

ARE EXCLUSIVELY ATTRIBUTIVE ADJECTIVES  
"TRANSPOSITIONAL"? —

SOME COMMENTS ON THE NATURE OF LEXICAL RULES  
AS OPPOSED TO SYNTACTIC TRANSFORMATIONS

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Standard derivation of attributive adjectives from predicative relative clauses first proposed in (Chomsky 1957) and later developed by Smith (1961; 1964) has been put into question only recently (see e.g. Levi 1973; Baker 1973; Berman 1974). Earlier voices of the few opponents of this derivation (notably Winter 1965; Bolinger 1967) have apparently had little effect on the popular opinion among TG linguists since Chomskyan analysis of attributive adjectives has remained unaffected for nearly two decades and by many linguists is still recognized as the only valid description (for relevant statements see e. g. Sussex 1973:111; Kaluža 1975:76).

Counterevidence to the accepted analysis pointed out as early as 1965 (Winter) has been either ignored altogether or considered in terms of recognized exceptions which can easily be accounted for in a TG by means of a set of appropriate adjectivizing transformations deriving adjectives in question from sentential sources other than predicative relative clauses. This opinion concerned mainly two large groups of attributive adjectives for which no underlying N-be-Adj. structures could be proposed, namely: deadverbial and denominal adjectives. It was tacitly assumed, though never really worked out in detail in terms of concrete lists of underlying structures and sets of appropriate transformations (see Berman 1974:145) that exclusively attributive deadverbial and denominal adjectives derive from underlying sentences with relevant adverbs and nouns, respectively, and thus, they were disregarded by generative grammarians as easy and uninteresting cases which did not constitute any danger to the fundamentals of the Standard Theory as they could be accounted for within the limits of the transformational grammar, provided appropriate transformations were postulated. The view



that denominal and deadverbial adjectives are derived from underlying sentences has probably led some transformational grammarians to adopting the name 'transpositional adjectives' as a cover term used in reference to all adjectives that do not have predicative counterparts.

The view implying a syntactic origin to morphologically derived adjectives is by no means an invention of generative grammarians, for already Jespersen (1931) suggested that deadverbial adjectives came from sentences with adverbs (see Jespersen's analysis of 'shifted subjunct adjuncts' in MEG. II: 285 ff.). Marchand (1960) used the epithet 'transpositional' (i.e. syntactic) to describe adjectives in NP's which were mere renderings of grammatical relations transposed from their underlying sentences (see also Marchand 1966). In Marchand's (1966:133) opinion Adj-N phrases are nothing more than "morphologic combinations which go back to ultimate kernel sentences" and "a morphologic syntagma is nothing but an explicit syntagma — the sentence". A similar analysis of Polish derived adjectives has been proposed by Doroszewski, known among polonists as his conception of syntactic interpretation of lexicology ("składniowa interpretacja słowotwórstwa") (Doroszewski 1952:282); examples of syntactic interpretation of Polish derived adjectives can also be found in Bartnicka (1961:212 - 219).

In this paper the assumption that exclusively attributive adjectives derive transformationally will be put to question on the basis of cross-linguistic evidence from English and Polish. It will be tentatively suggested that in the semantic component these adjectives are present in NP's in their attributive position and function, arguments in support of this proposal being founded on the observed similarity in general characteristics between processes responsible for their putative derivation and lexical rules of word-formation.

An attempt at a transformational account of exclusively attributive adjectives along the lines of syntactic interpretation involves two main tasks: first, one has to see whether it is possible to postulate uniform deep structure sources for NP's containing attributive adjectives related to adverbs or nouns, and second, the exact process of changing adverbs and nouns into attributive adjectives needs to be worked out which means formulating relevant transformational rules and specifying conditions under which they may apply. There appear to be major problems with accomplishing the first task as attributive adjectives apparently come from highly versified sources depending not only on the given adjective but also on the kind of noun this adjective modifies in an NP. What is more, among exclusively attributive adjectives one can find groups of items for which no sentence sources at all can be proposed, and which are neither denominal nor deadverbial. The term 'transpositional adjectives' applied to these items implies a gross oversimplification since, by definition, they have no corresponding 'N+be+Adj' predications.

By way of example one type of such nonpredicate adjectives will be men-

tioned here: namely, adjectives which from the point of view of their semantic function can be described as 'intensifying'.

