THE LEXICON AND CONTRASTIVE LANGUAGE STUDIES

Mirosław Nowakowski

Adam Mickiewicz University, Poznań

0.1. Polish-English lexical contrastive studies seem to be lagging far behind contrastive analyses of all other levels of the two languages. Our reader, however, should not be mistaken to take the statement as suggesting that there are no bilingual English-Polish dictionaries as good (or may be as bad) and as comprehensive as any standard comprehensive bilingual dictionary may be. Furthermore, it does not seem that what is badly needed is a new more comprehensive contrastive dictionary (even if someone was ready to define the vague concept *contrastive dictionary*).

To make up for the delay the Project needs a number of articles, longer papers, monographs, and vocabulary studies which, using a unified set of criteria and a unified terminology, will define systematically and exhaustively lexical differences and similarities of the two languages. Many of those studies will be of theoretical importance but quite a number of them could, with certain reservations, be termed "dictionaries". As envisioned by the present author these "dictionaries" will differ from what is usually (but by no means always) meant by the term in their being primarily "customer-oriented" (the teacher, learner and translator — being the most important adressees). This, in turn, should have a marked influence upon the format of the "dictionary" (e. g. it would not have to be alphabetical, it need not be presented in the form of an ordered list, usually more context than in standard dictionaries will be introduced, illustrations could be used freely). Similarly, no independent requirements of comprehensiveness could be postulated for our "dictionaries" (i. e. number of details or the "delicacy" and length of definitions in the dictionary will depend on the application).

It is hoped that with theoretical assumptions presented in this article, the postulate that replacing (or rather assisting) the bilingual dictionary with a

number of "dictionaries" will be found both principled and much less trivial than it seems to be at this point.

0.1.1. It will be claimed here that, inherent difficulties of the so-called lexical semantic studies aside (cf. Lyons 1968: ch's 9, 10), it is the lack of an adequate theory of lexical contrasts[1] that has to be dealt with first if any progress is to be made in the area. Furthermore, since it is the strongest belief of the author that the only possible type of lexical studies must of its very nature be contrastive (i. e. either interlinguistically or intralinguistically contrastive; cf. Bańczerowski 1974: 11 - 12), then there is no use waiting for general linguists to come out with an adequate theory of lexical studies. In other words, we assume that as far as the lexicon is concerned, contrasting linguists should be prepared to give at least as much as they take from general lexical theories (if not more).

For reasons given in 0.1. the aim of the present paper is more practical than theoretical. Its author is primarily concerned with:

a. limiting the scope of contrastive lexical studies,
b. pointing to certain areas of contrasts which, being more interesting from either the pedagogical or theoretical standpoint, could or should be investigated first; and
c. suggesting certain methodological principles for contrastive analysis of that type.

1.1. By lexical contrastive studies we mean here the type of studies in which LEXICONS of two (or more) languages, or two and more varieties of one language (i.e. subsets of the L-lexicon) are systematically compared and lexical differences and similarities are systematically and exhaustively characterized.

The purpose of such investigation may be theoretical. Thus, for contrastive language studies it is necessary to define such notions as: *similar//different lexical items, systematic* vs. *accidental lexical gaps,* or the notion of lexically defined cultural overlap. For general language theory, investigation of that type would ultimately aim at the definition of the *possible lexical item* and/or attainable concepts (system of, the structure of the system).

Alternatively, the application of contrastive lexical analysis could be pe-

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[1] Rather than any of other putative reasons usually given to account for similar delays, e. g.:

a. all existing mono- and bi-lingual dictionaries are lacking in 'current idiom", are circular, inconsistent, and/or lacking in all other possible ways: faulty frequency assignments, not comprehensive enough or too bulky and too detailed, based on inadequate language theories, etc.,

b. lack of a sufficient number of qualified investigators (i.e. lexicographers).

Obviously, one could blame the state of the art (general linguistics) for what has not been done in contrastive studies, but cf. § 0.1.1.

dagogical. Studies of that type would be used in preparation of teaching material (handbooks and exercises), so that foreign language learners get acquainted with L_2-lexical items placed within particular semantic fields equivalent to L_1-fields with marked L_2 differences. Similarly, the second standard pedagogical application of contrastive studies, namely, error-prediction and error analysis, would profit from systematic description of the areas of lexical gaps, areas of overlap or false cognates.[2]

There may be still another application of contrastive lexical studies. It is doubtless that studies of lexicons of two languages will be found useful to those lexicographers and linguists who work on the DICTIONARY of either of the compared languages or on a bilingual dictionary of the known type (it may be worth stressing here that both dictionaries-as-handbooks, AND dictionaries-as-components of the grammar-theory are being referred to at this point; cf. below).

By the LEXICON of a language we mean a set, possibly an infinite set, of WEINREICH LEXICAL ITEMS organized into interrelated "vertical" and "horizontal" nets of relationships. Weinreich lexical item (henceforth: W-lexical item) is an abstract unit in which one meaning is assigned to one form.[3] "Vertical" lexical relations are relations between W-lexical items in terms of hyponymy and hyperonymy (see Lyons 1968:453ff.). "Horizontal" relations are those of paraphrase, synonymy, oppositeness, reference (coreference), presupposition,[4] and metaphorization[4] (cf. Lyons 1968: ch. s. 9 and 10).

