

## DEEPER AND DEEPER CONTRASTIVE ANALYSIS

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There is now no doubt that the major trend of post-*Aspects* syntactic investigation is an ever-deepening search for a semantic base for grammars (or Grammar). Although this search has done some damage to the notion of paraphrase as most linguists have generally understood that concept (e.g. recently, Chafe 1970 : 87; Polański 1972 : 4), it has, on the other hand, provided a more realizable basis for universal considerations. That is, it is more reasonable to assume that a large number of languages (perhaps all) might share rules such as

+ — [O (I) (A)]

Figure 1

in which abstract semantic units (here NP's) are represented non-linearly, than to suggest that individual realizations of such rules as those represented by the following diagram have any universal applicability:

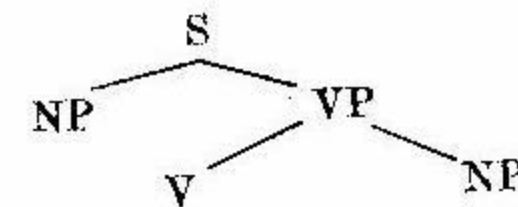


Figure 2

Although I have chosen here to pair Fillmore (1968) and Chomsky, (1965) a rather large number of post-*Aspects* models of syntax might have been chosen

to represent the turn towards semantic considerations, e.g. Gruber (1967), McCawley, (1968, 1970), Langendoen, (1969, 1970), Chafe (1970), Lakoff, (1970), and Ross (1970). Although semantic-based grammars are by no means uniform, all suggest that deeper (and therefore closer to universal) categories of syntactic "classification" may be uncovered by considering primarily semantic notions. Thus, for example, Fillmore asks us to disregard domination (in the classical *Aspects* or standard transformational theory sense) in determining the function of various NP elements in a string. He notes the lack of functional similarity among the following so-called subjects:

- 1) *John* broke the window (with a hammer).
- 2) *The hammer* broke the window.
- 3) *The window* broke.

Why, Fillmore asks, should we call these three NP's similar, except in the most superficial (positional) sense? Of course, the standard theory would not have overburdened the analysis with extra notation indicating the surface and deep subject status of the items under discussion, but it would have us understand that an NP immediately dominated by an S in deep structure automatically acquires the identification "subject of".

