On componential analysis as a valid pedagogic tool for vocabulary instruction in foreign language teaching

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«Words make a language» (Clark 1993, p.1). They are vital if we are to survive in our world. Only death can prevent us from extending our vocabularies. Depriving learners of their right to expand theirs is an unforgivable sin.

Introduction

The aim of this paper is to explore the role of Componential Analysis in vocabulary teaching in the context of foreign language instruction. A fruitful line of inquiry is to consider whether vocabulary deserves separate pedagogic treatment in the language classroom and if so, to inspect whether Componential Analysis proves advantageous. The paper is divided into two sections. Section I presents the theoretical foundations for the claim that vocabulary is not peripheral but central in language teaching. Section II examines the advantages and disadvantages of Componential Analysis as a framework to orchestrate vocabulary teaching practices. Theoretical considerations, pedagogic implications and some practical applications are explored.

I. Is vocabulary worth teaching?

Grammar and lexis: are they incompatible?

One of the most unfortunate legacies of the structural approach has been

the blind acceptance of grammar as an object of veneration, the regrettable outcome being that this supremacy came to be regarded as axiomatic. A grammar-based syllabus naturally led to the relegation of lexis to the mere role of spectator. However, grammar and lexis are not incompatible. In fact, research in first and second language acquisition (Peters 1983; Clark 1993) shows that there is a complex interplay between syntax and the lexicon. Yet, the fact that lexis plays an important role in language acquisition does not entail that grammar should be subdued. Rather, such interplay suggests that a balance is needed. Extremes -either too much emphasis on grammar alone or lexis alone- are dangerous. This implies that vocabulary teaching is possible within a structurally-oriented lesson. Even if the focus is on grammar, vocabulary may constitute the basis on which to build further grammatical knowledge. An expanded lexicon offers the advantage of enabling teachers to present grammar in more elaborate and mature contexts thus making grammar instruction less tedious for learners.

Incidental vocabulary learning

The relegation of lexis as auxiliary is supported on the argument that exposure to a considerable amount of reading and listening texts results in the acquisition of vocabulary. Since vocabulary is mastered in a natural and automatic fashion, instruction is not needed. However, as Coady (1993) suggests, this argument is paradoxical in nature. How can learners be expected to acquire vocabulary solely through reading and listening when their vocabulary repertoire is not developed enough to enable them to be good readers and listeners? The ability to learn vocabulary in reading and listening contexts presupposes a fairly high lexical competence -which many learners may lack. The oddity of the argument has been further strengthened by the fact that lexical errors are a pervasive feature in some learners' performance. This may be taken as evidence to suggest that incidental learning of this kind is not effective. For incidental learning alone does not lead to vocabulary expansion (Stoller and Grabe 1993). Instruction is needed if learners are to achieve a certain level of competence that enables them to profit from reading and listening encounters.

Yet, however untenable this «magical learning» argument might be, its traces can still be observed. Hammerly (1982) claims that vocabulary expansion should be considered only after grammatical patterns have been mastered. The assumption is that a process of early lexicalization will result in highly deviant interlanguage forms. The main objection against this view is that early vocabulary instruction allows for fluency -particularly in the case of learners who are not highly proficient (Judd 1978). Although it is undeniable that some sort of pidgin English will develop, this stage might be necessary -and unavoidable- if the aim is to enhance motivation. For being incapable of expressing one's ideas may be very frustrating. «While without grammar very little can be conveyed, without vocabulary *nothing* can be conveyed» (Wilkins 1974, p.111, his italics; Scrivener 1994). Lexical fluency offers learners the possibility of becoming communicatively competent despite their limited linguistic and grammatical competence. Put differently, control over lexis fosters fluency at early stages of language development.

This point leads smoothly to the claim that vocabulary development is a skill in its own right. Since learners acknowledge their need for words and are consequently strongly motivated to welcome vocabulary lessons (Stoller and Grabe), vocabulary instruction should be allotted separate treatment in the classroom. Teachers would not need to masquerade vocabulary lessons as part of reading or listening instruction. Stoller and Grabe have gone as far as to argue that in fact vocabulary training might enhance the development of reading and listening skills (see also Judd)[1]. However, the view that vocabulary deserves deliberate consideration in the classroom has been challenged by Rivers (1981, p. 463) who posits that «vocabulary cannot be taught.» She claims that «excessive vocabulary learning (...) can be very deleterious to effective language use» (p.209). On the basis of this assertion, one would be tempted to conclude that vocabulary should be put aside. Yet, sound support for such conclusion is lacking.

Research on the acquisition of grammar: implications for L2 lexical acquisition

Research studies which explore the acquisition of grammar and examine

the effects of instruction on the route of development of L2 acquisition warrant the conclusion that instruction (despite its beneficial effects when the rate and success of L2 acquisition are considered) seems to be powerless to alter the path of development of L2 learners (Ellis 1990). Based on these findings, Judd suggests that since syntactic errors in the learners' interlanguage are unavoidable, the obsession of some teachers with grammatical accuracy may be fruitless. The implication is that a shift of focus from grammar to lexis would maximize the teaching time available. Rather than wasting valuable time in the correction of syntactic errors which are bound to occur, teachers could concentrate on vocabulary expansion.

Although at face value Judd's claim is appealing, it may mislead. One is tempted to infer, for instance, that lexical acquisition may follow a certain path of development as well. If so, Judd's argument would demolish his own point because lexical errors would also be unavoidable. Pedagogic treatment in the classroom, being futile and ineffective, should be abandoned altogether. Or, more mildly, teachers could adjust vocabulary instruction to reflect the sequence of lexical acquisition and in so doing, facilitate the process of learning lexis. The fact is, however, that research studies on lexical acquisition are too scant to warrant evidence for these conclusions.

