
Contrastive analysis (CA) for the past decade or so has been struggling through a rather difficult period. The rapidly evolving linguistic theory does not favour convenient and easy applications since the investigators in the area of CA are constantly being tormented by new developments in the theory which they are reluctant to ignore for fear of being outdated. Psycholinguistic research does not help matters either. What once was expected to be a neat set of predictions concerning learning difficulties in a foreign language has now become at the best a set of statements which ex post can be utilized in explaining some of the errors made by the students, which constitute some of the learning difficulties. The pedagogical value of CA is becoming less and less obvious and the solutions therein more and more removed to a remote area near the horizon. Experiments demonstrate that errors in a foreign language cannot be exclusively attributed to differences between the native and the foreign language. The best that CA can do is to predict areas of potential mistakes without making any claims as to whether or not and in what circumstances they are likely to occur in actual performance.

Di Pietro in his book skillfully manages to navigate his CA boat amidst the rough and rocky seas of linguistics and psychology despite the discouraging fact that the land is nowhere to be seen. Fortunately, the author does not rest assured and does not claim that his is the only method of procedures. On the contrary, he is constantly aware that his construction may prove to be inadequate, that future theories may shatter his own theory and he finally realistically concludes, as if in self-defense: “we cannot afford to be doctrinaire either about our linguistics or our language teaching” (p.175). With this sentence as our motto let us set about examining Di Pietro’s book in more detail.

The book consists of eight chapters centering around three thematic groups. The first group contains the exposition of theoretical and procedural foundations of CA and includes chapters on “Developments in CA” (Ch. 1), “Theory and procedures” (Ch. 2) and “Aspects of language design” (Ch. 3). The second group contains a discussion of various components of language design seen in the contrastive dimensions. It includes the discussion of “The syntactic component” (Ch. 4), “The semantic projection” (Ch. 5), “The structure of the lexicon” (Ch. 6) and “The phonological component” (Ch. 7). Finally, there is a chapter on “CA and the foreign language teaching” (Ch. 8).

The inevitable list of references and index ends the work.

Di Pietro’s linguistic theory is a modified version of the “case” grammar suggested by Fillmore (1968). It differs from both Chomsky 1965-model and Fillmore 1968-model in that in Di Pietro’s model in contrast with Chomsky’s those deep structure categories which are later realized as NP’s are not arranged in a linear or hierarchical order analogous to the order in which NP’s in Chomsky’s deep structures appeared. Di Pietro’s model differs from Fillmore’s in that the former contains language-free “universal” categories or as Di Pietro chooses to call them “syntactic primes” like Name and Verboid
in addition to Sentence, Modality, Proposition and Class. CATegory. Di Pietro defines Name as "a unit of arrangement which refers to that property of human languages whereby objects and notions are indexed" (p. 39). In particular languages this universal category may be realized as Noun (reported to be at least one natural language, Noo.ka, lacking the category noun (cf. Hockett 1958: 224)). VERBOID is the label given to another unit of arrangement which has to do with the description of relationships among NAMBS. In particular languages verbs are realized not only as verbs but also as adjectives and possibly as adverbs. The other universal categories in Di Pietro's DS are arranged hierarchically in the following fashion:

\[ S \rightarrow M \leftarrow V \leftarrow C \]

where CM is a case marker and where the linear ordering of constituents is irrelevant.

Unlike Fillmore (1968) the specific of case, i.e., agent, instrument and the like are provided by the semantic projection rules and are not generated by the syntactic rules to justify Di Pietro's claim that his base rules are more consistently syntactic than Fillmore's. We shall comment on this point later. At the moment let us observe that this sort of hierarchical arrangement as well as the recognition of S as a syntactic prime in this particular framework raise certain doubts.

If Noun Phrase and Verb are dismissed from the universal DS on the grounds that they are too "suggestive of the surface restrictions of particular languages" (p. 56) then S should be dismissed on the same grounds. Surely sentences in particular languages observe a vast number of surface structure restrictions stated by the grammar of these languages. In Chomsky's DS S directly dominated NP and VP, which reflected the assumption that every sentence in its surface structure must be a Noun Phrase or a Verb Phrase in that order, unless transformed otherwise. This sort of DS was a direct result of the analysis of every sentence, at least in English, into two immediate constituents labelled as NP and VP respectively, which provided the thus desired deep structure with categories related to a certain surface structure reality. Admittedly, not all sentences could be analysed thus, but at least every sentence could be "untransformed" to restore the basic underlying shape inevitably consisting of NP followed by VP. It was furthermore known that every NP contained a Noun as one of its constituents and every VP contained a verb or be. Thus the DS categories were different from surface structure categories and consequently the initial element S was justified in that it dominated all the categories which appeared in the surface structure of sentences in addition to whatever symbols were necessary to trigger off appropriate transformations mapping the deep structure into the surface structure.