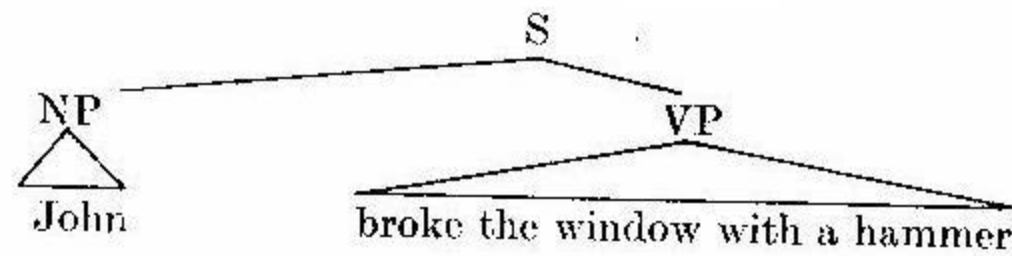


Figure 3

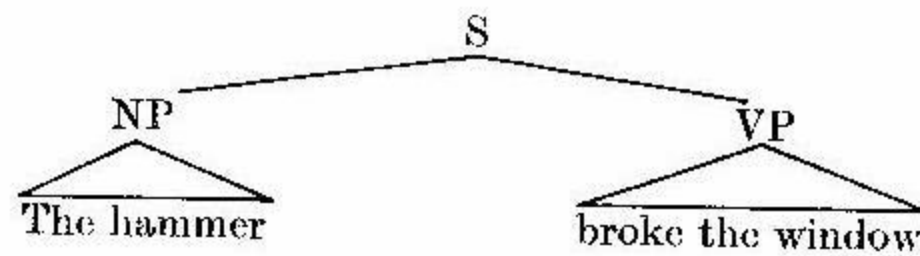


Figure 4

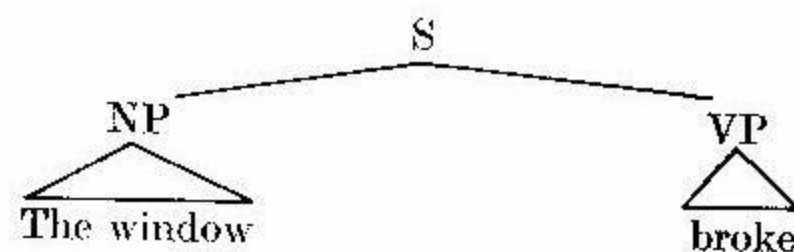


Figure 5

Although Chomsky does not thoroughly develop these functional assignment notions in *Aspects*, it is obvious that he would regard *John*, *the hammer*, and *the window*, respectively, as "subjects of" the above strings. His contention concerning the semantic surroundings of the verb (in this case, *break*) would be that strict subcategorizational and selectional rules would, eventually, provide the same information (along with lexical readings) as, for example, Fillmore's "case frames." Here, for example, Chomsky would note that *break* may take either + or - animate subjects but that it requires a +concrete object. In addition, the subcategorization rules would reveal that it is an object-deleting verb, allowing sentence 3 above.

Syntacticians who rely more on semantic considerations do not question the correctness of Chomsky's observations about the behavior of such an item as *break*; however, they suggest that concern for semantic roles will lead more directly (and explicitly) to the same results, do away with the necessity for a separate, interpretive semantic component, and, most importantly, yield universally valid generalizations.

Doubtless I have overgeneralized in this hasty characterization of *Aspects* and post-*Aspects* grammars. Certainly I have done an injustice to the distinction one might draw between the case (or "role") systems of Fillmore and Langendoen and the neo-transformational, formal logic systems of Ross, Lakoff and McCawley. In addition, I have excluded specific discussion of Chafe's suggestion that verbs, not nouns, bear the selectional load in sentences and of Gruber's notions concerning lexical transformations. I have not done so to mislead anyone about the differences which do exist among these several proposals, but to emphasize the essentially similar *semantic* properties at the bottom of most post-*Aspects* syntactic research and speculation.

In an earlier paper I have suggested that contrastive analysis is primarily a practical tool, one which feeds students, teachers, authors, and curriculum planners with explanatory detail (Preston 1972). Though I am as yet unshaken in that belief, I am concerned now with the selection of models for contrastive analysis in the semantic area. In the above-mentioned paper I suggest that an eclectic approach which considers the linguistic sophistication of the teacher, the level of proficiency of the learner, and the nature of the data to be presented is the best solution for contrastive statements concerning morpho-syntactic data (and, probably, phonological, though I have not treated that question). Such eclecticism, however, leaves open for selection models which bring with them little or no semantic sophistication. In particular, any choice of taxonomic models, often powerful pedagogical devices (cf. Cygan 1967), suggests that semantic material must be derived from some other source.

In the short time that has elapsed between that paper on the choice of linguistic models for contrastive analysis and now, I have grown to suspect

that a transformational model (simplified) is a very powerful contrastive device (for Polish-English) for relative clauses and VP expansion; that a structural (taxonomic) presentation is probably most suitable for negation, interrogation, and pre-nominal modification; that traditional statements still serve best for larger verb and sentence modification structures (i.e. complex adverbial elements); and that case frames provide excellent, early specifications of basic string configurations and their constituents and meanings, though such a need for Polish-English is not at all clear. The difficulty with this hodge-podge of syntactic specifications is, of course, that accompanying semantic statements are not available with every grammatical choice. Even where they are, there is no assurance that they are suitable vehicles for contrastive semantic statements. Certainly we would not select a Katz-Postal interpretive semantic representation, with its inherent complexity, to accompany a simplified transformational comparison of relative clause embedding in Polish and English, though the choice of that particular syntactic device seems best.

To answer this question (or, at least, to approach it), I should like to leave formal linguistic considerations behind for the moment and concentrate on the foreign language learner as a meaning-perceiving organism. In short, what I want to consider is the semantic need of the learner, rather than the number of possible semantic systems which might be chosen for contrastive semantic analysis. (In fact, I would like to believe that this is essentially what I have proposed earlier for morpho-syntax, though I must admit that that earlier paper seems more concerned with models than with pedagogy) (Preston 1972).

What is the semantic information a learner seeks as he approaches a new language? My guess is that it is peculiarly nonlinguistic, for, regardless of linguistic theory, semantics always reflects that process which somehow hinges on the interpretation of linguistic forms and their relations, and there is no reason to challenge the productivity of such approaches, whether formidably theoretical (e.g. Gruber's lexical transformations) or patently simple (e.g. the traditional lexicographer's numbered entries of the senses of words). Nevertheless, the learner doubtless grasps the forms and relations of words in a new language as reality vehicles rather than as multiply ambiguous linguistic units whose ambiguities and collocational properties must be sorted out by some appropriate linguistic process. By "reality vehicle" I refer to the straightforward relationship the learner seeks between a phenomenological entity of the real world and a linguistic form. At one level such relationships are deceptively clear—they constitute the simple "point-and-say" method of on-the-street noun instruction. (In fact, I should like to suggest here a study of lexical facility of "immersed" versus "classroom" learners. My feeling

is that immersed learners achieve a disproportionate proficiency in nouns just as a result of this "point-and-say" learning. From English to Polish, where the complex verbal system is perhaps the biggest hurdle, the results are far from optimal). Beyond "point-and-say", linguistic forms and phenomenological entities do not correspond so nicely, of course, though I still believe that it is primarily the relationship the learner seeks. (I exclude, of course, the perverse situation of the linguist as language learner; there, naturally, concern for distributions and formal relationships might be excessive).