Lexical appropriacy: social consequences for learners

Closely related to the issue of lexical errors is native speakers' perception of them. As Carter (1987) points out, it seems that native speakers readily overlook syntactic errors whereas they are much more sensitive to lexical ones. The reason for this might lie in the fact that lexical items carry stylistic, evaluative, emotive, dialectal and cultural associations which are not tolerated in inappropriate contexts.

The learners' inability to use lexical items appropriately may have serious social consequences. Segalowitz (1976) has shown that the learners' inability to handle situations in a sociolinguistically appropriate fashion (which, one could assume, involves the ability to use lexical items appropriately) may make them feel socially isolated and may create denigrating (or non-friendly) images of themselves. They may also develop negative attitudes towards the idea of

communicating in the L2 as well as negative stereotyped attitudes towards the foreign language people.

The fact that learners misattribute the source of their inability to their interlocutors may be crucial. For if they do, they are likely to perceive the foreign language people as hostile and unfriendly. Gardner and Lambert (1972) have shown that the learners' negative attitudes towards them may significantly affect their motivation to learn the L2. Consequently, learners may avoid the uncomfortable experiences associated with communication encounters in the L2 and persistently resist the idea of communicating in that language. The «association of little liking with little interaction» (Homans 1961, p.186) appears to be warranted.

If one accepts that communicating in the L2 offers learners the possibility of receiving comprehensible input and given that optimal input (i+1) is automatically supplied when learners engage in communication successfully (Krashen 1987, 1988), it follows that avoiding communication in the L2 will reduce the learners' chances of obtaining input of this kind. If input is minimal, language development -to its full potential- would be seriously impaired. In this context, lexical appropriacy has a high learning yield since it helps learners communicate successfully in the L2 and in so doing, obtain comprehensible input from native speakers. In this way, exposure to the L2 is maximized.

Granted that the learners' ability to use lexical items appropriately helps them communicate successfully in the L2 and given that this ability results in further language development as well as a sense of achievement and motivation for learning, it is evident that lexical appropriacy should be a goal of any vocabulary lesson. Whether pedagogic treatment in the classroom takes the form of direct instruction or awareness raising is, however, a different matter.

II. Componential analysis: an alternative

If one accepts that vocabulary *does* deserve close attention in the language classroom, the question arises as to how to approach the issue. What words should be taught? When? How? Answers are not self-evident. Moreover, stated as such, the problem is too broad to be handled appropriately. What is

needed, therefore, is a close examination of *one* aspect of the picture.

Yet, this leaves us with another problem: which semantic theory should be considered? A sound starting point, as Channell (1981) suggests, is to focus on the learners' needs. She argues that in order to make words part of their active vocabularies, there are two vital things learners need to know. Firstly, how a word relates to other words which have similar meanings. Secondly, what company a word may keep with others and in which contexts it can be used. «Each word has its own syntactic and collocational environment» (Bress 1995, p.27)[2][3]. In like manner, Cook (1991, p.38) ascertains that «learning the vocabulary of a second language is not just memorizing equivalent words between languages («red» means «rouge»), or learning the definition of the word («red» is «a colour typically seen in blood») or putting it in context («Rudolph the red-nosed reindeer») -but learning the meaning relationships between «red» and all the other words in English within the full context of cultural life.» One semantic theory is particularly relevant in this respect: Componential Analysis. The aim of this section is to explore its theoretical foundations as well as its pedagogic implications and some practical applications.

A) A teorical framework

Componential Analysis (hereafter CA) is a semantic theory originally proposed by Katz and Fodor (1963) which has been continually modified and developed (see, for example, Katz 1967). The theory consists of two components: a dictionary and projection rules (Katz and Fodor 1963)

The dictionary component

The inclusion of a dictionary component is justified on the argument that it may explain problems for which the grammar of a language offers no answer. To begin with, grammar is limited in the sense that it assigns the same structural description to sentences which are different in meaning. Consider, for instance, «The policeman killed the robber» and «The policeman killed the baby.» In addition, grammar cannot account for the fact that «The teacher

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displayed her expertise» and «The practitioner displayed her expertise» have the same meaning -although they are structurally identical and *only* morphemically different. Furthermore, grammar is helpless in cases where sentences with different syntactic structures are synonymous such as «The policeman killed the robber» and «The robber was killed by the policeman.» In all cases, grammar *alone* cannot account for the way speakers interpret sentences. This is because the meanings of morphemes are crucial to the interpretations of sentences. A dictionary component, then, may decipher facts which grammar leaves unexplained.

The dictionary includes grammatical markers, semantic markers and distinguishers. Figure 1 in the Appendix shows a typical dictionary entry in CA[4]. Grammatical markers -the unenclosed elements in the example- express syntactic relations such as noun, adverb, adjective and so on. Semantic markers -enclosed in parentheses- express semantic relations between a given lexical item and all the vocabulary in the language. Semantic markers are not words but concepts represented by words or phrases and, as such, they are theoretical constructs. Distinguishers -enclosed in brackets- express the idiosyncratic features of a lexical item. Branching under semantic markers is a way of showing the various senses a lexical item has. Multiple branching means that a lexical item has more than one sense and is consequently ambiguous.

In addition to the grammatical markers, the semantic markers and the distinguishers, there are *redundancy rules* which reduce the number of semantic markers when these are predictable. For instance, *dog* would have the feature (Mammal) as well as some additional semantic features necessary to distinguish if from other mammals. The redundancy rules for *dog* would include (Animate) and (Living) among others. The dictionary, in short, defines lexical items by providing information about parts of speech, number of senses, general semantic features and idiosyncratic features.

Projection rules

Neither grammar *alone* nor a dictionary component *alone* is a rigorous predictor of success in the interpretation of sentences. Fluent speakers need a

system of rules to apply both the information in the dictionary as well as the grammatical description of sentences in order to interpret sentences semantically. The input to these rules, called projection rules, is a sentence and the output is a semantic interpretation. They operate on the semantic and grammatical information necessary to establish the different «readings» -that is, interpretations- sentences may have. Semantically, these rules take account of the semantic relations among morphemes within a sentence. Grammatically, they take account of the interplay between meaning and syntax to arrive at a semantic interpretation of a sentence.