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[2] For definitions of terms and an example of such analysis see: *The Romanian-English contrastive analysis project; reports and studies.* (1971: 27 - 30, and -especially- 127 - 144).

[3] On Weinreich lexical item see: Weinreich (1966); McCawley (1968). Both Weinreich and McCawley, however, treat the term as pre-theoretical and intuitionally graspable. Thus, a number of questions needs further elaboration within a lexical theory.

To begin with, the reader may equate "W-lexical items" with Lyons' "lexemes" stipulated by definition to be unambiguous. As its "form" — one may take morphonological and categorial features. Its "meaning" may be either defined by the nets in which a given item appears with other items (thus all items are mutually co-defining their meanings) or, though this is a much weaker position, the meaning of each W-lexical item may be defined in terms of sememes arrived at in the process of componential analysis (cf. Lyons 1968: ch. 10). The second position is weaker since it forces one to state explicitly the relation of 'words' (units) as W-lexical items to equally unambiguous 'words' (units) as sememes, e. g. sibling: SIBLING, male: MALE, young: YOUNG, etc. Also, relations among W-lexical items within a net can hardly be stated in terms of sememes unless the notion of semantic field is redefined (so as to at least make it polycategorial and metaphor-sensitive; on what is meant by semantic fields today see Hartmann (1973)).

[4] The terms 'metaphorization' and 'presupposition' seem to be amply illustrated in the text, though, at the moment the author is unable to formulate a formalized and explicit definitions of the two. Metaphors have traditionally been investigated by lexicosemanticists (cf. Ullman (1962), Zvegintsev (1957)). A need for extending the notion of presupposition into lexical analysis was first suggested by Fillmore (1971). We would

It seems highly plausible to assume that the relationships between W-lexical items is identical to logical and/or semanto-syntactic relations as they are being currently discussed in modern linguistic theories (cf. for instance the generative-interpretive semantics controversies). Thus, our list of relations may be considered open-ended.

1.1.1. The distinction (implied in §1.1. above) between the LEXICON of a language and the DICTIONARY as a component of the theory of this language[5] will be claimed here to be vital if any progress in lexical (lexico-semantic) studies is to be made. The distinction should also be recognized by theoretical linguists.

LEXICONS as codified structures of meanings in human languages in additions to linguistic rules that do govern their structure (cf. § 1.1.), seem to be subject to a number of rules and restrictions which, if stated explicitly, would be *uniquely* postulated for that particular (sub-) component alone. To give some examples:

a. It has been found impossible to define formally in either morphological or semanto-syntactic terms a form (=a unit) which would cover (=be superordinate to) all the different structures that should be investigated and listed in the lexicon. (cf. Lyons 1968:§ 5. 3,§ 5.4 on words vs. morphemes; see also Lees (1960) on morpheme vs. compound vs. phrase).

In other words, the linguist who includes the lexicon as a subcomponent of his theory could be expected to give a formal definition of a superterm that would cover what is traditionally known as "words", idioms, compounds, numerous "set phrases" (with various degree of "setness" of the type: Ngen.s.+N, Adj.+N, N+Prep+N, N(+case+N), as well as certain ready made utterances and definitions (of the genus proximum-differentia specifica type).

The group of the so called "transformationalists" (in the current "lexicalists" vs. "transformationalists" controversy) seems to be far better off in this respect since their use of the notion "underlying S" comes closest to the needed superterm.

To be workable in contrastive language studies, however, the superterm would have to additionally account for: intralinguistic paraphrase relations (e. g. E. words=E. phrases) and for certain interlinguistic equivalence relations of (at least) the following types: morpheme :: word: e.g.: *wiatrAK* :: *wind-*

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like to extend Fillmorian presupposition here, so as to include certain relations traditionally referred to as 'collocability' and 'compatibility' (cf. Lyons 1968:440). Both metaphorization and presupposition as they are understood here have been dealt with in Nowakowski (1976). As far as examples are concerned, the previous article is slightly more 'generous' than the present one. We would not like to support, however, all the theoretical assumptions made there, or in other words, the present article seems to me less wrong than the other one.

[5] Dictionary as a handbook is also included here.

MILL, chimneySWEEP :: *kominiARZ, PICKpocket* : *kieszonkOWIEC*; or a "category split" as in: *tap* :: *stukać lekko* (V :: V+Adv), *give up* :: *rzucić* (V :: V+Prt), *lock* :: *zamknąć kluczem/na klucz* (V ::V+N).[6]

b. Furthermore, the lexicon would be the only component of grammar that would have to be made SIMULTANEOUSLY sensitive to:

1. dialectal values (geographical space)
2. profession value (jargons of professional groups)
3. fashion-temporal values (e. g. "current idiom" vs. the "prohibition time idiom")
4. certain other social values ("class dialects")
5. time value (±archaic or obsolete)
6. "esthetic" values
7. emotive values (vs. "intellectual, neutral or descriptive words")
8. "style" values (i.e. intimacy or familiarity judgements)
9. frequency values

(NOTE: only certain of those markings would have any relevance for the morphonological component)

c. Consequently, no other component of grammar would be so sensitive with respect to what is being modelled (i.e. predicted and explained) within our theory as the lexicon.