In Di Pietro's DS a no longer dominates these categories which in the surface structure are constituents of sentences. Instead it dominates a number of "syntactic" units which in various languages are realized as various surface structure categories in a vast multiplicity of ways. For example, Modality cannot be associated with any single type of expansion. As a matter of fact, in purely syntactic terms it cannot be expanded at all in any predictable way suitable in terms of PS rules as it incorporates various semantic elements highly heterogeneous from the point of view of syntactic realizations, such as time, aspect, question, negation, etc. Moreover, it is feasible to predict the possibility of a particular DS being realized as one surface structure sentence in one language and as two or possibly more surface structure sentences in another. It may even be possible for one DS to be realized as one or more sentences in the same language. Nonrestrictive relative clauses constitute a good set of examples:

John is a coward. He ran away.

John, who is a coward, ran away.

Whether or not the two phrase markers underlying John is a coward and He ran away come under the domination of one S is a matter which cannot be decided upon at the level of DS suggested by Di Pietro. These sentences demonstrate that what in the DS is a single Sentence (1) in the surface structure may be realized as two sentences, whose meaning is exactly equivalent to the meaning of the corresponding one-sentence realization. The common DS correctly reflects this situation but it contains no clue as to the number of sentences which arc the surface structure realizations. Sentences with concessive or restrictive clauses which Di Pietro associates with Modality furnish yet another example akin to ordinary conjoining for which conditions are stated in the area extending beyond the realm of grammar. Observe that

If it rains, I'll take my umbrella

can be a paraphrase of

It will rain and I'll take my umbrella

understood conditionally and not sequentially. In the equivalent Polish utterance

Bednie deszcz, to wznosi parasol

Bednie deszcz; to wznosi parasol

Bednie deszcz. To wznosi parasol

the punctuation varies from nothing to a full stop separating the two constituent sentences. The conditional meaning underlying all the sentences cannot be correctly represented in any non-counterfactual way unless the same deep structure is postulated for all these sentences.

The contradictory nature of the problem has its roots in the fact that although Di Pietro believes that his DS contains syntactic primes in reality it is a construct representing semantic relations underlying surface structure sentences. If one defines one's term as something "which represents man's universal need to label objects, ideas and sentiments which are subject to his cognitive powers" (p. 56), one cannot be serious about insisting on calling the thus notionally defined object a syntactic prime since syntactic primes can only be defined in terms of syntactic markers such as word order, function words, etc., or in terms of syntactic transformations operating on such objects. Another confusion of a similar sort arises from the exclusion of role specification from the base. Roles are relevant in determining the arrangements of syntactic entities. Such processes as subjectivization and objectivization can only be triggered off by the presence of specific roles in the derivation (cf. the appropriate roles in Fillmore 1968; the USEF grammar 1968; Langendoen 1970). If the specification of roles is relegated to the interpretation of the semantic projection rules then the theory collapses since the resulting DS no longer uniquely determines the semantic interpretation in so far as one array of Case Categories can be assigned a variety of roles by the semantic component.

The difficulty discussed above seem to point to the suggestion that for the purpose of conducting CA it is necessary to adopt such a model of language design in which distinction is made between the semantic structure as input to transformations and the syntactic structure as output of transformations. Consequently, consistent difference
must be made between semantic primes of the semantic structure and surface structure categories. Di Pietro's terms NAME and VERBOID are quite appropriate as labels for semantic primes, while SENTOLOGI could be suggested as the term referring to the DS "sentences". Syntactic categories could be traditionally labelled as Nouns, Verbs, Adjectives, Adverbs, and various function words, constituents of surface structure sentences in addition to such minor categories as tense, aspect, etc. In his attempt to construct the universal syntactic base Di Pietro is only half successful since, as was pointed out above, he cannot help introducing semantically grounded terms into his syntactic model of the base. It may prove necessary to go further and postulate a universal semantic base free of all syntactic relations which are inevitably language specific in any meaningful sense of the word syntactic. The existence of such a universal semantic base would be considered to be the initial postulate for the construction of contrastive grammars.

