Lexical Familiarization in Economics Text, and its Pedagogic Implications in Reading Comprehension

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In teaching the reading of educational text, authorities commonly claim that teachers should not attempt to teach specialist vocabulary. This is not in dispute with regard to vocabulary development; but the current article holds that in vocabulary *recognition*, strategies for puzzling out the meaning of a newly-introduced specialist term *should* be taught. One such strategy is the recognition of the writer's lexical familiarization devices, i.e. the ways in which the writer sets out to give some degree of understanding of a new term, so that the reader is able to continue.

This study reports on research (based on an Economics corpus) that analyzes those devices, their signalling, and their comparative frequencies. Teaching suggestions are then made.

INTRODUCTION

In many non-English-speaking countries, students and professionals need access to educational text written in English, as such text contains information and opinions that are of value for both academic and professional purposes. L2 readers face many difficulties in struggling to extract meaning from specialist text. Clearly, however, a major difficulty is specialist vocabulary.

With the advent of the notional/functional approach to language teaching, and with (welcome) emphasis in recent years given to texture (i.e. the essential characteristics of text), vocabulary has received less emphasis in teaching/learning reading comprehension. Harvey (1983), for example, laments: "The study of vocabulary has been given a minor focus of classroom activities, perhaps partly due to more modern communicative approach methodologies." Swales (1982) expresses the same thought, when he chastises ESP practitioners and textbook writers for their neglect of vocabulary-teaching.

This often-mentioned "neglect" is, in our view, most apparent in the field of specialist vocabulary. Whether or not one should teach specialist vocabulary does not appear to be an issue among ESP practitioners. Higgins (1967), for example, states firmly that "... it is not the job of the English teacher to teach technical vocabulary." Robinson (1980) supports this view, by recommending that coursebook writers do not need to concentrate on specialist vocabulary, as students will absorb it from their main course studies. Moody (1975) puts the issue succinctly: "One cannot and should not expect the ESP teacher to deal with levels 1-4[1], since it is quite unrealistic to expect that he will know enough to deal with them. If he does try to deal with these levels, he will arouse amusement, if not contempt, in his students: they know far more about such things than he does."

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[1] Moody posits six levels of vocabulary. Levels 1-4 relate to specialist vocabulary.

VOCABULARY RECOGNITION AND VOCABULARY DEVELOPMENT

The issue, then, of whether the FL reading teacher should teach specialist vocabulary, appears to offer little scope for debate. But *does* it? In "vocabulary teaching", we must take care to distinguish between *development* and *recognition. Vocabulary development* refers to the teacher deliberately and systematically expanding the student's stock of words - by means of word lists, form-class exercises, functional groupings, dictionary exercises, semantic clines, etc. And it is the deliberate, systematic expansion of *specialist* vocabulary that the writers mentioned above regard as being outside the province of the reading teacher. *Vocabulary recognition*, however, is quite another matter. Vocabulary recognition relates to the strategies that an efficient reader employs, while reading a text, to work out the meaning of an unfamiliar word encountered in that text. Put another way, the meaning of the unfamiliar word is *already in* the text (or part in the text and part in the reader's head). The efficient reader possesses certain strategies for working out that meaning; the inefficient reader does not. Those strategies are common to both specialist and non-specialist vocabulary. There is therefore every reason for the FL reading teacher to help the student acquire those vocabulary recognition strategies. Most are well-known, and are common in coursebooks: they include guessing from context, cognate recognition (and false cognate disambiguation), and back-tracking a nominal compound in order to puzzle out the functional inter-relationships of its constituents.

LEXICAL FAMILIARIZATION AND GUESSING FROM CONTEXT

A vocabulary recognition strategy that has attracted far less attention - and in fact is rarely taught - is that of lexical familiarization. Williams (1980) defines lexical familiarization as being: "The author's *intention* to familiarize the newly-introduced lexical items to the *target reader*, by verbal, illustrative or numerical devices, or any combination of these means." Lexical familiarization is therefore a contextual aid, intentionally and explicitly provided by the author when writing for a specific readership. The writer's intention is to help his reader, by providing him with sufficient familiarity with the new word, as employed in its context, so that the reader can continue reading with understanding.