Intensifying adjectives belong to the class of adjectives that appear only in attributive position functioning, in some undefined semantic sense, as intensifiers of the nouns they modify. The type is encountered both in English and Polish and in both languages these 'intensifying' adjectives tend to have negative connotation,<sup>1</sup> cf.,

- (1) He is just *a bloody fool* (\*a fool who is bloody)  
I can't open *the blasted door* (\*the door is blasted)  
Don't talk to *the stupid/blithering idiot* (\*the idiot is blithering)  
He is *a lowdown cheat* (\*a cheat who is lowdown)
- (2) a. On jest po prostu *skończonym idiotą* (\*idiota, który jest skończony)  
b. Nie mogę otworzyć (tych) *przeklętych drzwi* (\*drzwi, które są przekłete)  
c. Byłem *ostatnim głupcem*, gdy się z tobą żeniłem (\*głupiec, który jest ostatni; \*ostatnio głupi)  
d. Tak *wściekłego cymbała* dawno nie widziałam (\*cymbał, który jest wściekły)

It is very difficult, if not impossible, to find any paraphrases for Adj-N phrases underlined in (1) and (2). Thus, proposing any sentential sources to account for these NP's transformationally would be a highly artificial and totally unmotivated undertaking, not to speak of the apparent impossibility of a uniform transformational handling of these examples.

Berman (1974:145) observes that attributive adjectives that seem to be related to adverbs constitute the largest group of exceptions to the standard analysis of attributive adjectives. In this paper I shall discuss only some aspects of putative transformational derivations of exclusively attributive deadverbial adjectives modifying miscellaneous nouns.

Deadverbial adjectives found in NP's such as those in (3) appear to be related to adverbs occurring in predicative constructions such as those in (4) from which they might be considered to be derived. Morphological structure of the head-nouns in (3) does not seem to matter in the task of establishing the relationship between the adjectives of NP's in (3) and their cognate adverbs occurring in the underlying structures of (4), cf.,

- (3) a. a potential murderer (\*a murderer who is potential)  
b. an absolute idiot (\*an idiot who is absolute)  
c. a real danger (\*a danger which is real)

<sup>1</sup> Dr Kaznowski has pointed out to me an example of the English NP obviously belonging to the group under consideration, in which the intensifying adjective has positive implication, cf., *He is a fantastic sport* (\*a sport who is fantastic).



- d. a true friend (\*a friend who is true)  
 e. a definite improvement (\*an improvement, which is definite)  
 (4) a. He is, potentially, a murderer  
 b. He is, absolutely, an idiot  
 c. It is, really, a danger  
 d. That is, truly, a friend  
 e. That is, definitely, an improvement

Considering Polish translational equivalents of the NP's in (3) it is possible to distinguish a corresponding group of Polish attributive adjectives related to adverbs occurring in predicative structures corresponding to the English predicative structures of (4), cf.

- (5) a. potencjalny morderca (\*morderca, który jest potencjalny)  
 b. absolutny idiota (\*idiota, który jest absolutny)  
 c. autentyczne niebezpieczeństwo (\*niebezpieczeństwo, które jest autentyczne)  
 d. prawdziwy przyjaciel (?\*przyjaciel, który jest prawdziwy)  
 e. zdecydowana poprawa (?\*poprawa, która jest zdecydowana)  
 (6) a. To potencjalnie jest morderca — On, potencjalnie, jest mordercą  
 b. To absolutnie jest idiota — On, absolutnie, jest idiotą  
 c. To,  $\left\{ \begin{array}{l} \text{realnie} \\ \text{rzeczywiście} \end{array} \right\}$  jest niebezpieczeństwo — To jest rzeczywiście niebezpieczeństwo.  
 d. To, naprawdę, jest przyjaciel — On naprawdę jest przyjacielem  
 e. To zdecydowanie jest poprawa.

It can be noticed that adverbs in the Polish examples of (6) do not pattern consistently. It seems to me that they sound better when placed before the copula *być* if that copula is stressed. I have placed commas around some of the adverbs in (6) but many seem equally possible without commas though certainly, intonation (which is marked here by the commas) is a significant factor often determining the acceptability of these sentences. How it works and in what way exactly it influences the meaning of these sentences are questions that will not even be speculated about in this paper. For the contrastive purposes of this study it should be pointed out, however, that whereas English adjectives of the group under discussion are invariably exclusively attributive, some of their Polish equivalents can be used in predicative position (cf. examples 5d, 5e). Another contrastive observation hinges on the question of lexical productivity in the two languages as exemplified by differences in the number of adjectives created from adverbs present in the equivalent underlying structures of English and Polish. English examples in (7) cannot be rendered by congruent NP's in Polish although their underlying structures, given in (8) are congruent in both languages, cf.,