Thus, from the point of view of language acquisition, lexical problems are either trivial or accidetnal (unpredictable), or else, they should become the subject matter of developmental psychology and sociolinguistics.

If, on the other hand, it is the ideal native speaker's knowledge of his language that we are trying to model primarily, then the lexicon is either equated with the memorized (or memorizable) morphological structures of his language and rules for combining well-formed structures of this type (and thus — as in Halle (1973) — lexical studies are trivialized being reduced to certain aspects of word-formational analysis only), or else, the investigator is being accused of not doing linguistics properly (as was Chomsky in Weinreich, et al. (1968) since the homogeneous speech society assumption (Chomsky 1965: 3) presents him with a serious difficulty of how to explain where the native speaker's value judgements (cf. b above) come from. And to treat those judgements as factors of performance would be most inadvisable.

The notion of the heterogeneous language theory has been rejected by the present author elsewhere (Nowakowski 1975) but the notion of the native speaker who knows all the lexical items of his language perfectly seems equally implausible.[7] We would like to suggest that by ascribing to the ideal native

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[6] For paraphrase relations see Lipińska (1974), Rozwadowski (1904).

[7] Namely, in Nowakowski (1975).

As for the native speaker's knowledge of all W-lexical items of his language one might,

speaker the perfect knowledge of the grammar of his homogeneous community nothing else is claimed than that he is able to:

a. unambiguously accept or reject a certain sound sequence or sequences as morphonologically well-formed or ill-formed English strings; if he accepts the string and is given ("recognizes", has the category given by the grammar) its categorial (=syntactic) value, he is able to fit it into a lexical net or nets (i.e. "to ascribe meaning to it");

b. ascribe to the morphonological string of elements the ±foreign marking on the basis of the morphonological rules of his language (although an alternative solution, namely, to ascribe "strangeness values" as the tenth value of our 1.1.1. b-list seems plausible as well).

However paradoxically it may sound, we would like to claim here that the assumption (formulated below) concerning a principled lack of knowledge of all lexical items of one's own language is theoretically more interesting than the opposite claim which condemns human languages to infinite (mostly unexplainable) homophony (cf. also note 7).

The assumption is: for a native speaker of an L it is true that at any moment he does not know all Weinreich lexical items of this L (though he does know both the morphonological and semanto-syntactic rules of his L — and thus possible lexical relationships and "possible nets" — perfectly). This "lack" is a matter of principle, it "belongs" to native speaker's competence and has nothing to do with memory restrictions, other performance factors or the "active use-vs.-passive recognition" dychotomy.

1.1.2. It seems that the distinction between dictionaries and lexicons has been implicitly accepted in language pedagogy for a number of years. Teach-

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in addition to other arguments presented in the article. put forth a following "naive" argument:

In an ideal lexicon (cf. e. g. Krzeszowski (1974:160 - 178) in which all Katz-like, i. e. polysemous, lexical items are perfectly specified with respect to their presuppositions, implications, entailment, and all other syntacto-semantic features, there would have to be a certain degree of "overspecification" which could be looked upon as a restriction on native speaker's creativity (i. e. his syntactic creativity). In other words, why does not the ideal native speaker who knows all the items of his language, attach always the most appropriate item, the best specified "word" well-defined by either the selectional restriction rules and rules of context (and -or consituation — to include the possible influence of the conversational postulates). It is rather the give-and-take or the "flow" relation between the semantosyntax and the lexicon that seems to be responsible for the creativity (if the notion is looked upon from the semantic point of view).

Thus, semanto-syntax and lexicon could be thought of as being connected by a feedback mechanism of some sort. This hypothesis would account for the fact that the number of W-lexical items is infinite. It could also explain why Chomsky's assumption about creativity, which was so far demonstrated to operate in the domain of syntax, has been understood by most readers of TG theories to means "semantically motivated creativity".

ers have always warned beginners in foreign language studies that to use a bilingual or a pedagogically oriented monolingual dictionary effectively, one has to have a good grasp of language. There have always been known bilingual speakers, i.e. those who "think in foreign languages", or who "have the language feel" unable to talk about, for instance, plants and trees or animals. It might be assumed that to have a good grasp of a language, to have language feel means (as far as the lexicon is concerned) the knowledge of nets and possible relationships within a single net and across the nets (in other words, it means the ability to make both good recognition guesses and production guesses; the ability to make the most out of the limited number of the morphonological dictionary items at the bilingual's disposal).

