

SOME GRAMMATICAL IMPLICATIONS OF THE CONTRASTIVE
ANALYSIS OF ENGLISH SENTENCE ADVERBS AND THEIR
EQUIVALENTS IN POLISH

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The aim of this paper is to show an example of a certain type of linguistic (as opposed to pedagogical) implications that may be derived from the systematic comparison of the structures of two languages which is called "contrastive analysis". First, it will be shown how the existence of some "grammatical words" in the surface structure of certain Polish sentences testifies on behalf of the particular hypothesis as to the deep syntactic structure of their translation equivalents in English. Secondly, we will see how the tentative proposal as to the deep structure of some expressions in English receives an additional justification from the Polish data, when the tentative character of the original hypothesis was due to the unproductive character of certain transformational processes.

It appears that if the linguists working within this area of study (contrastive analysis) were urged to focus their attention on the facts similar to those which will be described here, their investigations, being usually conducted with the practical aim in view, might produce some interesting "by-products" that would justify their laborious and often tedious work no matter what is the real value of their transfer predictions and error explanations denied recently by many linguists and language teaching specialists.

Contrastive analysis grew as the result of the practical demands of language teaching methodology, where it was empirically shown that the errors which are made recurrently by foreign language students can be often traced back to the differences in structure between the target language and the native language of the learner. It has been claimed that the interference can be explained, predicted and possibly eliminated by the subsequent application of some proper pedagogical techniques once we had realized what these differences are. This naturally implied the necessity of the detailed comparison of the structures of a native and a target language, which has been named "contrastive analysis".

The type of comparison that was usually applied here can be called practical. Typically, after the theoretical linguistic model had been chosen, the grammars of the two languages, written within this theoretical framework, were subjected to comparison so that the points of contrast were established leading to the subsequent formulation of the set of tacit transfer predictions. The theoretical linguistic model adopted was usually informal, often openly inexplicit and simplified, in order to make the description available to the foreign language teacher and the advanced language student. Moreover, the model was often eclectic combining in a peculiar way elements of the transformational theory, tagmemics, traditional grammar, and whatever approach had found suitable for the author's purposes, which were straightforwardly practical. Perhaps the most characteristic feature of this way of doing contrastive analysis is that the descriptions of the languages under consideration were considered as "given", which means that the contrastivist was simply making use of the available grammars, each of them having been arrived at independently, on the basis of the data taken from only one language at a time ⁽¹⁾.

Contrastive analysis so conceived may be called a difference oriented practical comparison, where the main objective is to find the differences in structure between two languages that may underlie possible transfer errors.

One can imagine another type of grammatical comparison, which we shall call theoretical. Broadly speaking, there are two ways in which it can be conducted.

As in practically oriented contrastive analysis, two or more possibly adequate grammars, constructed independently from each other, may be subjected to comparison. The aim of this operation, however, is purely linguistic. It may be (on the synchronic level), either the search for universals, the interesting example of which would be an attempt to verify the universal base hypothesis, or the attempt to develop language typology. In the first case we would have to do with the similarity oriented comparison, in the second with the difference oriented one.

Such a comparison to be of any value, has to presuppose the existence of the grammars that are at least descriptively adequate on

¹ Naturally, when the less known languages were investigated the contrastivist himself had to perform the work of the descriptive grammarian and to fill up the "blank spaces" in the descriptions he had at his disposal. It might also be that he will have to "translate" the existing descriptions into the language of the general theory he had chosen. Nonetheless, he would treat the comparison as something one gets to once the grammatical analysis proper had been finished.

a fairly large scale. Unfortunately, this is not the case even for the much studied languages such as English and Polish. Therefore, it seems that the second type of theoretical comparison, that can actually be used to facilitate the construction of such grammars is much more interesting, at least presently.

Suppose that we have a sentence A in language L, for which, on the basis of some heuristic principle such as the one given by Katz and Postal, 1964 some deep structure X has been postulated. Unhappily, the evidence that we can find in L₁, and which may constitute the syntactic justification of X, is really scanty. Suppose also that there is another language L₂ in which there is a sentence A' that is equivalent to A in L₁, in the sense it is semantically identical to it, not by the virtue of the synonymous expressions but due to the identity of semantemes (meanings of lexical morphemes) out of which the sentences are constructed and, which is important, due to the identity of the semantically relevant fundamental syntactic relations.

