Chapter II

LITERATURE REVIEW
2. LITERATURE REVIEW

2.1. Introduction

Lexicography has been generally defined as the writing or compiling of a lexicon or dictionary, the art or practice of writing dictionaries or the science of methods of compiling dictionaries. In the past, the lexicographers worked randomly from their chance encounters with written sources, collecting interesting usages of words found while reading books and newspapers, and from examples drawn from their own intuition of general language use. Then in the early 1960's, systematic attempt were made to create a large corpus that was representative in some way of language. (Dash, 2007).

In the eyes of most people, lexicography is seen only as the writing or compiling of dictionaries. It is true to the extent that dictionary making involves observing, collecting, selecting, and describing units from the stock of words and word combinations in one or more languages. But this is just one aspect of the practicality of lexicography. The other side of the study is on the theoretical generalization about what the dictionary is, how it is made and why it is needed.

As Haussmann (1986) rightly pointed out, that the “Lexicography also includes the development and description of the theories and methods which are to be the basis of this activity”. In terms of the communicative theory outlined above, the lexicography can be defined as the theory and practice of encoding and transmitting, intra-culturally or inter cultural information and knowledge concerning socialized linguistic forms of a given speech community and/or extra linguistic reality from the compiler to the user so as to affect the user’s knowledge structure and perception of the world. This definition covers all the major aspects in the study of communication and all the major activities
in dictionary making, encompassing both theoretical and practical aspects of lexicographic communication.

The practice of lexicography dates back to several thousand years ago, when the Assyrians in the Middle East and the ancient Chinese began to make attempts at compiling monolingual and specialized dictionaries. Although the theoretical study of lexicography is not considered quite a novelty in the modern linguistic world by few, it has its own frameworks and designs for dictionary-making preceded by some theoretical considerations fundamental issues involved in the process. Whoever decides to embark upon a new dictionary project will have to think, before they actually set to work, about such rudimentary questions as for whom and for what purpose the dictionary is to be compiled, how entry words are to be selected, how dictionary structure is to be organized, how pronunciation is to be transcribed, how words are to be defined, how meanings are to be differentiated, and so on. In the pioneering age, the fruits of this sort of thinking were not collected under a separate cover. Instead they were incorporated into dictionary making activities and were contained in the dictionary body (Yong, H., & Peng, 2007).

It is no exaggeration to say that language study, in a sense, started with dictionary-making and received inspiration from it. Dictionaries of earlier periods are gold mines of information for both linguistic and cultural research. They provide unique historical insights into how languages evolve, how words change their forms and meanings, and how cultures are reflected in languages. Through several thousand years’ arduous labor, lexicographers have produced countless glossaries, wordbooks, vocabularies and dictionaries. They have accumulated exceptionally large bodies of written and/or spoken material for language research and study. However, theoretical generalizations about dictionary making were largely neglected. That is perhaps why
the lexicon (dictionary) was given a deplorable status as “an appendix of grammar, a list of basic irregularities” (Bloomfield, 1933).

Lexicographers have often been blamed for their alienation from other related disciplines, especially from the rest of language study (Sinclair, 1984). A general survey of modern English dictionaries will indicate that this criticism was not entirely justified, especially when judged by the positive and painstaking efforts made by the lexicographers to apply the latest findings of linguistics to the writing of learners dictionaries in the past two decades. In fact, the introduction of linguistic research findings into dictionary making took place as early as in the nineteenth century, when historical and comparative linguistics began to flourish. This aroused lexicographers’ general interest in word histories (though the actual practice of giving information about etymologies in dictionaries started much earlier) and gave rise to the compilations and principles of dictionaries. The labeling of word origin became the established practice and has come down to the present day. During the early 20th century, the emergence of descriptive linguistics and structural linguistics exerted a considerable influence upon the lexicographical field. The descriptive principle is generally accepted by modern lexicographers as one of the guidelines for contemporary dictionary making (Yong & Peng, 2007).

2.2 Current and Future of Lexicography and Lexicology

Historical dictionary research is seldom carried out by those familiar with historical dictionary practice. Today there still are projects under construction, although not enough in the eyes of many – the aforementioned Heidelberg Declaration reflects the necessity to continue investing in historical dictionaries to keep our cultural heritage alive. Today, the large historical dictionaries have been realized and many projects on ‘minor language periods’ (Middle Ages, Renaissance) and non-standard languages have
also been successfully completed. Nowadays the emphasis in the lexicographical world often primarily lies on corpus building and text encoding. Therefore it is urgent to keep interest in practical lexicography and make it alive; moreover most part of our historical vocabulary is not yet described sufficiently. In her contribution devoted to Old French charters, explores the possibilities of the compilation of a basic glossary to these texts. Traditionally literary texts were the main source of historical lexicography and it is gratifying to see that to other text types are being researched, often thanks to the availability of electronic text corpora. (Mooijaart & van der Wal, 2008).