The importance of the distinction for contrastive lexical analysis has been recognized by Di Pietro (1971:121) who closes his contrastive analysis of Eng. *meat/flesh* and their French, German, Bengali and Italian equivalents with the statement:

"From the above discussion it should be obvious that a lexeme-to-lexeme comparison of languages would not be very fruitful. (...) The learner has no automatic way to distinguish between central meanings and peripheral or secondary ones. Nor has he any way of determining universally what will be metaphorical and what will not."

In this article we try to present certain alternatives to an ingenious "dictionary check-up" that was proved by Di Pietro to be largely ineffective.

2.0. Our discussion of the organization of the lexicon would not be complete if, in addition to the semanto-syntactic nets of relationships mentioned above, still another type of nets (of a completely different status) was not taken into consideration. These, as they will be called here morpho-phonological nets *cannot* be characterized either in terms of Weinreich lexical items or in terms of morphonological units alone. In a rather informal way the difference between the "vertical" and "horizontal" lexical nets (presented in § 1.1. above) and morpho-phonological nets discussed here could be stated as follows: within the nets of the first type meaning is assigned to STRUCTURES (morphemes, words, compounds, phrases, etc.) at the level "higher" than phonology (phonetics), moreover, every single net-member here has its individual meaning restricted by the cooccurring members and there is no single meaning assignable to a single net as a whole; within our morpho-phonological nets, however, "meaning" (cf. below) is derivatively assigned to either purely phonological (phonetic) units or other elements AS phonological elements, this particular meaning assigned to a unit is common to the whole net.

Elements that are subject to morpho-phonological net arrangements may be as small as a single distinctive feature; e. g. introduction of the feature +palatal to the structure of the last syllable may be said to denote small

size and/or endearment in Polish[8] (cf. *tato, taluś, tatusiek, tatsio, tatuniek* — "*daddy, father*"). Meanings seem to be assignable to nets of that type on the basis of the fact that their members share a certain phoneme or a group of phonemes of a nonmorphological status. As in the case of contrastive features, examples here could be taken from analysis of the so called "phonetic symbolism" (cf. Marchand 1960:313 - 341). One could also mention here dialectal values of certain phonetic contrasts, and Zabrocki's "word-differentiating morphemes" (see Fisiak 1965:23) of the *gl*-type in English "light, shine" (e. g. *gleam, gleed, glisten, glow, glent, glimmer, glitter,* etc.) or *-ina/-yna* -type in Polish "berry" (*jeżyna, malina, żurawina,*). Similarly, elements may belong to a net on the basis of their single rhyme-pattern, or assonance and alliteration pattern (cf. Marchand 1960:ch. 8).

The term "meaningful organization" in the case of morpho-phonological nets, seems to be based on a slightly extended notion of meaning. In a rather imprecise manner this difference might be stated as follows: while meaningful lexical items in lexical nets have their meaning due to such factors (=relations) as reference, sense, presupposition, net-position — the meaning being primarily of the "intellectual" type — elements of morphophonological nets base their notion of meaning on linguistic and extralinguistic associations; this type of meaning is also largely of the "emotive" type.[9] In case linguistic associations are the source of a given net meaning, this meaning is clearly secondary, i.e. "borrowed" from a single W-lexical item which belongs to a given lexical net.

Accidentally, the notion of the "secondary" (or derived) meanings could be made use of at the level of morphological analysis in any theory of language that assumes that morphemes are form-meaning composites *of a definable meaning*.

An example might be useful at this point. Thus a Polish morphological series (accountable for in terms of morphonological rules): *ręk-* :: *ręc-* :: *ręč-* :: *rąk-* is usually said to be "a series of forms united by a common meaning" or "to be allomorphs of a single morpheme with a meaning M". The meaning

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[8] It was J. N. Baudouin de Courtenay who first noticed that in addition to the purely differential meaning (of the information theory type, i. e. where there is a choice there is meaning) distinctive features may have this second type of "full" meaning. The example is taken from Baudouin de Courtenay (1922). Courtenay's distinctive features were of two types: acoustic and auditory; +palatal in this case represents the second type.

[9] Obviously, it must be assumed within the theory that partial phonetic//morphophonetic//orthographic similarity of elements within morpho-phonological nets MAY but does not necessarily have to presuppose semanto-syntactic similarity (=may entail net relationship of the first, lexical type). In other words, such similarity is neither a necessary nor a sufficient condition for activating lexical nets, though speakers of most languages take the similarity to be a sufficient condition.

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is usually said to be RĘKA "hand". But this is clearly a secondary ("borrowed") meaning with referential restrictions of the W-lexical item "hand" only. The four listed phonetic forms do have this meaning only in certain "words" (roughly, only in case of Lyons' lexemes) e. g.: *ręka* (nom., sg., fem.), *ręce* (dat. sg.; nom. pl.), *rąk* (gen. pl.). The case of *ręč-* is doubtful: *ręczny???* "not mechanical".

