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# Problematic ESL Content Word Choice in Writing: A Proposed Foundation of Descriptive Categories

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*Accurate and native-like word choice in writing is an important but problematic area of second language use. This paper presents an analytic foundation for pedagogical research and application which extends beyond the traditional 'superficial' categories of morphosyntactic rule violations and false cognates. Simultaneous 'complementary' analytic categories are proposed: the complexity of understanding word choice in written production entails the incorporation of several relevant theoretical and applied perspectives: lexical-semantics, syntax, text-analysis, pragmatics, language acquisition, cognition and memory, and pedagogical research. This study focuses on the first four as a necessary preliminary step. Major categories of word choice analysis are synthesized from both a theoretical perspective and from an empirical one, with an examination of data from ESL writers. The paper goes on to discuss implications for ESL pedagogy and further research.*

## ESL WORD CHOICE IN WRITING

The second-language learner's word choice errors in academic writing can seriously impact the student's overall academic success, often resulting in misinterpretation or incomprehensibility. The reader's native or near native sense of "wrongness," even where comprehensibility is not affected, may entail an unfairly negative evaluation of the overall quality of the written work, in terms of its scholarship, clarity, or both. Moreover, when such a reader is an academic instructor with the power to judge and hence determine academic achievement, the consequences for the second-language learner can be a misunderstanding of the student's scholarly achievement or communicative ability.

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The precise nature of a particular word choice problem may not be clear to an ESL instructor, since the choice itself may involve subtle factors, sometimes of several types simultaneously. It is perhaps for this reason that there is a lack of pedagogical material to specifically deal with this general phenomenon, which probably occurs at all ESL achievement levels. TESL vocabulary materials have traditionally been based on native-speaker pedagogy, which is generally oriented toward the passive learning of vocabulary (memorization), active but purely receptive reading skills (inferring meaning from context and Greco-Latin morphology), and error correction (teacher-dependent revision). The missing consideration among all these approaches has been a lack of focus on the linguistic and real-world knowledge compendium known as the lexicon—particularly as it is used in the conceptually-driven recall and associative retrieval of lexical items in acts of written text *production*. In this paper, I will survey what I believe to be the necessary levels of analysis, and from this, attempt to derive a typology which might be applied to identifying the linguistic and other problems with unsuccessful word choices in ESL writing, focusing on the basic word classes of nouns, verbs, and adjectives.

## A PRACTICAL QUESTION ABOUT WORD CHOICE IN WRITING

What constitutes successful (acceptable to native speakers) versus problematic ESL content word choice in writing, and how are successful word choices made? This is an applied linguistics question in the purest sense because it derives from the need to handle a practical problem, as any ESL writing instructor can attest. Although there is an urgent need for direct research answers to this question, there is certainly a paucity of useful research solutions. Perhaps it is also a naive question from the point of view of the psycholinguistic or the language performance theoretician: the problematicity of ESL word choice is often a consequence of interacting variables which are likely to be discovered only by operating from several theoretical viewpoints simultaneously. Although reasonable from a pedagogical viewpoint, therefore, this vital question has remained largely unanswered.[1] It is up to ESL researchers and instructors, then, to make use of several theoretical viewpoints, and to begin to lay some practical foundation for dealing precisely and effectively with the unending instances of problematic word choices in the writing of ESL students. Establishing this foundation requires us to confront the complexity of relevant analytic categories and to produce an encompassing set of useful conflations of them.

The requirement for a comprehensive set of such categories arises from a practical teaching need. While most second language writers regularly make successful word choices, they also make unacceptable ones, some on a fairly regular basis, others only sporadically. Unfortunately, the problem involving the non-fluent, continual word choice errors of ESL writers has been largely ignored by researchers (Laufer, 1986). Further, the relevant existing research looks at only bits of the question, usually in terms of reception rather than production, and does not furnish an overall, pedagogically applicable view of the problem. My purpose in the present paper is to propose a basis for and to provoke an interest in the study of ESL word choice in writing by presenting the descriptive categories which I have found to be the most useful in assessing problematic content word choices.[2]

## SURVEY OF DESCRIPTIVE CATEGORIES

I will begin this survey with a brief discussion of categories of content word choice problems and their L1 and interlanguage sources which have traditionally been the focus of research (e.g., Nation, 1990; Channell, 1988; Carter, 1987; Meara, 1987; Palmberg, 1987). Identifying these categories is not particularly difficult since any one category tends to fully define the problematicity of the word choice to which it applies. These categories will be termed *superficial categories* and are summarized in Figure 1, below. The survey will then look into areas of categorizations which may be less obvious, those which are usually describable only by taking into account the potentially simultaneous interaction of more than one textual level and more than one descriptive category. These will be termed *complementary categories*. A general framework for pedagogical application is then proposed.