2.3 Sketch of the Structure and Contents of a General Theory of Lexicography

A general theory of lexicography must systematically explain the reasons for the knowledge required for the lexicographers to carry out their work appropriately. In accordance with the proposed structure of lexicography, a general theory of lexicography can consist of four constituent theories as shown in the following diagram. Both the individual constituent theories A to D and some of the components may be developed independently (Wiegand, 1984).
In constituent theory, a relationship is established between the general theory of lexicography and the following: (1) society, (2) other theories, and (3) the history of lexicography. Thus constituent theory A consists of three components in which meta-theoretical considerations bearing on the general theory of lexicography are also permitted.

In the first component, general purposes for mono-, bi-, and multilingual language dictionaries are derived from the communicative and cognitive needs of the society or societies; or possibly goals are set that can stimulate needs. The purposes are
given in general terms and classified in groups in such a way that specific and concrete lexicographical purposes may be derived for each dictionary type and differentiated theory of the lexicographical description of language. Such purposes are set out in the general section of the dictionary plan.

In the second component, the connections with other theories or constituent theories are listed. This includes, for example, a description of which concepts have been borrowed, which sections of conceptual systems, and which tenets of a theory of language and communication used. In particular, it must be established which premises are taken over from a general lexical theory, from a special lexicology (i.e., one related to an individual language) or from several such lexicologist (Wiegand, 1984).

In the third component, connections are made with the history of lexicography by establishing the principles that have been followed in lexicography to up now. Thus it is stated, for example, which principles have been valid for which dictionary types in the past and why, and which principles could apply in future, for example, for new types of dictionaries as well.

Now some comments on constituent, the theory of lexicographical research on language. The subject area of a theory of lexicographical research on language is the class of all scientific methods that can be applied in lexicography.

The first component is a theory of lexicographical data collection. This is a theory about how to compile a dictionary base; that is, it concerns, firstly, with the collection, composition, representatively, function and typology of lexicographical corpora relative to dictionary types. Thus it concerns with lexicographical field-work as well, e.g. for designing a direct or indirect opinion poll to gather lexical data. Secondly, the role played by secondary sources in the work on the dictionary has to be clarified
(Wiegand & KuCera, 1982). However the research on the use of dictionaries does not belong here. It is a special part of meta-lexicography (see Figure2).

The second component of constituent theory is a theory about ways of processing the linguistic data collected so that a dictionary file suitable for a particular dictionary type or a group of dictionary types is established. The role of the computer must either be considered in both components, or a third component, a theory about computer assistance in lexicography, may be added. If computational lexicography makes good progress, every constituent theory should be supplemented by a component about computer assistance (Wiegand, 1984).

2.4 Dictionary

When the first major international handbook on lexicography was published, thirty years ago, it defined dictionary as follows. A dictionary is a systematically arranged list of socialized linguistic forms compiled from the speech-habits of a given speech community and commented on by the author in such a way that the qualified reader understands the meaning of each (Zgusta, 1971). Twenty years later, the Swedish lexicographer Bo Svensén (1993) provides a less fragile and much more explicit definition. To him a dictionary is a book that in the first place contains information on the meaning of words and their usage in specific communicative situations. It distinguishes itself from other sources of information in that it does not offer information in a coherent order, but divided into thousands of short chapters or sections.

In lexicography these are usually referred to as articles or dictionary entries, meaning the headwords and everything that is said about them. The entries are usually ordered rather arbitrarily with regard to their content that is to say alphabetically.
according to the spelling of the headwords. First the dictionary describes the formal characteristics of the words, i.e. how they are spelled, pronounced and inflected and to what part of speech they belong. Some dictionaries also mention the forms of derivations and compounds, sometimes at the level of the headword, sometimes within the structured information. The formal information is usually followed by a description of the meaning of the word, an indication of usage and a list of the words that it can be linked with (collocations, idioms, pragmatic routine formulations, proverbs, sayings, etc.). Moreover, to Svensén it is a practical reference tool, not a book to be read from cover to cover. The user consults it if he does not know the meaning of a word, if he is unsure of the spelling, or if he just wants to fill a gap in his knowledge (Sterkenburg, 1984).