The twin characteristics of *author's intention*, and familiarizing a newly-introduced word for *a pre-decided target reader*, clearly distinguish lexical familiarization as being a sub-set of the commonly-taught strategy of guessing from context. In order to make a case for lexical familiarization as a separate vocabulary recognition strategy, it is first necessary to examine its parent strategy - guessing from context - in more detail.

GUESSING FROM CONTEXT

Research and scholarship in this field fall into two areas: *categories* of contextual clues, and *reading strategies* together with pedagogic advice.

Ames (1966) offers what is probably the longest list of categories, based on research which required readers to say *how* they arrived at the meaning of nonsense words embedded in a series of short texts. Ames's list is:

1. clues derived from language experience or familiar expression
2. clues utilizing modifying phrases or clauses
3. clues utilizing definition or description
4. clues provided through words connected in series

5. comparison or contrast clues
6. synonym clues
7. clues provided by the tone, setting and mood of a selection
8. referral clues
9. association clues
10. clues derived from the main ideas and supporting detail
11. clues provided through the question-answer pattern
12. preposition clues
13. clues using non-restrictive or appositive phrases
14. clues derived from cause and effect pattern of paragraph and sentence organization

These categories are a combination of intentional and incidental. In analyzing the short texts used in Ames's study, it is not always possible to decide whether context clues are intentionally given by the author, or are merely incidental. But 1, 4, 7, 10, 12 and 14 appear to be incidental, whereas 3, 5 and 11 are clearly intentional. What Ames's study *does* indicate, however (although Ames does not make this point), is the distinction between *intentional and incidental assistance.*

Brown (1980) offers only five categories:

1. definition, i.e. "... meanings can be found embedded in the sentences that contain the new words."
2. experience (From her example, one must infer that she means "knowledge of the world.")
3. contrast
4. inference
5. analysis, i.e. analysis of word-parts

Brown's definitions of each of her five categories are somewhat vague. Nonetheless, an analysis of her examples suggests that she is referring to:

a. clues deliberately provided by the writer for the reader, such as *definition;*
b. clues which are inferred by the reader from the context, such as *experience;* and
c. clues provided by the word itself, such as *analysis.*

In contrast to offering categories of contextual clue, other authors put forward pedagogic advice for capitalizing on such clues. Van Parreren and Schouten-van Parreren (1981), for example, report mentalistic ("think-aloud") research to determine the psycholinguistic processes involved in guessing from context. Their analysis indicates that the reader acts on different linguistic levels:

↑ stylistic (searching for the exact, stylistic use of the word)

↑ lexical (inspecting word-form to derive its meaning)

↑ semantic (exploring the context of the unknown word; using one's "knowledge of the world")

↑ syntactic (sorting out the sentence's grammatical structure)

Their research indicates that a good guesser is characterized by his ability to estimate how many difficulties are presented by attempting to guess a certain word, after which he enters at the appropriate level. And a good guesser has the ability to move up or down the hierarchy of levels if his initial estimation proves wrong. Van Parreren and Schouten-van Parreren's pedagogic suggestions follow from their research, e.g. the reader being made aware of the four levels on which he may act, the importance of hypothesis-testing, estimating the level on which to enter (and adjusting up or down as appropriate).

Clarke and Nation's (1980) approach (not, apparently, research-based) is also four-level:

1. Examine the unfamiliar word and its immediate surroundings, to decide on its form-class.
2. From the immediate context, assign a positive or negative value to the word.
3. Where necessary, examine the word's wider context - particularly across sentence boundaries - to assign a positive or negative value.
4. Guess the word's meaning, and check that the guess makes sense, in terms of both syntax and semantics.

In spite of the sometimes extensive lists of categories of contextual clue provided by investigators such as Ames, Brown and others, pedagogic advice as typified by Van Parreren and Schouten-van Parreren and by Clarke and Nation takes no account of the differences in type of contextual clue, and (more importantly in relation to the current study) takes no account of categories of contextual clue which are intentionally provided by the writer for a specific readership, as opposed to categories which occur incidentally. And - as we shall see later - pedagogic advice such as that outlined above is not sufficiently pointed for helping the reader acquire appropriate strategies for dealing with lexical familiarizations.