Projection rules are helpful in determining the content and number of readings a sentence may have. Given that a dictionary entry provides *all* senses of a lexical item, speakers need a mechanism to successfully select the appropriate sense of a lexical item in a given sentence. Consider, for instance, «The operation was successful.» The sentence is semantically ambiguous in the sense that it may have at least two readings: it may mean that the medical treatment a patient received was successful; or it may mean that certain military actions were successful. In both cases, the syntactic structure of the sentences is identical. The task of projection rules is to detect non-syntactic ambiguities (or rather, semantic ambiguities) and select the appropriate sense for the entry *operation* in the sentence «The operation was successful» in order to determine the number of readings it has as well as the content for each reading.

Projection rules are also helpful in disambiguating a sentence by the exploitation of semantic relations. Consider the example «The military operation was successful.» Projection rules contribute to the selection of the entry *a military action that is usually part of a larger plan* instead of *a form of medical treatment in which a doctor cuts open a patient's body in order to remove, replace, or repair a diseased or damaged part of it.* Once potential ambiguities are eliminated and the number of readings available is established, projection rules show the content of each reading.

In addition, projection rules help speakers distinguish between two grammatically correct sentences such as «The man is eating extrovert meat» and «The man is eating red meat.» Although both sentences are grammatically well-formed, the former is beyond doubt semantically anomalous. These

rules, then, assist speakers in determining which sentences are anomalous -in which case there is no possibility of interpretation and no reading is assigned to the sentence.

Finally, projection rules are useful in determining whether a sentence is a paraphrase of another irrespective of how distinct, from a grammatical point of view, they may be. Consider, for instance, «I was happy to hear you passed your exam,» «The fact that you passed your exam made me feel happy» and «I experienced feelings of pleasure when I heard you had passed your exam.» The ability to paraphrase and identify paraphrases of a given sentence is basically a semantic ability -irrespective of grammatical knowledge. This is because the paraphrases of a sentence may be grammatically unrelated as the examples above show.

B) Implications and practical aplications

A systematic implementation of such theoretical framework in the domain of application can be found in The words you need (Rudzka et al 1981) where vocabulary expansion is approached by using grids that group words from the same semantic field. The reduction of lexical items to semantic primitives and the use of collocational grids are two of the most salient peculiarities of the book. Figure 2 in the Appendix exemplifies the approach and it will constitute the basis for the discussion that follows.

Economy and visual impact

A good starting point is to examine some of the advantages grids offer learners. Three aspects will be considered. In the first place, it is undeniable that they are a utilitarian asset since they help learners save time. Since lexical items are arranged in semantically related sets, learners do not have to resort to a dictionary and look up one item at a time (Carter 1987; McCarthy 1990). Secondly, grids of this kind will no doubt impact learners visually. Visual-type learners -those with a strong, highly developed visual memory- will benefit from the layout since it aids retention and, possibly, future recall of words[5]. It should be noted, however, that the auditory and kinetic types will be ill-

favoured. Finally, these grids may help learners realize that the items in a semantic field do not stand on an equal basis (Carter and McCarthy 1988; Channell 1981). Learners are encouraged to discover semantic boundaries across words.

Semantic relations: advantages.

Lehrer (1974 p. 66) claims that «many of the semantic relationships can be extracted from a componential analysis.» She argues that synonymy can be easily established from a CA of this kind. If two words share the same components, they are regarded as synonyms. Put differently, «two lexical items are fully synonymous if and only if they have identical entries» (Katz and Fodor, p. 185). A scrutiny of our grid reveals that no items in it are synonymous[6]. The reason for this might be that 100% interchangeable synonyms are rare since if this were the case it would mean that the same information is stored in the lexicon twice -and this is clearly redundant and unnecessary. Besides, since the purpose of these grids is to *distinguish* between words -although similarities are also established- it is reasonable *not* to expect synonyms to appear in them.

Another semantic relationship that may be determined is that of class inclusion. «If two items A and B have components which are identical except that B has one more additional component, then B is subordinate to A» (Lehrer, p.66). In our example, *be attached to* and *be fond of* share two components (*feel strong ties with* and *result of prolonged contact*)[7] but the latter has an additional one (*feel tenderness for*), which is the distinguishable feature. Following Lehrer's argument, *be fond of* is subordinate to *be attached to*. The same relationship holds between *feel/have an affection for* and *be fond of,* in which case the latter has an additional component.

Lehrer also considers the case of incompatible sets, antonyms, converse terms and gradable items and concludes that «many of the semantic relationships between words can be deducted from an adequate componential analysis» (p.69). More strongly, Katz and Fodor (p.188) claim that «all semantic relations are expressed by semantic markers.»

From the foregoing, it may be concluded that semantic feature analysis may be useful to help learners discover the semantic relations into which

words can enter. The fact that items are presented in semantic fields offers learners the possibility of building semantic networks. Lexical sets may be refined and expanded as learners become more proficient. Thus, vocabulary development is enhanced. Similarly, collocational grids may help learners consolidate and expand their vocabulary by building on previously acquired knowledge. Cardew (1995) has pointed out that if the learners' knowledge takes the form of previous contextualized encounters with the target items, the grids could be used for reinforcement and revision. For grids allow learners to relate the new information provided in them to knowledge they have previously acquired. If learners are stimulated to create associations by linking old and new information, vocabulary development will take place. It should be apparent, then, that CA leads to the reinforcement, revision, expansion and refining of vocabulary. Let us now consider these in depth.