Dictionary is compiled mainly for reference. This is the most primitive and most practical function of the dictionary. However, there are far more functions for dictionaries to perform than just that. “The dictionary is much more than an instrument providing answers to linguistic questions, however complex, even for a fairly well-educated public of users” (Bejoint, 1981). Scholars have made serious studies of the ways the dictionary is actually used. These actual dictionary uses can be categorized as three kinds of function: descriptive, didactic and ideological. The dictionary may be designed to give an exhaustive description of a dead language like Latin or a selective description of the lexicon of a living language, thus functioning as a storehouse for the vocabulary of a language, a branch of knowledge or even an individual person, i.e. a writer; to perform instrumental and instructional functions, providing guidelines for correct usage, improving intra- and inter-cultural communication, strengthening language unity, and thus enhancing social promotion; and to serve as “an ideological weapon” (Hartmann, 1987), safeguarding the moral and ideological values of the
society. Obviously, the reference function of the dictionary presents only part of the picture of dictionary uses, though it is the most fundamental and important (Yong, 2007).

Dictionary making is a reference work and aims to record the lexicon of a language, in order to provide the user with an instrument with which he can quickly find the information he needs to produce and understand his native language. It also serves as a guardian of the purity of the language, of language standards and of moral and ideological values because it makes choices, for instance in the words that are to be described. With regard to content it mainly provides information on spelling, form, meaning, usage of words and fixed collocations. It gives students forms of the language one can easily comprehend and understood.

Nowadays the dictionaries are supplemented with CDs. Many dictionaries on CD-ROM contain much more material than their hardcopy counterparts, such as audio and video material, pronunciation and a corpus of authentic texts, to name but a few. Some of the electronic dictionaries allow deletion, addition, correction and any kind of editing. Such a dictionary is unmistakably dynamic.

2.4.1 Dictionaries of Collocations, Idioms and Proverbs

The vocabulary of a language, apart from single words, also consists of fixed combinations of words. These word combinations can be classified into various categories, such as collocations, idioms, proverbs, phrasal verbs, etc. Dictionaries of idioms, expressions/proverbs have the longest tradition among the above-mentioned group. Dictionaries which describe the idioms, proverbs and expressions of a language display a wide variety with regard to the information they provide on the recorded
lemmas. Historical information of this nature is often used as source material for the compilation of historical dictionaries (Sterkenburg, 1984).

2.4.2 The Dictionary as Communication

Communication is defined in most dictionaries as “the process or act of communicating”, “the exchanging or imparting of ideas and information, etc.” Looked at from a socio-cultural context, this lexicographic definition does seem to be oversimplified and is susceptible to serious challenges. It covers two basic aspects of communication. It treats communication as “process” or “act”, and in this process “ideas and information, etc.” (Generally referred to as “message” in communication theory) are exchanged and imparted. However, it fails to indicate the following important aspects:

1. Communication is a socio-cultural behavior.
2. Communication involves sending and receiving messages.
3. Messages are encoded by senders and intend to be decoded by receivers.
4. Senders and receivers of messages are participants in the process.
5. Participants are socio-cultural beings and share a common code.
6. Messages are sent and received to achieve certain purposes.

These aspects of communication have certainly fallen outside the scope of lexicographers’ concerns, but they are essential elements that constitute a theory of communication. It will soon be seen that these basic aspects of communication are fundamental concerns of Meta lexicographers and lexicographers as well. There are currently two major schools of thought in the study of communication (Yong, 2007).
2.4.3 The Traditional Approach: The Dictionary as Reference

There is a long tradition of treating the dictionary as a word list or a wordbook providing information about orthography, pronunciation and meaning of words in language. As a matter of fact, that is what early dictionaries could offer. Until now, this has also been the reason why the great majority of dictionaries are made and why lay people keep a dictionary at hand. This narrow interpretation of the dictionary as reference is typically reflected in definitions written by lexicographers themselves.

![Diagram of Dictionary Typology](image)

- Figure (3). A dictionary typology (Zgusta, 1971)

- linguistic dictionaries are discerned from encyclopedias (mainly) in terms of the status of lemma types (or: entry words) included and the kind of information provided on them;
- monolingual and multilingual dictionaries are distinguished on the basis of the number of languages treated in them;
- Diachronic and synchronic dictionaries are discerned on an opposition on the time-axis; the distinctive features *general, limited, comprehensive* and *standard* refer to the strata
and/or scope of the vocabulary that has been selected for inclusion and treatment in a
dictionary.