- (7) a. a probable murder — \*prawdopodobne morderstwo (but: morderstwo jest prawdopodobne)  
 b. the precise service it renders — \*dokładne usługi jakie świadczy  
 c. a possible  $\left\{ \begin{array}{l} \text{athlete} \\ \text{murderer} \end{array} \right\}$  —  $\left\{ \begin{array}{l} \text{*przypuszczalny} \\ \text{*możliwy} \end{array} \right\} \left\{ \begin{array}{l} \text{atleta} \\ \text{morderca} \end{array} \right\}$   
 d. an apparent counterexample —  $\left\{ \begin{array}{l} \text{*widoczny} \\ \text{oczywisty} \\ \text{pozorny} \end{array} \right\}$  kontrprzykład  
 e. an eventual husband —  $\left\{ \begin{array}{l} \text{*ewentualny} \\ \text{*ostateczny} \end{array} \right\}$  małżonek  
 f. his actual address — jego  $\left\{ \begin{array}{l} \text{*aktualny} \\ \text{faktyczny} \\ \text{rzeczywisty} \end{array} \right\}$  adres  
 g. the exact physical characteristics he had divined (Jespersen 1931) — \*dokładna taka charakterystyka fizyczna jaką przewidział.  
 (8) a. It was, probably, a murder — Prawdopodobnie było to morderstwo  
 b. This is, precisely, the service it renders — To są, dokładnie usługi jakie świadczy  
 c. He is, possibly,  $\left\{ \begin{array}{l} \text{an athlete} \\ \text{a murderer} \end{array} \right\}$  —  $\left\{ \begin{array}{l} \text{Przypuszczalnie} \\ \text{Możliwe, że} \end{array} \right\}$  jest on  $\left\{ \begin{array}{l} \text{atletą} \\ \text{mordercą} \end{array} \right\}$   
 d. It is, apparently, a counterexample — Jest to  $\left\{ \begin{array}{l} \text{widocznie} \\ \text{wyraźnie} \\ \text{oczywiście} \\ \text{pozornie} \end{array} \right\}$  kontrprzykład  
 e. He has eventually become a husband — Ostatecznie został mężem  
 f. This is, actually, his address — Jest to  $\left\{ \begin{array}{l} \text{faktycznie} \\ \text{*aktualnie} \end{array} \right\}$ , jego adres  
 g. This is exactly the physical characteristics he has divined — Jest to dokładnie taka charakterystyka fizyczna, jaką przewidział.

Special constraints seem to be blocking Adj. Preposing in the Polish examples of 7a and 7b but I am unable to specify their nature at present. It seems that they depend on some lexical properties of nouns *morderstwo* and *usługi* in Polish since adjectives *prawdopodobny* and *dokładny* can freely be used in attributive position when modifying other nouns, e.g. *prawdopodobne zakończenie/rozwiązanie*, *dokładne sprawozdanie/plany*, etc. Examples 7e, 7f would provide useful material for the practical pedagogical English-Polish grammar since they are instances of what Lado (1957:83) calls 'deceptive cognates', i.e. lexical items which are similar in form (and probably the origin, too) but differ in meaning in two languages thus being a frequent source of language errors in foreign language learning. *Eventual* and *actual* in 7e and 7f must not be ren-



dered by the formally 'equivalent' Polish adjectives *ewentualny* and *aktualny* which have a different meaning in the lexicon of Polish. Adjectives *possible* and *apparent* from the English examples 5c and 5d cannot be translated by means of what are their literal equivalents in Polish, namely, adjectives *możliwy* and *widoczny* since the cooccurrence of these adjectives with nouns in Polish seems to be restricted to [-human] nouns in the former case, e.g. *możliwe wyjście z sytuacji*, (*inne*) *możliwe rozwiązanie* (But: *co za niemożliwa dziewczyna!*), and [+concrete] nouns, in the latter case, cf. *widoczna plama*. Since the meaning of the adjective *widoczny* in Polish is not quite the same as the meaning of the adverb *widocznie*, which undoubtedly is equivalent to *apparently* in English, the fact that it does not occur attributively in (7d) can be explained if we assume that *widocznie* (in the sense of *apparently*) does not have a cognate adjective in Polish. Synonymous adjectives *oczywisty* and *pozorny* can be used as an equivalent of *apparent* in (7d), just as *przypuszczalny* may substitute *możliwy* in some cases of attribution to [+human] nouns (see the possibilities in 7c, 7d). In the case of the Polish examples in (7f) and (7g) Adverb-to-Adj change does not apply at all because a possible cognate adjective *ostateczny* cannot modify [+human] nouns in Polish (cf. *ostateczne słowo*, *ostateczny sąd* but *\*ostateczny człowiek*) in the first case (see 7f) and because it would change the meaning of the comparative construction involved in the modification of the noun *charakterystyka* in the second case (example 7g). In English, Adv-to-Adj transformation is apparently possible in structures of comparison but in Polish it seems to be blocked under such conditions.

