (cf. *umierający* 'dying')

⁴I advance this hypothesis also in Pasternak-Cetnarowska (1986). When discussing English verbal passive participles, Strauss (1987) makes a similar assumption that they undergo conversion into adjectives.

e. *zasypany przez lawine* 'one who has been buried by the avalanche' (cf. *zasypany* 'covered up')

The data in (13) appear to indicate that verbal present participles undergo conversion into adverbs. However, while verbal active *-acy* participles denote a process in progress, e.g. *rozjasniajaca teraz mrok pokoju lampa* 'a lamp which is now lightening the darkness of the room', the forms terminating in *-acy* which give rise to the adverbs in (13) denote a property of an object, e.g. *proszek wybielajacy* 'the whitening powder', as is characteristic of adjectives.

- (13) a. *chlodzaco* 'with the cooling effect' (cf. *chlodzacy* 'cooling')
 b. *kruszaco* '(about explosives) breaking up the rocks' (cf. *kruszacy* 'breaking up rocks')
 c. *lagodzaco* 'soothingly' (cf. *lagodzacy* 'palliative, soothing')
 d. *odurzajaco* 'dizzingly' (cf. *odurzajacy* 'dizzing, stupefying')
 e. *rozgrzewajaco* 'with the warming up effect' (cf. *rozgrzewajacy* 'warming up')
 f. *rozjasniajaco* 'with the brightening effect' (cf. *rozjasniajacy* 'brightening, bleaching')
 g. *wybielajaco* 'producing the bleaching effect' (cf. *wybielajacy* 'bleaching')
 h. *wzmacniajaco* 'with the strengthening effect' (cf. *wzmacniajacy* 'strengthening')

It seems justified to assume that the adverbs in (13) are related to participial *-acy* adjectives. Such adjectives are derived from verbal present participles through conversion (adjectivization) and therefore show closer semantic/syntactic relatedness to verbal participles than deverbal *-acy* adjectives do (such as *znaczacy* 'telling' cognate to the verb *znaczyć* 'to mean, to mark').

6. Conversion as syntactic word-class exchange or as semantic extension

There is no agreement within the linguistic literature as to the proper treatment of conversion. The phenomenon in question can be treated as purely syntactic word-class exchange or as a derivational process. This is partly due to the variety of processes subsumed under the label of conversion. Marchand (1968), for instance, treats noun-to-verb or verb-to-noun conversion in English as an instance of morphological derivation (i.e. zero-derivation) while the cases of partial conversion, such as the occurrence of the noun phrases *the wealthy* and *the poor*, are analyzed as involving functional transposition of words (i.e. a temporary change of their syntactic function).⁵ Within the framework of Cognitive Linguistics, Twardzisz (1996) analyzes zero-derivation in English as

⁵ In a similar vein, Strauss (1987) regards the English noun phrases *the oldest* and *the very poor* as instantiating syntactic conversion of adjectives into nouns while the nouns *the untouchables* and *sexists* are examples of morphological conversion. A critical overview of theoretical approaches to conversion is offered in, among others, Cetnarowska (1993), Don (1993), and Twardzisz (1997).

a process of semantic extension and hence being of essentially the same nature as metonymy and metaphor.

Various types of conversion have been proposed in this paper to occur in Polish.

Derivation of resultative adjectives (such as *zwiedly* 'faded, withered' discussed in section 3 above) from past tense stems can be regarded as a non-affixal morphological process, involving a change of inflectional paradigm, syntactic word-class and semantic properties of the derivational base.

Conversion of Polish verbal passive participles into departicipial adjectives (proposed in section 4) constitutes a special case of semantic extension. It results in a modification of the meaning of participles but does not seriously affect their syntactic properties and involves no change in their inflectional paradigm. Both adjectival resultative passives and verbal passives agree in case, number and gender with their heads. They cannot be inflected for degree, they form no *Nomina Essendi* and cannot take the negative prefix *nie-*. Moreover, departicipial resultative adjectives and verbal passives can occur with agentive adjuncts, complements and adverbials of manner, as in the sentence *Przez całe lato pola były całkowicie zalane wodą* 'All the summer the fields were flooded with water completely', *Przywiozłam ogórki kiszzone w zeszłym roku przez moją mamę* 'I've brought cucumbers pickled by my mother last year.' Adjectival passives which function as derivational bases for the nouns in (10) differ from corresponding verbal passives in their inability to follow the copula verb *zostać* 'to become' and ability to take the copular verb *być* 'to be'.

Similarly, present (active) *-acy* participles and departicipial adjectives share their inflectional paradigms and the choice of complements but differ mainly in their semantic interpretation.