## Superficial Descriptive Categories

Identifying the relevant descriptive categories of some unacceptable word choices is a relatively straightforward task, as they are largely dependent on either a single co-textual variable (morphosyntactic or referential) or on a single contextual (pragmatic) consideration, such as register. See Figure 1.

**Figure 1. Superficial Descriptive Categories**

| CATEGORY | EXAMPLE |
|---|---|
| •morphosyntactic or lexical-derivational | *"thinkings"<br>[pluralized non-count gerundive]<br>(Examples (1) - (4) below) |
| •pragmatic<br>register | *"so" [= *very*]<br>(Example (5) below) |
| text-deictic | *"first" [= *before* or *next*?]<br>(Example (6) below) |
| " | *"the inside [of NP]"<br>[indeterminable antecedent NP]<br>(Example (6) below) |

Word forms may be unacceptable because of morphosyntactic or lexical-derivational violations. For example, a student may write

(1) **informations* (vs. *information*)

or

(2) **thinkings* (vs. thoughts)

The student may not know that some non-count nouns may not be made countable; or that some can be, resulting in a new lexeme, as below:

(3) a) *food --> food(s)*
b) *light* (illumination)-->*light(s)*

or effecting no denotational change in meaning, as in (4):

(4) *data is --> data are*

Other word choices may be unacceptable for certain well-known pragmatic reasons. For example, a student who writes in her academic research report

(5) **These results are so significant*

vs.

(5') *These results are very significant,*

violates register or discourse community constraints. The same could be said for pronoun+AUX contractions, where informal or conversational structures violate formal register constraints. Other examples of pragmatic problems with word choice are provided by the following example excerpted from the corpus of student data:

(6) *Before pouring the measured amount from a beaker,*
*an agar medium was prepared.* ***It was put the***
***inside first.***

The intended meaning conforms with the paraphrase in (6'):

(6') *An agar medium was prepared inside a beaker;*
*a measured amount of the medium was then poured out.*

In the second original sentence of (6), not only is the referent for anaphoric 'it' ambiguous, the referentially 'old' information—"the inside [of *something*]"—implied by the anaphoric deletion is not certain. These are text-deictic problems of grammatical anaphor (as opposed to lexical-semantic 'cohesion', see the discussion of lexical-semantic problems below). Also, "first" may be redundant with "before" in its intended meaning—the time of the preparation of the agar medium, or "first" may indicate a time prior to or simultaneous with that denoted by "before." Word choice problems, then, can be linked to faulty conversational implicatures in temporal and spatial deixis.

There are some clear-cut sources for the problems discussed so far. An easily understood source of problematic word choice results from language-to-language 'translation.' One might see the L2 (second or non-native language) writer's use of 'false friend' cognates from diachronically related languages, as in (7):

(7) *(estar) constipado* [Span.] ≠ (have a) cold[3]

Alternatively, the source language may *not* have a diachronic relationship with the language being written, with the similarity of form being purely a matter of chance. Worse yet are those errors in choice of function words traceable to faulty target language instruction or translation dictionaries, as in (8):

(8) *zhídào* (Chin.) [= 'not until']--> **until.*[4]

Researchers might also observe typological transference from a relatively morphologically 'free' language to a relatively 'bound' one. For example, a problem involving count/noncount nouns as in (3) above may have its source in the lack of a similar inflectional system in the L1 for marking plural or mass nominals. Finally L1 lexical-semantic systems, directly translated or imposed, may violate the internal argument structures of the L2 lexical items themselves (e.g., Chinese --> English; see discussion of problematic word choice example (12) below). The detection of this type of error is difficult without a comparative analysis of the two languages, but such analyses are sometimes available for teachers and students (e.g., Swan & Smith, 1987). In principle, translation effects on written word choice are a straightforward matter to explain (cf. Laufer, 1988).[5]

## Complementary Descriptive Categories

The foregoing discussion involved superficial categories which generally provide single conclusive descriptions of some types of problematic word choices; in other words, each superficial descriptive category labels a 'type' of problematic word choice. In contrast, the following discussion involves categories which generally apply in some complementary combination, rather than singly, to particular word choices.