In such a case the relation holding between A and A' resembles that of a simple paraphrase. We have then the right to suppose that the deep structures underlying A and A' are practically identical. Such a statement needs, quite naturally, further qualifications. The deep-structure-identity-of-equivalent-expressions claim would receive the principled theoretical basis had we adopted the generative semantics hypothesis ⁽²⁾. It seems, however, that it would be almost equally reasonable within the standard theory. Especially, it appears to fit the early Postal-Lakoff conception ⁽³⁾ of the deep syntactic structure where the so called "grammatical words" are treated as the transformationally created particles rather than the deep constituents. Thus it becomes possible to distinguish quite clearly this part of the deep structure which is relevant for the semantic interpretation, namely, the phrase marker tree configurations determining syntactic relations and the semantic specification of the inserted lexical items, from this part of the deep structure which is not, for example the order of elements and the semantically empty markers specifying the obligatory character of certain segment transformations etc. Of course, when we postulate the identity of structures underlying A and A' we mean the identity of their semantically important aspects.

Imagine now that there are some surface syntactic facts in L₁ which could not have been accounted for if we had not postulated X as the

² On the formal nature of the "identity" of semantic representation of synonymous expressions see McCawley 1968, 1970 Chomsky 1968.

³ See Lakoff 1965, Postal 1966.

structure underlying A". We are entitled now to regard the existence of such facts in L_2 as an additional argument for our earlier hypothesis that X underlies A in L_1 .

An example of this way of reasoning may be found, for instance, in Ross's paper "On Declarative Sentences" where the evidence from Arabic and Thai is called for in support of the hypothesis that all declarative sentences in English are embedded in the superordinate performative clause. It has been observed that in Arabic the word *?inna*, which is otherwise used as the complementizer following the verb of saying *?aquulu*, may appear optionally at the beginning of all declarative sentences. As Ross puts it "even if no other evidence were available in Arabic one would be tempted to propose the analysis along the general lines of performative analysis to account for them (those facts)" (4) When this sufficient argument is extrapolated into English the performative analysis finds strong additional motivation.

Similarly, when the hypothesis was advanced that verbs and adjectives belong to the same deep category in English, the copula being introduced by the transformation whenever adjectives appear predicatively, the well known facts from languages like Russian and Hebrew where copula is not present in this position at all, were called for in support of this claim.

When we accept the universal base hypothesis, the consideration of such issues would naturally have the character of a general theoretical inquiry.

Now I would like to show how the evidence found in the examination of Polish equivalents of English sentence adverbs supports some specific claims as to the structural description of English sentences containing this category. Those few examples to be discussed here shall provide a sample of a contrastive analysis which is based on what we have called "theoretical comparison".

Sentence adverbs are words like: *obviously, fortunately, wisely, frankly* in sentences

- 1) Obviously, he wants it.
- 2) Fortunately for us, she broke her leg.
- 3) Wisely, she left him.
- 4) Frankly, she did not deserve it.

All of them stand in some syntactic relation to the rest of the surface sentence. Semantically, they express an evaluation of what is being said. The evaluation may be of several kinds. It may be concerned with

- 1) the content of the communication
- 2) the manner in which this content

⁴ Ross, J. 1970, p. 245.

has been communicated. In the first case we have to do with attitudinal adverbs like *fortunately, wisely, probably*, in the second one we are dealing with the stylistic adverbs like *frankly, seriously, confidentially* etc. This distinction and the terminology is taken from Greenbaum 1968.

Attitudinal adverbs may be further subdivided into two groups. a) Modals like *certainly, possibly, apparently, obviously* etc. which "assign a degree of likelihood (a probably truth value) to the associated predication" (5). b) Evaluative adverbs which "presuppose the positive truth value of the surface predication with which they are in construction and offer an evaluation (judgement value) of what is being said" (6) Examples are *interestingly, luckily, foolishly*.

The distinction between modal and evaluative adverbs corresponds to parallel one made in Kiparsky and Kiparsky 1970 between non-factive and factive predicates.

The judgement expressed by [evaluative adverbs] may be concerned with the "consequence" of the fact described by the predication to some person who may be the speaker himself, agent of the action performed or some other specified or unspecified human being. The "consequence" may be connected with the fact that a) what is being said is fortunate or unfortunate to somebody: *tragically, fortunately, happily, sadly* b) that it causes some satisfaction or discomfort to some person: *annoyingly, comfortably, disturbingly*. c) that the content of the communication is in some measure strange or unexpected to somebody, *puzzlingly, incredibly, curiously, surprisingly* etc.

