Macrothink Institute™

International Journal of Linguistics
ISSN 1948-5425
2013, Vol. 5, No. 3

Frame Semantics, Metalexicography and the Microstructure of Persian Monolingual Dictionaries

Mohammad Reza Aslani(Corresponding author)

Department of linguistics, Faculty of foreign languages

University of Isfahan, Isfahan, Iran

Tel: 98-217-794-7557 E-mail: mohammadrezaaslani@gmail.com

Manoochehr Tavangar

Department of linguistics, Faculty of foreign languages

University of Isfahan, Isfahan, Iran

Tel: 98-311-793-4217 E-mail:tavangar@yahoo.com

Adel Rafeie

Department of linguistics, Faculty of foreign languages

University of Isfahan, Isfahan, Iran

Tel: 98-311-793-4217 E-mail:rafeie@yahoo.com

Received: April 13, 2013 Accepted: May 8, 2013 Published: June 24 2013

doi:10.5296/ijl.v5i3.3520 URL: http://dx.doi.org/10.5296/ijl.v5i3.3520

Abstract

This paper is based on insights gained from “Frame Semantics Theory", and sets out to undertake a metalexicographical analysis of five current Persian monolingual dictionaries. It demonstrates that a frame semantic perspective can be applied in the microstructures of such dictionaries. This research is conducted by using a descriptive-analytic method. For this purpose, 100 entries have been selected from frames: COMMERCIAL TRANSACTION, EXAMINATION and REQUEST. Bearing in mind that these frames have been used in analysis of the “Oxford Advanced Learner’s Dictionary (7th ed.)", It is worthwhile to find out

to what extent our proposed model compares with the past achievements. The results of data analysis reveal that none of dictionaries have been compiled on the basis of a linguistic theory. To redress the situation, the authors have come up with a pattern inspired by "Frame Semantics" and designed to compile and edit the entries of prospective Persian monolingual dictionaries.

Keywords: Metalexicography, Microstructure, Persian monolingual dictionary, Frame semantic

1. Introduction

Lexicography, as a completely specialized domain with general and specific readers, is greatly influenced by linguistics. Although the history of lexicography in Iran dates back to 1037, when Loghat-e-Fors Asadi was compiled, the necessity of a collective approach to monolingual dictionaries was not perceived until the *"Constitutional Revolution*" in 1906.The first comprehensive contemporary monolingual dictionary was composed by Ali Akbar Dehkhoda in 1946. Since then, a number of monolingual Persian dictionaries have been published. But unfortunately, an evaluation of all these dictionaries reveals the fact that none of them seems to be based upon lexicographic theoretical concepts _meta lexicography.

The main framework of this article- Frame Semantics theory- was first proposed by Fillmore in 1970s. Its applicability in composing monolingual dictionaries was further acknowledged by Patrick Hanks (2008:217-275) and Atkins-Rundell (2008:144-150). The authors have invoked a theoretical perspective based upon Frame Semantics to take an initial step towards redressing failings and preventive approaches to lexicography. The main concept of this theory emphasizes a structured background of experiences, beliefs, or practices (semantic 'frames') as the only reference in terms of which to understand the meaning of words. The other key concept of Frame Semantics is incorporating syntactic information in a word's frame-based lexical entry.

The aim of the present article is to discuss the practical applicability of the frame semantic approach in microstructure of Persian monolingual lexicography. The authors also aim to find out whether syntactic parameters composed of collocation (at least one collocation in each entry), grammatical category, valence description and the other two non syntactic parameters including corpus examples and inflectional form have been considered in compilation of five major Persian monolingual dictionaries of the modern era.

2. Theoretical Concepts

2.1 Frame Semantics and Lexicography

Frame semantics theory which was introduced by Charles J. Fillmore in 1970s, helps professional lexicographers place their work on a new and suitable theoretical basis. It represents a comprehensive framework within which the corpus data can be identified and analyzed in a more systematic and less subjective way. According to Fillmore(1994:114) in this theoretical model," the proper way of analyzing and describing the sense of a word is to consider the full range of its semantic and syntactic relations, and to identify the grammatical constructions in which it participates: all the obligatory and optional companions such as complements, modifiers, adjuncts, etc."

