Componential Analysis

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1. Definition.

Componential analysis is a procedure which aims at operating semantic analysis at the level of the word. It assumes that the meaning of "full" words (nouns, verbs, adjectives, adverbs) can be split up into smaller elements of meaning. These are known as semantic components or semantic features.

The analysis is carried out within a semantic field. This can be defined as a group of words that stand in paradigmatic opposition to one another and that share at least one semantic component. Determining and delimiting a semantic field requires a methodology. According to some, we might start from a pair of words that we suppose belong to the same field, and analyse the features that differentiate them; then we add to them words that carry new features.¹ The features obtained by comparing the lexemes must be such as to account for the meaning of all the terms examined in the semantic field.

Another procedure consists of starting from the intuitive understanding of the sense of a group of words and trying to define the features they share (singled out by means of proportional equations) in order to determine the semantic components.² A third procedure uses the definition offered by the dictionary (or the speaker) in order to define the meaning of the word under analysis.³

2. Origins and development.

There is no need here to trace a history of studies made on the subject. Nevertheless, since the investigations, both theoretical and practical, that have made use of methods of componential analysis have moved along different lines, a brief sketch of the subject is needed.

2.1. The European tradition.

The idea of a componential analysis had been anticipated by L. Hjelmslev.⁴ He assumed that meaning could be broken up into elementary entities by analogy with what occurs at phonological level. These entities ("content figurae") were equipped with characteristics similar to those of the phonological features, and were limited in number.

Among the linguists who refer to the European tradition, we can recall the French linguists B. Pottier⁵, A.J. Greimas⁶, T. Todorov⁷, who developed a method of

⁵ Vers une sémantique moderne, Travaux de linguistique et de littérature 1, 1964, 107-138.

⁶ Sémantique structurale, Paris 1966.

¹ E. Coseriu, Les structures lexématiques, in W.T. Elwert (ed.), Probleme der Semantik, Wiesbaden 1968, 3-16.

² J. Lyons, An Introduction to Theoretical Linguistics, Cambridge 1968.

³ E.g., M. Alinei, La struttura del lessico, Bologna 1974.

⁴ Omkring sprogteoriens grundlaeggelse, Copenhagen 1943 (= Prolegomena to a Theory of a Language, Baltimore 1953).

analysis that describes the elements of lexicon as "packets of semes". According to Todorov, for semic analysis to imply the irreducible character of the semantic combinatory, it has to consider (as in Greimas) the contents of segments of larger utterances, that is, it has to consider meanings that are connected to a specific context or a certain situation of speech. This might, however, remove the boundary between the semantics of a language and the analysis of the speeches uttered in that language.

In recent years, this epistemological aim (not to exclude from the field of semantics those phenomena of meaning observed in speech) has been pursued within the French school by scholars such as F. Rastier.⁸ He re-examines the notion of *virtuème*⁹ and develops it, distinguishing between denotative and connotative features, that he considers as inherent and afferent semes respectively. The former depend upon the functional system of the language, the latter upon other kinds of encoding (such as socialised or rather idiolectal norms).

The treatment offered by Coseriu and his pupils (like H. Geckeler)¹⁰ seems more rigorous. He prefers to talk of "lexematic structures". He distinguishes between designation (relations between signs and extralinguistic realities) and signification (relations between meanings), pointing out that in lexematics it is exclusively a matter of relations of signification. Moreover, the lexematic point of view concerns only the lexical meanings of one and only one functional language. This allows him to distinguish lexematics from onomasiology (the study of the relations between the signified and the different signifiers that express it) and semasiology (the study of the relations that connect a signifier with the different signified it might express). One of the results of this approach is the possibility of excluding from structural semantics Katz and Fodor's method which, according to Coseriu, does not deal with the structure of meaning but rather the study of interpretation. The lexematic structures are then distinguished from the associative fields (studied by Ch. Bally and his school); these fields concern the associations of one sign with others and are partly connected not with the linguistic units as such but with associations between units of non-linguistic reality.