Basically, CA provides the framework in which vocabulary enlargement -through the revision and expansion of old knowledge- can proceed. This claim is in harmony with the idea that «the best way to remember new words is to incorporate them into language that is already known» (Schmitt and Schmitt 1995, p.133). In addition, grouping words in lexical sets and collocational grids facilitates learning. The assumption is that material which is organized in some way is easier to understand and learn than that which is unrelated (Schmitt and Schmitt).

CA can also assist learners in refining and enriching their vocabularies. Children, in the acquisition of their L1, rely on the principle of contrast by which they assume that every new word they encounter is different from the others in their repertoire (Clark). If one accepts that this is also true of L2 lexical acquisition, it seems reasonable to conclude that CA may help learners refine their vocabularies for it operates on the same principle. For instance, lexical sets and collocational grids may help learners capture subtle differences among a set of semantically related items. At the level of individual words, refining may take the form of multiple meaning aspects of a given word. The assumption is that «the growth of the lexicon not only concerns the acquisition of more and more words, but also the acquisition of multiple meanings assigned to words» (Verhallen and Schoonen 1993, p.345).

Sense relations: drawbacks

Nevertheless, CA fails in dealing with all semantic relations satisfactorily (Lehrer; Carter; Palmer 1981). Basically, five problems can be identified. Firstly, defining contrasts is problematic because in some cases different contrasts operate simultaneously. For instance, *man* can be contrasted with *woman* and, on another dimension, with *boy*. Similarly, *old* can be contrasted with *young* on the one hand and *new* on the other. In addition, some antonyms, such as *tall-short, beautiful-ugly, fat-thin, intelligent-stupid, hot-cold,* are a matter of degree and are subject to private and idiosyncratic associations. Binary combinations of the kind *give-take, bring-take* and *come-go* can also be difficult to reduce to primitives. In these cases, it seems that labelling the components is a tough task -if possible at all (Palmer). Additionally, function words and abstract nouns are particularly difficult to analyze into components.

Secondly, it may be that grouping synonymous lexical items together does not facilitate learning but induces interference errors (Schmitt and Schmitt). Furthermore, since stylistic contrasts are not marked, learners may be misled to assume that synonyms can be used interchangeably irrespective of the context in which they are embedded. The problem is that knowing a word involves knowledge -or at least awareness- of its semantic *and* its syntactic, stylistic and pragmatic behaviour -which componential analysis does not capture[8]. More substantially, Clark (p.73) suggests that the absence of complete synonyms may mean that speakers do not need them. «Speakers typically make use of only one term out of a synonymous set. That is, the speakers do not make use, at any one time, of the range of synonyms actually available.» If this is indeed the case, one could question whether all synonyms in a lexical set should be given the same pedagogic treatment or, more dramatically, whether it would be necessary to teach those sets at all -at least if the aim is oral and written production[9].

Thirdly, presenting words in lexical sets may have the unwanted outcome of teachers having to include items «for the sake of neatness» (Gairns and Redman 1986, p.69) despite their limited usefulness to some learners at certain levels of language proficiency. In the realm of cooking terms, for instance, one could include *boil, bake, fry, microwave, poach, stew, steam, braise, roast, grill, broil,*

barbecue, simmer, toast, smoke and *brown.* Yet, it is obvious that not all of these terms will be useful for all language learners at all levels of proficiency[10].

Fourthly, too much semantic information may be confusing for learners since vocabulary acquisition proceeds in small steps. Ellis (1995, p.429) has explored the issue of how learners acquire word meanings from oral input and has shown that «too much information makes it impossible for the learner to identify those semantic features which are criterial to the meaning of an item.» One could hypothesize that the amount of semantic information learners get from *written* input is also significant in the acquisition of lexis. If so, it is evident that the semantic information The Words you Need offers, complete but overwhelming as it is, may preclude learners from identifying those features which are crucial to the meaning of a word. It may be conjectured that assessing which semantic features are salient both in oral *and* written input is of paramount importance if vocabulary acquisition is to be enhanced.

Finally, CA fails to capture the associative meaning of words, which is not fixed and depends on context (both linguistic and social). Besides, some lexical items are inherently indeterminate and simply cannot be analytically described. Others conceal ideological assumptions. Learners, however, do need to be aware of the emotive and evaluative associations of words. Teachers, wherever possible, can work cooperatively with their learners to provide componential descriptions for *some* words.[11]

Grid flexibility and levels of difficulty: alternatives

Grids enjoy another advantageous feature, namely, that components may be specified minimally or maximally (Lehrer). The choice is between establishing only those features necessary to distinguish between items or completing all components for all items. In this sense, grids are no doubt flexible and dual. Consequently, their level of difficulty is not fixed. A continuum whose extreme ends are simple grids -when minimally completed- and difficult ones -when maximally filled out- may be proposed. Grids, therefore, are suitable for all levels of proficiency[12]. Teachers can provide learners with empty grids to complete -minimally or maximally, depending on their stage of development.

Having to create their own associations to complete a grid can also be very motivating for learners.

Channell (1988) suggests that lexical associations are crucial because they allow learners to «make choices which faithfully reflect intended meaning» (p. 90). According to her, the point to be borne in mind is that both paradigmatic and syntagmatic associations are vital. In our grid, only paradigmatic links are considered. *Like, be attached to, be fond of, love* and so on are all paradigmatically related but there is no collocational grid showing syntagmatic relations[13]. These relations are essential if lexical errors are to be avoided.

Yet, the problem is not insoluble. Teachers could create an appropriate collocational grid or, even better, ask learners to provide it themselves with the help of a dictionary. In particular, Januzzi (1995) has suggested that the whole semantic feature analysis grid could be a co-production of learners and teachers. His proposal is that learners negotiate the features to be included in the grid with the help of their teacher. This negotiation procedure is advantageous for it stimulates discussion and cooperation in the classroom. Learners become aware of the similarities and differences among words as a step towards the building of semantic boundaries across words.