THE NATURE AND PURPOSE OF LEXICAL FAMILIARIZATION

We have suggested, then, that both the categories and the pedagogic advice relating to guessing from context need closer examination. This is necessary in order to take account of a subset of categories that are *intentionally* provided by the author for a pre-decided readership, and in order to devise appropriate teaching/learning strategies relating to those categories. It is now necessary for us to consider, in more detail, the nature and purpose of lexical familiarization, before (in the next section) outlining the results of our research into familiarization categories.

In what way is lexical familiarization different from lexicographic definition? In a definition, the reader is supplied with full and precise information - usually context-free - about the lexical item concerned. The writer's aim is to provide an accurate, all-embracing, unchallengeable explanation. For example, the Penguin Dictionary of Economics (1972) provides the following definition of an *oligopolistic market*:

> A market in which a small number of corporations provide a high proportion of the output; the corporations may act together to control the market.

On the other hand, in lexical familiarization, the textbook author's intention is not necessarily to provide a 100% completely accurate explanation, as this may not be necessary - indeed, it may well be counter-productive - at this stage of the book. Instead, he sets out to give the reader sufficient familiarity with the newly-introduced lexical item, so that the reader can continue his journey, e.g.

> Most raw materials are produced in worldwide competitive markets, so that prices are driven down as output increases. In contrast, manufactured products are produced in oligopolistic markets, where output is controlled and prices maintained. (Wyatt 1977:159)[1]

This familiarization is (a) less complete than the definition, in that it contains fewer facts; and (b) it is more reader-oriented, by contrasting *oligopolistic* with the better-known *competitive*, and *manufactured products* with *raw materials*. The author's aim is to help the reader acquire sufficient understanding of the term, at this stage of the book, to proceed. Or, as Brown (1980) puts it: "... even if he (the reader) does not get the full meaning, he gets enough to proceed for a while." This is not to say that authors do not familiarize by definition. Indeed, they often do. But - as we shall see in the next section - definition is only one form of lexical familiarization.

We have referred several times to the twin characteristics of author's intention and specific readership. This, in fact, is precisely the advice given *to* authors. Huckin (1981), for example, says: "Those who write to non-specialists must be sure to explicate the most important concepts in their texts, by using examples, definitions, analogies or other forms of illustrations. In other words, use the familiar concepts to explain unfamiliar ones." Writers of educational textbooks are aware of the fact that their readers are not yet specialists, and that they often do not have the opportunity of relying on a teacher to explain new terms to them. Textbook writers are also aware of the fact that their readers have no time to refer to the dictionary every time they meet a new word; that a suitable dictionary is often not available; and that even if one is available, the definition it contains will not always be of much assistance. For these reasons, the educational textbook writer is well aware of the importance of familiarizing specialist terms on first occurrence. In contrast, Huckin's advice to authors writing to a highly-specialist readership is entirely different: "... do not overexplain, i.e. do not use lengthy examples, operational definitions, analogies and so on for concepts the reader is likely to be already familiar with. Instead, rely on the standard terminology of the field, even when such terminology is long and complicated."

This contrast as between advice given to authors when writing for a not-yet specialist readership (i.e. educational, content field text) as compared with a specialist readership allows us to conclude that lexical familiarization is predominantly found in text addressed to comparative newcomers to the subject-field concerned. It is intentional on the part of the author, and is worded with a specific readership in mind. The author's over-riding objective is "... to ensure that newly-introduced lexical items are presented in such a way that the reader has the greatest possible likelihood of understanding their meanings." (Williams 1980)

It is now time for us to examine some of the most common types of familiarization.

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[1] In the corpus, the wider context from which such extracts are taken makes *writer's intention* clear.