Observing the primary paradigmatic structures (where terms are mutually implied, without supremacy of one over the other), Coseriu distinguishes the lexical field from the lexical class. The lexical field consists of units which share an area of signification and which stand in immediate opposition to one another. The lexical class is a class of lexemes determined by a classeme which is a distinctive feature that operates in an entire category (e.g., the class of /living creatures/, and within it /human beings/, /non-human beings/, etc.). The classes are revealed in the grammatical or lexical combination of the lexemes (lexemes that allow for the same lexical and/or grammatical combination belong to the same class). Coseriu's concept of lexical field differs from that of the abovementioned French scholars mainly in the procedure that prescribes that one should

⁷ Recherches sémantiques, Langages 1, 1966, 5-43.

⁸ Typologies des composants sémantiques, Quaderni di Semantica 6, 1985, 35-49.

⁹ B. Pottier, Linguistique générale, Paris 1974.

¹⁰ Strukturelle Semantik und Wortfeldtheorie, München 1971.

construct the lexical field gradually, starting from the immediate oppositions between two or three lexemes.

Among the Italian scholars who made their contribution to componential analysis, I would like to recall Alinei¹¹ who investigates the Italian lexicon using the computer. The semantic features used by Alinei are taken from the definitions given in dictionaries. In his approach, a "feature" is defined as all information assigned to an entry (= lexeme). From the feature analysis of the lexical system of the "dog's sounds", the feature formulation seems at times to fail to observe the principles of economy of description and their primitive value. So, for example, when the Italian lexeme ustolare ("to yelp for food") is defined by the feature / seeing its master while he eats/.

2.2. The American tradition.

Whilst in Europe the interest in semantic components begins with Hjelmslev's theoretical considerations, in the United States the first examples of feature analysis of semantic fields originate from the field-work of the ethnoanthropologists. The first studies concern the structure of colours,¹² the terminology of kinship¹³ and other lexical and cultural areas of anthropological interest.

The analyses provided by these authors have been particularly important in the theory of features and their function in the economy of description.¹⁴ Although the linguistic relevance of the semantic fields they studied and the fact that these belong more specifically to cultural taxonomies may be a matter of discussion, their methodologies are not incompatible with the tenets of structural semantics.

The approach to semantic analysis elaborated by J.J. Katz and J.A. Fodor¹⁵ in the framework of transformational grammar is completely different. Their analysis aims at giving an account of the semantic interpretation that the speaker offers of the words, which are considered in their syntactic context as members of a sentence. The search for semantic features is then carried out starting from the utterance and from the polysemic lexeme, rather than the semantic field. This is done in order to determine "semantic markers", "distinguishers" and "selection restrictions" for each entry of the dictionary. Katz and Fodor's theory of semantic interpretation has witnessed many developments that cannot be considered here. Suffice it to say that in these developments, as well as in Katz and Fodor's approach, the analysis of the meaning of the words tends to become the analysis of the meaning of the sentence.

One of the results of Chomsky's definition of semantic feature is the assumption that the features have to be "universals of language". Concerning this J. Lyons¹⁶ observed that the empirical evidence that we possess so far tends to refute this

¹¹ La struttura del lessico, Bologna 1974.

¹² H.C. Conklin, Hanunóo Color Categories, Southwestern Journal of Anthropology 11, 1955, 399-344.

¹³ F.G. Lounsbury, The Structural Analysis of Kinship Semantics, in: Proceedings of the Ninth International Congress of Linguists, The Hague 1964, 1073-1074.

¹⁴ W. H. Goodenough, Componential Analysis and the Study of Meaning, Language 32, 1956, 195-216.

¹⁵ The Structure of a Semantic Theory, Language 39, 1963, 170-210.

¹⁶ Semantics I, Cambridge 1977, 331 ff.

hypothesis rather than confirm it. In spite of very interesting studies, such as that on names of colours by B. Berlin and P. Kay¹⁷, it does not seem to me that the situation has changed in the past twenty years.

3. Evaluation.

If componential analysis has not been the object of further developments and seems to have been set aside during the past decades, that is due to the growth of the theoretical debate which has shifted its stress onto other aspects of linguistic communication. Following the model of scientific revolutions,¹⁸ in linguistics the focus has been shifted onto the text and the event, making the meaning of the word as such less interesting. In a similar way, in archaeology attention has shifted during recent years from procedural and structural models towards historical and contextual considerations¹⁹.

