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IMPLICATIONS AND APPLICATIONS OF SEMANTIC FIELD THEORY AND COMPONENTIAL ANALYSIS IN VOCABULARY TEACHING

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ABSTRACT. Linguistics, which is primarily concerned with the nature and structure of language, is no doubt of great value to the language teacher. This is because the language teacher's professional pre-occupation is with the "what" and "how" of language teaching. The "what" would largely be informed by the quality of his grounding in linguistic theories, principles, tenets and research findings, which also have a measure of relevance for the "how."

This paper employs this general background to assess the strengths and weaknesses of semantic Field Theory and Componential Analysis in accounting for the nature and structure of the lexical system in a language. Practical implications and applications of the two theories for the teaching of vocabulary are later discussed. Lexical examples throughout the paper are drawn from the English Language.

INTRODUCTION

Applied Linguistics is a widening field of language enquiry whose purview is the intricate interaction between language and the web of human social, economic, educational, religious and political activities. It aims at clarifying and analysing the tricky issues of language use and language functions by deploying the insights, tenets, principles and findings in linguistics to practical ends. This is why Applied Linguistics is often perceived as the most useful linguistics.

In Applied Linguistics, decisions of practical and pragmatic significance are taken on the basis of a sound understanding of the nature of language (Theoretical/Descriptive Linguistics), how it is best learnt or acquired (Psycholinguistics) and its roles and functions in society (Sociolinguistics). This indicates that the field is an interdisciplinary pool of knowledge which

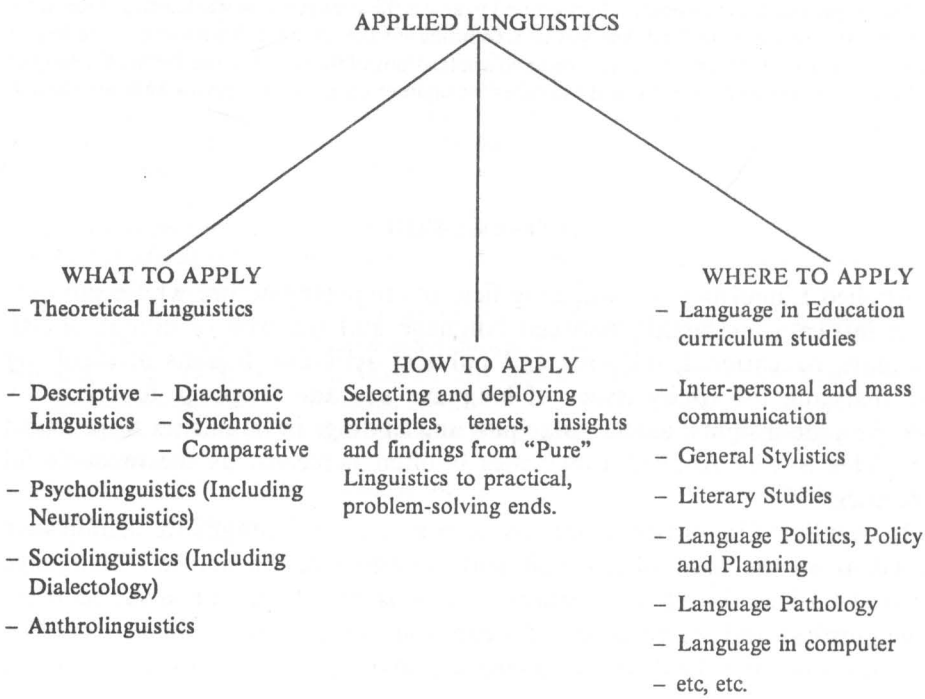
comprises "pure" Linguistics (Theoretical and Descriptive), Psycholinguistics and Sociolinguistics.