### *Lexical-Syntactic Problems*

Particular verbs may take a selectionally restricted or limited set of prepositions in the bulk of dialects of a language, or according to the target dialect at issue (in this case, 'Standard American English'); (e.g., *interested in/*on*). The modification of words from other categories may also be so restricted, as is well known (adjectives, for example: *angry* {*with it, about it, *on it, for a reason, *for it*}). Semantic role assignments and their consequent impact on the meaning of the realized sentence may be improperly or incompletely understood by the L2 writer, as below:

> (9) **A complicated system may destroy because of a minor event.*

That is, 'a complicated system may be destroyed/may break down because of a minor event'; or, 'a minor event may destroy a complicated system'. While categorized as a lexical-syntactic problem, either a syntactic solution (passivization) or a lexical-semantic solution (use of an ergative or middle verb such as *break down*) could repair the sentence. Subcategorization problems may also seem to the native reader to be word choice problems committed by the non-native writer. In such cases, of course, verbs may be substituted for nouns, finite clauses for nonfinite clauses, and so on. Problems such as these may be viewed as word choice problems which involve lexical-syntactic rather than lexical-semantic competence.[6] Some of the areas just mentioned might be better termed semantic, but I wish to adopt a broad view of what syntax is relative to vocabulary and reserve 'lexical-semantics' as a term for the text-independent or conventional denotational paradigms of semantic fields and for text-sensitive sense interpretations, for example, 'connotations.'

## *Lexical-Semantic Problems*

The lexical-semantics of a word may also be incompletely or inaccurately controlled, resulting in denotational, connotational, or ambiguity problems. For example, consider *He was hostile/aggressive* (denotational hyponyms), *She rushed/hurried* (connotationally more-or-less action-focused), and *The police traced the body* (homonymic ambiguity: "traced" with chalk or via dental records?). Of course, the text in which a word is embedded is essential to the production of word choices. Related to this is the problem of lexical-semantic cohesion across a text, for example, in using a general (intensional, abstract, or superordinate class) word when a particular (extensional, concrete, or hyponymic) one is called for, and *vice versa*; for example, *a very big problem* versus *a major flood* (see Halliday & Hasan, 1976, 1989 and Hoey, 1991). As for L1:L2 effects on word choice, these have been previously discussed. As pointed out then, this is an important but resistant area of understanding, due in part to the frustrating lack of research on natural L2 lexical production.

## *Collocational Problems*

The collocational demands of particular words (conventional co-occurrences) may also be a special type of lexical-semantic issue, in the sense that collocations operate as multi-word units. However, the notion of collocations has been expanding in recent years to include everything from selectional restrictions to prefabricated expressions to semantically cohesive lexical chains throughout a text. I use the term 'collocation' more narrowly (and traditionally) here; that is, as referring to commonly associated content words, such as *computer* + *system*, *volcano* + *eruption*, etc. (c.f., Hakuta, 1974; Verschueren, 1981; Pawley & Syder, 1983; Halliday & Hasan, 1989; Sinclair, 1991; Hoey, 1991; Nattinger & DeCarrico 1992; and Leech, 1993b for relevant discussions.) Creating purely original combinations of words may violate native expectations; not following collocational expectations may stigmatize a non-native speaker.