At this point, excluding further mention of the linguist or others who might approach the foreign language learning task with peculiar sets, we may put forth the following hypothesis regarding semantic expectations in foreign language learning: the learner seeks to discover how reality is segmented, parcelled out, in the new language; he is not primarily concerned with the internal distribution of linguistic forms in the new language. For example, whether coming to English or Polish, the learner is more concerned with such sets as *widzieć*, *patrzeć*, *see*, *look* (verbs of vision) and *rozumieć*, *widzieć*, *see*, *understand* (verbs of understanding) than with the fact that *widzieć* and *see* may be doubly classified as both verbs of vision and verbs of understanding. Of course, I am aware that this level of seeking for reality in the new language often finds expression in the old language in such phrases as "How do you say X or Y in such-and-such a language?" However, I do not suspect that such questions ask for one-to-one correspondence: responses to the lexical items of the native language as much as they simply use the native language as the only available vehicle for adjusting the structure of reality to the new language.

Such reality arrangements, rather than semantic distributions, seem, essentially, what Sharwood Smith attempts in his pedagogical grammar of future reference in English (Sharwood Smith 1972) and what Scovel (1972) attempts, on a much more limited scale, for verbs of perception in English, Spanish, French, Thai, and Chinese. Such studies seem to suggest that it is pedagogically more productive to frame contrastive statements such as, e.g., "one talks about the future in English (or sensation in Thai, etc...) by using the following forms," rather than such statements as, e.g., "the form *be + ing* is used for the following purposes in English".

Two considerations promote such descriptions of target languages, and one strongly militates against them. First, this order of presentation matches the hypothetical order of concern in the learner proposed above—that the learner seeks a path from reality to linguistic form, not vice versa. Second, although this notion is not fully expanded here, such an order of presentation seems to lend itself better to usage and appropriateness considerations:

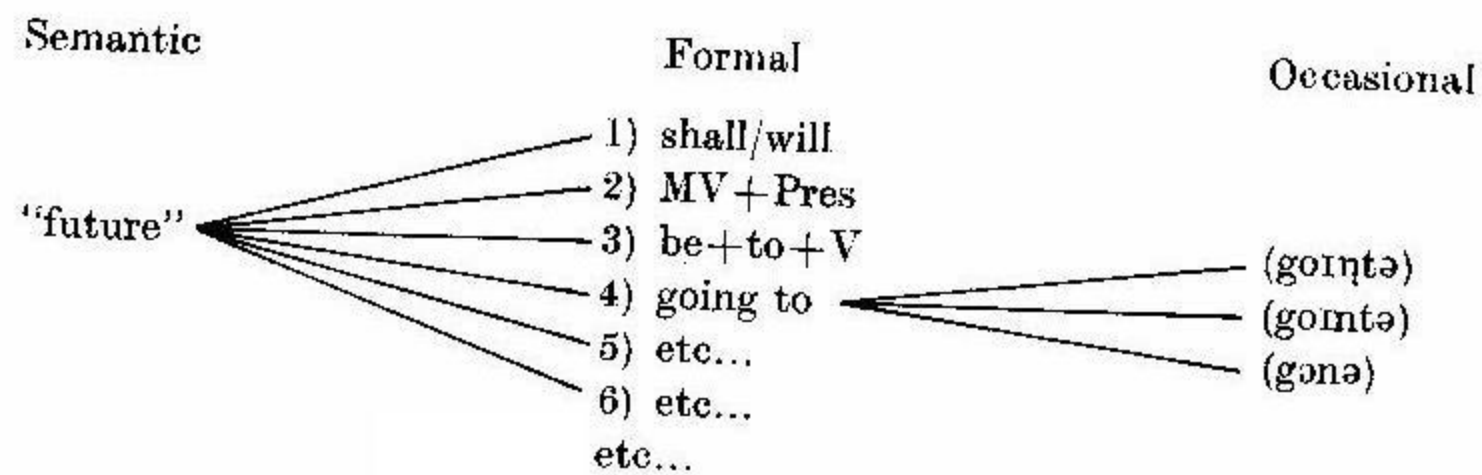


Figure 6

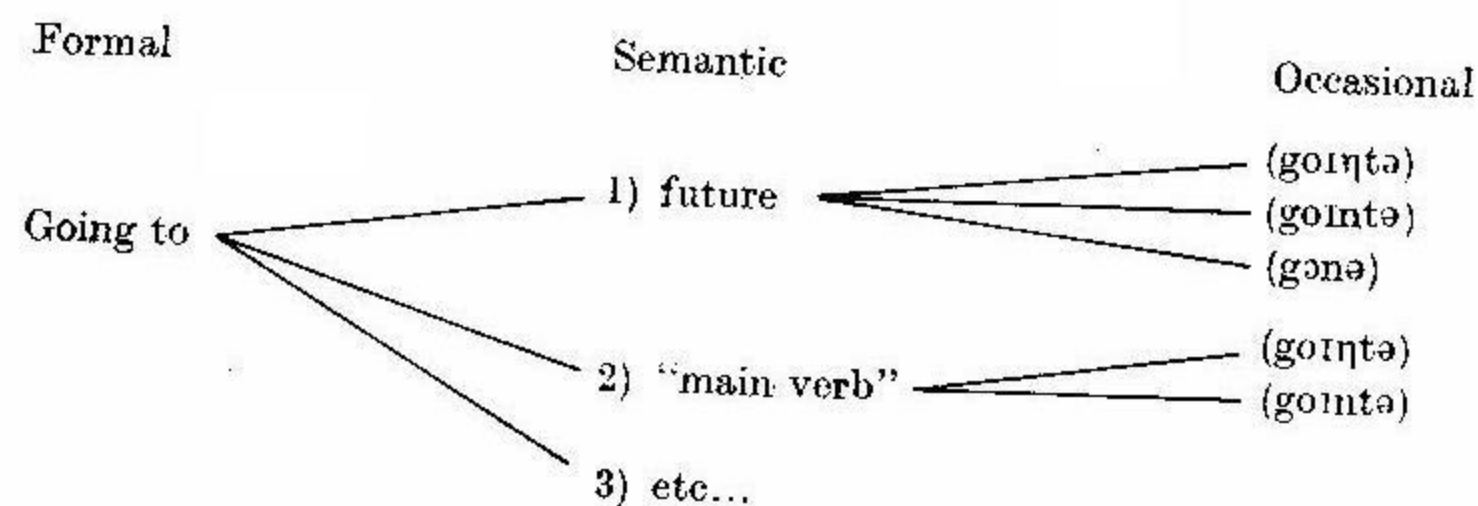


Figure 7

Although duplication of information eventually occurs in both systems, pedagogical grammars surely seek psychological rather than theoretical elegance. Although linguists may take delight in noting that the reduced form /gənə/ does not occur when the form *going to* (actually, *go + ing*, the *to* developed prepositionally) occurs as main verb, there is no psycholinguistic validity in suggesting that that fact takes precedence over semantic differential information.

Set strongly against this order of presentation (i.e. semantic — formal — occasional as opposed to formal — semantic — occasional) is, however, the obvious fact that there exist elegant syntactic descriptions of language, while no plan which would offer a partitioning of reality has ever achieved even minimal agreement among philosophers.

The remainder of this paper, then, concerns itself with the basically theoretical background for what began as a practical suggestion. What has been proposed for contrastive studies up to this point is represented in the following figure:

This expanded version of Figure 6 above, which allows for the incorporation of contrastive detail, may be compared with the following expanded version of Figure 7 above:

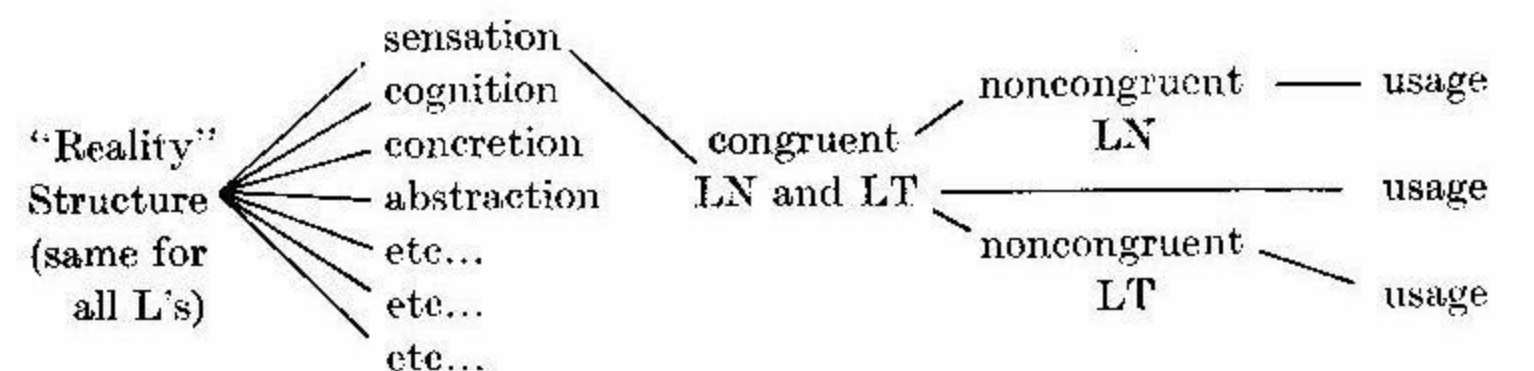


Figure 8

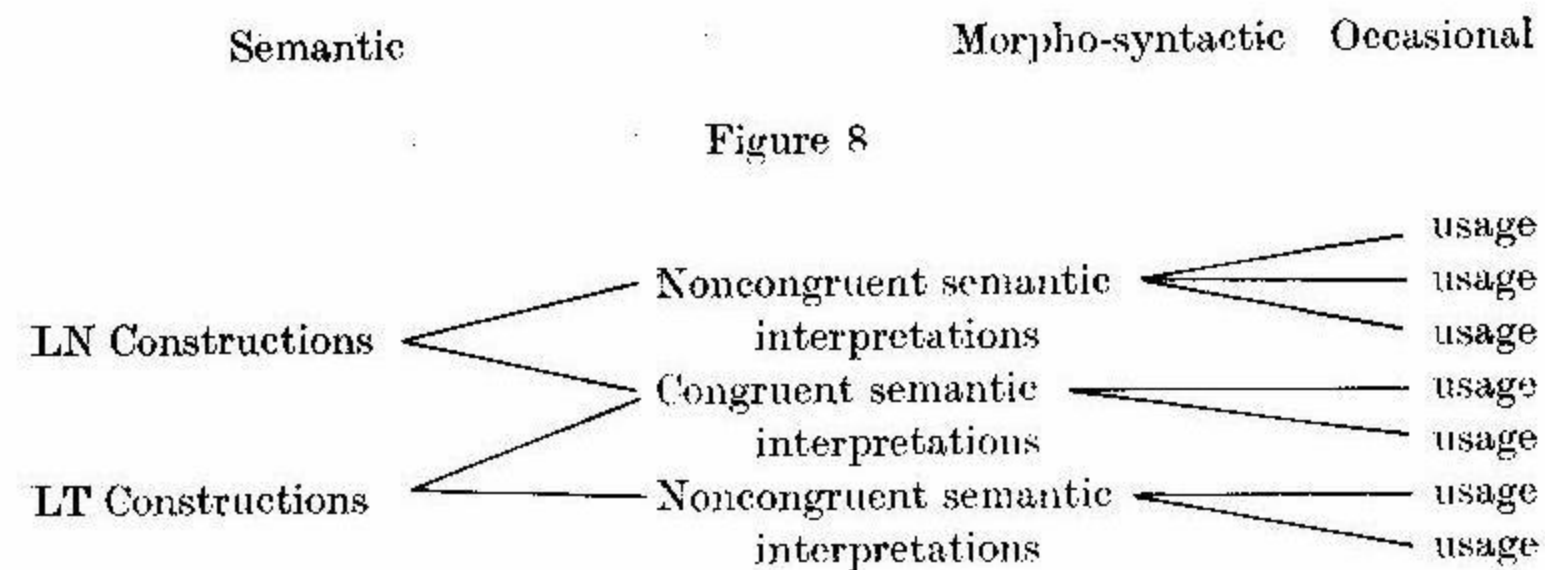


Figure 9

Although the theory which provides for syntactic description in Figure 9 is "tighter" than any available philosophical theory for the first stage in Figure 8, the resultant duplication and confusion of description in Figure 9 (and its failure to match the learner's natural strategy in moving from reality to structure) suggest that deeper ("reality") structures offer a more convenient theoretical and pedagogically feasible base for practically oriented contrastive analyses. In short, answers to "How does one talk about X?" questions exist in Figure 8 at a deep (universal) level, while such questions must be answered from the middle of Figure 9, a solution which sends the learner in two directions for answers to questions about morphological, syntactic, and occasional correlates. In Figure 8, on the other hand, the learner moves from "reality" to forms to use, a progression which surely matches more carefully the psycholinguistic set brought by most learners to the data of a new language.