Useful as much as Applied Linguistics is, it is most misconceived and misunderstood branch of language studies. This problem is evident in vague definitions and lopsided course content. Certain definitions are cyclic by using the word "Application" without any clear indication of what exactly to apply, how to apply and where to apply. Several courses in Applied Linguistics focus exclusively on language learning and teaching which are in the realm of "Educational Linguistics". Educational Linguistics, a sub-set of Applied Linguistics, is a term coined recently to describe the study of the interaction of language and education (Spolsky 1992). Since language is central to all human activities, insights from linguistics have far-reaching applications and implications for several practical ends other than education.

The model in figure 1 below is an attempt to illuminate the polymorphous field of Applied Linguistics before properly situating the topic of this paper within the general framework.

The model assumes that Applied Linguistics entails the application of insights from linguistics to solve practical problems of language use. But more importantly, beyond this, the model identifies and explains the three dimensions

Figure 1. A Model of Applied Linguistics



of the 'what', the 'how' and the 'where' of this application. From the model one salient point emerges: While the "Pure Linguist" would be content to give valid descriptions of language at the lexico-semantic, orthographic, morpho-syntactic and phonological levels, the applied linguist goes beyond this to *select* and *employ* specific aspects of these descriptions to *prescribe* practical criteria and processes for effective language use and functions.

If the grammatical system can be analogically described as the skeleton of language, and the sound system as its flesh, the vocabulary or lexicon represents the veritable blood of language which unites and animates the other sub-systems. This would explain why a word can be described at the morphological, phonological, syntactic and semantic levels.

Semantic Field Theory and Componental Analysis are two mutually dependent approaches to the description of the lexicon. The most pertinent aspects of this description are selected in this paper and the criteria and procedures for deploying them to the teaching of vocabulary are explained, with particular reference to English Language.

GOALS OF SEMANTIC FIELD THEORY

The central point in Semantic Field Theory is that the lexicon is not a random assortment of words, but a system of inter-related and interlocking networks made up of semantically overlapping words (Lawal 1994). In the view of Lehrer 1974 (cited by Carter and McCarthy 1988), "the words of a language can be classified into sets which are related to conceptual fields and which divide up the semantic space or the semantic domain in certain ways" (P. 15). Carter (1987) explains that the lexicon as consisting of fields classifiable into the traditional grammatical categories of lexical words. These categories would thus include nouns, verbs, adverbs and adjectives, and collocations involving either an expansion or combination of any of the previous categories.

Semantic Field Theory has both philosophical and psychological origins in naturalism and wholism respectively. The search for unifying principles underlying all forms of knowledge is as old as man (Lawal 1993). Naturalist philosophers such as Aristotle have argued that everything in the universe is part of the same universe, and according to John Muir (cited by Showater 1973), whenever we try to pick out anything by itself, we find it hitched to everything else in the universe. This implies that the organising structure of "nature", and by implication the lexical universe, is not built of seperate components tagged, for instance, sociology, engineering, law, zoology, religion, culture, cookery, agriculture, etc.

The concept of "semantic or meaning field" is also traceable to "Gestalt" or field psychology which originated in Germany in the early part of the 20th century. The theory stresses the significance of insight and perception in the learning process and the importance of the "whole" as constituting more than the cumulative sum of its inter-related and inter-dependent parts (Koffka, 1993). Perception and insight, according to the field theorists, are influenced by the patterns and organisation of a field, and a thing cannot be understood by the study of its constituent parts, but only by a study of it as a totality (Kohler 1929).

The philosophical and psychological foundations illustrated so far have both logical and psychological implications for the way the lexicon is organized and for the lexical acquisition process respectively. The logical relationship between two or more lexical items can either be paradigmatic or syntagmatic. Using the sentence as the reference point, paradigmatic relations are the vertical while syntagmatic ones are the horizontal ones existing between two or more words.

For instance, in the sentence "Gani is an honest Nigerian", any word such as "dishonest," "truthful," "good," and "bad" among several others which can meaningfully replace "honest" are said to be in paradigmatic relations to it.

However, whereas the paradigmatic relationship between "honest" and "dishonest" is that of antonymy, "honest" relates to "truthful" in the same way in a fairly synonymous sense. The paradigmatic relation holding between "honest" and "good" is that of hyponymy or meaning inclusiveness with "good" being the superordinate and "honest" being one of its hyponyms. This implies that "honest," "dishonest," "truthful," "good" and other such adjectives occupy a semantic field organically united by the general attribute of "goodness".