Thus it cannot be the morpheme, but some still more abstract unit which enters all the lexical-net relations (with such W-items as e. g.: *arm, shoulder, glove*, etc.). Yet, there are certain relations "forced upon Polish" by the form of the morpheme alone and those relations cannot be traced along semanto-syntactic nets alone but must refer to morpho-phonological nets, cf. *ręcznik* "towel", *poręczyć* "guarantee", *zręczny* "skillful", *wyręczyć* "do sth. for sb. as a favour", *rękaw* "sleeve". A Polish learner of English will not be very successful if he looks for the E. *towel* in the *hand*- net (? hand drier).

There seem to be phenomena present in many languages that could be called forth to support our assumption concerning the existence of two independent types of nets in the organization of the lexicon. They include, among others, native speaker's intuitions concerning puns, "word games", alliteration, sound symbolism, lexical creativity, or rhyme (especially as it is used in children games, in rhyming name calling, counting-outrhymes, nonsensical verses and nonsensical "word exercises"). Similarly, native speakers' characteristic language errors known as folk (or false) etymologies support the assumption.

We would like to recognize here the need for investigating morpho-phonological nets of that type as a part of contrastive lexical studies since a great deal of what is termed the "foreign language feel" could be accounted for in terms of those nets.

Polish learners of English, for instance, will have to be made sensitive to (at least) the alliteration principles of English, as well as to certain most typical sound symbolism of the *gl-, cr-, sw-* type. It would not be unreasonable to introduce into FLT syllabuses *Mother Goose* or some other standard handbooks of nursery rhymes, to present the more advanced learner with the most banal, naive — thus most typical — systems of English rhyme (alliteration) sound symbolism systems. For very obvious reasons his classes in English literature will help him little in this respect.

3.0. Both our mention of the different "value judgements" attached by native speakers to individual lexical items (see: § 1.1.1 above) and our sketchy analysis of the two distinct types of nets into which the lexicon is organized, seem to point to the same fact, namely, that lexicons of human languages suffer from a conspicuous "lack of democracy" in their structures.

This heterogeneity is also the subject matter of the present section. It seems that for both formal and semantic reasons, contrastive lexical studies must accept one other dychotomy, i.e. the distinction between *closed* and *open*

sets of lexical items (cf. Lyons 1968:436,[10] the distinction overlaps to a large extent with the classification of lexical categories into minor and major).

Within the field of lexical contrastive studies we would stipulate that only the open sets of lexical items be investigated. Analysis of the closed sets of items (by no means less important) will be carried out within semanto-syntax and should be made available to the lexicographer in the form of a taxonomic by-product (i.e. lists or indexes appended to the monographs) of those semanto-syntactic analyses.

In other words, it has been assumed here that only forms corresponding to nominal, verbal, adverbial and adjectival concepts[11] of English and Polish (and forms "converted" into such concepts) will be the subject matter of English-Polish lexical analysis.

Furthermore, we would like to assume that NOMINAL CONCEPTS ("names") are given precedence over the three remaining concepts.

As far as contrastive language studies are concerned (especially the pedagogically oriented ones) our decision seems to be intuitively more correct than e. g. the Fillmorian "real-verb" precedence.[12] On account of their referential properties (but cf. footnote 13 below) and easily graspable ("contrastable") relations in terms of "more general" :: "more specific", a precedence of this type seems to account correctly for at least the foreign language learner's expectations concerning the L_2 lexicon.

Outside the domain of contrastive analysis proper, certain presuppositional properties of names as well as certain properties of language paraphrase and definition also seem to favour this approach. The former properties in traditional linguistic analysis are known as collocability and compatibility, or syntagmatic interdependence of structures. Similarly to the paraphrase and definitional properties of lexical items, the presuppositional properties seem to point to the fact that nominal concepts are the only obligatory category

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[10] There are certain differences between Lyons' approach and the one adopted here. Relevant at this point is the fact that Lyons operates in terms of lexemes and not W-lexical items and that he identifies the open set with lexical, and closed with grammatical items. Except for the fact that "grammatical" items may be "converted" into lexical, we would gladly identify W-lexical items with all and only members of the open class.

[11] In spite of Lyons' warning, we have decided to preserve the vague notion of concept in this paper as a pretheoretical term. We follow in this respect both, the two current trends of the TG school and the procedures of a number of logicians both, past and present, who do not find the insupportable.

[12] Fillmore's case grammar seems to be strongest whenever his formalized cases correspond to speakers' intuitions concerning "notional" classes (=categories) of nominal objects, for instance if the +Instrumental role or case correspond (to nouns which could be notionally defined as tools, instruments or materials used. Thus it could be predicted that +agentive and ÷objective but not temporal or locative would be most disputable cases.

in all structures of the discussed type; (cf. Lyons 1968:440 and his examples: *bird* : *fly*, *fish* : *swim*, *blond* : *hair*, *addled* : *egg*, *drive* : *car*, *bite* : *teeth*, *kick* : *foot*).