Di Pietro views language as a multidimensional design consisting of syntax which is central in the sense that it provides the initial node 8 and hence the beginning of all derivations. The output of the syntactic component is fed into the semantic component which interprets the structures generated by the syntactic component and thereby provides input to the phonological component which presumably accounts for the outer form of sentences. This organization is illustrated in the figure on p. 37. Surprisingly, Di Pietro's design accommodates no such thing as transformations despite his claim on p. 29 that "the grammatical theory which will be adopted in this book is the transformational-generative one". Instead he talks rather vaguely about "deep-to-surface rules" (p. 25), or "specific syntactic ordering rules" (pp. 68-70 and the diagram on p. 46) as well as about "realizational rules" (p. 73), without ever mentioning either some formal properties of such rules or more specific effects on sentences generated from their general function consisting in converting deep into surface structures. This is a pity since, as Di Pietro claims, DS is universal, the most interesting things for a CA analyst occur at the levels at which these rules operate since presumably these rules account for the variety of the surface phenomena in particular languages. Di Pietro is aware of the importance of the explicit statement of the rules in CA when he writes on p. 27: "Since it is possible to show that the difference between languages can be found at any number of stages between the deep and surface structures, we are also provided with a metric to measure the similarity between languages; languages are similar to each other in proportion to the number and hierarchical ordering of rules shared in the intermediate levels." On the other hand, however, a wholesale treatment of languages seems a trifle premature at this stage of research. It would be safer to talk about the proportion of rules employed in the derivation of particular sentences and constructions rather than about similarities of languages based on the number of shared rules, especially in the situation in which these rules are not adequately formulated and listed.

Although a special chapter is devoted to the structure of the lexicon (Ch. 6, pp. 109-154 and 651-674), its function in Di Pietro's model is rather obscure. As a matter of fact it is even presented in any of his models of language design, either on p. 37 or on pp. 46-7. It remains a puzzle throughout the book how particular lexical items (or perhaps lemmas or morphemes) are inserted into phrase markers and at what stage of the derivation. In Di Pietro's lexicon the entries are characterized in terms of matrices of semantic features such as [+human], [+concrete], [+localized], [+animal], etc. for names. The features are selected from the universal repertoire of semantic features. Each language makes use of a specific set of these features discovered by the analyst on the basis of contriving the so-called "decomposition contexts", analogous to Katz and Fodor's "disambiguating settings" (Di Pietro erroneously has it "disambiguating sentences"; cf. Katz and Fodor 1964: 487), which reveal a certain number of semantic features. It appears, however, that there is no a priori way to set an upper limit on the number of such contexts and consequently on the number of features. Only considerations of how sensitive our grammar should be to and what extent it is worthwhile to make it more and more refined are relevant. Di Pietro seems to realize this when he quotes Bolinger's (1965) critique of Katz and Fodor, yet he plunges headlong into designing some decompositional contexts for the English items "meat" and "flesh", arbitrarily stopping at the point where he has discovered six features. This procedure, however, allows Di Pietro to compute the English matrices for "flesh" and "meat" with the matrices of equivalent lexical items in other languages such as Portuguese, German, Vietnamese and Bengali in order to draw the well-justified conclusion that "a lexeme-to-lexeme comparison of languages would not be very fruitful". Regrettably there is no mention of how verbs are characterized in the lexicon, nor is there any indication of how lexical entries are characterized in terms of syntactic features.