Berman (1974:149) makes an interesting observation concerning English deadverbial adjectives of the type discussed here. Namely, she notices that whereas NP's such as those in (3) can occur at various places in a sentence their underlying adverbs are restricted to predicative position. Consider examples given in (9) and (10),

- (9) a. He made *a real contribution*  
 b. You must come up with *a definite alternative*  
 c. It is necessary to keep ahead of *potential rivals* (Berman 1974:149)  
 d. He gave me *the exact reason* for your absence  
 e. I don't know his *actual housewife*
- (10) a. \* He made, really, a contribution — He really made a contribution  
 b. \* You must come up with, definitely, an alternative ≠ You must definitely come up with an alternative  
 c. \* It's necessary to keep ahead of, potentially, rivals ≠ \* It's necessary to, potentially, keep ahead of rivals  
 d. \* He gave me, exactly, the reason of your absence ≠ ?He exactly gave me the reason of your absence  
 e. \* I don't know, actually, his housewife ≠ I don't actually know his housewife

If the adverbs in question were placed near the main verbs of the sentences in (10) these sentences might become grammatical in some cases but their meaning would differ from the meaning of the relevant examples in (9) as they would modify the verbs instead of the nouns in question. It seems that the only possible sources of the underlined NP's in (9) would be something like,

- (11) a. what was, really, a contribution  
 b. what is, definitely, an alternative  
 c. those, who are, potentially, rivals  
 d. what was, exactly, the reason  
 e. one who actually is his housewife

The same observation applies to the Polish NP's containing deadverbial adjectives of the type under discussion. Their underlying adverbs in the putative source sentence are restricted to predicative position. Object NP's of (12) are semantically different from the constructions with adverbs given in (13). The underlined NP's from (12) seem to have been derived from the relative clauses suggested in (14).

- (12) a. Nie będziemy uwzględniać *oczywistych pomyłek*  
 b. Należy podjąć *konkretną decyzję*  
 c. Nie znam jego *faktycznego nazwiska*  
 d. Liczymy na *pewny sukces*
- (13) a. Nie będziemy, oczywiście, uwzględniać pomyłek ≠ \* Nie będziemy uwzględniać, oczywiście, pomyłek  
 b. Należy konkretnie podjąć decyzję ≠ \* Należy podjąć, konkretnie, decyzję  
 c. Faktycznie nie znam jego nazwiska ≠ \* Nie znam jego, faktycznie, nazwiska  
 d. Na pewno liczymy na sukces ≠ ? Liczymy na sukces na pewno
- (14) a. to, co oczywiście jest pomyłką  
 b. coś, co konkretnie (już) będzie decyzją  
 c. to, co faktycznie jest jego nazwiskiem  
 d. coś, co na pewno będzie sukcesem

The observation that adverbs underlying certain attributive adjectives are restricted to predicative position in the underlying sentences seems to point out an important insight concerning the nature of exclusively attributive adjectives related to adverbs. An attempt at formulating it in terms of a significant generalization prior to a putative transformational rule, however, gives rise to a whole series of problems.

First of all, in English as well as in Polish it is not the case that sentences with adverbs such as those in (4) and (6) must have 'corresponding' Adj-N constructions. E.g. adverbs in the predicative sentences of (15) are morpholo-



gically related to the relevant adjectives in (16) but they cannot be treated as their underlying sources, because of the obvious differences in meaning between (15) and (16), cf.