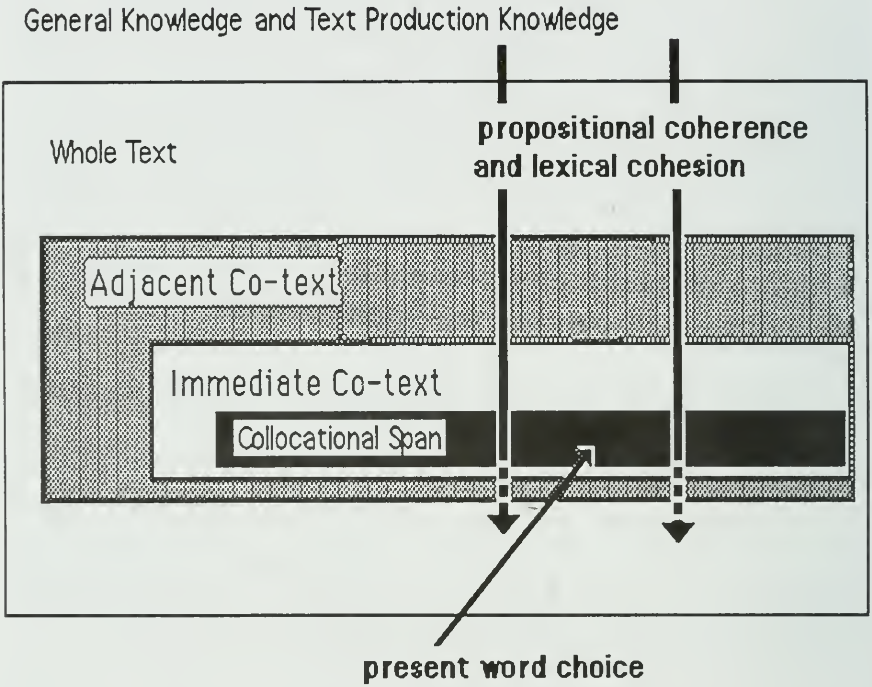
### *Logicality, Topic Knowledge, and Overlap*

Of course, certain discourse and topic knowledge is also necessary for successful word choices (cf. Daneman & Green, 1986). Obviously, information must be accurately denoted, presuppositions and implications adequately handled, and cultural expectations met, a requirement which extends to register. Not only this, but the phenomenon of overlap, or simultaneously existing effects of problematic word choices at different levels of analysis should be expected, since there is no basis to presume that, for example, a lexical-semantic problem may not also be accompanied by a syntactic problem or a larger problem of logical coherence or discourse register; these are not mutually exclusive categories.

## TEXTUAL AND CONTEXTUAL LEVELS OF ANALYSIS

The foregoing discussion of analytical means by which to explain problematic word choice effects (on the reader) must ultimately be considered within an account of the co-textual and contextual levels with which the embedded word choice interacts. This can be illustrated as in Figure 2 (below).

**Figure 2. Framework of Levels of Word Choice Factors**


General Knowledge and Text Production Knowledge
Whole Text
propositional coherence and lexical cohesion
Adjacent Co-text
Immediate Co-text
Collocational Span
present word choice

An assumption fundamental to the word choice scheme shown in Figure 2, is that propositional coherence, or the underlying semantic representation of the text, is mapped at the lexical level by word choices which form a cohesive network. This mapping may extend beyond the point of "present word choice," in the sense of potential or planned text production, or actual production in the case of revision of completed text. 'Present word choice' refers to the existential event with which we are concerned. This present word choice is made at its location within a collocational span (up to and including a clause or a combination of clauses in a sentence, occasionally even several sentences).

Another assumption suggested by Figure 2 is that the *complete* act of word choice can involve all of the levels shown, and when it does, the levels are involved either simultaneously or iteratively in some possible sequence of cognitive processing.

These correspondences include the word's conventional collocation(s) as well as its lexical-semantic relation (i.e., cohesion) with other lexemes throughout the text, its lexical-syntactic work within the immediate co-text of its containing phrasal/clausal frame, and its lexical-semantic meaning in relation to the logical meaning of its co-text, either at the phrasal/clausal (micropropositional) level, or at larger adjacent (macropropositional) co-textual levels, such as argument sequences, expository episodes, or the whole text.