In the syntagmatic sense, "honest" shares a semantic (and also a syntactic) relationship (or collocates) with "Nigerian." The relationship is so "systemic" that the word "tree" or "stone" cannot share this with "honest." This implies that the semantic field occupied by "Nigerian" and its other paradigmatic associates (such as Ghanaian, American, Canadian, or even boy, girl, man, mammal) would be closer to that occupied by "honest" and its own lexical companions than that of "stone," "tree," "hill," "river," etc.

The psychological validity of semantic field theory, which has far-reaching implications for both vocabulary acquisition and reading comprehension (Lawal 1994), can be seen in the logical relationship that exists between cue-miscue pairs in both speech and reading among both native and non-native users of English. Examples of such slips include "commission" for "commissioner," "insurance" for "assurance," "man" for "woman," "angry" for "hungry," etc.

The paradigmatic relation that exists between each of these pairs is easily understandable. The major psychological implication here is that the theory suggests that the lexicon of a language is not haphazardly organised in the mind of the language user who selects words rightly or wrongly on the basis of

a logically arranged network of semantic sub-systems in the latent psychological structure.

One pertinent inference that can be drawn from the logical and psychological dimensions of the lexico-semantic structure is the fact that words keep company on the basis of the proximity or overlap that exists between the fields or sub-fields from which they are selected. Therefore, the lexical items contained in a sentence, a paragraph or even a discourse that is systemically united by a central theme can be classified into related or even overlapping fields and sub-fields, some of which would show closer affinities than others. In addition, an insight into the semantic organisation of the lexicon would be facilitated by familiarity with lexical systems or "wholes" rather than through a haphazard and disjointed presentation of discrete lexical items in a non-systemic, incremental fashion.

In spite of the strengths of this theory in illuminating the structure of the lexicon, it is not easy, if not totally impossible, to predict collocation on the basis of semantic fields. Figurative language in both ordinary and literary usages is a difficult area to which the theory cannot be meaningfully applied. For instance, in the sentence "A fence runs round the campus," "fence" and "run" would not apparently collocate since they seem to belong to two widely separated semantic fields. However, a fairly competent user of English would not be in any doubt about the meaning of the sentence.

Furthermore, the non-correspondence of semantic fields in different languages definitely creates problems for translators. This is because words change their colour and texture when they change their nativity.

COMPONENTIAL ANALYSIS: PURPOSE AND PROCEDURES

Componential Analysis is a theory that examines the system of linguistic relationships which a lexical item contracts with other items by breaking each word or item into its irreducible features (Kemson 1970). The goal, therefore, is to explain the total meaning of a word in terms of its distinct elements or components of meaning (Lyons 1977).

In essence, while semantic field theory is wholistic and synthetic in its approach to the description of the lexicon, Componential Analysis adopts an analytical and atomistic procedure by focusing on each word and further decomposing it into its ultimate semantic particles. The basic assumption, therefore, is that all lexical items can be broken down into certain component parts or features and the relationships between the components which hold among lexical items explicated and labelled systematically.

Like semantic field theory, Componential Analysis is a structuralist approach to the semantic analysis of vocabulary. Therefore, Componential Analysis purports to offer a theoretical framework for handling lexico-semantic relations rather than introducing a further kind of relation. However, while Semantic Field Theory attempts to unify the lexicon, Componential Analysis breaks it down, both approaches employing ironically the same semantic criteria. In other words, it is the same semantic markers employed in Componential Analysis in labelling each word that are used in Semantic Field Theory to organise the lexicon into a harmonious network of sub-systems.

In Componential Analysis, the semantic attributes of a word are analysed not as a unitary concept but as a complex made up of components of meaning which are themselves semantic primitives. These components are variously referred to as 'sememe,' "semantic marker," "semantic category" and "semantic feature" (Cater 1987). For instance, "wife" can be analysed as a semantic complex made up of the features: (+ Female), (+ Married), (+ Adult) and (+ Human). This kind of analysis has been of particular usefulness to anthropologists in giving account of kinship terminologies in various cultures.