The judgement may be also concerned with the moral or the pragmatic evaluation of the event or the person involved in it: *cleverly, correctly, rightly, reasonably, artfully, wisely* etc.

Adverbs expressing the two kinds of judgement distinguished here will be called adverbs A and B respectively (7).

Notice that sentence adverbs in sentences 1-4 belong to different semantic classes. It will be claimed that those differences have their reflection in the deep syntactic analysis of those sentences. In other words, it will be asserted that the surface structure of the type "Adj+ly+S" is multiply ambiguous being the neutralization of at least four different deep structures.

I shall propose that the sentences 1-4 are transformationally related to the structures underlying the sentences 4-8, which are shown on the diagrams (1), (2), (3) and (4) respectively (8).

⁵ Schreiber 1971 p. 88.

⁶ Op. cit. p. 88.

⁷ The latter are sometimes called epithet adverbs.

⁸ Strictly speaking, these are not the very deep structures, which are most

- 4) That he wants it is obvious to me.
 5) She broke her leg and it was fortunate for us that she did it.
 6) She left him and it was wise of her that she did it.
 7) If I may say frankly, I would say that she did not deserve it.

probably much more abstract formal objects, but some sort of intermediate ones simplified for the sake of clarity of presentation. After all, for the purpose of contrastive analysis we need not go deeper than it is necessary to assure a common basis for comparison.

As to (2) and (3) I have followed Schreiber 1971. The rationale behind his analysis, although he does not make it explicit, is to make the focus phrase of a sentence the topmost predicate in the underlying structure. Thus the special character of sentence adverbs as parenthetical constructions with an independent intonation center and thus also what follows after it an independent focus, (For the discussion of the relation between focus and intonation see Chomsky 1968) has been accounted for.

It seems, however, that such an approach involves considerable difficulties. It is impossible to derive adverbs of modality from the structure underlying conjunctions like "He broke his leg and it was probable that he did it". To treat them differently from the evaluative adverbs would be inadequate since they seem to display the identical focus-presupposition structure as other sentence adverbs. In (1) we are dealing with the two independent foci "obviously" and "broke his leg" (or some subpart of the VP) whereas in (5) (with the normal intonation) the focus is "obvious" and the VP of the embedded sentence is a part of the presupposition which is something like "That S is true to some degree" in some way.

It should be clear that it is not the case, as Schreiber suggests, that the analysis of the evaluative adverbs constructions as conjunctions explains their factive character as opposed to the non-factive character of modal adverbs. It seems that such an explanation, apart from other reservations, would be needlessly redundant since the factive or non-factive character of adverbs follows from the factive or non-factive character of their adjectival roots and it has to be accounted for on the level "That S is Adj" structures, most probably along the lines of Kiparsky and Kiparsky 1970.

The possible way out of this DILEMMA would be either not to bother with the focus-presupposition at the level of deep structure at all, leaving it to the surface interpretation rules (as it is done in Chomsky 1968), or to account for them in some other way, perhaps along the lines of Lakoff 1969 where deep structure is presented as an n-tuple (DS, F, PR, T...) F=focus, PR=the set of presuppositions. (Apparently, he has in mind another type of presuppositions. For the discussion of his views see Chomsky 1972).

In both cases (2) and (3) are wrong. Still another possibility would be to derive modal adverbs from some other source, perhaps from the obligatory modal frame elements. They may be presented either as a set of modality markers or some "performative" superordinate modal clause "I suppose", "I am certain", "I think it obvious" with the subsequent establishment of some general principles concerning modal frame and pertaining to the focus-presupposition relations. In this case (1) is obviously wrong.

Further discussion of such cases, however interesting, would lead us beyond the scope of the present paper.