By using a wide range of examples, Fillmore demonstrates that some significant phenomena cannot easily be captured in structural semantics. For example a restaurant is not merely a service institution; rather it is associated with a number of concepts such as customer, waiter, ordering, eating, and bill. These concepts are not related to restaurant by hyponomy, meronomy, antonymy or other structural semantic relations. Their relations are based on ordinary human experience. (Croft and Cruse, 2004:7-8)

In frame semantics theory, understanding the meaning of a word depends on having a structured knowledge of the experiences, beliefs or performances (i.e. frames) which motivate the concepts that the word encodes. A frame can be defined as a system in its most straightforward form, including collections of words, choices of grammatical rules and linguistic categories. It is also defined as a schematic representation of a situation type together with a list of the typical participants and concepts that are to be found in such a situation. Speakers can communicate via language because the words and phrases which they use motivate frames in mind. Within such an approach, words or word senses are not related to each other directly, word to word. Rather, their relations are based on common background frames, and indicate the manner in which their meanings highlight particular elements of such frames. Each situation of the frame contains semantic roles called "frame elements"(FEs). FEs are used to describe the behavior of the words in that frame. For example the verbs, "ask", "appeal", "beg", "command", "order" and "suggest", in REQUEST frame have got 3 core FEs: the speaker, the addressee and the message. The complete set of FEs is called "valency pattern". The words used to express FEs are the important collocates of the target word, entry. (Fillmore, 1975: 220;Fillmore and Atkins,1992: 228; Fillmore et al, 2003: 235; Atkins and Rundell, 2008: 145,147-149)

Frame semantics theory can inspire confidence into lexicographers and enable them to see how all relevant features are captured in a frame. In this process lexicographers should define the selected frames and their core elements. Next, a list should be provided from the words which at least one of their sense evoke the frame. Then, for each sense or lexical unit, a set of corpus sentences is extracted in which the target word is used in the particular sense. (Atkins and Rundell, 2008: 147)

The facts in the valency description are the most important facts that lexicographers need to be aware of when writing the entry. (Atkins and Rundell, 2008:149) Valence description concerns the grammar and meanings of verbs. Because of the obligatory and optional complements which a verb may take, the verbs are divided into one -valency, two- valency, three valency or four valency types. For example the "COMMERCIAL TRANSACTION" frame is a frequently cited example which involves semantically related verbs with different valences, each of which evokes different aspects of the frame. The following table represents the valencies of the different verbs in "COMMERCIAL TRANSACTION" frame in the active voice.

Table 1. The semantic and syntactic valences of the verbs in active voice from the Commercial Transaction frame (Fillmore and Atkins, 1992:230).

	Buyer	Seller	Goods	Money
BUY	Subj	(from)	D-Obj	(for)
SELL	(to)	Subj	D-Obj	(for)
CHARGE	(I-Obj)	Subj	(for)	D-Obj
SPEND	Subj	Null	for/on	D-Obj

PAY	Subj	[I-Obj]	[for]	D-Obj
PAY	Subj	(to)	for	D-Obj
COST	I-Obj	Null	Subj.	D-Obj

Parentheses signal optionality; square brackets signal omissibility under conditions of "definite" anaphora. There is a difference (not revealed in the table) between For and On, the former requiring the understanding that the exchange took place (Fillmore and Atkins, 1992: 230-231).

Although all of these verbs motivate the COMMERCIAL TRANSACTION frame, the perspective from which the frame is viewed differs depending on the type of verb which describes the event. Consider the following examples:

"Carla bought the computer from Sally for 100$"

Such a report takes the perspective of the buyer. But the following sentence is a report from the perspective of the seller:

"Sally sold the computer to Carla for 100$:" (Petruck, —— :3).

Lexicographers also need to observe the ways in which the frame elements are expressed. The words used to express them are the important members of a thesauric set of an entry. The features, grammatical category (word class), inflectional form (word form) and collocation are the other important inherent properties which should be considered in frames. Collocations in corpus sentences identify all the essential components that lexicographers should take into account. (Atkins and Rundell, 2008:152-153) Landau (2001:308, 309) says," collocations are important in corpus lexicography because they are largely invisible in citation files and can only be discovered through the use of corpora. The corpus allows lexicographers to measure the likelihood that 2 words have co-occurred by chance and to compare this datum with the actual frequency of their co-occurrence." Another important point is to distinguish a collocation from an idiom. Although this issue has been much discussed and debated by linguists and lexicographers, yet they are not in complete agreement. An idiom is usually defined as a group of two or more words whose collective meaning cannot be divined by someone who knows the meanings of the separate words.

3. Research Methodology

To find out whether frame semantic parameters have applicability to Persian monolingual lexicographic practice, the present research was conducted using a descriptive-analytic method.

The data were collected from the microstructures of the full set of five important Persian monolingual dictionaries compiled by Amid(2 volumes), Anvari(8 volumes), Dehkhoda(14 volumes), Moin(6 volumes) and Sadri Afshar(3 volumes).The authors selected verbs evoking one of COMMERCIAL TRANSACTION , EXAMINATION and REQUEST frames , which are the most often, cited examples from Fillmore's frame semantic theory (for example

Fillmore and Atkins,1992:229-231;Fontenelle,2000:276-290;Atkins and Rundell ,2008:148-149).