The assumption, one could object, is that learners have the linguistic knowledge to negotiate features in the L2. The question arises as to how feasible the proposal is if learners lack the necessary linguistic tools to do so. Januzzi offers different alternatives to overcome the learners' limited linguistic competence. For instance, their L1 could be used to discuss the vocabulary and negotiate features, which could then be translated to the L2. One could wonder, at this junction, whether learning subtleties of the language such as *be fond of, be attached to, have a strong affection for* and the like is appropriate at all if learners need to resort to the L1 to complete the grid[14]. For if they need to, one can assume that they are not linguistically competent in the L2 and therefore have more urgent and basic language needs.

However, some simple lexical sets such as those related to *weather and seasons, jobs, leisure activities, food and drink* and *clothes*, for instance, paint a different picture. For the likelihood is that beginners *will* need to master the lexical items in these semantic fields. The fact that the language used to describe the features may be too difficult for learners (Carter; McCarthy) does

not mean that the items should not be taught or do not need to be learned. What I am suggesting is that, at least in *some* cases, having to resort to the L1 to express the metalanguage in the features does not necessarily mean that the lexical items have a low learning yield.

Another possibility offered by Januzzi is to adopt a binary system (+ = yes; - = no) where learners cooperatively decide whether the negotiated features are present or not in a given word. «Using the information in the grid, even beginning students should be able to make simple statements about and in the target language» (Januzzi, p.41). At more advanced levels, a promising suggestion involves the use of a more complex system where learners may choose among A = Always, S = Sometimes, N = Never or almost never and ? = Don't know. The point, Januzzi warns us, is not to complete the grid perfectly. Rather, the idea is that learners manipulate the words and in so doing make them their own. Figures 3 and 4 in the Appendix show how Rudzka et al's grid can be adapted to some of Januzzi's ideas.

Is dynamism possible?

In spite of the advantages mentioned so far, related objections against feature analysis as found in grids proliferate. One of the criticisms usually levelled at CA is that it is «too abstract» (Carter and McCarthy, p.31); it suggests «a static model of word meanings» (Carter, p.171) and «presupposes a stable, universal world of concepts in which lexical items semanticize the structure of reality» (Carter, p.17). «Unchanging, static, formalized, symbolic descriptions cannot account for all of lexical knowledge» (Gass and Selinker 1994, p.273). However, be that as it may, the fact that semantic markers can be added and substituted does reveal a certain extent of flexibility. It would be possible to account for language variation and change, for instance. Furthermore, the learners' perception of the system as fixed depends on the teacher's attitude. If teachers allow room for manoeuvre and creativity and encourage learners to manipulate the grids to suit their needs (and in so doing, test their validity), learners will be prone to regard the system as dynamic. «The analytical techniques can thus be seen to further creative and dynamic ends» (Carter, p.173).

Atomic globules or prefabricated patterns?

The issue of dynamism is related to another objection raised against CA, namely, that the atomizing of language involved in it contradicts research suggesting that prefabricated patterns -unanalyzed chunks functioning as wholes- are a pervasive feature in L1 and L2 acquisition and use (Clark; Peters; Pawley and Syder 1983; Nattinger and DeCarrico 1992). Aitchinson (1994, p.80) has pointed out that «atomic globules do not exist in the mind.» CA, with its implicit message that meaning is discrete and can be broken up into atoms, offers little consolation.

However, mention has been made of the fact that this atomization of meaning may be a pedagogically valid tool since it assists learners in establishing similarities and differences among words in a semantic field. In this sense, CA offers learners the possibility to understand semantic boundaries (Gairns and Redman), disambiguate homonyms (Carter) and identify hyponymy, incompatibility, synonymy and so on (Carter; Cater and McCarthy). CA is therefore «economical» (Carter and McCarthy, p.31).

It may be the case that the atomic globule perspective and the prefabricated pattern view are not *inherently* contradictory. At low levels of language proficiency, learners can be encouraged to regard strings of words as wholes. For instance, in our example, learners can consider *be attached to* and *be in love with* as wholes. The idea is that they do not reduce these phrases to their constituents. Ready made language of this sort constitutes a way of overcoming the learners' limited linguistic competence in situations where communicative needs are present. Unanalyzed expressions may be seen as a strategy used by learners (Hakuta 1974) to express themselves in the absence of rich linguistic resources -particularly in the case of beginners. In this sense, therefore, ready-made language may prove highly motivating since it offers learners the possibility of achieving fluency at very early stages of the language acquisition process. Given that learners may become conversationally competent without the need to know the underlying structure of those phrases, a sense of achievement is also fostered.

The stage of analysis whereby learners reduce phrases to their constituents might come later in the process of language acquisition. Learners can be made

aware of the fact that *feel an affection for* is a phrase whose constituents include a verb, an article, a noun and a preposition. Phrases may also be expanded to enhance language development. For instance, *be fond of* may be extended to get *be very fond of, be really fond of* and *be extremely fond of.* Similarly, *be in love with* may be expanded to produce *be madly/crazily/deeply in love with. Feel an affection for* may be analyzed and extended to get *feel a strong affection for.* In this way, the expansion of previously acquired knowledge would be enhanced[15].

The role of context in lexical acquisition

In the realm of lexical acquisition, another objection to the validity of CA is that learners, as Verhallen and Schoonen (1993, p.346) put it, «need to experience words in different contexts to acquire all possible facets of the potential meaning.» The argument is that different meaning aspects of a certain word are highlighted depending on the context in which the word is embedded. Verhallen and Schoonen posit that bilingual children have significant limitations with regard to the number and range of meaning aspects they are able to express in their L2. In particular, they have shown that bilingual Turkish children born in The Netherlands, when compared to native Dutch children, assigned less extensive and less varied range of meaning to several Dutch words. The reason for this lies in the fact that monolingual children are exposed to words in different contexts and situations both at school and at home whereas bilingual children depend on the L2 input they get from teachers at school. One could conjecture that in the realm of foreign language learning, where learners are exposed to the foreign language in even less diverse situations than bilingual children are, the learners' lexical limitations will be considerably more dramatic.