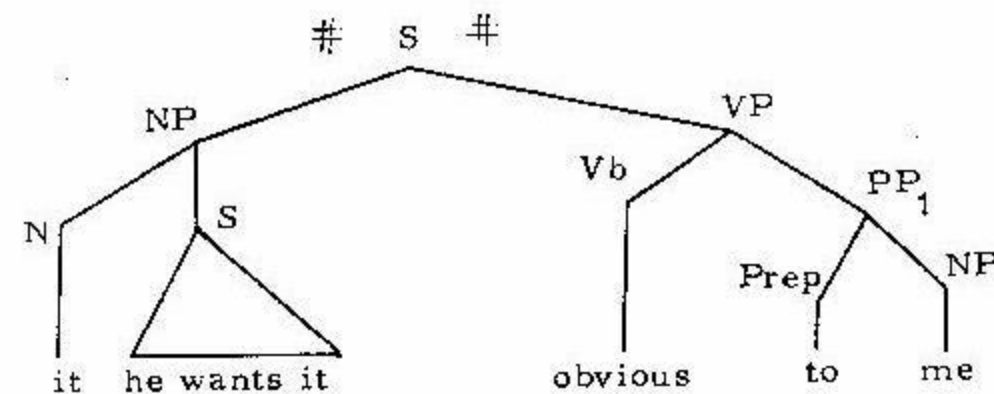
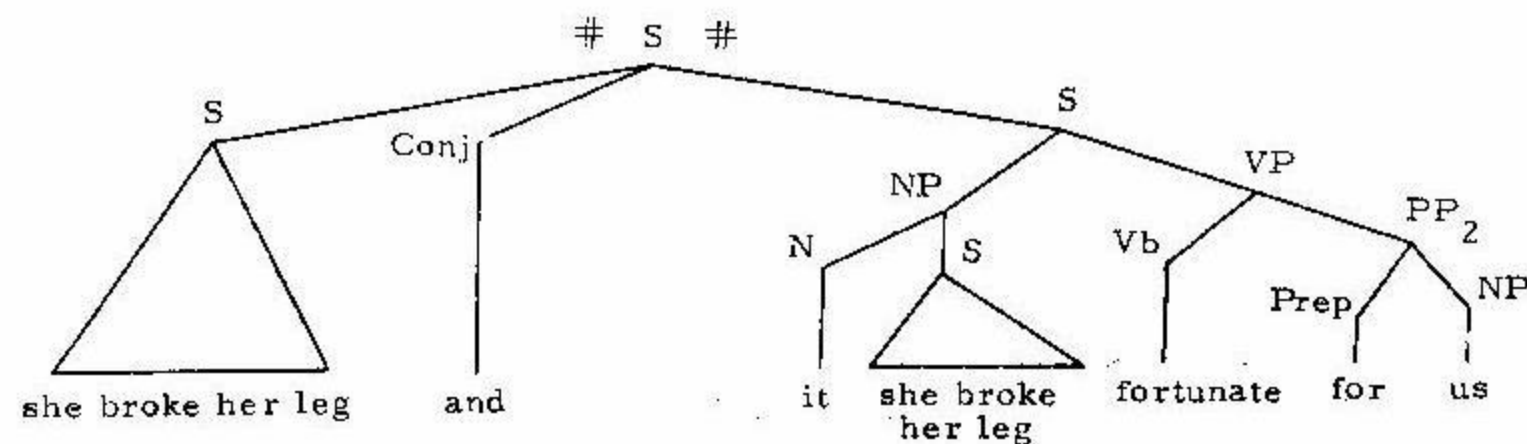
Diagram (1)⁹

Diagram (2)