Notwithstanding the shortcomings many of which can be easily remedied, the theory adapted and adopted by Di Pietro seems to be the best of the currently available linguistic theories as it provides a framework for carrying out the analysis he sets forth for his CA. It provides the necessary universal platform of reference and the necessary set of concepts for stating the similarities and differences between contrasted languages. Di Pietro characterizes his model of CA as generalized and taxonomic. Generalized is understood as an antonym of autonomous, i.e. as relative to universal features of compared languages. Taxonomic in the sense employed by Di Pietro stands in opposition to operational and not to generative. An operational model of CA would be a "linguistic analog to those mental processes which may be at work in acquiring a foreign language" (p. 18). Di Pietro correctly points out that operational models are much more difficult to construct than "taxonomic" ones since the former require the formulation of conversion rules operating on the source language, converting the forms of the source into the forms of the target language. Yet there is no way of predicting the sort of conversion rules that may be adopted by a learner of a foreign language. What Di Pietro seems to be saying is that operational models in principle can be constructed but their practical utility in language pedagogy is difficult to determine. On the other hand, Di Pietro claims taxonomic models based on generative rules of contrasted languages can be very effective, especially in handling contrasts involved in inanimate of structure" (p. 19). One wonders whether perhaps even better insights could not be gained from those models of CA which without being operational would be generative in that they would enumerate (define) equivalent sentences and constructions in the contrasted languages and specify identical and different rules employed in their derivation. A detailed proposal along these lines is given elsewhere (Krzemkowski 1972).

Assuming his model of CA to be generalized and taxonomic, Di Pietro suggests three steps in contrastive any two languages. The first step involves stating differences between the compared languages in terms of what Di Pietro cautiously calls "surface features", such as for example number, and observing how if at all a given "feature" is realized in a given language. In the second step Di Pietro's procedure involves postulating underlying universals. The universal in his example is NUMERAL. It must be noted that "universal" does not stand for a surface structure feature universally shared by all languages but rather for an underlying conceptual (notional) feature (category) which may have different surface structure realizations ranging in different languages from language to language and to no covert realizations. The third step involves the formulation of deep-to-surface rules accounting for the various realizations of universal categories in various languages.

The proposal implies that the first step must be performed more or less intuitively
On p. 36 Di Pietro's language design is described as "generative" on account of its being "stable in terms of rules which are productive of all sentences possible in a language and not restricted to a single corpus of them". In fact the word 'generative' is usually used with reference to those grammars which are not only productive but also explicit (cf. Chomsky 1965: 184). It 'explicit' were omitted from the definition of 'generative' then 'generative' would also refer to a large number of traditional grammars of prestructural sort, which were also productive without being explicit (cf. Lyons 1968: 165).

The discussion of DS is fairly muddled from a historical point of view. Chomsky (1965) and Fillmore (1968) are quoted side by side as responsible for inspiring the DS designed by Di Pietro, but he neither acknowledges the fundamental differences in the design of Chomsky's DS in comparison with Fillmore's DS nor argues Chomsky's (1965) claim that Fillmore’s theory is but a notational variant of what Chomsky calls 'standard' theory which roughly corresponds to the model expounded in Chomsky (1965).

In support of the statement that adjectives are a subclass of verbs (p. 85) reference is made to Ross (1967) where adjectives are not discussed at all. As far as I know, Ross's opinion on the matter is quite different in so far as he considers adjectives to be deep structure NPs, at least in his article "Adjectives as noun phrases" (Ross 1969). Incidentally, the article is listed in Di Pietro's bibliography but does not seem to refer to anything in the text.

Of other minor points, the following ones deserve mention. The assignment of case features to certain NPs is at places, mildly speaking, surprising. The boy in the boy sees the girl (p. 23) is assigned the specification agent and Fillmore (1968) is quoted in support. If one consults the source one finds on p. 31 that see and know differ from look and learn in that only the latter pair appears in the frame involving objective and agentive, while the former can only be inserted into frames with objective and dative. If Di Pietro thinks otherwise he should have explained his position which directly contradicts the acknowledged source. In there arrived an old man at the town (even there lived a giant; there is a man in space (pp. 79, 80) the underlined NPs are considered to be objective. It is difficult to see how being objective they represent "things which are affected by the action or state identified by the verb" (Fillmore 1968: 26). It would be interesting to know what sort of semantic or syntactic criteria are applied in assigning this sort of interpretation to NPs.