Consider, for example, F. Rundgren's point of view: "Now this *a priori* named reality being articulated by the aid of textual behaviour, the text, as a cultural as well as a linguistic category, is to be regarded as *the first articulation* of language^{«,20} Rundgren asks himself: "Why then in Proto-Semitic was the notion of ,tomb' designated as *qabr-?*". He proposes the following answer: "In the possible world that found expression in *Mundus Semiticus inflectus et intellectus* a cultural fact existed that was expressed in the phonetic behavioural events *q-a-b-r* (image acoustique)^{«,21} In this perspective the meaning of the word in itself does not seem to be a problem any longer.

The same shift onto other aspects of linguistic communications could be achieved in other ways: through sociolinguistics, for example, considering the pre-eminence of the event in acts of communication. With reference to languages with a limited corpus, A. Avanzini's study²² on the formulary of building inscriptions of ancient South Arabia offers an approach which is derived from the consideration of the writing event in a given society. But although this consideration of the writing event throws light upon the criteria for the use of the lexicon that go beyond literary genre and the textual model, I do not think that it makes the study of the lexicon worthless at the level of functional language.

That being said, we might ask ourselves what is still valid in componential analysis both from the explicative-theoretical point of view and the operative one. Lyons has drawn attention to the fact that "the allegedly more basic sense-components cannot be shown to have any psychological validity", and to the "highly questionable procedure of treating as basic sense-components ... the meanings of certain lexemes, like "human", "adult" or "female" from his own native language or from some other language that is commonly employed as a metalanguage in theoretical

¹⁷ Basic Colour Terms: Their Universality and Evolution, Berkeley – Los Angeles 1969.

¹⁸ T.S. Kuhn, The Structure of Scientific Revolutions, Chicago 1962.

¹⁹ I. Hodder, Reading the Past, Cambridge 1986.

²⁰ The Word and the Text, Acta Universitatis Upsaliensis. Acta Societatis Linguisticae Upsaliensis, N.S. 4:1, 1992, 5.

²¹ Ibid., 7.

²² For a Study on the Formulary of Construction Inscriptions, in: C. Robin - M. Bafaqih (edd.), *Şayhadica*, Paris 1987, 11-20.

and descriptive linguistics".²³ In spite of this and other problems which are still open (whose solution, as in the case of the relation between the linguistic system and cognitive processes, does not depend only upon componential analysis) some positive effects might perhaps be indicated. As regards our awareness of the functioning of linguistic systems, these methods have served to underline some distinctions. Firstly, they have emphasized the need to distinguish clearly between relations of signification and relations of designation. This proves to be equally clear in both the interpretation based upon the lexematic point of view and that which requires the extension of its applicability to speech. Rastier,²⁴ for example, points out that semantic features are neither qualities of a referent nor parts of a concept.

Just as clearly, componential analysis has helped to distinguish structures of the lexicon from associative fields. Besides, Coseriu²⁵ has effectively shown the difference between the structured linguistic lexicon and the terminological lexicon ("lexique nomenclateur et terminologique"), including popular classifications. In the debate that followed Coseriu's exposition, this distinction was supported by Ullmann²⁶ who, although approving it in general terms, wondered whether or not popular nomenclatures should be put on the same level of technical and scientific terminologies.

From the operative point of view, Lyons has expressed a rather negative opinion. According to him, componential analysis "is as valid as the relations upon which it is based and which it may conveniently summarize ... But there seems little value in setting up a new kind of linguistic unit (the ,sememe') when all that can be said with it can be said just easily without".²⁷ With respect to the treatment offered by Coseriu, the difficulty of delimiting the functional languages is also to be considered (as the same Lyons noticed during the Workshop).

Other linguists may consider interesting the results of experiments that have made use of componential analysis. Having observed that a componential analysis rigorously carried out fails to account for metonymic and metaphoric uses, B. Kedar²⁸ still admits that it can become, in some circumstances, a heuristic method clarifying differences of meaning. So the paradox of componential analysis (supposing the method is valid, the plan to elaborate a complete list of the semantic components of a language is illusory) is in any case an answer to the intention of the past to create "semantic alphabets" or "universal mental dictionaries".²⁹

4. Applicability.

My task on the present occasion is not to offer a theoretical contribution to issues concerning componential analysis but only to verify its possible value within the

²³ Structural Semantics I, Oxford 1977, 333 ff.

²⁴ Typologies des composants sémantiques, Quaderni di Semantica 6, 1985, 35.

²⁵ Structure lexicale et enseignement du vocabulaire, in: (various authors), Les théories linguistiques et leurs applications, Nancy 1967, 18.

²⁶ Ibid., 79.