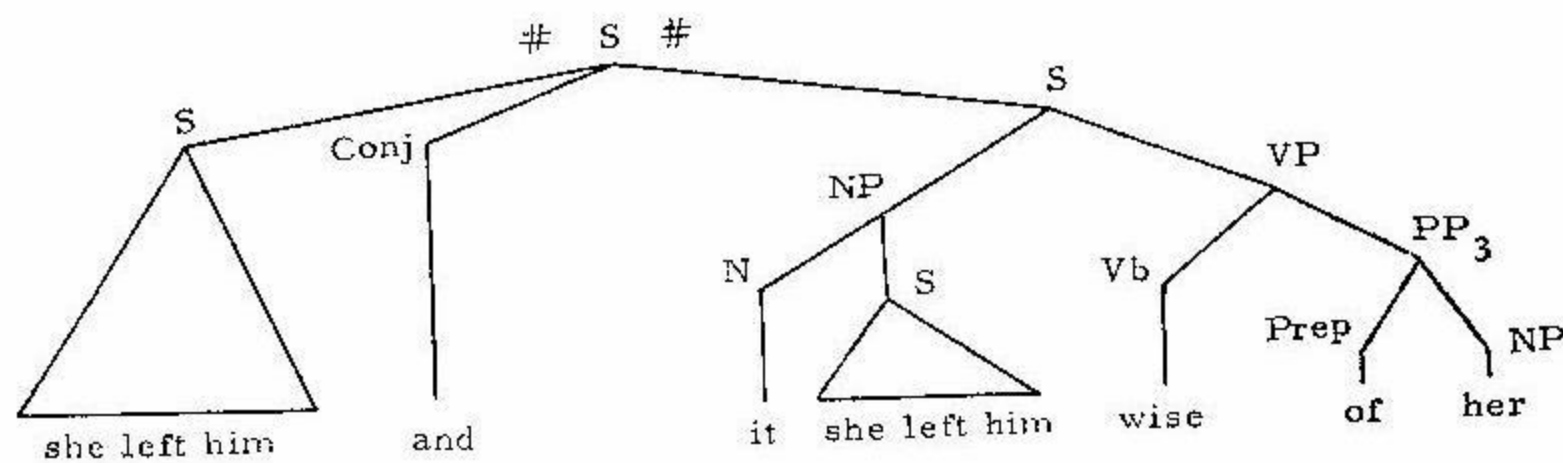


Diagram (3)

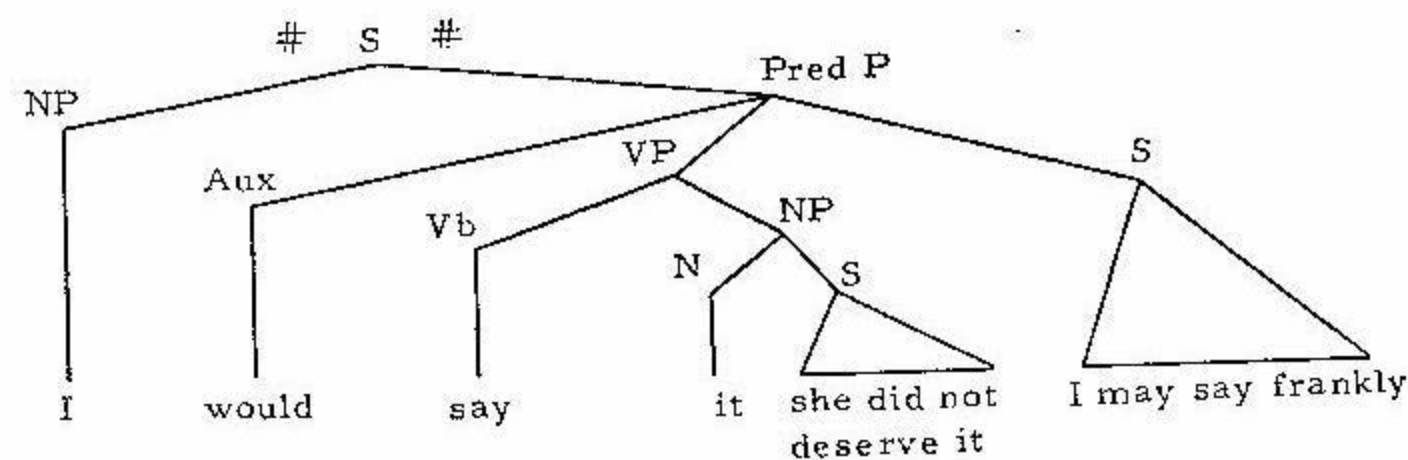


Diagram (4)

Let us concentrate now on the three specific claims which are implicitly present in this analysis.

Modal and evaluative adverbs are derivationally related to adjectives predicating sentences embedded in the subject noun phrase of the complex sentence.

An apparent alternative would be to introduce sentence adverbs as separate deep structure categories forming a pre-sentence unit as it has been actually suggested in Chomsky (1965, 102) We may thus think about the phrase structure rules like 8) or 9)

8) $\Sigma \rightarrow Adv \circ S$

9) $S \rightarrow Adv \circ NP \circ Aux \circ VP$ (Chomsky 1965, 72)

In fact, such a proposal would seem favourable on some other grounds, namely, it would seem more compatible with the lexicalist hypothesis which has recently been generalized from derived nominals to some classes of adverbs (Bowers 1968).

How are we to decide which analysis is correct? What kind of arguments can we present in the defence of the transformational hypothesis as applied to sentence adverbs? In other words, what kind of facts except the cognitive synonymy of 1 - 4) and 5 - 8), otherwise unexplained, can be accounted for within the adopted approach. It appears that there are not many of them. The following evidence is mentioned in Schreiber (1971).

It is alleged that the analysis simplifies the grammar since the constraints of the formation of sentence adverbs follow from the constraints on the class of adjectives that may appear in (1). The ungrammaticality of 10) and 11) may be explained on the common basis. This purports to account for our intuitions concerning these facts.

10) Easily, she thought about it.

11) That she thought about it was easy.