It may be necessary to mention that the recent edition of FrameNet divides COMMERCIAL TRANSACTION frame into two separate frames, COMERCE-BUY frame and COMMERCE-SELL frame. According to Frame Net in COMERCE-BUY frame "there are words describing a basic commercial transaction involving a BUYER and a SELLER exchanging Money and Goods, taking the perspective of the BUYER. The typical pattern for the verb BUY: Buyer buys Goods from Seller for Money. For example: Abby bought a car from Robin for $5, ooo. "In COMERCE-SELL frame "there are words describing basic commercial transactions involving a BUYER and SELLER exchanging Money and Goods, taking the perspective of the SELLER. The typical patter for SELL: SELLER sells GOODS to BUYER for MONEY, For example: Robin sold a car to Abby for $5,000." EXAMINATION frame "deals with testing or examination of someone's knowledge or skill in a particular area .An EXAMINER conducts an EXAMINATION to an EXAMINEE to determine the EXAMINEE'S KNOWLEDGE and/or determine their QUALIFICATION for some privilege, this precedes either by the EXAMINEE demonstrating a skill or by writing response to questions." In REQUEST frame "a SPEAKER asks an ADDRESSEE for SOMETHING or to CARRY OUT some action. For example: The customer demanded a refund. (and) I begged my parents to let me stay up late." These kinds of patterns and corpus sentences are a great help for lexicographers to introduce valences of verb entries.

The sample size (N) of this paper was calculated based on the following formula:

$$N= (Z\ 21-\alpha/2 \times p \times q)/d2$$

Where Z1-α/2 stands for study precision (1.96), p is the estimated proportion of concordance between PMDs and OALD (50%), q equals 1-p (50%) and d stands for the margin of error authors allowed in the estimate of the proportion (0.1).

Considering the number of Persian monolingual dictionaries (5), a total number of 20 verbs evoking one of the three frames mentioned above were selected by the authors. Next, each entry was analyzed from the frame semantics point of view. That is, in addition to the semantic aspect which motivates the desired frame, other nonsemantic characteristics such as collocations, corpus examples, grammatical category, inflectional form and valence description were evaluated in detail.

According to Atkins and Rundell (2008:149), monolingual learner's dictionaries are mainly compiled on the functional aspects of frame semantics theory. They note that pedagogical dictionaries aim to record the constructions which language-learners need to know and they therefore recommend applying frame-semantic principles as a way of ensuring that all relevant information is included and nothing of importance is missed. It should be reminded that Oxford Advanced Learner's Dictionary is the most widely used learner's dictionary in Iran. As a result, researchers chose Oxford Advanced Learner's Dictionary (2005) as a suitable model for the application of frame semantics consequences and a valid reference point for evaluation of Persian monolingual dictionaries. The comparison with this model

provides a theoretical basis for ensuring that all relevant facts are recorded and that nothing of importance is missed to Persian monolingual dictionary-making.

The extracted data were summarized in a tabular and graphic form and analyzed both quantitatively and qualitatively. Finally, the results were used to develop a model with regard to Fillmore's frame semantics.

It should be noted that this study was not meant to undertake to systematically criticize the above mentioned Persian monolingual dictionaries. Instead, the authors tried to evaluate particular grammatical aspects emphasized by Fillmore's frame semantics theory.

4. Results and Discussion

The present corpus-based analysis indicates a general lack of systematicity and comprehensiveness of description in the analysis of PMDs in terms of framework of Frame Semantics theory. These deficiencies are discussed as follows:

except porsidan [to question] in Sadri Afshar. Looking up "to question" and "to request" entries in OALD (sally, 2005:1236, 1289), one can easily find out that these verbs have got [VN], [V wh-], [V to inf] and [V that] valency patterns.(From the point of view of dictionary entry, a verb's complements are more important than its subject

4.1 There is No Entry for Some Lexical Items

Considering the size of Persian monolingual dictionaries, there are some entries which cannot found in them. For example, in Anvari dictionary, there is no entry for āmādeh šodan [to prepare] .By the same token, the entries āmādeh šodan [to prepare], soāl kardan [to ask], gedāi: kardan [to beg] and be hesāb neveštan / be hesāb gozārdan [to charge] are not found in Amid dictionary. Moin dictionary also has no entry for soāl kardan [to ask] and be hesāb neveštan/ be hesāb gozārdan [to charge].Ofcourse this deficiency is macrostructural problem, it cannot be related to a criticism that frame semantics functional aspects have not been used.

4.2 Some Entries do not belong to the Selected Frames

Some senses related to such common frames such as EXAMINATION frame are not mentioned in the explanations of the entries by lexicographers. To exemplify, In Dehkhoda dictionary, the explanations of entries āmādeh šodan [to prepare], emtehān dādan [to examine] and nešastan [to sit] ,in Sadri Afshar dictionary, the explanations of entries āmādeh šodan [to prepare] and nešastan [to sit] and in Moin dictionary the explanations of entries āmādeh šodan [to prepare] , tashi:h kardan [to correct] , taqallob kardan [to cheat] , nešastan [to sit] and pardāxtan [to pay] are not related to EXAMINATION frame . May be the reason is that their reference corpus is infrequent.