²⁷ Structural Semantics, Oxford 1967, 80.

²⁸ Biblische Semantik: Eine Einführung, Stuttgart 1981, 188.

²⁹ R. Simone, Fondamenti di linguistica, Roma – Bari ²1991, 491 ff.

study of the lexicon of Biblical Hebrew or other languages with a limited corpus. This can be done in two ways; through theoretical examination of the problem, and through critical examination of the available studies in this field.

4.1. Applicability to languages with a limited corpus.

Adherence to a model of linguistic description, when there is no bias to an ideology or school, may be based upon two different factors: realism and convenience, as has been observed with regard to another problem.³⁰ Realism means to choose the model that we think is able to reproduce the object described as accurately as possible. Convenience means to choose a method that can describe most of the facts using less principles (be they rules or elements). Economy would probably be a more suitable term for this second criterion.

A principle that can be used in description might also be the one of "irreversible solidarity", formulated by Jakobson. Some elements are presupposed by the presence of others (primary values) whereas some others presuppose the presence of the former (secondary values). When the language we want to study is part of a verifiable historical evolution, the consideration that a certain characteristic (phonological for instance) should not appear before others might be a means to verify the effectiveness of a reconstruction. An example of an application of this criterion can be seen in L. Heilmann's observations³¹ with regard to the "impossible" phonological system of Nostratic proposed by Cuny. The use of the Berlin-Kay hypothesis to support the stages of development of colour terms in Hebrew³² could be regarded as an example of the application of the same criterion in the field of Semitic languages.

If we pass on to verify these criteria with reference to the analysis of the lexicon in languages with a limited corpus, we have first to observe that we know these languages from written documents. These are considered as a secondary code, functionally parallel to phonic utterances. In principle, graphic variants and invariants are assimilated to phonological ones and likewise on the morphological and lexical levels. Nevertheless it remains to consider the influence that the secondary code (the graphic system, but also the writing system in general) exerts on the transmission of a language. This is particularly obvious in the Semitic graphic systems, especially that which is used in Hebrew. But the influence of the code is evident not only with regard to the phonological system. The manuscript tradition in itself with all its problems could be taken into account and also, regarding the original writing, the manifold conventions of the scribes. It seems to follow then that the focus of structural methods on the formal aspect of language might become an operative instrument for the study of these texts. Compare what W. Richter³³ has observed with regard to Hebrew.

Since we cannot study Hebrew but only the literary language that has been preserved (and which belongs to different literary genres), and it is not possible to resort to "informants" to check the records, what method of componential analysis

³⁰ M. Negri, Lingue antiche e linguistica strutturale: nuclei problematici e prospettive euristiche, Acme 40, 1987, 14 ff.

³¹ Linguaggio, lingue, culture, Bologna 1983, 198 ff.

³² A. Brenner, Colour Terms in the Old Testament, Sheffield 1982, 56 f.

³³ Grundlagen einer althebräischen Grammatik, St. Ottilien 1978, 5.

should we then prefer? In principle it would seem that, on these terms, only the level of signification (and not that of designation) is accessible.

"We may learn the meanings of the words, but not a knowledge of their intended content which must be derived from other, non-linguistic sources, or which there is no hope of recognizing at all⁴.³⁴ For this reason, Coseriu's method, which refers only to relations of signification, has seemed appropriate.

If we wanted to apply a method such as the generative one we would find ourselves in a vicious circle for lack of informants (that is, for lack of intuitive judgements on the meaning of sentences offered by the speaker). Also, a structural method should allow us to expand our knowledge of the lexical meaning of individual words which are parts of a field.

4.2. Lexical fields in Hebrew.

In my first article on the structure of the semantic field of colours³⁵ I attributed the fact that the literature about Biblical Hebrew did not offer examples of componential analysis to special difficulties caused by the study of dead languages. In fact I was able to quote only two articles which, though failing to come to a real semic analysis, tried to define the meaning of terms by examining the system of oppositions found in the texts. These terms belong to the semantic field of "folly⁴³⁶ and the field of rich and poor³⁷ in the wisdom literature. To these were added observations on words relating to the semantic field of truth,³⁸ where the concept of semantic field is understood in the sense of J. Trier. Even after my article on the structure of the semantic field of colours, followed by an application to a single problem,³⁹ the bibliography about this subject has not grown very much. Sawyer⁴⁰, for example, indicated among previous studies on associative fields those on biblical words for "time",⁴¹ geographic terminology,⁴² terms for the pottery,⁴³ but he did not mention any study of componential analysis. In following years we can recall A. Vivian⁴⁴, I. Zatelli⁴⁵ and A. Brenner⁴⁶. Kedar's manual⁴⁷ does not provide a selected

³⁷ T. Donald, The Semantic Field of Rich and Poor in the Wisdom Literature of Hebrew and Akkadian, OrAnt 3, 1964, 27-41.