A STUDY OF ECONOMICS TEXT: CORPUS AND PROCEDURE

In order to investigate lexical familiarization, we analyzed Chapters 1-4 of *Introductory Economics* (Stanlake 1976), consisting of 17,802 running words. This corpus was chosen because:

1. The first author teaches reading English to L2 Economics students at her home university (Constantine, Algeria).
2. The book is an introductory textbook, and thus is clearly targetted at a not-yet specialist readership.
3. We worked on the assumption that familiarization was more likely to occur early in a textbook - hence the choice of the first four chapters.

These first four chapters of *Introductory Economics* are concerned with some of the basic concepts of Economics. Chapter headings are:

1. The Nature, Scope and Methods of Economics
2. Economic Systems
3. Economic Resources
4. Specialization and Mobility

In analyzing the corpus, the procedure followed was first to underline all instances of intentional familiarization (newly-introduced term + lexical familiarization). Then the signalling devices of each familiarization were identified, the lexical familiarization was described, and it was finally assigned to a category, e.g. (corpus p.21)

> ... It is still common practice to talk of 'productive' and 'non-productive' workers. Productive workers are generally understood to be those who work directly on the goods being made. Turners and grinders in an engineering factory, coalminers, bricklayers, farmers and potters would be classified as productive workers. On the other hand, teachers, bank-clerks, shop assistants, and entertainers would be described as non-productive workers, because they do not 'make' anything...

LEXICAL ITEM	SIGNALLING DEVICES	DESCRIPTION OF LEXICAL FAMILIARIZATION	CATEGORY
productive workers	are generally understood to be, would be classified as	A is B which C (class is referential) + examples of A	definition + exemplification
non-productive workers	on the other hand, would be described as	contrast with productive workers + series of examples (of non-productive workers) + explanation of why such workers are termed non-productive	contrast + exemplification + explanation

Before we consider the categories of familiarization found in the corpus, five preliminary, general points should be made. The first is that, with only two exceptions (verb-forms), all familiarizations in the corpus are either nouns (e.g. *specialization*) or

nominal compounds (e.g. *consumer goods*). Second, terms in titles, headings and sub-headings are often familiarized. Next, verbal signalling is sometimes accompanied by typographic clues: for example, the term itself is enclosed within quotation marks, or is italicized. Fourth, familiarization is more frequent in the early part of the corpus - quite naturally, as it here that specialist terms are first introduced. And finally (as seen in the two examples above) familiarization is often by means of a combination of devices. (We would suggest that the first four of these general points apply only to *intentional* contextual clues, thus providing further support for our argument that lexical familiarizations should be treated as a sub-set of context clues.)

CATEGORIES OF LEXICAL FAMILIARIZATION

The following is a summary of instances of lexical familiarization found in the corpus:

Table 1: Summary of occurrences of lexical familiarization in the corpus

CATEGORY	NUMBER	FREQUENCY
1. exemplification	44	32%
2. explanation	42	31%
3. definition	35	26%
4. stipulation	7	5%
5. synonymy	5	4%
6. non-verbal illustration	3	2%

These six categories will now be considered in further detail. (In the corpus extracts that follow, the convention is that italicized terms in the original text are retained as italicized in the extracts. Underlined terms in the following extracts were not typographically cued in the original in any way.)

1. Exemplification

Exemplification provides the reader with an instance (or instances) of what the newly-introduced term refers to. For example:

- *Durable consumer goods* include such things as books, furniture, television sets, motor cars and domestic electric appliances. (p.22)
- The production of the simplest of our daily needs, a loaf of bread for example, requires the co-operative activities of hundreds of specialists. (p.2)
- A caste system such as obtained in India until quite recent times provides a good example of the rigidity of a traditional society. (p.10)
- ... A simple arithmetical example will make this point clear. Suppose that there are two leather workers, Jones and Smith, each producing shoes and handbags. In 1 week, Jones can make either 10 pairs of shoes, or 10 handbags ... This is a very simple account of the important principle of *comparative advantage*... (pp.36/37)

These familiarizations illustrate different types of exemplification. In the first, exemplification is expressed through a list of familiar items, compared with a single item in the second. In the third familiarization, there is a description of a situation - rather than exemplification by item. And in the fourth instance, exemplification is expressed arithmetically. Table 2 shows the frequency of occurrence of these four types.