- (15) a. That is, basically, a mistake; *Zasadniczo, jest to błąd*  
 b. It was, definitely, a man; *To, stanowczo, był człowiek*

- (16) a. That is a basic mistake; *Jest to zasadniczy błąd*  
 b. It was a definite man; *To był stanowczy człowiek*

Secondly, the constraints on Adverb-to-Adj shift depend both on the adverb involved and on the noun to be modified, cf.,

- (17) a. truly an improvement  $\neq$  \* a true improvement  
 b. truly a friend = a true friend  
 c. definitely an improvement = a definite improvement  
 d. definitely a friend  $\neq$  \* a definite friend

- (18) a. *naprawdę poprawa*  $\neq$  ? \* *prawdziwa poprawa*  
 b. *naprawdę przyjaciel* = *prawdziwy przyjaciel*  
 c. *zdecydowanie poprawa* = *zdecydowana poprawa*  
 d. *zdecydowanie przyjaciel*  $\neq$  \* *zdecydowany przyjaciel*

Thirdly, there are examples of NP's containing deadverbial adjectives which are not related to constructions with corresponding adverbs in predicative position but appear to come from sentences with higher adverbs, i.e. from sentences in which the corresponding adverbs modify deleted declarative verbs implied by the performative analysis. Underlined NP's in the Polish examples of (19) seem semantically related to the sentences in (20) rather than to the predicative examples of (21), cf.,

- (19) a. *Przeciętny Polak* chodzi do teatru dwa razy w roku.  
 b. *Co trzeci statystyczny obywatel* posiada telewizor.

- (20) a. *Przeciętnie* (rzecz ujmując), Polak chodzi do teatru dwa razy w roku  
 b. *Statystycznie* (rzecz ujmując/patrząc) *co trzeci obywatel* posiada telewizor.

- (21) a. \* *Polak, który jest przeciętny*  
 \* *Ten, kto przeciętnie jest Polakiem*  
 b. *Co trzeci obywatel, który jest statystyczny*  
 ? \* *Ten, kto/który statystycznie jest co trzecim obywatelem*

Fourthly, even the generalization concerning the impossibility of placing adverbs underlying deadverbial attributive adjectives in positions other than the one after the copula *be* is not without exceptions. E.g. The Polish object NP in (22) seems to me to be more related to the construction in (23) with the corresponding adverb modifying the main verb rather than to the putative source sentences in (24) with this adverb in predicative position, cf.,

(22) *Widać wyraźną poprawę*

(23) *Wyraźnie widać poprawę*

- (24) a. ? *Widać*  $\left\{ \begin{array}{l} \text{coś} \\ \text{to,} \end{array} \right\}$  *co wyraźnie jest poprawą*  
 b. *Widać, że wyraźnie jest poprawa*

Considering the numerous problems posed by the idiosyncrasies of the data examined here it might be concluded that postulating a syntactic description of attributive deadverbial adjectives in terms of a set of Adv-to-Adj transformations would be an extremely difficult and uneconomical undertaking since the number of constraints required for such rules, assuming that they can be formulated, seems to outweigh the value of possible generalizations these rules might capture.

NP's containing deadverbial adjectives can be classified into many types from the point of view of the kind of noun these adjectives are used to modify, and various other aspects of these adjectives could still be considered contrastively. Yet, an examination of relevant examples invariably points out one fact: that there are no uniform sentence sources for these adjectives as exceptions to the suggested generalizations can be found in the case of nearly every type. The same conclusion applies to English and Polish denominal adjectives in NP's which have often been described as having sentential origin (for discussion see Lees 1960; Fedorowicz-Bacz 1974). As can be easily noticed it is not the case that simple sentences containing nouns in various functions are convertible into relevant Adj-N constructions even if corresponding denominal adjectives are available in the lexicons of English or Polish. E.g. although we have *they study medicine*  $\rightarrow$  *medical students* or *the sun gives energy*  $\rightarrow$  *solar energy* in English and *delegaci są z Warszawy*  $\rightarrow$  *delegaci warszawscy* or *film pokazuje historię*  $\rightarrow$  *film historyczny* in Polish, we do not have e.g. *they hope for promotion*  $\leftrightarrow$  \* *promotional hopes*; *they study history*  $\leftrightarrow$  \* *historical students* nor *praca dotyczy uniwersytetu* (opisuje go)  $\leftrightarrow$  \* *praca uniwersytecka* or *oni służą ojczyźnie*  $\leftrightarrow$  \* *służba ojczyźniana*, etc. Besides, it is entirely unpredictable what suffix a given noun converted into a surface adjective will take, not even whether it will convert into an adjective at all.<sup>2</sup>

It seems that a theory deriving Adj-N collocations from underlying sentential (or phrasal) sources will have to be provided with a special filtering device to check all combinations produced by appropriate transformational