The dictionary categories distinguished in the typology will be further subdivided, as suggested in Geeraerts (1984) and Geeraerts and Janssens (1982), on the basis of their macro- and micro structural features. In terms of their macrostructure dictionaries are compared with regard to the stratum/strata and scope of the vocabulary of a language from which lemmas are selected for lexicographical description in a dictionary;

- The principle(s) underlying the ordering of the lemmas (alphabetic, conceptual/ideological or a combination of both) by taking their microstructure as point of departure, dictionaries are compared with regard to the categories of grammatical information provided for each lemma in a dictionary article;

- The ordering of these information categories within a dictionary article given the prominent role that the macro- and micro structural features have to play in this typology (as it does in most typologies) some elucidating remarks are in order (Sterkenburg, 1984).

2.4.4 Types of Dictionaries

There are many types of dictionaries viz, children’s dictionaries, illustrated dictionaries, translation dictionaries, learning dictionaries, biographical dictionaries, quotation dictionaries, retrograde dictionaries, dictionaries of slang, curses and dialects, dictionaries of proper names and dictionaries of synonyms, rhyming dictionaries and technical dictionaries, electronic dictionaries, online dictionaries and dictionaries on CD-ROM. They are also Monolingual, bilingual trilingual and Many lingual.

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2.5 Etymology

Since the late seventeenth century, for the general purpose of native speaker dictionaries have included information about the etymology of words. Indeed, common words were included in dictionaries initially merely for the sake of recording their etymologies. The etymology section of a dictionary entry aims to trace the history of a word to its ultimate source. Where a word has come into existence as the result of a word formation process, e.g. derivation or compounding, then it is not usually given an etymology, unless it is unclear what the elements of the new word are and how they have been combined. In general the information on etymology was given for root forms.

In the liken the tracing of etymologies to archaeology, the evidence is often partial or not there at all, and etymologists must make informed decisions using the evidence available, however inadequate it may be. From time to time new evidence becomes available, and the known history of a word may need to be reconsidered. We now consider many of the etymologies proposed by eighteenth-century dictionaries to be rather fanciful, particularly in the light of nineteenth- and twentieth-century scholarship. Larger dictionaries have an etymology consultant, and the OED (Oxford English Dictionary) continues to add to etymological scholarship by its ongoing research into the histories of words. It is to the Oxford English Dictionary that most dictionaries look as the primary source for their etymological information (Jackson & Ze Amvela, 2000).

2.5.1 Why Etymology?

It could be argued that etymology has no place in a general-purpose dictionary, and it should be left to historical or specialised dictionaries. Learners’ dictionaries do not contain etymological information, though its exclusion from these dictionaries has
been challenged (Ellegard 1978; Ilson 1983). Of the three Collins dictionaries, the smallest, the *Pocket*, does not contain etymologies, but the other two larger ones have. It was only half a century or so after the first monolingual English dictionary that etymologies began to be included in dictionaries so they have a long pedigree. Hudson (1988) includes etymology among the ‘lexical facts’ about words that dictionaries should pay attention to. But there is little evidence that users routinely resort to a dictionary for this information. So, is there any justification for the inclusion of etymological information in general-purpose dictionaries aimed at the ordinary user? The dictionaries have a double function: as a record of the vocabulary of the language, i.e. a lexical description, and as a reference work to meet the needs of users for information about words and their usage. On neither count is the inclusion of etymology uncontentious obvious. As a record, a dictionary describes the contemporary vocabulary; it omits obsolete words and meanings and marks as ‘archaic’ those whose currency is beginning to wane. As a reference work, a dictionary does not have the space to give a full account of the etymology of words, such as might be found in an historical dictionary. Moreover, the etymological information is probably the hardest of all the parts of a dictionary entry to decode, needing as it does some background knowledge in history, and specifically in the history of languages. Otherwise, what sense can anyone make of terms like ‘Old High German’?

Sidney Landau (2001) expresses the opinion that ‘of all the elements included in modern dictionaries, etymology has the least to do with the essential purpose of a synchronic dictionary’. Etymology does not make a contribution to the description of the contemporary meaning and usage of words and it may help to illuminate how things have got to, where they are now. But it is as likely to be misleading as helpful (as with the ‘etymological fallacy’). Etymology offers no advice to one who consults a
dictionary on the appropriate use of a word in the context of a written text or spoken discourse. It merely provides some passing insight for the interested dictionary browser with the requisite background knowledge and interpretative skills. On this perspective, Landau is right in saying that etymology does not have the same status as other elements of lexical description in a dictionary.