In addition it should be noted that the entries eltemās kardan [to appeal] , amr kardan [to order] , pišnahad kardan [to suggest] , soāl kardan [to ask] and xarj kardan [to spend] are indicated as nouns but not verbs in Amid dictionary . In Sadri Afshar dictionary taqallob kardan [to cheat] and pišnahād kardan [to suggest] are not found in verbal form but in

nominal form. In Moin dictionary qeymat dāštan / arzidan [to cost] is mentioned only in nominal form. Of course it is clear that nouns and nominal forms are equally capable of being analyzed and described using a Frame Semantics approach; consequently this result indicates the lack of coordination in microstructures of Persian monolingual dictionaries and reflects the small coverage of the reference corpus.

It is interesting to mention that Dehkhoda contains 4 pages of detailed explanation for nešastan [to sit] entry ,such as payetaxt dāštan [to have a capital] , mostuli šodan [to gain control of something] , qorub kardan [to set] , be azā nešastan [to mourn] , be ferāq nešastan [to get separated] , xamuš šodan [to go out or be extinguished] and even qazāye hājat dāštan [to answer the call of nature],all of them belong to different frames but none of the senses related to EXAMINATION frame. One reason might be that in Dehkhoda the meanings of each entry are mainly based on the composition of corpuses of Persian classical literature such as the works of Ferdusi, Nezāmi, Sa'di, Hāfez, Nāser Khosru and Rudaki. On the other hand, Dehkhoda does not consider samples from Persian contemporary literature. Why he should have done this is by no means clear.

4.3 There is Limited Information about Components of Microstructures

Important features associated with COMMERCIAL TRANSACTION , EXAMINATION and REQUEST frames (except collocations of tashi:h kardan [correct] and fail [mardud šudan] and inflectional form of taqallob kardan [cheat]) can be found in the entries of OALD dictionary .But unlike OALD the selected PMDs include limited information about components of microstructures. For example, despite being the most important characteristic in frame semantics, valence is not mentioned in PMDs.) As a result dictionaries rarely indicate the subject of a verb headword.) OALD also introduces "~sb (about/on sth) and "~sth (from sb)"syntactic patterns of these verbs. But investigating the valency descriptions of these entries shows that PMDs do not introduce such kinds of important information systematically and comprehensively. According to Tabibzādeh(2007:95,211-212,216) in Persian language the verbs "Porsidan "[to question] and "darxāst kardan" [to request] have got 3 valences. Their basic structures are consecutively " || subject, object, object of preposition|| "and "||subject, object of preposition, genitive object ||".In general there are 23 basic structures in the syntax of Persian language . The verbs of these structures have got 1, 2, 3 or 4 valence(s). The valency patters are shown in the form of 8 kinds of syntactic complements including: subject, object, object of preposition, genetive object, complemental clause, subject complement, object complement and adverbial complement. Considering this information in PMDs is recommended by the authors. It helps lexicographers to introduce the inherent properties of the entries.

As similar, inadequacy holds for the inflectional of the selected verbs. It should be mentioned that all PMDs contain information about the grammatical category of the verbs (involved Tables 2, 3 and 4).

Table 2. COMMERCIAL TRANSACTION frame

entry	monolingual dictionaries	Collocations	Corpus examples	Grammatical category	Inflectional form	Valence description
Xaridan [to buy]	Amid	–	–	+	–	–
	Anvari	–	+	+	–	–
	Dehkhoda	+	+	+	–	–
	Moin	–	–	+	+	–
	SadriAfshar	–	+	+	+	–
	OALD	+	+	+	+	+
be hesāb gozārdan [to charge]	Amid	NE	NE	NE	NE	NE
	Anvari	+	+	+	–	–
	Dehkhoda	–	–	+	–	–
	Moin	NE	NE	NE	NE	NE
	SadriAfshar	–	+	+	–	–
	OALD	+	+	+	+	+
arzidan [to cost]	Amid	–	+	+	–	–
	Anvari	–	+	+	–	–
	Dehkhoda	–	–	+	–	–
	Moin	NE	NE	NE	NE	NE
	SadriAfshar	–	–	+	+	–
	OALD	+	+	+	+	+
Pardāxtan [to pay]	Amid	–	–	+	–	–
	Anvari	–	+	+	–	–
	Dehkhoda	–	+	+	–	–
	Moin	NE	NE	NE	NE	NE
	SadriAfshar	+	–	+	+	–
	OALD	+	+	+	+	+
Foruxtan [sell]	Amid	–	–	+	–	–
	Anvari	–	+	+	–	–
	Dehkhoda	–	+	+	–	–
	Moin	–	–	+	+	–
	SadriAfshar	–	+	+	+	–
	OALD	+	+	+	+	+
xarj kardan [to spend]	Amid	NE	NE	NE	NE	NE
	Anvari	–	+	+	–	–
	Dehkhoda	NE	NE	NE	NE	NE
	Moin	NE	NE	NE	NE	NE
	SadriAfshar	+	+	+	–	–
	OALD	+	+	+	+	+