<sup>2</sup> The following quotation from Bolinger (1967:31) illustrates the point quite clearly: "There seems to be no good reason, for example, why Civil War had noun + noun *Union Forces* on one side and adj + noun *Confederate Forces* on the other, or any reason besides speech level why a man with a tin hat uses *construction materials* while one with a cap and gown uses *instructional materials* — word-formation is a transformational wilderness. We may say *a medical man* for 'a doctor' but not \**a dental man* nor \**a surgical man* for 'a dentist' and 'a surgeon'. We keep *a dental appointment* and *a medical appointment* with a dentist and a doctor, but not an \**electrical appointment* with an electrician. There are *legal minds* in the law but not \**botanical minds* among botanists".



processes against the list of Adj-N collocations really found in a given language in order to filter out combinations that are not used. In terms of the TG theory a filtering device so conceived would mean a specification of a number of appropriate conditions on either the surface Adj-N collocations, similar to Perlmutter's (1971) surface structure constraints or on particular adjectivizing transformations (as conditions on transformations — see e.g. Chomsky 1971). Since an inventory of Adj-N combinations acceptable in a given language will be needed in any case, and it cannot be supplied without consulting the inventory of Adj-N expressions in the vocabulary of a competent language user, introducing a complicated theoretical apparatus in order to account for relevant NP's seems a fairly uneconomical undertaking. A derivation of Adj-N phrases restricted by the acceptability constraints applicable only on the surface and conditioned pragmatically by the actual appearance of relevant Adj-N combinations in the language strikingly resembles conditions characterizing lexical processes of word-formation in that the products of both have to be checked against a list of existent items. In word-formation processes such e.g. compounding, a lexical derivation from underlying sentential sources has been generally accepted (see e.g. Lees 1960; also Nowakowski 1974) and it was assumed that all results of the derivational procedures applied there would have to be checked against the list of actual compounds given in the lexicon.

Morphological idiosyncrasies and the lack of uniform deep structure sources, as well as the necessity of involving a complicated theoretical apparatus that would still have to rely on the information provided by the vocabulary of a competent user of a language cast serious doubts on the assumption concerning transformational derivation of exclusively attributive adjectives. Similarity of conditions characterizing derivation of Adj-N phrases and some processes of word-formation (e.g. compounding) suggests that the analysis of relevant Adj-N phrases might be considered as a lexical process. In order to determine the character of derivations responsible for NP's containing exclusively attributive adjectives a clear-cut differentiation between syntactic (i.e. transformational) and lexical processes has to be established and a general characteristics of lexical rules as opposed to the syntactic ones needs to be given. The status of lexical rules is not yet established as no complete theory of the lexicon exists in the transformational grammar at present.<sup>3</sup>

<sup>3</sup> Not much has been written on the nature of the transformational grammar lexicon. The most prominent positions seem to be the two works by Gruber (1965; 1967) apart from Chomsky (1970). Papers and articles relating to the structure of the lexicon have been mostly concerned with the place of lexical insertion in the TG model and the decomposition analysis of certain lexical items (mainly verbs) — see e. g. McCawley (1968), Postal (1972), Fillmore (1968), Bolinger (1971) and the definition of the term 'related lexical entry' — Green (1969), Becker Makkai (1969), McCawley (1968a). Independent studies of lexis are conducted in Great Britain with an extensive application of the so-called 'technique of collocation' — see e. g. Halliday (1966) and Sinclair (1966).

Bolinger (1967) assumes the existence of two distinct types of transformations: 'syntactical' and lexical, which from the point of view of some essential differences in their respective characteristics should be kept separate in a grammar (see especially Bolinger's (1967) footnote 6 on page 7 where, among others, he says: "Lexical transformations and syntactical transformations, I think belong at different places in a grammar"). His statement of the differences between the two types of rules comes to observing that 'lexical coinages' (by which he understands products of lexical transformations) are "tied to a time and a place" unlike "free-flowing syntactical transformations that move as smoothly in one direction as in the other".