Finally, there are some default assumptions, what Figure 2 leaves out, with which I am not concerned here because of their lack of construability or observability with only the information provided by the writer's text, although they are important to the application of the analytical categories being discussed. These involve the ESL writer's native language, text-topic knowledge, genre knowledge, thinking skills, and memory capacity. I will assume here that our ESL writer is 'ideal' in these ways for the following discussion, but will return to them briefly in my summary of word choice problems. Figure 3, below, is an attempt to summarize the descriptive categories, both superficial and complementary, as we might expect them most likely to relate to various levels of text:

**Figure 3. Descriptive Categories and Textual Levels**

| | Superficial and Complementary Descriptive Categories | | | | |
|---|---|---|---|---|---|
| | Pragmatic | Logical | Lexical-semantic | Collocational | Lexical-syntactic/ morpho-syntactic |
| Whole text | √<br>register | √ | √<br>cohesion | | |
| Adjacent co-text (multi-sentential) | √<br>text-deictic | √ | √<br>cohesion | √ | |
| Immediate co-text (up to sentential) | √<br>text-deictic | | √<br>denotation, false cognates | √ | √ |

In sum, there are three important tracks which may be relevant simultaneously. The first is categorial or descriptive, which includes many general categories of word choice effects. The second is the potential overlap or simultaneity of these categories with each other. The third is that word choices must ultimately be analyzed at more than just the sentence level. This complexity makes it difficult to label the 'type' of problematic word choice without qualification. Usually, however, we can intuitively gauge the salience of one complementary category over another (i.e., its relatively larger contribution to a word's problematicity).

## EXAMPLE ANALYSES OF PROBLEMATIC WORD CHOICES BY ESL WRITERS

Various theoretical perspectives have been, or could be, applied to the diagnosis of problematic word choices in writing. The brief survey above laid out what I think are the analytical perspectives which a comprehensive empirical study should be prepared to take into account. In examining the authentic ESL student examples below, some of these perspectives will naturally be invoked by the data at hand and some will not. Those which are most observable involve the syntactic, semantic, pragmatic, collocational, and logical aspects of word choice. I will focus on these. Those which may not be as observable simply from an inspection of the written product involve first language transfer effects, mastery of text-topic knowledge, and cognitive ability. I will return to these at the end of the paper. All of these constitute the principle descriptive categories of word choice effects which I believe can be applied in a practical manner toward the analysis of unsuccessful (or, for that matter, successful) ESL word choices in writing.

All of the following examples were selected from ESL student academic writing. Although there is not space here for a highly detailed account of these examples as they might relate to a larger, embedding text, they are intended to exemplify the major descriptive categories of problematic word choice (Fig. 3). It needs to be kept in mind that these categories may all, in principle, co-occur in various combinations. Further, other problematic word choices may be apparent in these examples, such as "use" in (10), and the reader is welcome to examine these as well.

> (10) The researchers convincingly support their idea by re-examining the theories of Aristotle concerning philosophical inquiry. Perhaps owing to this use of classical philosophy, they present *organized* reasons for their position on this issue.

In (10), the salient problems with "organized" are both lexical-semantic and logical, involving an incongruity of meaning of the word *organized* with propositional content in the preceding, adjacent co-text (i.e., the first sentence). In (10), the denotation of the word choice does not fit logically with the writer's probable intended meaning because it is too general—to the point of incompleteness—in meaning. The writer needed some adjective which would help to explain in what way the researchers' position is 'convincingly supported' because of some philosophy-inspired argumentative structure which they acquired from studying Aristotle. This can be seen more clearly when a 'better' native speaker word choice is substituted, and then compared with the original (e.g., *well-organized* or *valid*). Although a successful revision would no doubt have to be more extensive than this single substitution, the point here is that the lexical-semantic requirements of particular word choices are conditioned upon their macropropositional as well as micropropositional environments. Now consider the next example:

> (11) Rodents are the best fit mammalians for study because of their high rate of reproduction, *accessible* life spans, and relatively low cost.

In (11), the problem involves lexical-syntactic and lexical-semantic relations and connotations. In (11), the writer intended to explain why the life span of rodents is useful to laboratory scientists. I know this because I consulted the writer, a well-informed graduate student studying epidemiology. The word choice does not make sense because a "life span" can not be "accessible" (at least in English). This is a 'restricted combination' problem of lexical-semantic relations which hold for English, and is rather complex—as a derived nominal, 'accessible' assigns a theta role of AGENT, the identity of which (lab researchers) is not furnished. Furthermore, 'accessible' things must be 'openable' or 'enterable', having structural or conceptual internal content. One might further maintain that there is a collocational problem (We will see a clearer example of this in (12) below). Usually, with word choice problems like this, the original grammatical structure must be abandoned and paraphrase should be considered as a solution. Sometimes, even a paraphrase will have to allow some of the information to be 'implied' (e.g., *short lives, (research-) amenable life spans, usefully [to researchers] short life spans, short and therefore useful [to researchers] average age limits because of the rapid availability of mature carcasses for dissection and analysis [by researchers]*).