Two questions remain, and they are serious and annoying for the linguist who approaches the muddy point in contrastive linguistics where theory and application meet. In this case, for example, practical considerations seem to disallow use of the most elegant theory available. While teachers, textbook writers, and curriculum planners may be satisfied with that (They may even say "So what!"), methodologists and psycholinguists are aware that hundreds of experimental opportunities and many generalization for teacher training are lost if no coherent theoretical model stands behind explanatory classroom devices. (I should perhaps make it clear at this point that contrastive analysis, in my opinion, serves primarily an explanatory rather than predictive function).

Given this non-trivial concern for theoretical models behind language teaching, what theoretical forms can 1) be assigned to the general partitioning of reality indicated at the left in Figure 8, and, 2) be assigned to the internal structure of such items as "sensation", "cognition", etc... given one stage in from the left in Figure 8?

It should be clear that the leftmost subdivisions of Figure 8 are necessarily philosophical (phenomenological, if you will) rather than linguistic. On the other hand, category subdivisions, though given here in phenomenological terms, will have immediate linguistic correlates. That is, for the "deepest" level I have in mind some such subdividing as follows:

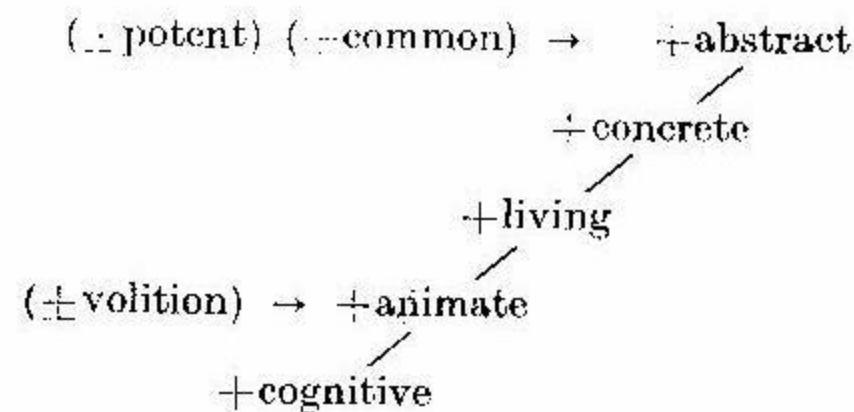


Figure 10

Such a tree as this, doubtless, is in need of much revision on the basis of phenomenological research; however, it attempts to capture the essentially non-linguistic categories of the world and display them in a hierarchy which could be assumed to promote features down the tree (that is, such features as  $\pm$ potent, given at the level  $+$ abstract, are understood to operate at every remaining lower node of the tree). This is, then, the theoretical basis for the "reality structure" suggested as a universal base at the left of Figure 8 above. Of course to the right of each major category symbol given above

is a hideously complex array of semantic classifications. For example, we might think of Sharwood Smith's classification of future reference in English (cited above) falling somewhere to the right of the  $+$ abstract entry roughly as follows:

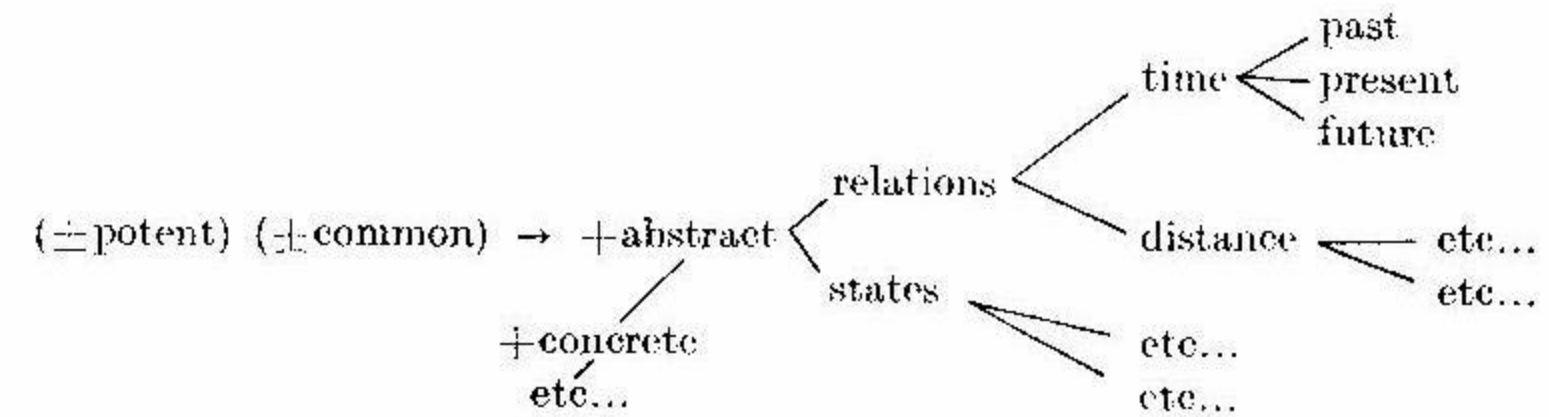


Figure 11

Of course, it may be immediately argued that we deal with relations such as *time* and *distance* as concrete rather than abstract entities in English, but this is the previously mentioned philosophical rather than linguistic problem inherent to this entire discussion. On the other hand, for the contrastive linguist as well as the learner, the further right we go in this philosophical diagram (that is, as philosophical complexity decreases), the more linguistically interesting the categories become. The far left is, quite naturally, interesting to the language philosopher, and it may, at some time in the future, provide a sound, theoretical basis for such descriptions of language, but what interests the learner is the everyday association he may make between reality and linguistic forms. For example, we might suggest that the category "sensation" fits into our more general diagram just one stage to the right of "animate" and that such subdivisions of sensation as "vision", "hearing", etc..., fit immediately to the right of that subcategory marker:

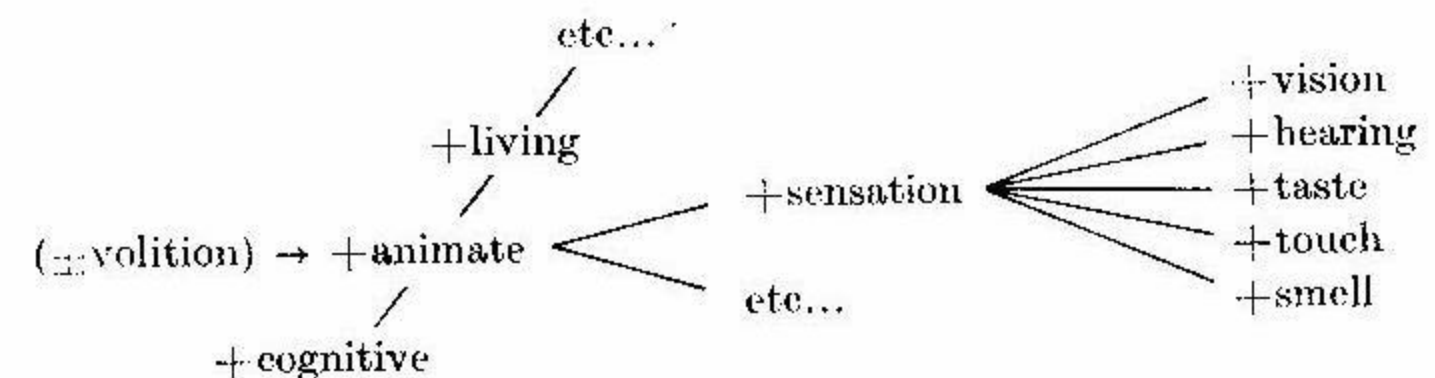


Figure 12

Now we are dealing in terms which are as interesting to the ordinary learner as they are to the philosopher or semanticist, for such questions as "How do

I talk about SEEING in language X?" are just the sort of "reality" to linguistic form adjustment questions discussed above. Furthering the phenomenological analysis of just "vision" for English one more stage, we might produce the following:

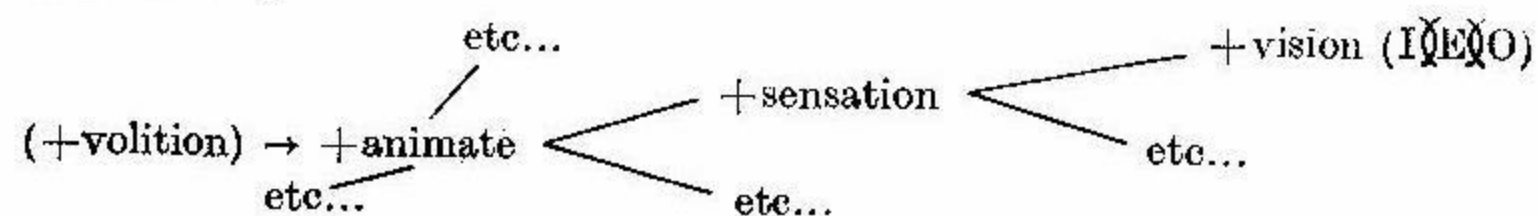


Figure 13

Let I, E and O represent "image", "eye", and "object", respectively (*object* here refers to concrete, beholdable things of the real world and has nothing to do with traditional, transformational, or Fillmorean functions, positions, or cases). Recalling that  $\pm$ volition is a necessary addition to all items to the right in the +animate line, we may "print out" of this phenomenological component the following "strings":