Unfortunately, the validity of the argumentation as to the identity of deep structures based on the identity of the selectional restrictions has been recently subjected to serious criticism. It is not clear whether se-

* Prepositional phrases in (1 - 3) are provided with subscripts to indicate their different functional status. They should be marked as such (in whatever way it is permitted by the theory) since they represent different co-occurrence potentials

To break her leg was wise to her

fortunate for her

obvious for me.

and are in a clearly different semantic relation to the adjective they modify. In a case grammar they would probably be assigned distinct roles. It is also probable

lectional restrictions are syntactic or purely semantic phenomenon⁽¹⁰⁾. It should be also remembered also that the relevant generalizations can be equally well captured within the lexicalist approach where the selectional restrictions are presented as the relations holding between the categorically unspecified roots in the head — modifier constructions⁽¹¹⁾.

Another fact that the adopted analysis purports to explain is that, as noted for the first time by Katz and Postal, attitudinal sentence adverbs do not appear in imperatives. Their non-occurrence follow directly from the total impossibility of the proper underlying structure since in imperatives the deep subject is the second person pronoun, whereas in the proposed derivation it is an embedded sentence.

Surely, the lexicalists would have their own way to explain this restriction. They may, for example, postulate the rule which would rewrite (Spec, S) into the mutually exclusive categories Adv and IMP.

The most persuasive argument, as it seems to me, for the transformational derivation of sentence adverbs comes from the evidence that can be found examining the similar syntactic phenomenon in Polish. We have the right to assume that there is in Polish the deep structure identical (identical with proper reservations, of course such as those discussed earlier) to (1), (2), (3) which underlies sentences like (12), (13), (14).

12) To, że on to chce jest oczywiste dla mnie.

13) Ona złamała nogę i to, że ona to zrobiła jest dobre dla niej.

14) Ona go opuściła i to, że ona go opuściła było mądre z jej strony.

We have also in Polish sentences like (15 - 17)

15) Oczywiście, (że) on to chce.

16) Dobrze, że ona złamała nogę.

17) Mądrze, że ona go opuściła.

(15 - 17) show that the adverbialization T-rule, if it exists, operates in Polish as well. Those sentences differ from their English counterparts in that the word "że" appears between adverbs and the rest of the sentence. This Polish "że" is a clause complementizer. Thus there seems to be no

that the functional difference could be presented not in terms of labels but in terms of tree configurations. This would be concerned with the possibility of some deep transformational relationship between (1 - 3) and some other types of structure. Such a possibility will be discussed briefly in the latter part of this paper.

¹⁰ See especially McCawley 1968.

¹¹ See Chomsky 1967. From this point of view the rule 8 (is preferable to 9) since it explicitly states the fact that sentence adverbs modify the whole sentence. In Chomsky's terms the rule should probably be reformulated as $S \rightarrow (\text{Spec } S) S$ when (Spec S) = Adv_g.

other way to account for its appearance in (15 - 17) than to admit that the sequence of words which follows after it is a constituent dominated by NP node-a nominal ⁽¹²⁾.

The only way for the lexicalists to account for (15 - 17) would be to formulate the highly improbable, artificial and surely ad hoc base rule

$$S \rightarrow \text{Adv} \circ \text{NP}$$

On the other hand the transformational approach offers a simple explanation here (15 - 17) like their English counterparts are derived from something like (1), (2), (3) respectively, the only difference being that in Polish complementizer deletion is optional after adverbialization (with some lexical items it is in fact either obligatory or does not apply at all) whereas in English it is always obligator.

In view of what we said earlier about the deep structure identity principle we have the right to say that the appearance of (15 - 17) testifies on the behalf of our earlier analysis of English sentences (1 - 3).

Another claim presupposed by (1), (2), (3), is that prepositional phrases in (5 - 7) have different syntactic functions depending on the kind of stem adjectives of sentence adverbs. One may say also, quite tentatively, that the function of PP following the stem adjective of the modal adverbs resembles that of subject of certain sentences and the function of PP following the stem adjective of the subgroup A of evaluative adverbs resembles that of a direct object of certain constructions. What syntactic evidence may be found in English to support this claim? That the three PPs are different in some way is clearly seen when we examine the prepositions which are either "to", "for" or "of" for each kind of adjective respectively. Let us examine the sentences containing adjectives which form the stems of those evaluative adverbs which have verbal roots. They seem to be transformationally related to the active sentences like (19).