Since neither the above assumption nor a similar, but more specific, hypothesis below can be justified adequately within the scope of the present paper, we would like to make the reader accept a more neutral version of the assumption, namely: if predicates may be said to presuppose both the number and functions of their arguments, so names (or rather arguments: their number and type, class or category) may be said to presuppose their predicate(s) or abstract relations of a predicative character (e. g.: part : : whole, class-inclusion, multiplication of classes, etc.). Presupposition in both cases seems to refer to a relation of the same type. Thus, both *open* :: *Agentive Arg.*, *Objective Arg.*, *Instrumental Arg.*; and *shoot* :: *gun* (with *pistol*, *firearm*, *weapon* in a "vertical" relation within the same net), *bird* :: *fly*, *bird* :: *egg* :: *lay* (and other "produce"-verbs) all are defined here as standing in the relation of presupposition.

The more specific hypothesis referred to in the previous paragraph may be stated as follows: out of the NOMINAL CONCEPTS (=NOM) there should be separated a universal, language independent class of basic concepts (they seem to be basic or primary in terms of language acquisition and language use at least), and this particular class of concepts comprises names of things, objects, artifacts, and animal and human beings. Particular members of the class are culture sensitive and the notion of the cultural overlap will have to be defined primarily in terms of this class' membership. This class will be referred to as NOM. (RES).[13]

The class NOM. (RES). has been separated here because the author would like to suggest that this particular class of names be analysed first within contrastive lexical studies. Most expectations of FL learners concern this class, and, consequently, most lexical language errors seem to fall within this category. The study of lexical gaps within the semanto-lexical field analysis as well as the field analysis itself if started from NOM. (RES).-analysis should be easiest and readily applicable in FLT. It also seems (but the author's belief will have to be proved) that it is the calss of NOM. (RES). at which the correspondence between notional and formal categories are definable.

4.0. It has been proved by the author elsewhere (Nowakowski 1976; see also Krzeszowski 1974:11 - 12) that the notion of congruence valid for other

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[13] The class NOM. (RES). corresponds to Katzian class of Physical Objects and the necessity for separating it could be partly defended along the same lines. Other arguments might be borrowed from a logical and philosophical trend known as "reism", cf. Kotarbiński's writings on the subject and some of Doroszewski's arguments in support of the theory in the lexicographic works of the latter. Unfortunately, there is no place in an article of this type to go any further into the problem than just to state the dependence of our argumentation on the theory.

levels of language contrasts has no application in lexical contrastive studies. Similarly, it would be most unwise to uncritically adopt the notion of equivalence from semanto-syntactic studies in order to work out even a tentative definition of *equivalent lexical items*. Certain guesses can be made, for instance, the notion will have to be sensitive (made sensitive) with respect to language variety (cf. §1.1.1.), its referential properties, and its position in a given net (with respect to closest "neighbours"?? to all net members??) will be among its most important factors. Yet the definition itself will have to wait until much more is known about lexical nets and semanto-syntactic properties of lexical items.

It seems, however, that certain studies on (interlinguistic and intralinguistic) lexical paraphrase relations could speed the task of the linguist working on such definition. Thus, we would suggest to include into the scope of contrastive lexical analysis studies of following types: (§§ 4.1 - 4.4. below).

4.1. *Paraphrase relations holding between a single lexical item of L_1 and its "natural paraphrase"* [14] *in L_2.*

It is assumed here after Lipińska (1974:168, 154) that the natural paraphrase holds when "a certain meaning X which is expressed in L_1 by means of one lexical item is expressed in L_2 ny means of more than one lexical items which stand in a well defined syntagmatic relationship one to another. Usually, the expression in L_2 has the form of some modification structure such that the head constituent of this structure corresponds to the archilexeme, [14] whereas the modifiers correspond to the other sememes [14] included in the meaning of the lexeme of L_1". (p. 168, cf. p. 154 "more lexical items but semantically simpler are used in L_2").

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[14] All references are to Lipińska (1974), where the reader finds the terms defined in a more detailed way. Archilexeme within the theory of lexical semantic fields is, roughly speaking, the most neutral and the most general lexeme within a given field, e. g.: *smell* is an archilexeme within a field that could include: *scent, aroma, fragrance; fetor, odour, stench; frowst; bouquet.* A sememe is a single componential meaning of a lexeme, o. g. *boy* may be analyzed into three sememes: MALE, YOUNG, HUMAN. Lexical gap is a lack of a lexeme in a language L_2 with respect to L_1 lexemes within a given comparable field, e. g. in the field with *smell* as archilexeme, English *with respect to* Polish has a lexical gap for which one may use a natural paraphrase: viz.: *swąd* :: *smell of burning.* The lexical gap illustrated above is an item gap. Polish with respect to English has a net-gap in the semantic field with the archilexeme *smak* "taste" which cannot be corrected with the help of any natural paraphrase, viz. *flavour, savour, relish, smack, tang.*

Similar phenomena of paraphrase have been discussed in terms of "analytic" vs. synthetic correspondences in Bańczerowski (1974), from both contrastive and theoretical point of view (his examples: *ende machen* :: *beenden, Glück wunschen* :: *congratulate, have breakfast* : : *zavtrakat'*).

Accidentally, Lipińska's 1974 "syntactic" monograph and Bańczerowski's 1974 "theoretical" paper are two best "lexical" studies in the project so far (a very good article of B. Lawendowski on corresponding lexical items referring to *women* in English and Polish has not been published).