Etymology could be said to be part of dictionary information by historical accident. The ‘hard words’ tradition, which has been started monolingual dictionaries in English, included, only words that had been borrowed, mostly from the classical languages. It was only a short step to indicate systematically their language of origin, as indeed dictionaries had done to an extent from the beginning. Combined with the increasing interest in cultural and linguistic history that flourished during the eighteenth century, etymology became firmly established in the tradition of monolingual dictionaries. Dictionary making does have its own tradition, its own set of principles and conventions, which are to a large extent independent of those associated with other branches of linguistic scholarship. It is only recently, in the last quarter of the twentieth century, that the discipline of linguistics has exercised any major influence on the processes of dictionary making. On this perspective, it is not surprising that etymology continues to be an element of the information given for words, at least in the larger general-purpose dictionaries (Jackson, 2003).

2.5.2 Etymological Dictionary

The etymological dictionaries have been classified in to several categories on the basis of the range of coverage, the number of languages covered etc. The most common is the one which classifies the dictionaries on the fact whether the focus of the dictionary is a single language or many languages. The dictionary with one language as focus deals with the lexical items of one language. The entry of the dictionary is given
in that language. The origin of the words of this language is traced back to the proto language. In this process cognate forms of the related languages are cited. Since the help of comparative method is taken by giving cognate words such dictionaries develop into comparative dictionaries.

In the dictionary which has many languages as its focus, the entry word is given in the proto language. The developed forms in different languages are given in the description part of the entry. For borrowings in the language, the etymological dictionary gives the immediate source of the borrowing, its original meaning and forms in cognate languages. If the borrowing is through some other language, the name of the intermediate language and the form therein are also given. The dictionary of borrowed or foreign word in a language can be included in the class of etymological dictionary, because by giving the origin of these words the dictionary provides clue to the etymology of these words.

Although the focus of the etymological and historical dictionaries is different, they are not opposed to each other. Each one, on the other hand, can be helpful for the other to get more reliable results. For an etymological dictionary the reconstruction of proto forms gets greater authenticity if they are attested by forms in the earlier stage of the history of the language. This information is made available by the historical dictionary. Again, it is in the historical dictionary that we find where new words are derived from the original word and at what stage.

Most of the analytical and descriptive dictionaries contain some elements of an etymological dictionary as they give what is the derivation or the origin of the word. In descriptive dictionaries, the etymological analysis helps in solving some of the basic problems of lexicography. Etymology helps in deciding the cases of homonymy and
polysemy and in ordering the sequence of the meanings of the polysemous words by giving the original or basic meaning. Etymology also helps in solving the problem of unclear meanings of some lexical units (R. A. Singh, 1984).

The synchronic dictionaries are generally grouped into two classes viz, general and special. General dictionaries contain those words of the language which are of general use representing various spheres of life and presenting a complete picture of the general language. They are meant for the general user of the language. The general dictionary will contain, more or less the entire lexical stock of the language, which is humanly impossible. Some of the special dictionaries with their focus on some particular purpose often contain the general word lists. For example, the dictionaries of pronunciation, the reverse dictionaries, in which the frequency counts, have special purpose but their word list is general.

2.5.3 Historical and Etymological Dictionaries

The diachronic or historical dictionary has a special class in it which can be called etymological. Although its focus is also to present the history of a lexical unit, its form and purpose but different from historical dictionary and it has a limited readership. Its word list is different from the general dictionaries, even from the historical dictionary and in this regard it comes under special type of dictionaries, which is described later.

The main function of both the historical and the etymological dictionary is to present the history of a lexical item. The difference lies in their approach to lexical items. The historical dictionary records the development of a lexical item in terms of both the form and the meaning whereas the etymological dictionary presents the origin of words by tracing the present day words to their oldest forms.
The historical dictionary is concerned with a systematic study of changes affecting a lexical unit during its origin to development. In order to present these changes in the structure and meaning of a word the lexicographer traces it from its earliest available form used in the literature of the language and records its development in subsequent stages of the language. In order to do this the lexicographer makes use of all the available works of the language, and find out the all lexical occurrences of the lexical units in different contexts. These contexts are analyzed and compared with each other and the lexicographer finds out the different senses of a lexical unit and its meanings. Then these meanings are arranged in chronological order. It is not a simple text as the number of words in a language is very large and it is also very difficult to record the changes with all details which may be minor or major. Moreover, the semantic changes of each lexical items cannot be generalized. As a result the lexicographer has to analyze each lexical item and the semantic changes of it. (R. A. Singh, 1982).