To illustrate the differences between 'syntactical' and lexical transformations he juxtaposes the regular Passive transformation with the set of rules involved in the derivation of English prenominal modifiers in *-ing* and *-ed* appearing in attributive position with or without object complements, producing NP's such as: *a slow-walking man* and *a mortifying remark* from *the man walks slow* and *the remark mortified John* (1967:6 - 7) and observes that while any new verb found in a Subject-Verb-Object structure can easily shift into Passive without any danger as to the acceptability of the resultant sentence (e.g. *They napalmed the village* → *the village was napalmed*), the great majority of predications representing the 'man-walks-slow' type "are not transposable to attributive position" (ibid.) as shown in examples of (25) and (26):

- (25) a. — the man walks slow → a slow-walking man  
 — the girl loves home → a home-loving girl (with a possibility for the predicative use, cf: the girl is home-loving)  
 — the child behaves badly → an ill-behaved child (also: the child is ill-behaved)
- b. — the vision scared X → a scary vision<sup>4</sup>  
 — the remark flattened X → a flattening remark  
 — the experience shattered X → a shattering experience
- (26) a. — The secretary erases mistakes → \* a mistake-erasing secretary ≠  
 \* the secretary is mistake erasing  
 — the wife wakes her husband → \* a husband-waking wife ≠  
 \* the wife is husband waking

<sup>4</sup> *Scary* and *deceptive* stand for *scaring* and *deceiving* here. See Chomsky (1965: 277) in this context. As examples in (25b) show, however, Chomsky's generalization that verbs having the syntactic features [+ [Abstract]... — ... [Animate]], i.e. verbs allowing abstract subjects and animate objects, seem invariably to have an adjectival use, has counterexamples. (See also Bolinger 1967:7).



- but: — the man hates women → a woman hating man ≠ \* the man is woman hating
- b. — the remark angered X → \* an angering remark  
— the experience broke X → \* a breaking experience
- and: — the remark affected X → an affecting remark ('causing (perhaps angered him) pity')

(because of the different semantic features on the underlying Verb and the corresponding *-ing* participial adjective) (see Bolinger 1967:7).

Corresponding rules that might be proposed in order to account for equivalent NP's in Polish will also have the characteristics of lexical processes rather than that of syntactic transformations proper since their outputs like the outputs of the relevant derivations in English will have to be checked against the list of modifier-Noun collocations actually encountered in the language. cf.,

- (27) a. — profesor nie cierpi kobiet → nie cierpiący kobiet profesor  
— kolejka jeździ wolno → wolno jeżdżąca kolejka ('ciuchcia')  
— dziewczyna tańczy na linie → tańcząca na linie dziewczyna ('tancerka na linie')  
— pomoc domowa dochodzi do pracy → dochodząca pomoc domowa ('dochodząca')  
— uczeń dojeżdżający do szkoły → dojeżdżający uczeń ('dojeżdżający')
- b. — obraz przeraził X'a → przerażający obraz  
— uwaga pochlebiła X'owi → pochlebiająca uwaga (also: pochlebna)  
— scena wzruszyła X'a → wzruszająca scena  
— ciężar przytłaczał X'a → przytłaczający ciężar  
— przeżycie załamało X'a → załamujące przeżycie
- (28) a. — sekretarka wymazuje błędy → \* wymazująca błędy sekretarka  
— żona budzi męża → \* budząca męża żona  
— mąż chodzi do kina → \* ? chodzący do kina mąż  
— praca zadowoliła recenzentów → \* ? zadawalająca praca  
— uwaga rozzłościła X'a → \* rozzłaszczająca uwaga  
— {powodzenie } rozpuścili X'a → rozpuszczające pieniądze (powo-  
{pieniądze } dzenie)

Structures given in sentences of (25) and (27) have corresponding NP's which may be described as products of relevant adjectivizing rules yet sentences of (26) and (28) do not coin lexical expressions of the Adj-N form. Thus, adjectivizing processes noted above cannot be described as syntactic transformations since they do not produce grammatical results in all cases, the grammaticality of their outputs being dependent on the existence of a relevant Adjective-N collocation established in the given language.

Kuryłowicz (1969:27) observes that complicated lexical processes can be analysed as processes implying transformations and that lexical processes implying transformations (similar to the typical syntactic T's in that they derive lexical items from underlying sentences) include mainly those in which a change in the syntactic category of part of speech is observed. In his opinion lexical transformations constitute the core of lexicology and as instances of lexical (i.e. semantic) transformations he quotes the following processes (with "→" representing a syntactic T and "↓" designating a lexical T):

- (29) a. derivation of the Polish verb *zieleńić się* (to be green) from the adjective *zielony* (green)

*zielony* → ↓ *jest zielony*  
↓ *zieleńić się*

- b. derivation of the Polish adjectives: *zapiękły*, *opuchły* from verbs *zapieć*, *opuchnąć*, respectively:

*zapieć* → ↓ *zapieczony*; *opuchnąć* → ↓ *opuchnięty*  
↓ *zapiękły* ↓ *opuchły*