The discussion of compound NPs and VP's also stimulates a few doubts (p. 105). In the first place, the suggested recursion of constituents in the DS represented as

\[ C, \text{CAT} \]

\[ CM, N_1, N_3 \]

according to Di Pietro underlying John and Mary are here must be regarded with considerable suspicion. For one thing it does not account for such paraphrases as John is here and Mary is here too. In order to account for such paraphrases it would be necessary to allow for S’s to be conjoined in DS with clause operating optionally on identical predicates. (For arguments in support of this solution and a critical discussion of alternative solutions see the USSP grammar (Stonewell, et al. 1965: 232-344). Furthermore, the rule formulated by Di Pietro, being a rule schema affords no possibility of specifying the logico-semantic conditions for the operation of the conjunction transformation. The rule schema cannot be expanded in any non-intuitive way to exclude such phenomena as:

*John and Mary are pregnant
*John killed Mary and had children with her, etc.
Di Pietro's discussion of compound sentences raises another controversial problem concerning the limits of grammatical sensitivity. Di Pietro says that according to him and those native speakers who he consulted Mary washed and dried her hair sounds more natural than Mary washed her hair and dried it, since wash and dry express actions which are "somewhat closely connected" as opposed to write and mail a letter which are not so connected. Consequently, both Joseph wrote and mailed the letter and Joseph wrote the letter and mailed it sound equally natural to Di Pietro and his informants. This is a very delicate distinction that Di Pietro is trying to make. It is difficult to see what semantic features wash and dry share that write and mail do not. But even assuming that such features are possible to isolate, one wonders whether they would be sufficiently general to warrant postulating such nice distinctions, especially in view of the fact that any violation of restrictions arising from such distinctions does not lead to the production of ungrammatical or even semantically anomalous sentences but merely to the production of sentences which occur less frequently in actual speech. Should the grammatical theory be concerned with such distinctions? Surely, the apparatus required for this purpose would grow to such enormous sizes that the applicability of the grammar constructed in this way would be seriously limited. One doubts whether it pays to refine the theory to account for such minute distinctions.

In the final chapter Di Pietro concerns himself with CA and FL Teacher. The chapter is brief and sketchy. Regrettably apart from some fairly general statements no direct connections between CA and the teaching process are demonstrated. A substantial part of the chapter consists of the summary of Stockwell and Bowen's (1965) hierarchy of difficulties in phonology. No mention is made of the analogous list for grammar (Cf. Stockwell, Bowen and Martin 1965: 184). The hierarchy of difficulties constructed by Stockwell and Bowen, although internally well-organized, cannot remain unchallenged by actual practice. It is impossible to expect from CA more than results of comparisons. Potential mistakes can be predicted with only some degree of accuracy but without certainty since mistakes often arise through various extralinguistic factors as Di Pietro himself admits earlier in his book (p. 21). Therefore, hierarchies of difficulties suggested by Stockwell and Bowen and duplicated by Di Pietro have only quite limited practical uses without some further distinctions. Specifically, the idea of difficulty must be made more precise since in the present framework it is a very comprehensive notion embracing such psycholinguistically varied phenomena as difficulty in memorizing a particular pattern, difficulty in repeating and reproducing its form, reluctance to use it, difficulty in understanding and learning its structure and/or its meaning, etc. All those factors must be considered if a workable hierarchy of difficulties is sought. It may be a rhetorical question to ask how many of these parameters constituting difficulty can be reasonably correlated with the results of CA.

Another portion of the chapter deals with some well-known techniques of developing audio-lingual skills with the emphasis on the contrasting places in the target language. It seems, however, that a practicing teacher will find little in this section beyond what he already knows from his teaching practice, e.g., the technique of teaching the Progressive Aspect in English (p. 169).

The remainder of the chapter contains some useful and original thoughts connected with building what Bruner (1965) calls 'competence drive', even if the final conclusion is not very helpful: "Much research is needed on how to build "competence drive".

Although published by American publishers, usually very reliable in editorial matters, the book suffers from a large number of misspellings, omissions and other technical blunders. Those that I bothered to note are the following: the reference to Longacre (1965) on p. 63 is empty since no publication by that author from 1965 is listed in the bibliography; on p. 87 states should read stages; on p. 74 one finds a superfluous could; on p. 104 "which follow prepositions" should read "which follow prepositions"; on the same page the German word odor should read odor.

In conclusion it must be emphasized that in spite of the lengthy criticism expanded above and traditionally highlighted in most reviews, the book under discussion does constitute a valuable acquisition to the literature on CA. It presents the state of the art in an orderly way and though not free from errors of all sorts it provides a necessary theoretical and practical guide for constructing pedagogically oriented CA. The author must be admired for undertaking a difficult and ungrateful task and applauded for fulfilling it with success inspired primarily by inadequacies of the current linguistic theory and not in a relatively small measure by slips of his own.

REFERENCES


