Componential Analysis

As an example of componential analysis, we notice that in English (and also many other languages) there is a three-fold division with many words that refer to living creatures as in the following:

man	woman	child
bull	cow	calf
ram	ewe	lamb

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In the light of relationships such as these we can abstract the components (male) and (female), (adult) and (non-adult), plus (human), (bovine) and (ovine). Thus, "ewe" is (ovine), (female), (adult), "child" is (human), (non-adult) and so on.

Analysis of this kind is called componential analysis. It allows us to provide definitions for all these words in terms of a few components.

Componential Analysis

A particular characteristic of componential analysis is that it attempts as far as possible to treat components in terms of "binary" opposites, e.g. between (male) and (female), (animate) and (inanimate), (adult) and (non-adult). It clearly gives emphasis to the relation of complementarity.

Notationally, there is an advantage in such binary terms in that we can <u>choose one only as the label</u> and distinguish this in terms of plusses and minuses.

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Thus, (male) and (female) are written as (+male) and (-male) and so on. We can, moreover, refer to the lack of a sex distinction as in the case of inanimate objects using the notation 'plus or minus' with the symbol (± male). This works well only where there is <u>a clear distinction</u>. Often, however, there is indeterminacy, as with the words "tar" and "porridge" in relation to the components (solid) or (liquid).

Componential Analysis

Componential analysis has been <u>used</u> to bring out the logical relations that are associated with sense relations. Thus by marking man as (+male) and pregnant as (-male), we can rule out *pregnant man. Yet, componential analysis does not handle all sense relations well; in particularly, the following two sense relations:

1. converses (relational opposites) in antonymy
2. hyponymy