The last example illustrates another important, but easily overlooked category of word choice problem, that of conventional collocation:

> (12) *Life* is an amazing *world* to biologists, revealing as it does that independent cells can cooperate with one another.

In (12), the problem is both collocational[7] and lexical-semantic. These two quite abstract words, *life* and *world*, occur in a roughly equational (copular) syntagmatic frame. The writer's meaning seems clear enough, but this collocation of 'life' and 'world' is very strange in English: there is no convention by which the general class denoted by the word *life* can be equated with the general class denoted by *world*. There is no lexical combinatory convention in English which might over-ride the lexical-semantic restriction against this novel equation of these two abstract nouns[8] (i.e., as in conventional metaphoric or idiomatic collocations, such as *life is a journey/an unfolding drama*). A practical approach is to see whether synonyms can be substituted or whether a minimal paraphrase would be satisfactory, e.g., instead of *world,* substitute *phenomenon* (which has weak collocability with *life*); or restructure the phrase: *The world of living things; The world's life* (at best, these are marginally satisfactory paraphrases). Conventional collocations generally pass unnoticed by the reader (or writer); contra-conventional ones generally will not.

T. F. Mitchell (1971) made the point long ago that in the absence of 'strong' collocational choices, the writer will generally attempt to retrieve a weaker, although still conventionally preferred, collocate, in order to make a communicatively familiar word choice:

> We are probably all aware of the operation of even weaker collocational constraints as we search for the 'right' choice among, say, *achieve, accomplish, effect, execute, implement, realize*, etc. to associate with *plan* or *project* or *proposal* or *ambition* or *object* or *objective*, and a certain inescapable 'prescriptivism' informing language choices is perhaps worthy of note in passing. (p. 54)

This particular prescriptivism is more than 'worthy of note' when it comes to the diagnosis of what ESL writers have written, as opposed to what they 'should' write, given the institutionalized collocational restrictions found, for example, in academic writing.

## RESEARCH AND PEDAGOGICAL APPLICATIONS

When writing, ESL students make mistakes in word choice for reasons which are not clearly or systematically understood. Word choices may be 'odd' for subtle, perhaps opaque reasons. There is sometimes the added difficulty of knowing what the intended, 'real' meaning was. An attempt has been made here simply to provide a rational list of descriptive categories based on observable factors, at various levels of language use, which may serve as a foundation for analyzing or diagnosing word choice problems in ESL writing. The following list of diagnostically oriented 'word choice problems' is derived from the preceding discussions and is an attempt to create 'super-categories' which are closer to research and pedagogical applicability. It should be kept in mind that all of these are potentially relevant categories in a given case, as seen in the foregoing analyses of student writing samples. The list has two parts, the first one recapitulating the problems which can be construed reliably from an examination of the text in question, as illustrated above. The second part makes use of those categories which are not construable from the text alone.

### *Word Choice Problems Construable from the Written Text:*

1. L2 COLLOCATIONAL knowledge is lacking, incomplete, or faulty (compared to native speaker knowledge).

2. L2 LEXICAL-SEMANTIC knowledge is lacking, incomplete, or faulty (compared to native speaker knowledge).

3. L2 LEXICAL-SYNTACTIC knowledge is lacking, incomplete, or faulty (compared to native speaker knowledge).

4. L2 LOGICAL. The proposition in which the word choice is embedded is not logical because of the word choice (either internally or in relation to co-textual propositional meanings).

5. PRAGMATIC. Included here are missing or inappropriate phoric reference and inappropriate register, especially overgeneralization from L2 conversational structures, including conversational strategies unsuitable for written discourse.