If one accepts that the contexts in which learners encounter words are crucial and granted that foreign language learners are exposed to L2 words in significantly restricted environments, it seems that CA, with its atomization of meaning and decontextualization of lexical items, has serious limitations as an adequate pedagogic tool for vocabulary acquisition and expansion. For «an analysis of words which remains at the level of the word (...) and does not consider the role and function of words in larger linguistic and contextual units

will be inadequate» (Carter, p.29). In fact, focusing on decontextualized lexical items may not only be inadequate but also hinder the process of vocabulary acquisition for learners are not given the opportunity to become aware of the syntactic and pragmatic functions of lexical items (Carter). The question arises as to whether it is legitimate to concentrate on the learners' semantic development with detriment to the syntactic and pragmatic aspects involved in lexical acquisition.

Although Verhallen and Schoonen's research has far-reaching implications in relation to the use of CA in the language classroom, a word of caution is appropriate here. To begin with, as Carter points out, teachers have the power to overcome these pitfalls depending on *how* they make use of semantic feature analysis. In addition, in <u>The Words you Need</u>, reading texts provide the context. One could argue, of course, that the context is exclusively materialized in reading texts to the exclusion of other available means like listening passages. True. But it is undeniable that the context *is* there, *is* valid and can always be creatively manipulated by teachers to their advantage. Even more to the point, perhaps, one could question whether learning words in context is more effective than using dictionaries or translating. Research on this issue is inconclusive. «It has not been convincingly demonstrated that the information learners obtain from meeting words in a variety of contexts is more beneficial» (Carter, p.168).

Arbitrariness

Much of the discontent with CA is ingrained with the objection that as the number of components is open, there is in principle an infinite set of features (Palmer). Besides, no standard notational convention has been adopted, which causes problems, especially with the use of the minus sign. If we accept that *man* has the features +[Male], +[Human] and +[Adult], the question arises as to whether it is logically necessary to specify every non-applicable primitive. Why should not we define *man* as -[Female], -[Animal], -[Young]? This indeterminacy, together with the fact that there are no limits to the specification of semantic components, may result in arbitrarily formulated and psychologically invalid componential descriptions -for it is feasible to conceive

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of different analyses for the same word. Put briefly, the implication is that features may be concocted at will.

The matter is not fully resolved, however. One could suggest, for instance, that this may in fact be considered as an asset. Given that components are not fixed, learners have the possibility of creating their own features. This means that there might be different CAs of the same word and none of these idiosyncratic alternatives would be wrong. There is not *one* single set of correct features. Learners might include personal links relevant to their own experience[16]. In our example of the «love» grid, teachers could ask learners to add one or more components to render a complete picture of the semantic field. Since learners are bound to have had different experiences and may, as a result, regard dissimilar components as essential, their grids may be far from similar. Having to create their own associations can no doubt be very demanding for learners but they will benefit from this for retention will be enhanced. Associations will be more memorable and items will be retained more easily. These grids can also be used as a springboard for small group work discussions through which a sense of respect for other people's ideas will be fostered. Similarly, owing to the fact that their ideas are appreciated and respected too, a sense of satisfaction and motivation to learn will grow. This may also constitute the basis for a handover of responsibility for learning from teachers to learners. By the same token, the ground for autonomous learning would be paved.

Vocabulary comprehension and production

Dissent originates over the issue of vocabulary comprehension and production. Laufer and Nation (1995, p.308) claim that «an important aim of a vocabulary program is to bring learners' vocabulary knowledge into communicative use.» Their assumption is that «vocabulary is not usually learned for its own sake.» Similarly, Channel (1988, p.84) considers that lexical acquisition has taken place if, among other things, L2 words «can be used naturally and appropriately to situation.» The Words you Need, however, presents words in the context of reading texts as a means to expand and enrich the learners' receptive vocabulary. Hardly any of the activities in the book

encourage production (Carter). Information about the pragmatic behaviour of lexical items, crucial both for oral and written production, is notoriously lacking. CA cannot capture vital differences in the way some words are used (Carter).

If it is indeed the case that CA may be powerless to enhance production, one could be tempted to ascertain that it may be a valuable tool as far as vocabulary *comprehension* is concerned. Comprehension precedes production after all. The question is: how do we comprehend and produce words? Can CA help? Following Clark, it is assumed that in order to comprehend words children need to establish C-representations and to produce words they need to set up P-representations of those words. Let us now consider each of these in turn.

In the acquisition of their L1, children formulate C-representations from the input they hear. These representations assist them in the identification of a given word when they hear it on other occasions. C-representations include auditory and semantic information and are involved in recognition. Auditory information is crucial because without it children would not know whether they had encountered a word before or not. They would not be able to recognize the word on subsequent occasions, either. Semantic information is vital too because it helps children refine and extend different meaning aspects of the same word. Continuous exposure to the language is essential if children are to adjust and refine their C-representations.

Generalizing, one could conjecture that L2 vocabulary comprehension proceeds in a similar fashion. If so, the implication is that learners need to be provided with the auditory and semantic information necessary to formulate their C-representations. Given that learners obtain such information through exposure to the target language, one could argue that teachers should maximize exposure. Now, exposure can take the form of oral or written input. In the case of The Words you Need, input is materialized in reading texts. These texts, together with the semantic sets, the collocational grids and the evaluation scales no doubt give learners enough semantic information. Yet, they leave them at a loss with respect to auditory information. If one accepts that both semantic information *and* auditory information are crucial in vocabulary comprehension, it should be apparent that CA is inadequate in this respect[17].

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It may be concluded that, in the realm of vocabulary comprehension, The Words you Need, though useful and valuable as far as semantic information is concerned, needs to be supplemented by the teacher with regard to auditory information.