Furthermore, let us consider the following sets of lexical items in English:

Man	Woman	Child
Lion	Lioness	Cub

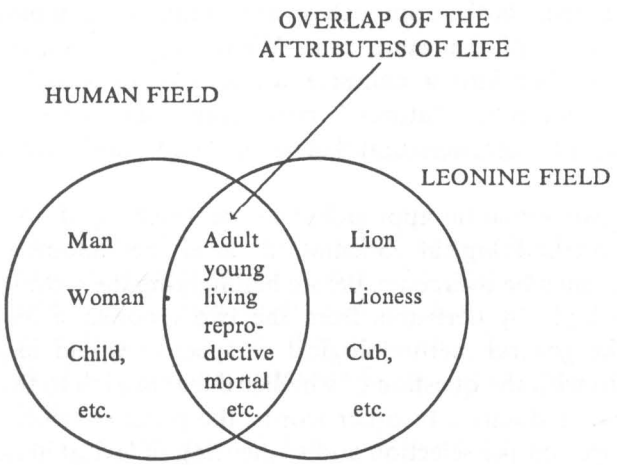
On the basis of our intuitive knowledge of the sense of each word, the following proportional equations can be proposed.

Man: Woman: Child :: Lion: Lioness: Cub.

This equation expresses the assumption, from the semantic point of view, that the words "Man," "Woman" and "Child," on the one hand, and "Lion," "Lioness" and "Cub" on the other, all have something in common. In addition, "Man" and "Lion" have something in common which is not shared by either "Lioness" and "Woman" or "Child" and "Cub," and so on. What these different groups of words have in common are referred to as semantic components. From the mathematical equations above, we can extract four components of sense which we can label (+ Male), (+ Female), (+ Adult-Human) and (+ Adult-Leonine). If we take "man", for instance, we can say that the sense of "Man" is the product of the components (+ Male), (+ Adult) and (+ Human). Also, in the equation above, "Man" is to "Woman," what "Lion" is to "Lioness".

It is interesting to note that the same semantic components identified through the Componential Analysis approach can be used to group the lexical items into appropriate semantic fields with identifiable overlaps as follows in figure 2.

Figure 2. A schematic model of overlap between the Human and the Leonine Fields.



It then follows that Semantic Field Theory and Componential Analysis are but two sides of the same coin.

Molecular and atomic concepts, deriving essentially from chemistry, are often used to describe Componential Analysis. Sense components can be described as atomic whereas the sense of a particular word can be described as molecular. For instance, "Man" is a molecular concept, whereas (+ Male), (+ Adult) and (+ Human) are all atomic concepts.

Componential Analysis has a long history in Linguistics, Logic and Philosophy. It is inherent in the traditional biological method of taxonomy which divides genus into species and species in turn into sub-species. This method has enjoyed the patronage of lexicographers as a procedure in lexical description. A number of attempts have been made to formalise the principles of Componential Analysis. The theory is based on the crucial assumption that semantic components are cultural universals and are thus language-independent.

In spite of the relevance of Componential Analysis in lexical description, the approach cannot adequately handle polysemy (e.g. "head" of a person and the

"head" of an organisation), homonymy ("file," material used for keeping papers in, and "file," tool for cutting or smoothening hard substances); and figurative language (e.g. "man" as used in "Janet will man the gate").

IMPLICATIONS AND APPLICATIONS IN VOCABULARY TEACHING

As we earlier noted, both approaches are mutually complementary since they are two sides of the same coin. What Semantic Field Theory attempts to bring together into a cohesive whole, Componential Analysis breaks down into undivisible "atoms," both using the same semantic parameters but different nomenclatural labels of "field" and "component" respectively.