It seems that certain additional restrictions should be added concerning the referential properties of the item and its paraphrase, and at least a restriction that would guarantee the same "variety" of language (style, emotional style, jargon, dialect, etc.).

The notion will be most useful if one tries to characterize such terms as lexical-item gaps vs. lexical-net gaps within contrastive lexical studies. Intralinguistic description will find the notion of natural paraphrase useful in accounting for certain types of synonymy relations. [14]

Examples of natural paraphrases are: *a piece of furniture* :: *mebel, tap* :: *stukać lekko* ("knock softly"), *lock* :: *zamknąć na klucz | kluczem* ("shut using/with a key"), *have breakfast* :: Rus. *zavtrakat', smell of burning* :: *swąd,* etc. They are to be distinguished from "artificial paraphrases" (Lipińska 1974) used by the logician, philosopher and linguist; of the type: kill=CAUSE BECOME NOT ALIVE, brother=MALE SIBLING, etc.

4.1.1. The notion of natural paraphrase would be extended here to include the relation that obtains between a lexical item of L_1 and its proper definition (genus proximum+differentia specifica) in L_2. Formal similarities between paraphases of both types are obvious. This type of paraphrases will probably be most useful for defining equivalents to certain (characteristically English) nominalizations typical of professional jargons.

Paraphrases discussed in §§ 4.2. and 4.3. in spite of their difference from structures difined by Lipińska will also be regarded as natural paraphrases here.

4.2. Analysis of this particular type of paraphrase relation will verge on the boundary of linguistic lexical analysis and the art of translation. The subject matter here will encompass all possible paraphrases and equivalents of items which themselves are marked with respect to language variety. In addition to markings listed in § 1.1.1. certain types of idioms (if stylistically marked) will be included here. The difficulties with which the investigator will be faced may be grasped by the reader if he tries to answer which of the Polish items is a "closest" equivalent to E. *kick the bucket* :: *przenieść się na lono Abrahama, wykitować, odwalić kitę, wyciągnąć nogi||kopyta, wykorkować.* Synonymic relations among English and Polish "idiom nets" might be of some help here (to exclude for instance the first possible equivalent). In many cases, however, a principled choice is very difficult, if possible at all. (Curiously, it seems that *wyciągnąć nogi|kopyta* is statistically the most frequent translation equivalent — could it be because of the cross-linguistic presuppositional relations between *kick* and *nogi|kopyta* "legs, hoofs"?).

4.3. This type of paraphrase relations has already been touched upon in § 1.1.1.a. In cases of this type, the investigator, if forced by semantic factors (notably reference and presupposition) will have to cross both the hypothetical "upper" and "lower" boundaries of the definition of lexical item; — the hypo-

thetical (implausible, it seems) upper boundary defined by the requirement that the form (=morphological structure) of a lexical item determined by the shape of the Lyons' lexeme, the lower boundary restricted by the assumption that no bound morpheme can be a W-lexical item.

As was said before, both suggestions are unrealistic. Certainly we would like to state that the following Polish items are single lexical items: *maszyna do pisania*, *wiatrak*, *parostatek*, *statek parowy*. And similarly, in spite of formal differences the investigator is forced to treat the English items as equivalent *typewriter*, *windmill*, *steamer*, *steamship* (if not for other reasons, than on account of their reference. Note that all items are by definition unambiguous).

It seems that paraphrase relations hold between meanings of morphemes (secondary, generalized meanings, cf. § 2.0.) and lexical items, i. e. in the example above: between -*er* (of *type- writer*) and Pol. *maszyna*, between -*er* (of *steamer*) and *statek*, and between -*ak* (of P. *wiatrak*) and E. *mill*. This seems to be a classical example of the correspondence between notional categories (tool, instrument) and its formal marking (instrumental -*er* marker).

Interesting as the problem may be, it certainly needs elaboration (cf. Nowakowski (1976) with reservations as in footnote 4). We would like to suggest only that contrastive lexical studies should include generalized descriptions of semantic relationships (=net analysis) which have formal markers in ANY of the compared languages (irrespective of whether the other language does or does not mark a given notional category in a formal way). Thus, for instance, we envisage studies of LOCATIVE NOUNS in English to account for the Polish locative marker -*isko*.

4.4. Lastly, we would like to recommend what seems to be the most fascinating and the most difficult paraphrase relation in lexical studies (both within a language and across language boundaries), viz. paraphrase holding between metaphoric vs. nonmetaphoric W-lexical items.

The relations are theoretically very interesting for a number of reasons. First of all, since Weinreich lexical item is unambiguous by definition, the investigator would have to make a distinction between uninteresting cases of pure-chance homonymy (e. g. Pol. *zamek* "castle", *zamek* "zipper") and those that are reflexes of rule governed metaphorical processes. This, in turn, would allow him to come closer to a definition of the notion of a possible metaphor. Since children most probably acquire lexicon in the form of a list of W-lexical items, studies of metaphorical processes would have serious implications on investigating the so called "growth of word meaning" within language acquisition analysis.