- c. derivation of the Polish compound adjectives: *modrooki*, *siwobrody* from relevant adj-N phrases:

*modre oczy* → ↓ *o modrych oczach*  
↓ *modrooki*

*siwa broda* → ↓ *z siwą brodą*  
↓ *siwobrody*

In Gruber's (1967) conception of translational lexicon processes traditionally referred to as morphological derivation and conversion are described in terms of transformational rules of affixal and non-affixal word-extension, which, as he demonstrates, belong to the lexicon (see Gruber (1967:115) for transformational derivation of some causative verbs in English). Gruber claims that word-extension, whether productive or non-productive, affixal or non-affixal, should be treated in the lexicon, not in the transformational component of the grammar. In his conception, relevant substitutions and structural changes should not be caused by means of rules operating after items had been attached to the derived tree, but should occur in the course of the process of lexical attachment. Lexical entries should have underlying categorical trees rather than unstructured feature matrices for lexical environment (1967:36, 37) and they should be able to indicate how the underlying base tree can be restructured while becoming a tree terminating in phonological matrices (1967:115).

Berman (1974:185) points out another property of lexical processes by observing that "it is a well-recognized fact in diachronic linguistics that lexical



items formed by even such productive rules as *-er* nominalization typically move away from the generalized meaning of their 'source' to a more idiomatic, narrower, meaning'. She quotes a Hungarian verb *ültet*, literally meaning: *cause-to-sit* from *ül*-(sit), actually used in the meaning of *to plant* (crops, trees ... etc.), as an example of a derived verb whose meaning is totally unrecoverable from the meaning suggested by the morphological structure. The equivalent Polish verb: *zasadzić* (*posadzić*) can also be quoted here as an instance of an output of a word-extension transformation applied to *siedzieć* which has adopted a narrower meaning of *plant* (e.g. *trees, bushes, lettuce*, etc.), if *posadzić* is analysed as derived from *siedzieć* in appropriate structures: *spowodować, żeby siedziało* or *spowodować, że siedzi* or *spowodować siedzenie* by relevant causative transformations. Various properties distinguishing processes discussed here as 'lexical' from the processes describable in term of classical transformations such as the Passive T, indicate that a theory of lexicon specifying types and number of lexical rules (transformations) is badly needed within the generative grammar. A tentative list of features characterizing lexical processes as different from classical syntactic transformations can be formulated as follows:

- (a) Syntactic rules (or syntactic transformations) describe syntactic processes in the transformational component of the grammar whereas lexical rules (or lexical transformations) describe processes in the lexicon (predominantly word-formation processes), and thus belong properly to the lexicon.
- (b) Syntactic transformations result in sentences whereas lexical transformations form lexical elements (words or phrases).
- (c) Outputs of lexical rules have to be checked against a list of existing lexical items. In other words, the 'grammaticality' of the output of a lexical rule depends, in part, on the presence of a word or phrase that matches that output in the lexicon.<sup>5</sup>
- (d) Lexical transformations frequently involve a change of the syntactic part-of-speech category of the items involved.
- (e) There is no morphological regularity in lexical processes whereas outputs of syntactic transformations that introduce new morphemes (e.g. Agreement T, Passive T and others of the group called 'cosmetic transformations' by Krzeszowski (1974) are practically exceptionless.
- (f) Outputs of word-formation rules have a tendency to grow (see the results of productive affixal or non-affixal word-extension transformations) and change (e.g. by narrowing the meaning) while outputs of syntactic transformations do not change meanings that easily.
- (g) While syntactic transformations operate in terms of recognized structural relations such as *Subject-of*, *Object-of*, etc. (e.g. the formulation of Raising-Transformation depends on the notion of grammatical subject) structural

<sup>5</sup> This point is made quite effectively in Berman (1974:187).

information of this type is largely irrelevant for lexical rules (e.g. nominal compounds as well as A-N phrases containing denominal adjectives can be analysed in terms of syntaco-semantic case relations or in terms of Gruber's and Jackendoff's thematic relations, not necessarily in terms of corresponding sentence structures).

Since derivations proposed here for NP's with exclusively attributive denominal and deadverbial adjectives can be characterized in terms of the properties typical of lexical rules, enumerated in points (b), (c), (d), (e), and (g) above, they will have to be classified as *lexical* rather than syntactic (i.e. transformational) and in view of the evidence presented the assumption that exclusively attributive adjectives are derived transformationally (i.e. by postlexical transformations) cannot be maintained.

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