³⁸ J.F.A. Sawyer, Root-meanings in Hebrew, JSS 12, 1967, 43-46.

³⁹ P. Fronzaroli, I cavalli del Proto-Zaccaria, Accademia Nazionale dei Lincei. Rendiconti 26, 1972, 593-602.

⁴⁰ Semantics in Biblical Research. New Methods of Defining Hebrew Words for Salvation, London 1972, 33.

- ⁴¹ J. Barr, Biblical Words for Time, rev. ed., London 1969, 185-207.
- ⁴² A. Schwarzenbach, Die geographische Terminologie im Alten Testament, Leiden 1954.

⁴³ A.M. Honeyman, The Pottery Vessels in the Old Testament, PEQ 71, 1939, 76-90.

⁴⁴ I campi lessicali della "separazione" nell'ebraico biblico, di Qumran e della Mishna, Firenze 1978.

- ⁴⁵ Il campo lessicale degli aggettivi di purità in ebraico biblico, Firenze 1978.
- ⁴⁶ Colour Terms in the Old Testament, Sheffield 1982.
- ⁴⁷ Biblische Semantik: Eine Einführung, Stuttgart 1981, 187-189.

³⁴ M.Z. Kaddari, Semantic Fields in the Language of the Dead Sea Scrolls, Jerusalem 1968, VII.

³⁵ P. Fronzaroli, Sulla struttura dei colori in ebraico biblico, in: (various authors), Studi linguistici in onore di Vittore Pisani, Brescia 1969, 377-389.

³⁶ T. Donald, The Semantic Field of ,Folly' in Proverbs, Job, Psalms and Ecclesiastes, VT 13, 1963, 285-292.

bibliography on this point, although it offers some interesting and original remarks. L. Kutler's article⁴⁸ refers to Weinrich but it does not use formal methods.

We can find in all these analyses some interesting contributions to the study of Hebrew semantics. Some of these are also relevant to the study of semantic fields as intended here. For example, Sawyer⁴⁹ notices that four terms belonging to the field of "truth" are also found in the field of "firmness" ($^{2} \rightarrow m\bar{u}n\bar{a}$, ne $^{2} \rightarrow m\bar{a}n$, kēn, $n\bar{a}k\bar{o}n$). This is in keeping with what has been observed on the possibility that a word can belong to more than one field at the same time.⁵⁰ But the way this has been investigated by Sawyer concerns "what part the root plays in the word total meaning". Moreover, the four terms specified do not correspond even to the basic definition of the semantic field (a group of words that are in paradigmatic opposition). Similar remarks could be made for most of the cited studies. In conclusion, the studies which can be used are limited to my two articles and the books by Vivian, Zatelli, Brenner.

4.2.1. Delimiting the lexical field.

Most of the authors I have quoted (who as already stated aim at studying associative fields) derive their standards for judging what words belong to a field from lexicographic descriptions.⁵¹ Sometimes they use the contexts of every single word. Or else they refer to the intuition of the scholar: "the criteria for building up this far larger field are in the last resort intuitive".⁵² Concerning this, Sawyer himself discusses whether or not the intuitive element could legitimately be used in the scientific investigation. He concludes that "a knowledge of Hebrew implies that I can intuitively recognize words of related meanings".⁵³

On the contrary, I had suggested in my first contribution a procedure based upon the possibilities of substitution allowed in the messages offered by the corpus.⁵⁴ Starting from the hypothesis that a lexeme A belongs to a field which is to be described, and considering it as an invariant, we then proceed to an inventory of a class B of variables. These are formed by lexemes which occur in the corpus associated with A. For each member of class B singled out in this way we extract from the corpus the members of class A', so that they can replace A in A+B. As regards the criterion to identify members of the class A', we must choose terms which occur in the corpus in opposition to one another (e.g., "Are they black or white?"). If a single member of class A' could replace A in all the utterances, it would be completely equivalent to A. In fact, we find that each member of class A' can replace A in some specific utterances, but not in all of them. For each member of A' we must then complete classes B using the same method of extraction already illustrated for A. Following this, we extract new replaceable members for each

⁴⁸ A Structural Semantic Approach to Israelite Communal Terminology, JANES 14, 1982, 69-77.