***Word Choice Problems not Construable from the Written Text Alone:***

6. L1 INTERFERENCE, grammatical and text-type knowledge. Not to be confused with word choice problems 4 or 5, this problem relates to L1 rather than L2 genre expectations: discourse moves, voice, register, and so forth. This may be the converse of word choice problem 5: L1 knowledge is being transferred because it sometimes works. I have conflated this pragmatic L1 area with L1 grammatical knowledge (see earlier discussion, "Superficial Descriptive Categories").

7. BACKGROUND KNOWLEDGE. The writer lacks general/"factual" knowledge related to the text topic (i.e., the person making the word choice has an inaccurate meaning to express).

8. COGNITIVE ABILITY. The fault is in episodic memory or problem-solving skills (i.e., the person making the word choice has no well-formulated meaning to express).

The potential usefulness of my presentation of both a detailed survey of theoretical categories and some attempts at applying them to real examples is clear enough, I expect, to ESL instructors interested in expanding their abilities to cope with the recurring word choice problems of their students. I hope that this discussion will provide a starting point, or at least a provocation, for further research into the possibilities of pedagogically utilizing ESL written word choice strategies and processes in effective ways. Such research could delve into the issues of production vocabulary acquisition, the effects of consciousness-raising about word choice in ESL student writing, the effectiveness of syllabus materials based on such knowledge, the question of 'made-up' versus simplified/unsimplified authentic materials used in teaching writing, the use and abuse of dictionaries and thesauri, and the clarification of logical coherence and lexical cohesion in writing. Sensitizing the writer to his or her own abilities and needs concerning word choice in writing can also be constructive. The basic pedagogical implication of this study, then, is that a systematic understanding of ESL student written word production is possible to achieve, and can provide a basis for diagnosing student word choice errors so long as the complex interactions of discourse, syntax, and vocabulary are not ignored.

It seems that a comprehensive inquiry requires that several research approaches be applied to ESL writing, and in a certain cumulative, iterative sequence: first, the development of a tentative analytical framework based on the extant literature along the lines discussed in this paper (this would include a working typology of word choice problems and one of word choice, or production, strategies); second, applying and then modifying or expanding this framework by examining word choice problems as they emerge from the analysis of actual ESL writing; third, a study of textually controlled word choice elicitations (e.g., by use of cloze elicitations) with further refinements to the analytical framework; fourth, the application and testing of this framework with real-time data, such as think-aloud (a running student commentary on their thoughts while writing), introspection (immediate or delayed student recollections), or interview data; and fifth, pedagogical application and testing.

## NOTES

[1] See Meara (1984) and Laufer (1986) for discussions.

[2] This information was developed from data collected at the UCLA ESL Service Courses as the preliminary investigative groundwork for Leech (1993a).

[3] Example from Swan and Smith (1987, p. 87).

[4] Example from Swan and Smith (1987, p. 234).

[5] Nonetheless, these effects may constitute a part of the explanation for the more baffling sorts of ESL word choices, along with considerations of idiomaticity and metaphor (especially those involving language-specific lexical-semantic systems--these may be among the least understood linguistic phenomena; for a theoretical understanding of such events, one might turn to thinkers such as Benjamin Whorf, but these are issues beyond the scope of this paper). The L2 lexical-syntactic and lexical-semantic systems, in this case those of English, may not be completely or appropriately indexed to particular lexical items which the ESL writer has available in his or her productive vocabulary. That is, an L2 word's syntactic and semantic behavior may have been incompletely or inaccurately acquired, either relative to the writer's own interlanguage or to a normative model of native-speaker English.

[6] By lexical-syntactic systems, I am referring here chiefly to morphological and selectional restrictions, semantic role assignments, and subcategorizations, although other things, such as adjunctive modification, aspect, modality, and factivity might be included.

[7] *Collocations*, in the Firthian sense used here (although I would include conventional metaphors and idioms as types of collocation). Collocations generally occur within phrasal and sentential boundaries. See Sinclair (1991) and Hoey (1991) for more on this traditional view, as opposed to Halliday and Hasan's (1976, 1989) usage in terms of lexical-semantic relations in 'cohesion'.

[8] According to the L2 writer, the corresponding Chinese collocation is fine, which suggests the notion of 'false collocational cognates'.

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