Table 3. EXAMINATION frame

entry	monolingual dictionaries	collocation	Corpus example	Grammatical category	Inflectional form	Valence description
āmādeh šodan [to prepare]	Amid	NE	NE	NE	NE	NE
	Anvari	NE	NE	NE	NE	NE
	Dehkhoda	NE	NE	NE	NE	NE
	Moin	NE	NE	NE	NE	NE
	SadriAfshar	NE	NE	NE	NE	NE
	OALD	+	+	+	+	+
emtehān dādan [to examine]	Amid	NE	NE	NE	NE	NE
	Anvari	–	+	+	–	–
	Dehkhoda	NE	NE	NE	NE	NE
	Moin	–	–	+	–	–
	SadriAfshar	–	–	+	–	–
	OALD	+	+	+	+	+
mardud šodan [to fail]	Amid	NE	NE	NE	NE	NE
	Anvari	–	+	+	–	–
	Dehkhoda	NE	NE	NE	NE	NE
	Moin	–	–	+	–	–
	SadriAfshar	NE	NE	NE	NE	NE
	OALD	–	+	+	+	+
Nešastan [to sit]	Amid	NE	NE	NE	NE	NE
	Anvari	NE	NE	NE	NE	NE
	Dehkhoda	NE	NE	NE	NE	NE
	Moin	NE	NE	NE	NE	NE
	SadriAfshar	NE	NE	NE	NE	NE
	OALD	+	+	+	+	+
qabul šodan [to pass]	Amid	NE	NE	NE	NE	NE
	Anvari	–	+	+	–	–
	Dehkhoda	+	–	+	–	–
	Moin	–	–	+	–	–
	SadriAfshar	–	+	+	–	–
	OALD	–	+	+	+	+
taqallob kardan [to cheat]	Amid	NE	NE	NE	NE	NE
	Anvari	–	+	+	–	–
	Dehkhoda	NE	NE	NE	NE	NE
	Moin	NE	NE	NE	NE	NE
	SadriAfshar	NE	NE	NE	NE	NE

	OALD	+	+	+	–	+
tashi:h kardan [to correct]	Amid	–	–	–	–	–
	Anvari	–	+	+	–	–
	Dehkhoda	NE	NE	NE	NE	NE
	Moin	NE	NE	NE	NE	NE
	SadriAfshar	–	+	+	–	–
	OALD	–	+	+	+	+

Table 4. REQUEST frame

entry	monolingual dictionaries	Collocations	Corpus examples	Grammatical category	Inflectional form	Valence description
eltemās kardan [to appeal]	Amid	NE	NE	NE	NE	NE
	Anvari	–	+	+	–	–
	Dehkhoda	–	+	+	–	–
	Moin	–	–	+	–	–
	SadriAfshar	–	–	+	–	–
	OALD	+	+	+	+	+
soāl kardan [to ask]	Amid	NE	NE	NE	NE	NE
	Anvari	–	+	+	–	–
	Dehkhoda	–	–	+	–	–
	Moin	NE	NE	NE	NE	NE
	SadriAfshar	–	+	+	–	–
	OALD	+	+	+	+	+
gedāi: kardan [to beg]	Amid	NE	NE	NE	NE	NE
	Anvari	–	+	+	–	–
	Dehkhoda	–	+	+	–	–
	Moin	–	+	+	–	–
	SadriAfshar	–	+	+	–	–
	OALD	+	+	+	+	+
amr kardan [to order]	Amid	NE	NE	NE	NE	NE
	Anvari	–	+	+	–	–
	Dehkhoda	–	–	+	–	–
	Moin	–	–	+	–	–
	SadriAfshar	–	–	+	–	–
	OALD	+	+	+	+	+
Porsidan [to question]	Amid	–	–	+	–	–
	Anvari	–	–	+	–	–
	Dehkhoda	+	+	+	–	–
	Moin	+	+	+	+	–
	SadriAfshar	+	+	+	+	+
	OALD	+	+	+	+	+
darxāst	Amid	NE	NE	NE	NE	NE

kardan	Anvari	–	+	+	–	–
	Dehkhoda	–	+	+	–	–
[to	Moin	–	–	+	–	–
request]	SadriAfshar	–	–	–	–	–
	OALD	+	+	+	+	+
pišnahād	Amid	NE	NE	NE	NE	NE
kardan	Anvari	–	+	+	–	–
	Dehkhoda	–	–	+	–	–
[to	Moin	–	–	+	–	–
suggest]	SadriAfshar	NE	NE	NE	NE	NE
	OALD	+	+	+	+	+

Based on description and analysis of corpus data, the authors suggest the following models for explanation of entries of PMDs based on frame semantics theory (figures 1 and 2).