⁴⁹ Journal of Semitic Studies 12, 1967, 45.

⁵⁰ E. Coseriu, Les structures lexématiques, in: W.T. Elwert (ed.), Probleme der Semantik, Wiesbaden 1968, § 3.1.3.

⁵¹ E.g., Sawyer, JSS 12, 1967, 45, n. 1.

⁵² Sawyer, Semantics in Biblical Research, 33.

⁵³ Ibid., 34.

⁵⁴ P. Fronzaroli, Sulla struttura dei colori in ebraico biblico, 379-381.

member of A' through the new members of class B not common to A. The procedure ends when new extractions are no longer possible:

A: white	B: horse	A': black, bay, sorrel, etc.
	B: garment	A': black, blue, pink, etc.
	B: flower	A': blue, pink, red, etc.
	B: house, etc.	A': red, gray, etc.

We have now a class A' of lexemes which belong to the same semantic field of A. In fact, being able to replace A they share at least one semantic feature with A. To each member of the class A+A' corresponds a class B of lexemes which can be associated with it:

A+A'	white B	horse, garment, flower, house, etc.
	black	horse, garment, etc.
	blue	garment, flower, etc.
	red	flower, house, etc.
	bay	horse
	sorrel	horse
	etc	

The extraction procedure does not establish a hierarchy between the lexemes extracted first and those extracted later. It is evident that the procedure could be started with any member of the field which is to be isolated; in that case the order of extraction would be different.

As for later studies, a full methodological discussion can be found in Zatelli's book. Moving along the same line as Coseriu and Geckeler, she chooses the field of "purity" adjectives as the subject of her investigation. To determine the area of a field she uses an integrated system (studying dictionaries of and linguistic researches on the lexemes under examination). She does not ignore difficulties typical of the biblical corpus, especially with reference to stylistic redoundancies and, with poetic language, the existence of "stereotype" antonymic pairs.⁵⁵ Vivian's research on the lexical field of "separation" runs along the same theoretical lines but differs in simultaneously dealing with different historical languages and different functional languages in the three stages of Hebrew: Biblical, Qumranic and Mishnaic. The criteria used to delineate fields are partly internal to the system, such as the exclusion of lexemes whose connection is weak or peripheral to the lexical field. They are also partly derived from the approved preliminary assumptions, such as the exclusion of technical terminology.56

A. Brenner, intending to suggest an evolutionary framework for the development of colour terms in Biblical Hebrew and Post-Biblical Hebrew, discusses at length the difficulties in the interpretation of the biblical text and standards to identify chronological stages and levels of speech, roughly equivalent to functional language. She also pays attention to the situational context.⁵⁷ As for the structuring of the field of "basic" colours with a different degree of complexity in successive stages of Hebrew, the Berlin-Kay hypothesis has been extensively used.⁵⁸ On the other hand

⁵⁵ I. Zatelli, Il campo lessicale degli aggettivi di purità, 24-27.

⁵⁶ A. Vivian, I campi lessicali della "separazione", 128 f. NAT Along its offense light should among it

⁵⁷ A. Brenner, Colour Terms, 18-25.

⁵⁸ Ibid., 39 ff. and passim.

it does not seem to me that any formal method has been used to determine the terms belonging to the field.