Table 2: Exemplification familiarization

TYPE	NUMBER	FREQUENCY	OF TOTAL LEXICAL FAMILIARIZATION
list of items	25	57%	32%
single item	5	11%	
descriptive item	13	30%	
arithmetical item	1	2%	

Signalling is most commonly by *such as*, *for example*, *is typified by*, *e.g.*, *include*, *provide an example of* and *such things as*.

2. Explanation

Explanation provides the reader with a sequence of words (a phrase, a sentence, several sentences) equivalent or opposed in meaning to the newly-introduced term. In the corpus, explanation is achieved in three distinct ways:

- by direct explanation, e.g.

  Saving is the act of foregoing consumption. (p.31)

In this example, the explanation is semantically equivalent to the term being familiarized.

- by contrasting the newly-introduced term with (e.g.) a situation that the author believes the reader already understands, e.g.

  A large percentage of the human race still lives in very small self-sufficient peasant communities. These people experience great poverty, but they can provide, on an individual basis, for their own survival. They have a degree of *economic independence.*

  If we now turn to the inhabitants of New York, London, or any other great metropolitan area we must observe the opposite situation - a high standard of living together with an extreme *economic dependence.* The inhabitants of cities are totally incapable of providing for themselves, directly, the means of their survival. (pp. 1/2)

- by operational description, e.g.

  Monopolies. It is a feature of the market economy, especially in more recent times, that firms tend to increase in size and power ... This tendency towards market domination by giant firms reduces, or removes, the limiting role of competition and gives the large firm power to exploit the consumer by charging prices well above costs. (p.17)

Table 3 shows the frequency of occurrence of these three types of familiarization by explanation.

Table 3: Explanation familiarization

TYPE	NUMBER	FREQUENCY	OF TOTAL LEXICAL FAMILIARIZATION
direct explanation	28	67%	
contrast	8	19%	31%
operational description	6	14%	

The most common signals of this category are *i.e.*, *means that, is known as, is taken to mean, refers to* and *concerns.* It should be noted, however, that familiarization by explanation is frequently *un*marked, e.g.

Whatever the reason the fact is that man finds himself in a situation of scarcity. He cannot have all the things he wants. (p.3)

3. Definition

Philosophers (such as Plato and Aristotle), lexicographers, and ESP practitioners (e.g. Swales 1971; Lambrou 1979) all agree that definition comprises three elements: the term (T), the class (or genus) to which the term belongs (C), and the differentia (i.e. the distinguishing features) (D). But whereas lexicography is concerned with establishing the principles of well-formed definitions and with the production of isolated extra-discoursal instances, in FL reading the definition is almost always found in text. Thus, for our purposes, it is an instance of lexical familiarization. The following are examples of definition familiarization from the corpus:

- Economics is essentially a study of the ways in which man provides for his material wellbeing. (p.1)
- any activity which helps to satisfy want is defined as production. (p.21)
- *Consumer goods* are those commodities which satisfy our wants directly. (p.22)
- *Services* might be defined as intangible economic 'goods'. (p.22)
- One major objective of science is to develop theories. These are general statements or unifying principles which describe and explain the relationship between things we observe in the world around us. (p.5)

Although variously formed and signalled, all five examples comprise term, class and differentia. Sometimes the class is referential or a substitute:

- Productive workers are generally understood to be those who work directly on the goods being made. (p.21)
- ... a fully planned economy means one in which all the important means of production are publicly owned. (p.14)

In the corpus, the definition familiarizations constitute 26% of the whole. Signalling is by means of the definition formula *T is/are C which D, is/are called, is/are known as, refers to, is/are understood to be, the term X is used to describe, may be defined as.* Definition familiarization is often typographically signalled by italicization of the term concerned.

4. Stipulation

As defined by Konecni (1978:378): "Stipulation is a type of definition which indicates that the term being defined has its particular meaning only in a given situation and that it does not necessarily have the same meaning in other situations, e.g. 'entropy' in thermodynamics means ..." In the Penguin Dictionary of Economics (1972), for example, the term *land* is stipulated in the following way:

> 'Land' in *Economics*, is taken to mean not simply that part of the earth's surface not covered by water, but also the 'free gifts of nature', such as minerals, soil fertility, etc.