Let us now consider P-representations. These include information about articulation, sound segments, syllable structure, stress, internal morphological structure and neighbouring words. Children need to check their P-representations to asses how close these are to the target language and adjust them if need arises. To do this, children use their C-representations as input or, alternatively, adult pronunciations of the target word -if available. When mismatches between their P-representation and their C-representation (or adult pronunciation) appear, they modify their P-representation. This gradual process of alignment allows children to adjust their P-representations to the target language forms.

Again, one could hypothesize that L2 learners go through a similar alignment process. That is, they need input against which to check their P-representations. Collocational grids provide valuable information about neighbouring words. Yet, aspects like articulation and stress, for instance, are not addressed. This implies that, if The words you Need is to be useful for oral vocabulary production at all, teachers need to supply this information.

In this framework, I would suggest that CA, carefully complemented, can be a valuable tool to enhance both vocabulary comprehension and vocabulary production. It may constitute the basis for an integral approach to vocabulary comprehension and production. For it includes solid semantic information - a requirement for vocabulary comprehension- as well as collocational information -essential for production. Its strength lies in the fact that it offers teachers an avenue towards the learners' lexical development. Teachers, however, should be aware of the limitations mentioned so far and be ready to adapt their teaching practices accordingly.

Conclusion

Knowing a word involves, among other things, knowledge about the syntagmatic and paradigmatic relations into which it can enter. It includes

information about its syntactic, semantic, phonological and pragmatic behaviour as well as awareness of its stylistic, evaluative, emotive, dialectal, cultural and ideological associations. Historical and etymological aspects, though peripheral, are available to be learned too. Knowing a word also involves knowledge about the situational and functional uses of a lexical item, its derivatives, its frequency as well as relevant collocational information. Learning a word, therefore, is not easy. The task is further complicated by the fact that «meaning and use overlap and tend towards fuzziness» (Januzzi, p.41). Meaning is not fixed but negotiable in discourse -what makes the lexicon of the language very difficult to systematize (Carter).

Given the variety and complexity of the aspects involved in lexical acquisition, it seems reasonable to suggest that pedagogic treatment in the language classroom should proceed in different directions. That is, a variety of approaches should be used. What I am advocating is the embracement of CA as only *one* resource teachers have at their disposal. As such, it has strengths and weaknesses -which teachers can manipulate to their advantage.

On the positive side, CA provides solid semantic and collocational information about words. The reduction to semantic primitives is economical and visually attractive. It offers a window on semantic relations such as synonymy, antonymy, class inclusion, incompatibility, hyponymy and others. The presentation of items in semantic fields helps learners build semantic networks and in so doing, expand, enrich and refine their vocabularies. Collocational grids assist learners in capturing subtle differences among a set of semantically related items. In addition, semantic feature analysis grids and collocational grids can be adapted to all levels of language proficiency since their components can be specified minimally or maximally. These grids might also be conceived as a co-production of teachers and learners and thus constitute fertile soil on which to orchestrate cooperative and participatory language activities leading to language development. The fact that learners may adjust or create their own grids to suit their needs enhances motivation and paves the ground for autonomous learning.

On the negative side, CA may give learners the impression that word meanings are stable, abstract and discrete. The atomization of language involved in CA contradicts research suggesting that unanalysed wholes are a

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pervasive feature in language acquisition and use, both in L1 and L2. CA does not capture the way in which words are used because the language is decontextualized. Neither does it reflect stylistic, associative, emotive or cultural aspects of word meanings -which are a matter of degree and are subject to personal and idiosyncratic associations. Besides, some words are inherently indeterminate and cannot be analyzed into components. More problems arise owing to the fact that there are no limits to the subclassification of components. This results in arbitrary and psychologically invalid componential descriptions for it is possible to conceive of different analyses for the same word.

These pitfalls notwithstanding, CA *may* constitute the framework in which vocabulary acquisition and expansion takes place. Carefully complemented, it can be a valuable pedagogic tool to stimulate vocabulary comprehension and production. Provided teachers acknowledge its limitations, CA can be a legitimate resource in the language classroom.
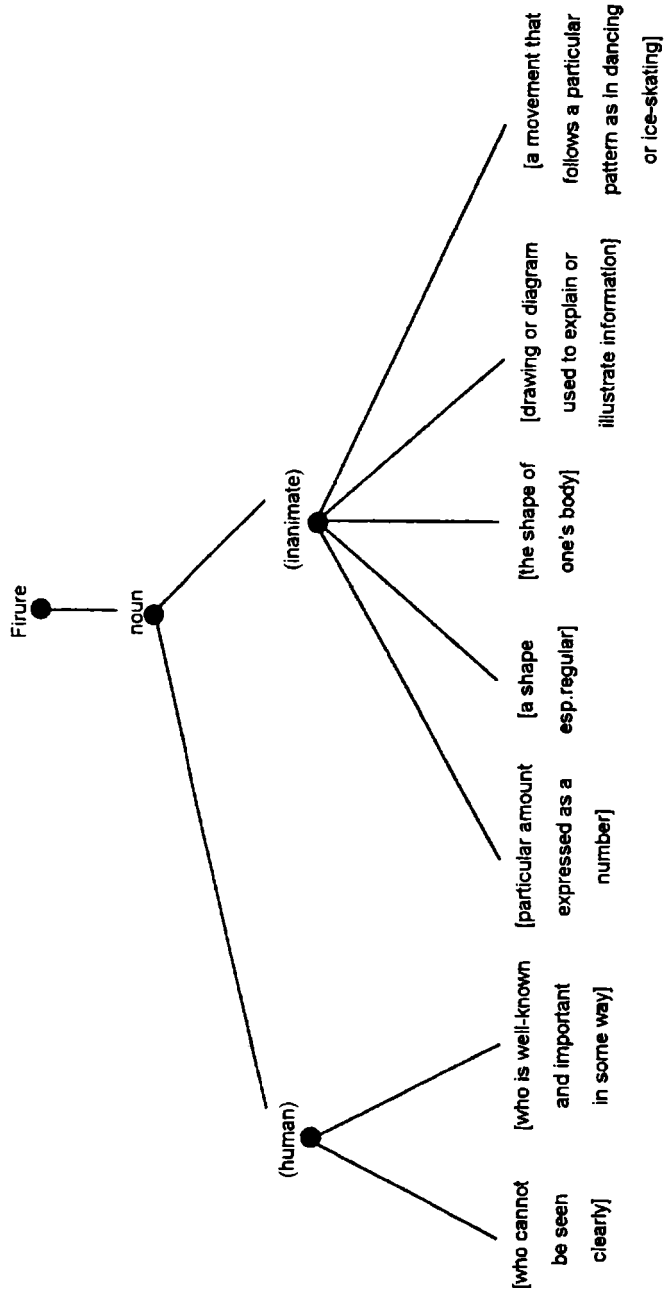
Notes