It seems that certain basically metaphorical processes have becomes so common to us as language users that very few would even think about applying the literary-tradition burdened term to relationships in e. g.: *This man invented a square wheel* versus *This man weighs 150 pounds*; or *The dissertation was about Chinese sex customs* vs. *The dissertation was on the piano*. And is the

item *piano* in the fourth example the same or different from *John was playing the piano*? It seems that both the subject nouns in the second and third sentence, and the first mention of the item *piano* illustrate metaphorized nouns (roughly two reifications and a locus-formation).

Certain other metaphors come very close in their relation to the non-metaphoric items of the same form to relationships that will have to be (or have already been) postulated for explaining (=describing and postulating an underlying structure for) such nominal elements as compounds or other nominal semanto-syntactic structures (cf. McCawley (1968); see also Nowakowski (1976)).

The use of such studies in contrasting lexicons of any two languages is related to what has been termed "the growth of word meaning" (Anglin 1970:1 - 12). Ultimately, one should aim at providing the FL learner with certain principles of how central meanings and peripheral or secondary ones are related (what is referred to here are "meanings of lexemes" as they are discussed in Di Pietro (1971 : 121); in our terms it would be more proper to talk about the relationship of W-lexical items of the same form). Additionally, certain lexical gaps are typically "gaps in metaphoric processes" operating in, for instance, Polish in case of equivalents of such lexemes as E. *dog*, *heart* (to take words of a very high frequency) in such contexts as *bench dog* "imak", *chain dog* "łańcuchowy hak chwytny", *hand dog* "klucz żerdziowy (do łączenia żerdzi wiertniczych)", *dogspike* "hak szynowy, szyniak", *trap dog* "zapadka zwalniająca", and in all other technical uses; or, in the case of *heart*: *at the heart of*, *the heart of the matter*, *take the heart put of* the equivalents are "sedno rzeczy, sedno sprawy, istota rzeczy, rdzeń". Quite naturally a number of lexical errors will have to be explained in terms of those gaps.

5.0. We would like to close the article listing certain lexical contrastive problems that have either been excluded from the paper or have only been mentioned in passing. The reader may get acquainted with certain aspects of lexical analysis of those types from publications of the Romanian-English Contrastive Analysis Project (*Reports and studies* 1971: 127 - 144, 27 - 30) and the Serbo-Croatian — English Contrastive Project.

The problems of borrowings and cognates seem to have fascinated linguists long before contrastive language studies gained on popularity (at least in Europe). Studies of that type were carried out from either a formal standpoint (i. e. morphographemic, morphological, phonetic and phonological influences of the language-as-borrower upon the lexemes of L_1 were investigated), or from a combined formal and semantic approach. The latter studies are better known as studies of lexical cognates. Both the $L_1 - L_2$ borrowings and $L L_1$ transfers were usually taken into consideration. Distinctions were drawn between orthographic borrowings (and cognates), e. g. *kowboj*, *Yale*, *jazz*, and phoneticized (oral) borrowings, e. g. *mecz*, *aut*, *faul* ("match", "out", "foul").

Both were separated from various types of calques, e. g. *drapacz chmur* "skyscraper", *słonecznik* "sunflower", *niezapominajka* "forget-me-not". Semantomorphological analysis of cognates attempted at drawing distinctions between proper cognates and false cognates (in the latter case formal similarity corresponds to semantic difference) in order to define the notion of semantic overlap and oppose it to that of formal overlap (i. e. relations of meanings and relations of forms between L_1 and L_2 defined as either one-to-many or many-to-one). Areas of overlap as source of potential language errors were of utmost importance to the investigator.

The best descriptions of English loanwords in Polish is Fisiak's (1965) unpublished PhD dissertation. Some other available printed material can be also found in Fisiak (1960, 1962, 1963, 1964, 1970, 1975).

5.0.1. One other aspect of lexical language studies should be mentioned here, viz. the a posteriori lexical error analysis (i. e. analysis of mistakes made within the area of lexeme use by Polish learners of English). Unlike in the case of previous studies, the author has on purpose paid little attention to the area. Two reasons could be given:

a. error analyses are most useful as a supplement to contrastive lexical studies; minimally the investigator must know which errors are grammatical, which are lexical, and must be able to principally distinguish between typical lexical errors of various types (e. g.: resulting from L_2 net generalization, L_1 transfer, from L_1 or L_2 lexical gaps, etc.) and accidental lexical mistakes. Given the present state of contrastive lexical analysis within our project, it seemed to the author premature to call for a supplement of that type.

b. To those who look at lexical analysis of errors as an alternative to contrastive lexical analysis of errors as an alternative to contrastive lexical analysis, we would like to dedicate the following quotation from Carl James with whom the author wholly agrees:

"This is a strange type of alternative, since the two are so different in their approaches: *a priori* versus *a posteriori* detection of error. It is like the alternative: give up smoking or have the tumor removed by surgery". (James 1971:55).

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