The problem arises as to whether a historical dictionary can cover all the works available in a language and give all citations for all the lexical items. No dictionaries, whatever are its resources, can afford to give all this. The lexicographer has to choose some workable way for the dictionary. In order to do this the lexicographer has to decide and listed the works to be undertaken for the dictionary and consider to following points viz, (1) time and (2) the subject or theme. First, certain broad classifications can be made for the selection of period. This classification may be based on some criterion like some landmark in the history of the development of the language e.g. some outstanding author or some notable literary work or other significant event. The lexicographer has to see that all the periods in the history of a language are given due and even attention. No period should be left without proper representation,
otherwise it would be impossible to find a coherent semantic development of a lexical item. In this sense has been contended whether a dictionary like Oxford English Dictionary (OED) which deals with all the periods of the history of the language, can be a true historical dictionary. It is suggested that it would provide more scientific and accurate account of the history of the words of a language if a particular period is taken up and a detailed analysis of all the works of that period is done, rather than taking total history and divide it into some periods and then making generalizations. For these Period dictionaries dealing with some particular period may be prepared. A dictionary dealing with the entire period of the history of the language may not do justice in presenting full picture of the semantic history of the lexical stock of a language.

The second point a lexicographer has to keep in mind while selecting the works for a historical dictionary is to see that all the subject fields are equally and evenly represented in the corpus of the dictionary. For this representative works of all the branches of human knowledge available in a language should be analyzed. Variation of region, style and subject matter should be carefully marked and entered in the dictionary. For example the Sanskrit Dictionary (Poona) has used 1500 books as its source material. Malayalam Lexicon has utilized 7000 works in addition to manuscripts etc. besides these works; even the available dictionaries can be utilized. Kannada Dictionary (Bangalore) analyzed 2000 books and all the available inscriptive material. (R. A. Singh, 1982).

The etymological dictionary, as stated earlier, traces the present word to its oldest form and gives the parent form. The interest of an etymological dictionary is primarily in the pre-history of the language. For arriving at the parent form the lexicographer takes recourse to historical comparative method, wherein on the basis of
recurring correspondences of form and meaning of words in different cognate languages, the proto word form or etymon is reconstructed.

In some cases even when the dictionary does not give reconstructed forms it may be considered etymological. In these cases a particular point in the development of a language is fixed as a terminal point and the etymologies are traced back to that point. For Indo-Aryan languages this point may be Sanskrit of which hypothetical or reconstructed forms are given. Sometimes, though it is not scientific, the nearer attested forms are given as the source word. In this connection some dictionaries give only the cognate forms.

2.6 Lexicon

2.6.1 The Notion of Lexicon

The lexicon is generally viewed as a listing of all the morphemes of a language, with information indicating how each morpheme behaves in the components of grammar involving phonology, syntax, and semantics. Nevertheless, both historically and conventionally, the lexicon has been seen as the passive module in the system of grammar. More recently, the model of the lexicon has undergone significant revision and maturation. In particular, two trends identified by Quemada (1972) have driven the architectural concerns of lexical researchers: lexical are (a) a tighter integration of compositional operations of syntax and semantics with the lexical information structures that bear them; and (b) a serious concern with how lexical types reflect the underlying ontological commitments of the grammar.

2.6.2 Lexicon and a Grammar

Each language has a lexicon and a grammar, i.e., a set of elementary expressions and a set of rules according to which complex expressions are constructed.
from simpler ones. Some of these rules form complex words; others operate beyond the
boundaries of the word, thus producing larger units’ phrases and sentences. These
distinctions, familiar from the days of the ancient grammarians, are not always clear
cut, at least for two reasons. First, the notion of ‘word’ is not very well defined. Second,
there are complex expressions, whose meaning is more or less predictable from the
meaning of its components, whereas this is not true for other complex expressions.

The former are said to be ‘compositional,’ whereas the latter are ‘lexicalized’;
slightly different terms to characterize this opposition are ‘productive’ vs. ‘idiomatic,’
and ’free’ vs. ‘fixed’; in each case, the distinction is gradual. Lexicalization is rarely
observed for infected words (a possible exception are ‘participles’ such as crooked in a
crooked street), but very frequent for compound words, such as landlord or (to)
withdraw, or phrases such as to kick the bucket, which has a compositional as well as a
lexicalized reading. Do lexicalized expressions belong to the lexicon of a language or to
its grammar? There is no straightforward answer available as their form is complex and
rule-based through their meaning is not.