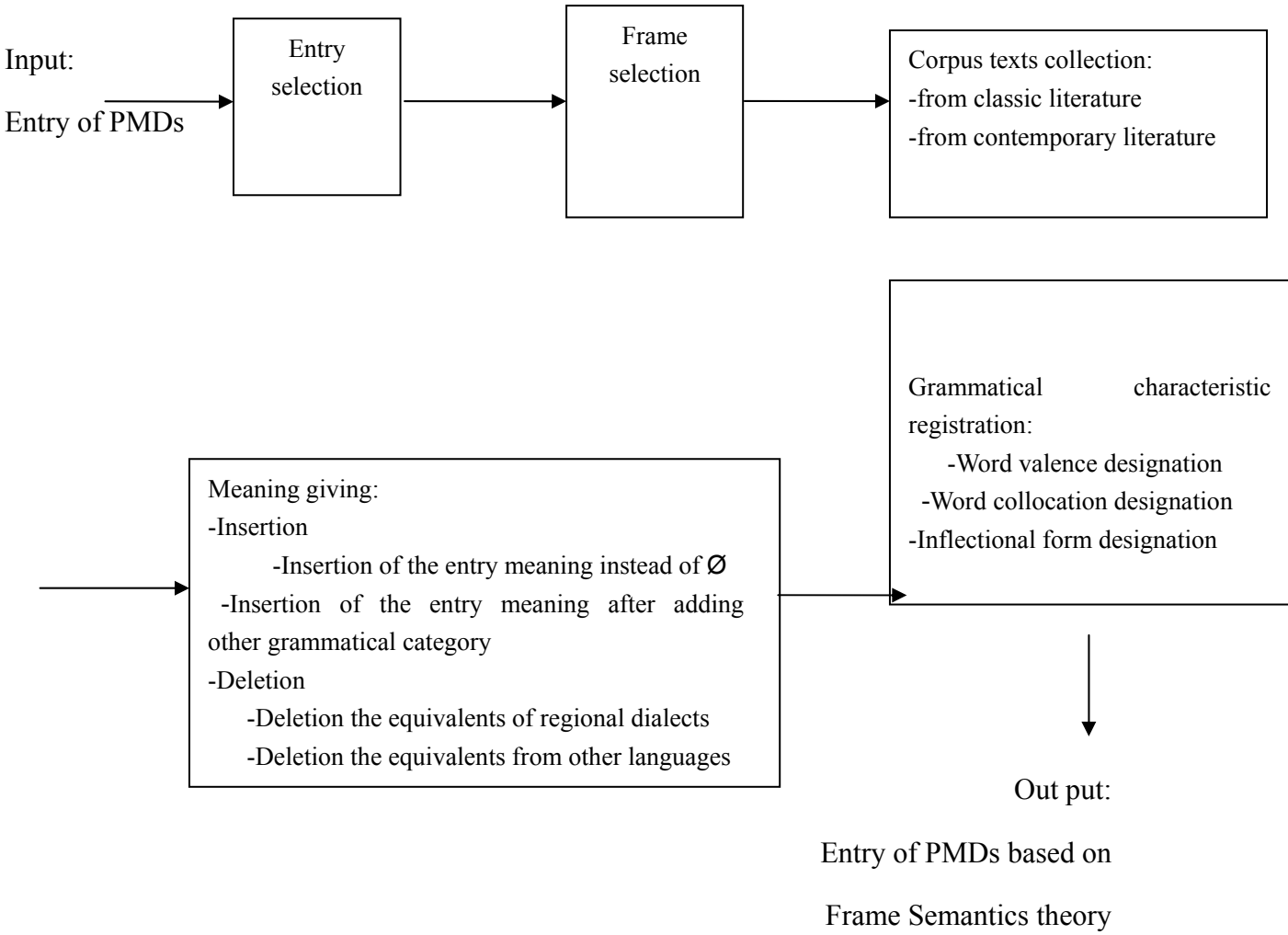

Figure1. Suggested pattern for explanation of entries of PMDs based on frame semantics theory

