Semantic Relations in Definitions in Monolingual Dictionaries

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Abstract

Making "definitions", as a part of micro structure, is perhaps the chief function of a monolingual dictionary, which can be performed in various styles depending on the purpose of dictionary and its users' perspectives. Apart from the theoretical aspect of definitions as an extensive catalogue of meanings in a language, they behold a more practical function which is sorting out the communicative needs of dictionary users. These needs are met in terms of "decoding" or and "encoding" of dictionary lemmas. One of the definition formulas in dictionary compiling is applying semantic relations, through which both decoding and encoding can be characterized.

The present descriptive-analytical study aims to highlight the role of semantic relations in definitions. To this end, extracted definitions of *Sokhan Comprehensive Dictionary* were analyzed based on the theoretical model of Casagrande and Hale (1967). This model, which is derived from 800 definitions of Papago informants for objects, events, processes, qualities and actions from many areas of Papago culture, discovers the most important semantic relations within a language surveying its social and cultural domain. With the purpose of acquiring a list of essential semantic relations in lexicography, the definitions were analyzed into simple declarative sentences each of which represented a fact predicated of the defined word/object (Murphy, 2003; p. 68). This analysis ended in a list of 13 types of semantic relations described in formula-like statements of their nature (Casagrande & Hale, 1967; p. 168). Definitions in this corpus-based study were randomly selected so that they can cover diverse semantic fields. The various types of semantic relations are listed below, accompanied by the examples taken from the *Sokhan Comprehensive Dictionary*. According to Murphy (2003), in the applied model, the $X \rightarrow Y$ formula is also used here to mean 'X is defined in terms of Y.' in the following examples, Persian head words are written in parentheses.

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Fig. 1. Semantic Relations in Casagrande and Hale (1967) Model

	Semantic Relation	Formula	Example from *Sokhan Comprehensive Dictionary*
1	Attributive	X is defined with respect to one or more distinctive or characteristic attributes Y (Y can be distinctive marker, habitat, behavior, or other attributes).	parrot (*tuti*)→tropical regions
2	Contingency	X is defined with relation to an antecedent or concomitant of Y.	flood (*seyl*)→rain
3	Function	X is defined as the means of effecting Y.	computer (*rāyāne*)→data processing
4	Spatial	X is oriented spatially with respect to Y.	foothills (*kuh-pāy-e*)→mountains
5	Operational	X is defined with respect to an action Y of which it is a goal or recipient.	cigarette (*sigār*) →smoke gold (*sigār*) → jewelry making
6	Comparison	X is defined in terms of its similarity and/or contrast with Y.	marimba (*mārimbā*) → xylophone
7	Exemplification	X is defined by citing an appropriate co-occurrent Y.	echinodermata (*xār-pust-ān*) →starfish
8	Class inclusion	X is defined with respect to its membership in a hierarchical class Y.	baguette (*bāget*) →bread
9	Synonymy	X is defined as an equivalent to Y.	difficult (*doš-vār*) →hard
10	Antonymy	X is defined as the negation of Y, its opposite.	outside (*xārej*) →inside clean (*pāk*) →dirty
11	Provenience	X is defined with respect to its source Y.	sugar *(kāqaz)* → cellulose pulp
12	Grading	X is defined with respect to its placement in a series or spectrum that also includes Y.	Thursday *(panj- šambe)* →Friday Future *('ā-y-ande)* →present
13	Circularity	X is defined as X.	sweet *(šir-in)* → something of sweet taste

The main purpose of this paper is to investigate whether applying semantic relations would result in more efficient definitions and also whether this would require different methods in lexicography. Exploring the list of thirteen relations in Casagrande and Hale (1967), including *attributive, contingency, function, spatial, operational, comparison, exemplification, class inclusion, synonymy, antonymy, provenience, grading* and *circularity*, showed that due to meticulous boundaries among semantic relations, this framework can be successfully employed to split similar complex concepts, among which cultural elements of a language are the prominent. That is why semantic relations have been highly regarded in ethnolinguistic studies. Semantic relationships provide the ethnographer with one of the best clues to the structure of meaning in another culture (Spradley, 1979; p. 112) and linguists can benefit from them in encoding and decoding cultural materials, both of which can be donated to lexicographers.

Mapping the theoretical model of Casagrande and Hale (1967) on the corpus under study and for more complicated lemmas in social and cultural fields of Persian, it seems that the mentioned model can be effectively implemented in compiling thematic culture-oriented dictionaries. The results revealed that applying semantic relations is already a common strategy in the definitions of *Sokhan Comprehensive Dictionary*, but in majority of cases, a combination of relations appeared for a single entry. Except for the most frequent relation, i.e. *attributive*, in which a lemma is defined with respect to one or more distinctive or characteristic attributes, other semantic relations play complementary roles to one another in a

definition. The following example from the corpus shows this multi-aspect approach in applying semantic relation in word definitions:

Hump (ku(o[w])hān**):** a protuberance found on the back of animals, like camel, for bearing fatty deposits.

Based on the Casagrande and Hale (1967), the following three semantic relations are employed to define the lemma "humpa":

1. Spatial: a protuberance found on the back of animals
2. Exemplification: like camel
3. Operational: for bearing fatty deposits

This research proposes a novel generation of thematic dictionaries, not the alphabetic ones, which can concentrate on cultural elements of a language, by applying semantic relations and providing word nets of cultural and social materials of a language.