18) That she broke her leg is puzzling for me.

amusing
interesting
comforting

19) That she broke her leg puzzles me.

amuses
interests
comforts

Similarly we may relate sentences with modal deverbal adjectives to sentences like (21)

20) That he wants it is obvious to me.

21) I think that it is obvious that he wants it.

Notice that what is a prepositional phrase object in 18) is the direct object of 19) but the prepositional phrase object of 20) is the subject of 21). The prepositional phrase "to me" in 20) is roughly equivalent to "in my opinion". The following expressions are tautological.

22) ?In my opinion it is obvious to me that he wants it.

23) ?I think that it is obvious to me that he wants it.

One has to admit that the evidence is not altogether compelling. What is, for example, the situation with adjectival adverbs like *strangely*, *funnily*, *curiously*, etc which cannot be paraphrased in the same way as *disturbingly* or *annoyingly*?

The at least partial answer to this question can be found in the examination of the Polish data. Consider the following triple

24) To, że on ją bije jest śmieszne dla mnie.

smutne
dziwne
ciekawe

25) To, że on ją bije śmieszy mnie.

smuci
dziwi
ciekawi

26) Jestem rozśmieszony tym, że on ją bije.

zasmucony
zdziwiony
zaciekawiony

Only the first element of this triple is directly translatable into English. We do not have causative verbs like

to funny
to sadden
to strangen
to curious ⁽¹³⁾

In Polish, on the other hand, almost every adjective may be verbalized by the addition of the proper prefix or suffix. If the adjective is of the kind which is used to form A-type evaluative adverbs, it becomes a tran-

¹³ There are undoubtedly near synonymous verbs like "to start", "to surprise", "to interest", etc. These, however, are separate lexical items and cannot possibly be transformationally related to the adjectives "curious", "strange". Non-lexical transformations may add some derivational morphemes but do not replace one lexical item by another since in such a case they would lose their general character.

¹² For the empirical statement that "that" complementizers are always connected with the sentences embedded in NP see Rosenbaum 1965.

sitive verb that may appear in sentences like (25). Its direct object is a NP that appears normally as an object of a prepositional phrase complement of an unverballed adjective. This seems to support our claim that the function of this PP complement does have something to do with the function of the direct object no matter whether the adjective in question is deverbal or not.

Suppose that we actually wanted to derive constructions like (5), (24) from the structures with transitive verbs and sentential complements as subjects. We would almost certainly have to make use of abstract words, the device which is found to be unsatisfactory by many grammarians¹⁴ but can be to certain extent justified if the words in question really exist in some other language, in this case Polish. Notice, that it would not help to apply the inchoative-causative analysis along the lines of Lakoff-McCawley (1965, 1969). We may relate (27) to (28) but (29) is obviously different from (30) because of the lack of the adjectival expressions in English corresponding to Polish *rozśmieszony, zdziwiony, zaciekawiony*, and related morphologically to *funny, strange, curious*.

27) That S is sad for me.

28) That S CAUSES that I BECOME sad.

29) That S is funny for me

strange

curious

30) That S CAUSES that I BECOME funny

strange

curious

The last problem that I would like to mention here is connected with our hypothesis as to the deep structure of sentences with stylistic adverbs. According to our analysis, stylistic adverbs are manner adjunct to the verb of saying in the subordinate part of the complex performative clause. We shall claim now that (4) underlies also the constructions like (31), (32).

31) Frankly speaking, she did not deserve it.

32) In all confidence, she did not deserve it.

All of them seem to be synonymous to (8) which I will repeat here for convenience.

33) If I may speak frankly, I would say that she did not deserve it.
confidentially

Consider, however the sentence (34)

¹⁴ See, for example, Chomsky 1967.

34) I am speaking frankly when I am saying that she did not deserve it.

It seems to me that we are dealing here with the case in which our intuitions are rather unclear. Is 31) synonymous to 33) or 34)? Is it ambiguous? What exactly is the difference in meaning between 33) 34)? The explicit answer to all those questions would be crucial if we were to determine the deep structure of 31) and 49) merely on the basis of semantic criteria. In fact, I can find no hint whatsoever in the surface syntactic structure of English sentences which would suggest the choice of the adequate analysis from the two alternatives available.

Again, the analysis of Polish data supports us with the hint which is at the same time a strong syntactic argument justifying the choice we have already made. Consider the particle "to" which appears optionally between the participial adverbial phrase and the rest of the sentence in 35 - 37)

35) Szczerze mówiąc, (to) ona na to nie zasłużyła.