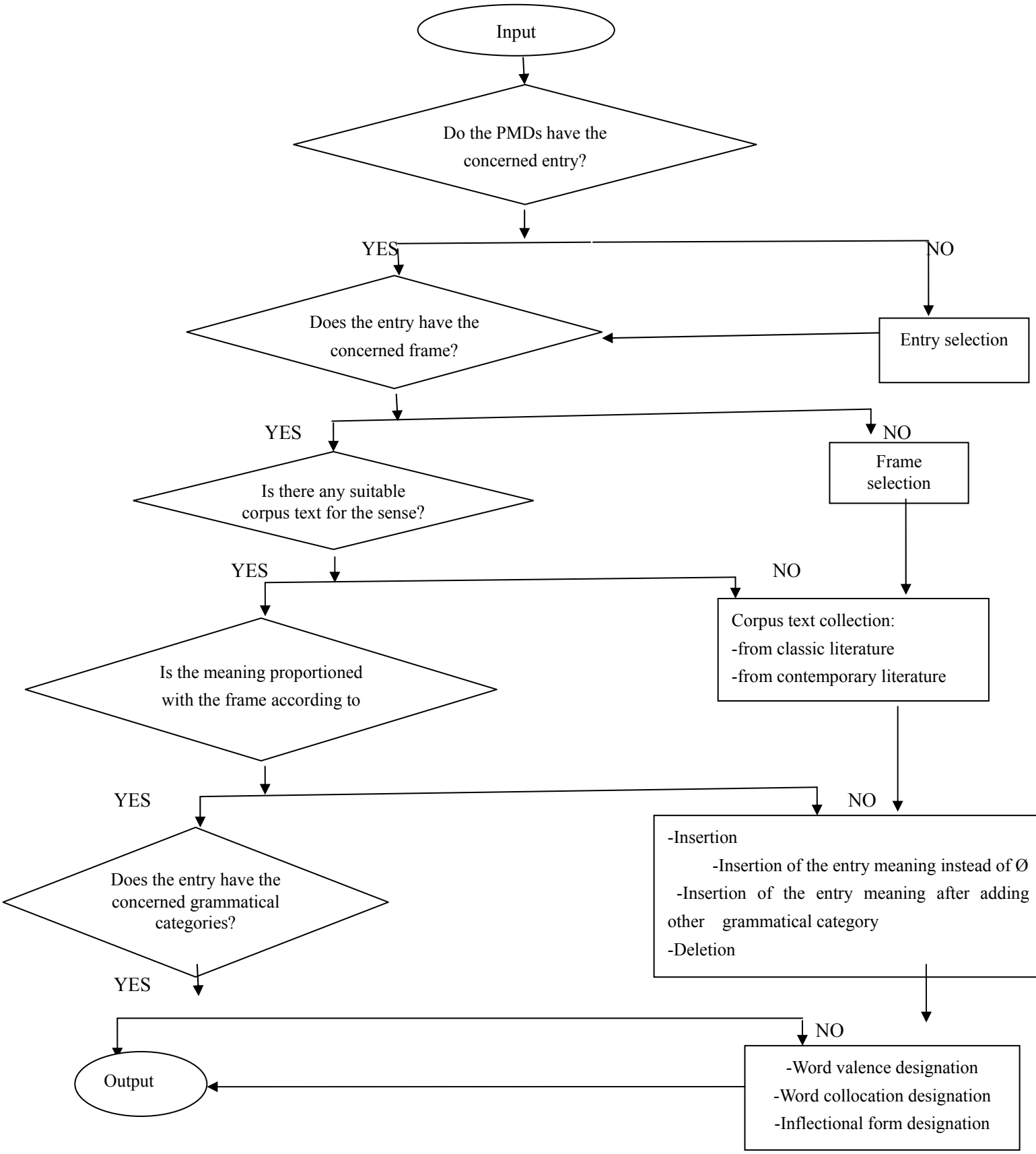

Figure 2. Flow chart of PMDs' entries based on Frame Semantics

Figures 1 and 2 show the authors' suggested pattern. This pattern is a stratified one; that is,

the output of each part is the input of next layer. The stratified pattern is in contrast to the flat pattern in which all the processing take place simultaneously. In addition, the suggested pattern has a modular identity, meaning that each independent layer interacts with other layers.

Figure 1 shows the pattern in 5 main layers. Figure 2 shows this pattern as the flow chart which identified movement path and yes/no choices. According to customary agreements of the flowcharts, yes/no choices have diamond shape and each ordinary part is shown in rectangular shape. In the first part, the input which is the entry of PMDs enters the "Entry Selection". In this part, there are 2 yes/no choices and lexicographers should consider whether the PMDs have this entry or not? If the PMDs do not have the concerned entry (like be hesāb nevešтan/ be hesāb gozārdan [to charge] and xarj kardan [to spend] in Moin dictionary), the pattern will force lexicographers to insert it in the list of dictionary entries. After that, the output is permitted to act as the input of next layer and enters the "Frame Selection". Again in this part, there are 2 yes/no choices. They should decide whether there is the frame related to the explanations of the entries .If there is no selected frame, such as EXAMINATION frame in Amid dictionary, the pattern will make the lexicographers consider it. Third step is called "Corpus Text Collection". In this box, it should be discussed whether the dictionary has corpus samples .Classic and contemporary literature are good sources for lexicographers, easily they can find the target words among them. The data analysis of PMDs shows that the corpus samples have not been taken systematically and completely. For example, Dehkhoda paid attention just to the classics literature while ignoring the samples of contemporary literature. As it was mentioned, the corpus samples have great importance in Frame Semantics; consequently they should be taken seriously.