4.2.2. Identifying semantic features.

As regards the criteria used to identify features, the situation is not too different from the one already examined in judging when individual words belong to a field. Most of the studies mentioned do not aim at using componential analysis and therefore do not deal with the problem. In other cases the problem is tackled, even though it is not considered to be of primary importance. Sawyer, for example, observes that of the six commonest words in the HOŠIA^c group, only one. ^cAZAR, is a Qal form" and asks himself if this "grammatical component" is also a semantic component.⁵⁹ Besides, he observes that an important "element of separation" is observable in verbs of the HOŠIA^c group and that it could be described as a semantic component. Yet it is context-bound, and moreover varies in degree from one member of the lexical group to another. In general, Sawyer underlines the numerous problems of componential analysis still unresolved. As regards labelling the components, he thinks that this depends entirely upon the intuitive knowledge of the linguist, doubting that it could be possible to find a method which would not refer to contextual criteria as well. I think we cannot say that he is wrong on this point. In fact, whilst it has been possible to suggest a procedure to judge when individual words belong to a field, the procedure that would extract semantic features from the meaning of the words is not clear at all. If we apply the same concept of features to the same lexical field, this might lead us to a different analysis of the field. In general features are supposed to have explicative and elementary values and to be such as to account for the economy of description. In order to proceed to a distinctive features analysis of the content, Zatelli⁶⁰ resorts to the notion of "dimension" (Geckeler) or "axe sémantique" (Greimas). The basic dimensions used to analyse the field of "purity" adjectives in Biblical Hebrew are: /natural dimension/, /ethical-religious dimension/, /material-religious dimension/. Within these the fundamental opposition is that of / pure / : / non - pure /. Zatelli warns us not to attribute a value of absolute definition to the metalinguistic formulations we use. As to the designation of classes in Biblical Hebrew she underlines the caution required by the limits of the biblical text, without any possibility of verification external to the text itself.⁶¹ So if a lexeme is attested once or twice referring to an animal, we cannot conclude that the term under examination acts in the class /living creatures /. This method of analysis leads to definitions such as the following:

bar old poetic language and language of Job

adjective denoting / purity/; dimension /ethical-religious/; positive pole; class /human beings/ and /culturalreligious elements/.

The most delicate point in Zatelli's classematic analysis (inspired by Coseriu's criteria) consists of her interpretation of the selected classes as classes determined

⁵⁹ Semantics in Biblical Research, 59.

⁶⁰ Il campo lessicale degli aggettivi di purità, 71-72.

⁶¹ Ibid., 31.

by "affinity". These are / human beings/; / human acts and behaviours/; /cultural-religious elements/; / natural and material elements/; / animals/.⁶² But whilst / human beings/ and / animals / correspond to the "affinity" criterion (the class of the determining term acts as the distinctive feature of the determined term), this could be maintained only with difficulty for the other classes listed above. These might rather correspond to the "selection" criterion (the archilexeme of the determining term acts as the distinctive feature of the determined term). Instead, the fact that a lexeme might be at the intersection of two classes (here, / + human beings/ and / + cultural-religious elements/) presents no difficulty. These reservations considered and formalizing more strictly we have then:

bar

/+purity/, /+ethical-religious/; /+human beings/, or /+culturalreligious elements/.

Vivian⁶³ also uses the notion of "dimension" but he points out that in lexical fields formed by verbs the relations with verbal classes and classemes are much stronger; this triggers much more complex and unstable relations. In order to verify the level of economy of description, we may consider the comparative table that summarizes the analyses of 11 lexemes of the field of "separation".⁶⁴ There 18 semes are used; this might seem excessive for the definition of 11 lexemes. Nevertheless, we must take into account the fact that the table considers the use of the verbs in four different functional languages of pre-exilic Hebrew (narrative, poetic, poeticdialectal, juridical-ritual). Moreover, the same semes are also found in other verbs which do not belong to this field and this diachrony.

In her study of the field of colours, A. Brenner can rely on previous researches and consequently deals with completely different problems. Firstly, she is able to organize the materials in groups which assemble colour adjectives according to a decreasing level of generality of use. The meaning of primary colour adjectives is determined by its being mutually exclusive. These adjectives are monolexemic; their meaning is not included in that of any other colour adjective; their application is not limited to a narrow class of objects. The area covered by each one of these lexemes is then divided into overlapping sections by secondary and tertiary adjectives. Brenner designates the dimensions of the field of colours as hue (the presence or relative absence of chromaticity), brightness (a quantitative criterion applied to the quality of chromaticity), and saturation (the intensity of the perceived colour), with reference to what is normally perceived as the characteristic attributes of colour sensation (i.e., as a psychological "reality").

Brenner's investigation contains very interesting observations and contributions, such as the discussion on primary adjectives that Hebrew possessed in different synchronies.⁶⁵ She is not interested in the semic definition of the lexemes. Consequently, she does not discuss the possibility of a semic analysis of primary

⁶² Ibid., 64 ff.

⁶³ I campi lessicali della "separazione", 126 ff.

⁶⁴ Ibid., 183 ff.