Therefore, it is useful to take the term ‘lexicon’ in a somewhat broader sense; it
contains all elementary expressions (lexicon in the narrower sense) as well as those
expressions which are compound in form but not accordingly in meaning. The scientific
investigation of the lexicon in this sense is usually called lexicology; it includes, for
example, the historical development of the lexicon, its social stratification, its
quantitative composition or the way in which some subfield is encoded in lexical items
(e.g., ‘terminology of hunting,’ ‘verbs of movement’). Lexicography, by contrast, deals
with the compilation of dictionaries. The lexicon of a language is stored primarily in the
head of its speakers, and also .We do not know what form the ‘mental lexicon' has.
There is agreement, however, that it consists of individual lexical units which are somehow interrelated to each other. There is no generally accepted term for lexical units. The familiar term `word' is both too broad and too narrow; one would not want to consider goes as a lexical unit, although it is a word, whereas expressions such as (to) cut up or red herring are lexical units but consist of several words. Other terms occasionally found are `lexeme,' `lemma,' or `lexical entry,' but since these are also used in other ways.

It is important to distinguish between a lexical unit and the way in which it is named. The word house in a dictionary, followed by all sorts of explanations, is not the lexical unit and it is a name for such a unit. The lexical unit itself is a bundle of various types of properties as proposed by Quemeda, 1972. These include: (a) phonological properties, which characterize how the lexical unit is pronounced; they include sounds, syllabic structure, lexical accent and, in some languages, lexical tone; (b) graphematic properties, which characterize how the lexical unit is written (Spelling); (c) morph, syntactic properties, which characterize how the unit can become part of more complex expressions; typically, they concern inflectional paradigm, word class, government relations, and others; (d) semantic properties, which concern the `lexical meaning' of the unit, i.e., the contribution which it makes to the meaning of the construction in which it occurs. Some of these properties may be absent. This is most obvious for graphematic properties, since not all languages are written. There are a few lexical units without lexical meaning, such as the expletive there in English. Many linguists also stipulate `zero elements,' i.e., units with morph syntactic and semantic properties but without phonological properties (such as `empty pronouns'); but these are normally treated in the grammar rather than in the lexicon.
Whereas these four types of properties are the defining characteristics of a lexical unit and other information may be associated with it, for example, its etymology, its frequency of usage, its semantic counterpart in other languages, or encyclopedic knowledge (thus, it is one thing to know the meaning of bread and a different thing to know various sorts of bread, how it is made, its price, its role in the history of mankind, etc.). The lexical units of a lexicon are in many ways interrelated. They may share some phonological properties (for example, they may rhyme with each other), they may belong to the same inflectional paradigm, they may have the opposite meaning (‘antonyms,’ such as black and white), approximately the same meaning (‘synonyms,’ such as to begin and to start), or when complex in form they may follow the same construction pattern. Lexicological research is often oriented towards these interrelations, whereas lexicography tends to give more weight to the lexical unit in itself.

Meaning and structure is a regular feature of a language. It can be used to provide valuable evidence for lexicography, suggesting sense divisions, and identifying phrase units with distinctive patterning. Then, by using the same evidence in reverse, the traditional domain of syntax will be invaded by lexical hordes’. Sinclair criticizes the traditional linguistic dichotomies, especially between grammar and lexis: ‘It is, therefore, unnecessary to make a sharp distinction between abstract and actual language structure the sort of distinction embodied in Saussure’s langue and parole or Chomsky’s competence and performance’ He goes further: ‘It is folly to decouple lexis and syntax, or either of those and semantics’ . The problem is that ‘Virtually all grammars are constructed on the open-choice principle’ . whereas ‘the principle of idiom is far more pervasive and elusive than we have allowed so far’ . and ‘at least as important as grammar in the explanation of how meaning arises in text’. The point is
that ‘open-choice is a process which goes on in principle all the time, but whose results are only intermittently called for’ (Sinclair, 1990).

2.7 Lexical Creativity

Above all, there is the problem of lexical creativity. Johnson’s phrase ‘the boundless chaos of a living speech’ beautifully summarizes this lexicographical problem. It is impossible to say how many words are there in the English language, or in any other languages, because writers and speakers constantly create new terms to suit their proposes. The vocabulary of a natural language is a small nonfinite set. We do not need to go to the extremes to observe the creative potential of the lexicon at work.

Everyday texts are full of ad-hoc coinages. Is giraffishness a word? It was once attested in an American newspaper article entitled. Is comparing a word? It is found in a text in the British National Corpus. The files of the OED Reading Program contain many thousands of this kind, which have not survived and get into any dictionary. Johnson was well aware that the vocabulary as well as the syntax of a natural language is dynamic and creative, not static, and that the motivating force of lexical creativity and indeed of linguistic change in general is analogy. He comments words arbitrarily formed by a constant and settled analogy, like diminutive adjectives in -is, as greenish, bluish, adverbs in -ly, as dully, openly, substantives in -nests, as were less diligently sought, and many sometimes have been omitted, when I had no authority that invited me to insert them; not that they are not genuine and regular offspring’s of English roots, but because their relation to the primitive being always the same, their signification cannot be mistaken (Johnson, 1755).
2.7.1 Which Lexical Properties Are to be Described?