Thus, stipulation restricts the use of a term to a particular subject-field: the author specifies what the term means in the subject-field under consideration.

Stipulation in the corpus concerns general-language words now used with a delimitation of meaning in the field of Economics, e.g.

> ... *production* in everyday speech is usually taken to mean the making of some physical object or the growing of produce ... The economist does not restrict the meaning of production in this manner ... All those activities which assist towards the satisfaction of material wants must be considered to be productive. (p.21)

Here, stipulation is expressed through contrast stated: the writer has familiarized *production* by means of an explicit general-specific relationship. Sometimes, however, stipulation is *im*plicit, e.g.

> Competition, as economists see it, is essentially *price competition.*

Stipulation in the corpus is entirely anonymous, i.e. it is not assigned to any particular economist. This is probably atypical, in that Economics is well-known for its inter-economist controversy: "Disputes among economists often arise from problems of definition ..." (Stanlake 1976)

Table 4 shows the frequency of occurrence of stipulation familiarization in the corpus.

Table 4: Stipulation familiarization

TYPE	NUMBER	FREQUENCY	OF TOTAL LEXICAL FAMILIARIZATION
explicit	2	35%	5%
implicit	5	65%	

Signalling is by means of *X uses (term) to describe Y, (term) as X sees it, X restricts the meaning of Y to, from the point of view of X* and *to X.*

5. Synonymy

Synonymy familiarizes by providing the reader with a more familiar lexical item which has almost the same meaning. In semantics, "... lexical items are said to be synonymous if they are close enough in their meanings to allow a choice to be made between them in some context, without there being any difference for the meaning of the sentence as a whole." (Crystal 1980)

The following are examples of synonymy familiarizations from the corpus:

- The market system of economic organization is commonly described as a *free enterprise*, or *laissez-faire* or *capitalist system.* We shall use all these terms to stand for a market economy. (p.10)
- *Working capital* consists of ... This kind of capital is sometimes called *circulating capital.* (p.30)

Synonymy accounts for 4% of all familiarizations in the corpus. It is signalled by *X stands for Y, X is referred to as Y,* and *X or Y.*

6. Illustration

The five categories so far described all familiarize verbally. Illustration is a predominantly non-verbal method (accompanied by annotation), familiarizing through tables, pictures, charts, diagrams, etc. As Konecni (1978:369) puts it: "Illustration is a rhetorical technique which refers to the combination of text and visual aid used in informational writing to clarify concepts."

In the Economics corpus, only three illustration familiarizations occur, clarifying concepts of: the structure of production, circulating capital, and division of labour. In all three cases, the illustrations support verbal familiarizations, e.g.

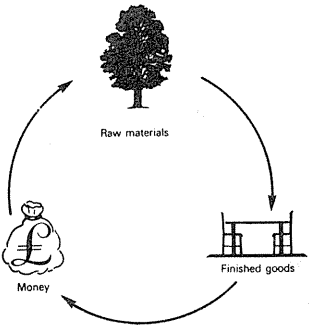

Fig. 2 Circulating capital

> ... This kind of capital is sometimes called *circulating capital* because it keeps moving and changing. Materials are changed into finished goods which are then exchanged for money and this in turn is used to buy more materials. (pp.30/31)

TEACHING SUGGESTIONS

The question now arises: "How can the FL reading teacher help the student acquire strategies for capitalizing on familiarizations deliberately implanted in text by the author, so that the reader can work out for himself the meanings of the terms concerned?" There are, we suggest, four stages: pointing-out, guided, semi-guided and free/integrated.

In the pointing-out stage, the teacher marks up a text - term, signalling, and familiarization. This can either be done with three coloured pens on the OHP, or by means of underlining, boxing and squiggling xeroxed texts, e.g.