+VIEO  
 -VIEO  
 +VIO  
 -VIO  
 +VEO  
 -VEO  
 +VE  
 -VE  
 +VI  
 -VI  
 +VO  
 -VO

Actually, of course, such strings are a reduction of  $\pm$ volition (represented here by  $\pm$ V), +animate, +sensation, +vision, and one or more of I ("image"), E ("eye"), and O ("object"). Though not established in the literature, I have taken three linked parentheses to mean take at least one of the symbols given or as many as desired. In these representations we have finally come to the end product of phenomenological rules and are ready for linguistic strings. The above sets might be represented by such strings as the following:

+VIEO I looked at the table (patrzeć, oglądać)  
 -VIEO I saw the table (widzieć)  
 +VIO I'm looking at the table (e.g. in my mind) (patrzeć, oglądać)  
 -VIO I see the table (e.g. in my mind) (widzieć)  
 +VEO I'm looking at the table (e.g., but I can't see it) (patrzeć, oglądać)

-VEO ?  
 +VE I'm looking around (rozejrzeć się, rozglądać się)  
 -VE I can see (widzieć)  
 +VI I'm looking at colors (e.g. in my mind) (patrzeć, oglądać)  
 -VI I'm seeing pink elephants (widzieć)  
 +VO I showed Jim something (pokazać)  
 -VO My cuffs showed (widać, wyglądać)  
 I look silly (wyglądać)

In such a list as this, phenomenological categories are most important, not linguistic ones. On the other hand, it is very obvious that some philosophical categories are very "unusual". It would be necessary to excise these odd realizations in order to avoid confusing presentation to the learner, though the contrastive analyst might be interested in a full presentation for all possible uses that might be made of the data. Here, for example, it is, obvious that high-frequency items include 1)  $\pm$ VIEO, that is, sentences which assert that "volitionally or nonvolitionally I received an image by means of my eyes of an object", 2)  $\pm$ VE, that is, sentences which assert that "volitionally or nonvolitionally I am making use of my eyes (though no object is focused on and no resultant image is produced)", and 3)  $\pm$ VO, that is sentences which assert that "volitionally or nonvolitionally an object has been presented to vision". (We may assume that this last case triggers a kind of phenomenological recursiveness, but since that borders on discourse analysis, it is perhaps best excluded from this discussion).

From the above list it is fairly obvious that Polish and English cut up the reality of vision in more or less the same way, including a central volitional and nonvolitional pair. In fact, the only interesting items, though important enough for the learner, produced by this particular comparison are the different relationships of *show*, *look* and *pokazać*, *widzieć*, *wyglądać*. Similar contrastive lines for *smell* would reveal even more basic differences among *smell*, *sniff*, *stink* in English and *czuć*, *wąchać*, *pachnieć*, *śmierdzieć* in Polish, for example.

Such analysis would not replace the accompanying morpho-syntactic information necessary to such forms as they are presented. For example, whatever information is revealed about the semantic properties of *say* and *tell*, that is, about how they cut up the real world, it is eventually important for the learner to distinguish well-formed versus poorly formed strings:

*Jack said that he had to leave.*  
 \**Jack said me that he had to leave.*  
*Jack said to me that he had to leave.*  
*Jack told me that he had to leave.*  
 \**Jack told to me that he had to leave.*  
 ?*Jack told that he had to leave.*

This paper does not at all question the importance of such information, but it does suggest that such concerns are rather distant from the language learner, particularly in his early contact with the new system. What is proposed here is a natural presentation of material which matches the learner's desire to find a match between the real world and the new language. It is equally important to realize that this proposal is exclusively practical. That is, the "system" suggested here has no importance for theoretical linguistics, for it tries to return to an unachievable and probably incorrect systematization of reality as a precondition for progress in linguistics. I believe, with Polański, that "a full analysis of a sentence should consist of both its deep structure interpretation and a careful inquiry into its surface structure phenomena, which do not always depend on the deep structure" (Polański 1972:12). Such a proposal as the one given here for contrastive analysis ignores this reasonable approach to surface structure considerations only in hopes that it may bring some more reasonable solution to practical problems in contrastive analysis.

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