1. Stoller and Grabe (p.30) believe that «vocabulary development must be viewed as both a cause and a consequence of reading abilities.»
2. The question arises as to how these semantics-based approaches will be balanced with the necessary grammatical information. A balance is needed. Yet, it should be noticed that some aspects of lexical acquisition and vocabulary development are independent of grammatical considerations and do require a lexical approach.
3. See Bahns (1993), Brown (1994) and Gough (1996) for practical ideas to develop the learners' «collocational competence» (Bahns, p.56).
4. In all cases, the Collins Cobuild English Language Dictionary has been used as a source of reference.
5. McCarthy (p.94), however, argues that «while grids may be useful for visual reference, they are difficult to commit to memory.»
6. See Leech (1969, p.5) who prefers the term «equivalence» to synonymy.
7. Carter (1987) and McCarthy (1990) argue that the language used to describe the features may be too difficult for learners. True. Yet, I believe this should be no cause of despair. Teachers can aid comprehension by using visual materials or contextualizing the language through examples. If this solution is seen as too time-consuming, teachers can always modify and simplify the metalanguage used making it accessible for learners. See Januzzi (1995) for other alternatives to solve this problem.

8. However, *some* stylistic distinctions may be obtained and exploited through collocational grids.
9. Listening and reading, however, paint a different picture. For the recognition of synonyms is crucial if learners are to succeed in the comprehension of oral and written language.
10. The issue of vocabulary selection, in which several aspects (frequency, range, productivity, core words, learnability, teachability, etc.) are involved, is beyond the scope of this paper.
11. The Words you Need has resorted to evaluation scales in an attempt to show emotional, attitudinal and evaluative aspects of meaning.
12. However, writers like Cairns and Redman (1986) do not subscribe to this view.
13. However, The Words you Need includes frequent collocational grids.
14. I wish to thank Prof. Blanca Gómez for bringing this point to my attention.
15. Teachers should exercise caution for not all expansions will be appropriate in all contexts. Their naturalness –or neutrality– depends on the situation. Similarly, some lexical expansions may be grammatically incorrect. We say *feel a strong affection for* but not *feel two strong affections for*. Making learners aware of these subtleties is also part of the task of developing their competence in the language.
16. There are, of course, limits to the freedom learners may exercise in this respect. The boundary between personal associations and abnormally idiosyncratic associations is delicate and not clear-cut.
17. It is possible to argue that reading texts in general might not constitute an appropriate framework to introduce vocabulary (Channel 1988).

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Figure 1: A typical dictionary entry in CA

Firure

noun

(human)

(inanimate)

[who cannot be seen clearly]

[who is well-known and important in some way]

[particular amount expressed as a number]

[a shape esp.regular]

[the shape of one's body]

[drawing or diagram used to explain or illustrate information]

[a movement that follows a particular pattern as in dancing or ice-skating]

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Figure 2: Rudzda et al 1981, p. 125

	find to one's taste, agreeable	feel strong ties with	feel tenderness for	feel great passion	feel inferiority to object of adoration	result of prolonged contact	usually sexually motivated	to the point unreasonableness and illogicality	often temporary
like	+								
be attached to		+				+			
be fond of		+	+			+			
love		+	+	+					
be in love with		+	+				+		
feel/have an affection for			+			+			
be infatuated				+				+	+
adore				+	+			+	

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Figure 3: Rudzka et al's grid adapted to suit learners at low levels of language proficiency

	gustar sentir agrado	lazos fuertes	sentir ternura por	sentir gran pasión	sentir inferioridad hacia objeto de adoración	resultado de contacto prolongado	motivación sexual	al extremo de la irracionalidad	a menudo temporario
like	Y	N	N	N	N	N	N	N	N
be attached to	N	Y	N	N	N	Y	N	N	N
be fond of	N	Y	Y	N	N	Y	N	N	N
love	N	Y	Y	Y	N	N	N	N	N
be in love with	N	Y	Y	N	N	N	Y	N	N
feel/have an affection for	N	N	Y	N	N	Y	N	N	N
be infatuated	N	N	N	Y	N	N	N	Y	Y
adore	N	N	N	Y	Y	N	N	N	N

Figure 4: Rudzka et al's grid adapted to suit Januzzi's suggestion

	find to one's taste, agreeable	feel strong ties with	feel tenderness for	feel great passion	feel inferiority to object of adoration	result of prolonged contact	usually sexually motivated	to the point of unreasonableness and illogicality	often temporary
like	Y	N	N	N	N	N	N	N	N
be attached to	N	Y	N	N	N	Y	N	N	N
be fond of	N	Y	Y	N	N	Y	N	N	N
love	N	Y	Y	Y	N	N	N	N	N
be in love with	N	Y	Y	N	N	N	Y	N	N
feel/have an affection for	N	N	Y	N	N	Y	N	N	N
be infatuated	N	N	N	Y	N	N	N	Y	Y
adore	N	N	N	Y	Y	N	N	N	N