> ... In any one year, some proportion of the total output of consumer goods is required for replacement. The value of this part of the total output is known as *depreciation*... (p.32)

By this means, students will (a) become more aware of the fact that the text already contains a considerable amount of intentionally-provided assistance with new terminology; (b) acquire familiarity with typographic assistance; (c) become aware of the signalling devices employed by familiarizations; and (d) learn that assistance with the meaning of the newly-introduced term occurs (usually) in the company of signalling and typographic clues. This preliminary stage is important, and should provide students with plenty of examples. It is best conducted in a whole-class, teacher-demonstration/teacher-class discussion mode.

The next stage is to mark up only one or two of the three elements in each familiarization, and have the *student* complete the marking up. This will initially need the teacher's guidance, but as soon as possible should be done by students in pairs or small groups. (Students should also be encouraged to contribute their own texts, partially mark them up, and pass them to another group to complete.)

The third stage is to mark the text simply by asterisking the margin where a familiarization occurs, and having students (again working in pairs or small groups) mark up the text as before.

(It will be noted that we do not advise teaching students to differentiate between *categories* of familiarization, or to mark texts with the names of such categories. This is the text analyst's - i.e. the teacher's or the materials writer's - job, and is an unnecessary, confusing degree of sophistication for the student.)

These three stages have all been high-focus, i.e. they have concentrated solely on familiarizations. It is now time to *integrate* the student's newly-acquired vocabulary recognition strategy with other such strategies, and with reading-for-meaning strategies in general. This can be done quite simply by margin rubrics such as "Underline the meaning of X", or "In your own words, briefly give the meaning of X".

CONCLUSION

Current views of FL vocabulary teaching do not take sufficient account of the development/recognition distinction in the field of specialist terminology. We hold

that it *is* the FL reading teacher's function to help students acquire appropriate strategies for recognizing the meaning of a term in a text, and that recognizing lexical familiarization is an appropriate and valuable strategy in reading specialist text.

REFERENCES

Ames, W.S. (1966) The development of a classification scheme of contextual aids. *Reading Research Quarterly*, 2(1), 57-82.

Bannock, G., R.E. Baxter and R. Rees (1972) *The Penguin Dictionary of Economics.* Harmondsworth: Penguin.

Brown, D.F. (1980) Eight Cs and a G. *RELC Journal Supplement 3.* Singapore: Regional English Language Centre, 1-17.

Clarke, D.F. and I.S.P. Nation (1980) Guessing the meanings of words from context: strategy and techniques. *System*, 8(3), 211-220.

Crystal, D. (1980) *A First Dictionary of Linguistics and Phonetics.* London: Andre Deutsch.

Harvey, P.D. (1983) Vocabulary learning: the use of grids. *English Language Teaching Journal*, 37(3), 243-250.

Higgins, J. (1967) Hard facts: notes on teaching English to science students. *English Language Teaching Journal*, 21(1), 55-60.

Huckin, T. (1981) Readability from a cognitive perspective. In P. Anderson, C. Miller and J. Brookman (Eds). *New Essays in Technical and Scientific Communication: Theory, Research and Criticism.* Farmingdale, New York: Baywood Press.

Konecni, E. (1978) Scientific and technical rhetoric. In L. Trimble and M. Todd Trimble (Eds). *English for Specific Purposes: Science and Technology.* Oregon: Oregon State University Press.

Lambrou, A.V. (1979) *The Form and Function of Definitions in Undergraduate Texts.* Unpublished MA thesis. University of Khartoum.

Moody, K. (1975) Levels of EST lexis. Regional English Language Centre, Singapore. (mimeo)

Stanlake, G.F. (1976) *Introductory Economics.* London: Longman.

Swales, J.M. (1971) *Writing Scientific English.* London: Nelson.

Swales, J.M. (1982) Vocabulary work in ESP: a case of neglect? *Bulletin CILA*, 37, 21-34.

Robinson, P. (1980) *English for Specific Purposes.* Oxford: Pergamon.

Van Parreren C.F. and M.C. Schouten-van Parreren (1981) Contextual guessing: a trainable reader strategy. *System* 9(3), 235-241.

Williams, R.C. (1980) Lexical familiarization in content area textbooks. In L.J. Chapman (Ed). *The Reader and the Text.* London: Heinemann.

Wyatt, D. (1977) *English for Professionals: International Economics and Development.* Washington, D.C.: American Language Academy.