⁶⁵ Colour Terms, 53-57.

colours, beyond the already cited observation on their mutually exclusive meanings (i.e., on the fact that they are in equipollent opposition). This position recalls that of R. Jackendorff: "Surely a decomposition of ,red' must include the stipulation that it is a color ... But once the marker COLOR is removed from the reading of ,red', what is left to decompose further? How can one make sense of redness minus coloration?"⁶⁶ Now this might be valid for contemporary European languages, where in the one-dimensional field of basic colours each one of them is opposed to the others. But, as far as Hebrew is concerned and from a strictly linguistic point of view, I think that it would be interesting to point out that in the pre-exilic stage the colour system defined $\frac{\partial a d \partial m}{\partial m}$ only as the area of highly saturated colours, whereas already in the exilic stage⁶⁷ the same lexeme defined the area of relative presence of chromaticity:

`ādōm (pre-exil.) / + brightness/, / + saturation /; (exil.) / + brightness/, / + saturation /, / + chromaticity /.

5. Conclusion.

In conclusion, the difficulties found in the attempt to analyse some semantic fields of Hebrew reflect the difficulties we met at the theoretical and operative level (§ 3). The problem of legitimizing the use of intuitive criteria has emerged in two different contexts: in delimiting the field and labelling the semantic components. The degree of intuitive knowledge will depend in part upon the size of the preserved corpus. But since we are considering languages with a limited corpus, the degree of intuitive knowledge will probably remain limited. The utility of componential analysis could then consist of the use of formal methods which would show clearly structures otherwise difficult to reveal. This can be obtained, at least to a certain extent, with regard to the delimitation of the field. As for identifying and labelling semantic features, the problem cannot be solved within our languages with a limited corpus but it concerns a basic limitation of the method.

One of the most evident characteristics of Vivian's and Zatelli's works is the attempt to keep distinct the functional languages (within different synchronies). The utility of applying the lexematic point of view to one and only one functional language can also be easily verified in languages with a limited corpus. An interesting case is that studied by B. Levine⁶⁸ in Ugaritic. In this language \S and *alp* continue the meaning of Common Semitic "ovine" and "bovine", but in ritual texts they mean "male ovine" and "male bovine" respectively, as opposed to the innovations *dqt* and *gdlt*, denoting the female of the two classes. This shows that the same lexeme may have a different meaning in different kinds of texts, that is in different functional languages belonging to the Ugaritic diasystem.

Because of the impossibility of carrying it out on the whole vocabulary of a language (in addition to theoretical and operative problems often mentioned), componential analysis will probably remain a technique for sounding the organisation of the lexicon. It underlines the complexity of the relations which exist

⁶⁶ Semantics and Cognition, Cambridge, Mass. 1983, 113.

⁶⁷ According to Brenner, ibid., 56.

⁶⁸ Ugaritic Descriptive Rituals, Journal of Cuneiform Studies 17, 1963, 108-111.

between words and the presence of a structuring in the lexicon. At the level of application, it is extremely convincing in describing structures which are different from those familiar to contemporary European languages. How many readers of the Bible, for example, have ever known that in pre-exilic texts the adjective commonly translated "red" should actually be translated (or, better, paraphrased) as "intensely coloured"?

As for the aim of an ideal semantic data-base for a machine-readable corpus of texts in a dead language, a system of cross-references could be used to connect the words of the same field.

Abstract:

Componential analysis is a procedure which aims at operating semantic analysis at the level of the word. It assumes that the meaning of "full" words can be split up into smaller elements of meaning (semantic components or semantic features).

Whilst in the United States the first examples of feature analysis of semantic fields originate from the field-work of the ethno-anthropologists, in Europe the interest in semantic components begins with Hjelmslev's theoretical considerations. Along these lines the more rigorous treatment is perhaps offered by Coseriu and his pupils. Completely different is the approach to semantic analysis elaborated by J.J. Katz and J.A. Fodor in the framework of transformational grammar.

Delimiting the lexical field and identifying semantic features requires a methodology and involves the problem of legitimizing the use of intuitive criteria. As to the applicability in Hebrew and the difficulties found in the attempt to analyse some semantic fields, articles and books are recalled, such as those on the semantic field of colours (P. Fronzaroli, A. Brenner), the field of "purity" adjectives (I. Zatelli), the field of "separation" (A. Vivian).

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