36) W zaufaniu, (to) ona na to nie zasłużyła.

37) Poważnie, (to) ona na to nie zasłużyła.

In Polish "to" is used to signal the beginning of the superordinate part of the sentence with the preposed conditional or adverbial clause,

38) Jeśli mam mówić szczerze, to powiem, że ona na to nie zasłużyła.

We were right then when we proposed initially that it is (4) and not something like the structure underlying 34) that is the deep structure of 4), 31). There is no other way to account for the appearance of "to" in Polish sentences which are equivalent and almost congruent to 4) 31) than by postulating that in their deep structure, which means in the deep structure of their English equivalents too, there is some conditional clause¹⁵.

What conclusions can be drawn from the three examples discussed here which may be relevant to the practical methodology of contrastive studies? It has been pointed out that the results of the comparison of two language systems may have a direct relevance to the synchronic descriptive analysis of those languages. One may think thus about two types of contrastive analysis.

¹⁵ In fact, there are quite a number of unsolved (at least as it seems to me) problems connected with the analysis of "to" in Polish. What is the source of "to" in the expressions like "Janek to osioł" where it seems to function as a copula? It may also appear between modal adverbs and the rest of the sentence as in "Prawdopodobnie, to Janek już tu nie wróci".

1) Theoretical, concerned with what we have called "theoretical comparison", which can be defined as the analysis "undertaken in order to shed light on a particular theoretical (grammatical) issue by gathering relevant data within the contrastive framework" ⁽¹⁶⁾ Such an analysis would have to be based on the fully explicit theory of language such as the TG theory. Any shortcuts and simplifications would be principally excluded here.

2) Practical, accepting without reservation language descriptions offered by the grammarians, that would limit itself to what we have described as "practical comparison".

The first type of contrastive analysis would be within the realm of the linguistic inquiry proper whereas the second one would be in the domain of psycholinguistics and language teaching methodology ⁽¹⁷⁾.

There are good reasons, however, not to make such a scrupulous distinction and try to combine in some way those two seemingly different approaches. Such a solution would eliminate the redundancy which follows from the fact that the grammatical systems are compared twice on the two independent levels of analysis. Secondly, grammatical research would certainly profit since the linguistically relevant comparison would be conducted systematically on a large scale receiving an additional impetus from the possible practical application of its results which motivates the generous supporters of the various "contrastive projects".

It could be therefore proposed that the work on the contrastive project should consist of two stages.

A) The "theoretical comparison" of the structures of two languages undertaken with the possibility of changes in the already available descriptions in view. The ultimate output of the analysis on this stage would be perhaps some sort of the formalized transfer grammar, along the lines of Harris 1954.

B) The psycholinguistic and pedagogical analysis of the results of the first stage work. Here the output would be the set of transfer predictions with the accompanying recommendations as to the possible ways of curing the negative effects of the interference. The points of the greatest difficulty in learning of one of the compared languages by the speakers of another can be predicted what in turn may lead to the suggestions as to the way of presentation of teaching materials.

The final results of the work within the project can be naturally

¹⁶ Selinker 1971, 1. In his paper he makes some interesting observations on the relation of contrastive linguistics to linguistic theory i.e. on the "theoretical" contrastive analysis.

¹⁷ A similar distinction is implied in Zabrocki, L. 1971 when he writes about the "pure" and "applied" CA.

presented in the form suitable for the teacher and the student with the minimum appeal to technical jargon etc. ⁽¹⁸⁾

Among the contrastive projects in progress with the published or semi-published materials of which I had the opportunity to get acquainted with the closest to the one outlined here seems to be the PROJECT OF APPLIED CONTRASTIVE LINGUISTICS being done in Kiel.

According to its chief researcher Gerhard Nickel, its central objective is a threefold one.

"(1) to uncover and formalize some of the underlying properties of natural languages, especially English and German;

(2) to contribute towards contrastive analysis of English and German on all structural levels;

(3) to provide new teaching materials for textbooks and tapes" ⁽¹⁹⁾.

Clearly, both the linguistic theory and language teaching methodology are aimed to profit from the result of such a work.

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¹⁸ The idea stressed by some contrastivists that the understandability for the teacher should be one of the fundamental principles guiding the investigator (even to the extent that it determines the choice of the linguistic theory) seems to be somewhat mistaken. One does not impose the constraint on the medical scientist or biochemist that they should write down the results of their research in the language understandable to the prospective patient or family doctor.

¹⁹ PAKS Arbeitsbericht 1968 — Preface.

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