Next part is called "Meaning Giving", which has 2 sub parts: "Insertion" and "Deletion". The "Insertion" sub part has 2 duties: 1) To insert the meaning instead of Ø, if there is just the entry without any meaning like darxāst kardan [to request] and 2)To insert the meaning after adding other grammatical category if there is the meaning just in different grammatical category like eltemās kardan [to appeal] and amr kardan [to order] in Amid dictionary. The deletion sub part also has 2 duties: 1) to delete the equivalent of regional dialects and 2) to delete the equivalents from other languages. The deletion sub part gives great help to general dictionaries to be uniform without unnecessary information. Xaridan [to buy] entry in Dehkhoda dictionary has such kinds of equivalents.

The last layer is called "Grammatical Characteristic Registration". In this part; collocation, inflectional form and valence of each entry should be determined. The final output of PMDs' entry helps lexicographers take the initial step toward redressing the failings of Meta lexicography approach.

5. Conclusion

As was pointed out above, frame semantics provides a reliable theoretical basis for lexical analysis of corpus data in that it integrates the syntactic and semantic features of entries. Unfortunately, however; the results of our investigation into five PMDs have revealed that none of them have been compiled on the basis of theoretical concepts employed in current

metalexicography .To compensate for this lamentable situation , to some extent, we have analyzed the data derived from 5 major PMDs with the aim of designing a model of compilation. Finally, it is strongly recommended that prospective Persian lexicographer avail themselves of the insightful approach to word meaning made possible by frame semantics.

References

Amid, H. (1975). *Farhang-e-Amid*. (8th Ed.). Tehran: Javidan Publication.

Anvari, H. (ed.) (2oo3) *Farhang-e-Bozorg-e-Sokhan*. (2nd ed.). Tehran: Sokhan Publication.

Atkins, B. T. S., & Rundell M. (2008). *The Oxford Guide to Practical Lexicography.* Oxford: Oxford University Press.

Croft, William, & A .D. Cruse. (2004). *Cognitive Linguistics.* Cambridge: Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511803864

Dehkhoda, A. (1993-1994). *Loghatnameye Dehkhoda* (First edition of new series.). Tehran: The Publishing Institute of the University of Tehran.

Fillmore, C. J. (1975). 'An alternative to checklist theories of meaning.' In P. Hanks. (ed.) Lexicology-critical concepts in linguistics (vol.IV). UK: Routledge, 219-227.

Fillmore, C. J., & S. B. T. Atkins. (1992). Toward a Frame-based Lexicon: The Semantics of RISK and its Neighbors. In P. Hanks. (ed.), *Lexicology-critical concepts in linguistics* (pp. 227-254). LONDON AND NEWYORK: Routledge.

Fillmore, C. J. et al. (2003). Background to FrameNet. *International Journal of Lexicography, 16*(3), 235-250. http://dx.doi.org/10.1093/ijl/16.3.235

Fillmore, Charles .J. (1994)."The Hard Road from Verbs to Nouns" In William S-Y Wang. In Honor of Williams S-Y.Wang: Interdisciplinary Studies on Language and Language Change. Taipei: Pyramid Press, 105-129.

Fontenelle, T. (2000). A bilingual lexical database for frame semantics. In P. Hanks (Ed.) *Lexicology-critical concepts in linguistics* (pp. 276-290). UK: Routledge.

Hanks, P. (ed.) (2008). *Lexicology-critical concepts in linguistics.* LONDON AND NEWYORK: Routledge.

Landau, S. I. (2001). *Dictionaries-The Art and Craft of Lexicography* (2th Ed.) Cambridge: Cambridge University Press.

Mo'in, M. (1992). *Farhange Farsi* (20th ed.).Tehran: Amir Kabir Publishing Corporation.

Sadri Afshar, G H.et al. (2009). *Farhangnameye Farsi Vazhegan Va Alam*. (First edition). Tehran: Farhang Moaser Publishers.

Sally, W. (ed.) (2005). *Oxford Advanced Learner's Dictionary* (7th edition) Oxford: Oxford University Press.

Tabibzadeh, O. (2007). *Verb Valency and Basic Sentence Structures in Modern persian _A*

Dependency Based Approach. Iran: Nashr-e Markaz Publishing Co.

Wierzbicka, A. (1996). *Semantics: Primes and Universals*. Oxford: Oxford University Press. Retrieved from http://framenet.icsi.berkeley.edu/fndrupal

Notes

The following abbreviations are used in the present article by the authors:

FE: frame element

PMD: Persian Monolingual Dictionary

OALD: Oxford Advanced Learners Dictionary

NE: No Entry