In applying the two semantic approaches to the teaching of vocabulary, a complementary methodological orientation need be adopted if the shortcomings in each must be overcome. Before highlighting the techniques and procedures that are logically derivable from the two theories, a major fundamental issue of the general methodological perspective would have to be settled. This has to do with the question of whether the approach to the lexicon would be deductive or inductive. In other words, the primary issue, which is a curricular one, centres on the selection and sequencing of lexical items within a syllabus, a vocabulary checklist and a language textbook to achieve both logical and psychological purposes.

In view of the relative strengths and shortcomings of the two theories, a deductive approach in which vocabulary presentation and teaching proceed from "wholes" or fields and sub-fields to the "specifics" or particular lexical items readily suggests itself. By adopting a deductive orientation words can be presented according to context, part-whole relations and similarities/dissimilarities in semantic attributes, such that later when the distinctive semantic components of each word are being explained, the word derives its full semantic essence within one or more fields.

This methodological procedure would also have implications for a spiral method of arranging vocabulary items in a course. In spiral sequencing, there is inbuilt repetition in such a way that a single lexical item recurs as many times as the fields to which it is pertinent would permit. This technique would thus serve both logical and psychological expediency.

However, this orientation, though starting off on a deductive note, should end inductively by identifying the semantic components of lexical items and using common components to re-affirm their memberships of their respective fields and sub-fields.

In the actual teaching of vocabulary, teachers can cognitively challenge learners to activate their knowledge of semantic fields by encouraging them to

employ semantic cues, particularly in written communication, as they read round unknown words. This has been described by Goodman (1977) as a "psycholinguistic guessing game." Teachers also need to constantly present lexical items that are semantically related and which they can also attempt to unify contextually through either pictorial or real-life support. In this way, learners can be guided to acquire useful registers and a sense of style by using related words to speak and write about the communicative situations which the teacher presents.

CONCLUDING REMARKS

Semantic Field Theory and Componential Analysis are two theoretical tools which language teachers need to acquire and be able to apply to the selection, presentation and evaluation of lexical items focused on in their lessons. These theories can also guide them in selecting, adapting and improvising materials for facilitating their learners' vocabulary development.

The theories are also of high relevance to the different but mutually dependent tasks of the language curriculum planner, the lexicographer and the language textbook writer. The insights and principles derivable from the theories would equally enable them to make well-uniformed decisions regarding the selection, grading and explanation of the lexical items in their materials. In applying these theories, however, the various professionals directly and indirectly concerned with the teaching-learning process would need to reflect an understanding of the relative strengths and weaknesses of the theories in their practical decisions.

REFERENCES

Carter, R. (1987), "Vocabulary" in Sinclair, John (ed.), *Applied Linguistic Perspectives.* London: Allen and Unwin.

Carter, R. and McCarthy, M. (1988). *Vocabulary and Language Teaching.* London and New York: Longman.

Goodman, K. (1977). "Reading: A Psycholinguistic Guessing Game." Reprinted in H. A. Singer and R. Ruddel (eds.) *Theoretical Models and Processes of Reading*, (2nd ed.). Newark, Delaware: International Reading Association.

Koffka, K. (1935). *Principles of Gestalt Psychology.* New York: Harcourt and Brace.

Kohler, W. (1929). *Gestalt Psychology.* New York: Lewright.

Kemson, R. M. (1970). *Semantic Theory.* London: Cambridge University Press.

Lawal Adebayo (1993). "Integration in the Language Arts Curriculum" IJE, Vol. 13, June.
Lawal Adebayo (1994). "A Comparative Psycholinguistic Study of Newscasters' Miscues in English and Yoruba". A paper presented at the 6th Biennial Conference of the Reading Association of Nigeria (RAN), University of Ilorin, 23rd-25th November 1994.
Lyons, J. (1977). *Semantics I.* London: Cambridge University Press.
Showater, V. (1974). "Desirable Characteristics of Teachers of Integrated Science." *New Trends in Integrated Science Teaching.* Vol. III, Paris, UNESCO Press.
Spolky, B. (1992). "Educational Linguistics" in: A. Lewy (ed.) *International Encyclopedia of Curriculum.* New York: Pergamon Press.