Formation of adverbs terminating in *-aco* (listed in 13 above) involves mainly a change of syntactic category and inflectional paradigm and can be treated as functional shift. I assume, however, that just as the remaining types of conversion mentioned earlier, adverbialization is a morphological process.

Substantivization of present and passive participles illustrated in (12) in section 5 instantiates a temporary use of verbal participles in the function of nouns (or noun phrases). It exhibits similarity to partial conversion in English and can be regarded as a syntactic (not a morphological) process.

7. Inflection/derivation continuum. Class-changing inflection

It is notable that none of the derivatives discussed in the present paper contain inflectional endings (i.e. markers of agreement) embedded word-internally and preceding derivational affixes. In other words, contextual inflection cannot feed morphological derivation in Polish while some types of inherent inflection can.

In view of Dressler's (1989) criteria for distinguishing prototypical from non-prototypical inflection, most types of inherent inflection in Polish do not constitute prototypical instances of inflection. This is the reason why the inflectional status of passive participles or comparative degree forms is still a controversial issue among Polish morphologists.

The idea that inflectional processes cannot be separated from derivational processes in a non-arbitrary fashion was expressed by Adam Heinz, who shared Jerzy Kury-

lowicz's belief in essentially homogenous nature of all morphological operations. Heinz (1961) regards semantic regularity, predictability of existence ('categorical-ness') and the capability of forming a closed set of items (a paradigm) as indices of grammaticality of morphological categories. Inflectional and derivational categories differ in their degree of grammaticality, hence there is a gradual transition between them. According to Heinz (1961), comparative and superlative degree markers and passive participles belong to the transitional zone between inflection proper and derivation proper.

There is an interesting overlap between the ideas expressed in Heinz (1961) and the more recent proposals of Haspelmath (1996). Haspelmath (1996) points out that the inflection/derivation distinction allows for gradience and fuzzy borders. He says (p. 47): „formations are inflectional to the extent that they are regular, general and productive; formations are derivational to the extent that they are irregular, defective and unproductive". Consequently, he treats German adjectival participles and Lezgian masdars (i.e. verbal nouns) as inflectional forms due to their productivity and regularity. These are instances of word-class-changing inflection. He also mentions, among others, the possibility of treating English *-ly* adverbs as inflectional forms of adjectives and Upper-Sorbian possessive adjectives as inflectional forms of nouns, i.e. as cases of transpositional (class-changing) inflection

Within the Polish tradition of morphology, the recognition of word-class-changing inflection has been proposed in Tokarski (1973), where action nouns in *-nie/-cie* are included into the verb paradigms as gerunds while adverbs are regarded as inflectional forms of corresponding adjectives. It is suggested in Tokarski (1973) that deadjectival *-osc* nouns, such as *pieknosc* 'beauty', *taniosc* 'cheapness', are to be regarded as nominal forms of adjectives, i.e. as additional cases in declensional paradigms of adjectives. Tokarski's inclination toward expanding the domain of inflection is driven mainly by his desire to facilitate the task of the lexicographer. Tokarski assumes that derived words should appear in the lexicon as independent entries while the burden of predicting the occurrence of inflectional forms should rest entirely with the grammar.

It is worth noting that the majority of suffixes appearing "outside" markers of inherent inflection in Polish lexemes (such as *-osc*, *-awy*, *-ak*, *-ka*) can be incorporated into the "transitional zone" between prototypical inflection and prototypical derivation since they exhibit relatively high productivity. These affixes can also be reanalyzed as inflectional morphemes, if one allows for the occurrence of word-class changing inflection⁶.

⁶ A potential problem with the postulation of word-class changing inflection is that it results in blurring the distinction between properties of word-forms and of derived lexemes. Firstly, derivatives undergo semantic drift when institutionalized (e.g. *-osc* abstract nouns develop concrete senses) while word-forms are not expected to do so. Secondly, while instances of parallel word-forms are rare (e.g. the alternative forms *dyrektorzy*, *dyrektorowie* 'directors, nom.pl'), examples of parallel derivation are numerous in Polish, as shown in the analysis of Polish diminutives in Malicka-Kleparska (1985).

8. Conclusion

The Polish data analyzed in this paper indicate that inherent and non-prototypical (i.e. stem-forming) inflection can feed non-prototypical (i.e. highly productive) suffixal derivation. Moreover, stem-forming verbal inflection can constitute an input to non-affixal (hence also non-prototypical) morphological processes, namely adjectivization and adverbialization of verbal participles.

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