Just as it is impossible to include all lexical units of a language in a dictionary, it is neither possible nor desirable to aim at a full description of those which are available in a language. Since a dictionary is normally a printed book, the graphematic properties of the unit (its ‘spelling’) are automatically given. Among the other defining properties, meaning is traditionally considered to be most important. Samuel Johnson's dictionary from 1755 defines ‘dictionary’ as ‘a book containing the words of any language in alphabetical order, with explanations of their meaning.’ But Johnson also noted that which syllable carries the main stress, and accordingly he gave some grammatical hints. In general, however, information on phonological properties was given up to the end of the nineteenth century, along with information on grammatical properties. But there are, of course, dictionaries which specifically address these properties as well as some of the other defining properties associated with a lexical entry, such as its origin (etymological dictionary) or, above all, its equivalent in other languages.

2.8 The User Perspective

One of the principal advances in lexicography has been the realization that different users have different reasons for using a dictionary. The dictionaries have usually tried to satisfy the overall perceived needs of large classes of users, there has often been little attention to the specific needs of smaller groups or individuals, or to the fact that users differ in their needs depending on the immediate context of dictionary use.

One very common reason for the use of to a dictionary is for translation from one language to another, and this need has helped in the emergence of bilingual and multilingual dictionaries of all sorts and sizes, over many hundreds of years. A speaker of English and a speaker of French, for example, translating a non-specialist English
text into French, might use a general English-French dictionary. It is only recently the recognition of the fact that the needs of the users will be different from one another for example a simple ‘English—French’ compilation may not respond to both the user equally well. Therefore, the attempts were made to realize the perspectives of the user. User-oriented research takes account of the profiles of dictionary users. The various contexts of dictionary use are identified the functions of the dictionary in its many situational use are realized. However, the response to the potential needs of users has implications for the teaching of dictionary use, an area of education that was somehow taken for granted, and either neglected or, badly treated, in the past. Now, more attention is now being paid to the abilities needed, and the behaviors associated with those abilities. The operations involved in the dictionary making process are being investigated and analyzed, to make the field vibrant.

2.9 The History of Lexicography

Lexicography, the art and craft of dictionary making, has an important place in the history of language study. We find that dictionaries and glossaries of various types (monolingual and bilingual, general and technical etc.) were compiled and used extensively from the early age of civilization in China, India, Middle East, Greece, and Rome. The earliest known prototypes of dictionary were the West Asian bilingual word lists, dating from the Second Millennium B. C.

The first lexicographic documents are lists of Sumerian words (up to 1400) with their Akkadian equivalents, written in cuneiform script on clay tablets about 4,700 years ago. The practice compiling such word lists was continued throughout Antiquity and the Middle Ages; thus, the oldest document in German, the *Abrogans* (written around 765), is an inventory of some Latin words with explanations in German. Usually, these ‘glossaries' did not aim at a full account of the lexicon as they simply
brought together a number of words which, for one reason or another, were felt to be `difficult,' and explained them either by a more familiar word in the same language or by a translation. Words were ordered alphabetically, by theme.

But there are also more systematic attempts, such as the Catholicon, a mixture of encyclopedia and dictionary which, compiled around 1250, was the first printed lexical work in Europe (Mainz 1460). In the sixteenth century, two developments led to major changes. The first of these was the invention of printing by Gutenberg. By 1500, virtually all classical authors were available in print, thus offering a solid basis for systematic lexical accounts of Latin and Greek, such as Calepinus' Dictionarium (1502), soon to be followed by two early masterpieces: Robert Etienne's Dictionarium seu Latinae Linguae Thesaurus (Paris 1531) and Henri Etienne's Thesaurus Graecae Linguae (Paris 1572). The second major development was the slow but steady rise of national languages (Landau, 1984).

The Chinese tradition of dictionary making is very old. The first known lexicographic work in China is Shish, which dates back to the 9th century BC. Unfortunately, this work did not survive. After a gap of centuries, during the Han Dynasty (206 BC – 220 AD), the art of lexicography was revived as a part of resurgence in literature. At that time, dictionaries such as Shuowén Jiézi and Erya were valuable reference works for understanding the ancient classics. In the later period, particularly during the Tang (618 AD-907 AD) and the Song (960 AD-1279 AD) dynasties, a few more dictionaries like Yupian, Qiyeun, and Guangyun were compiled (Shiqi, 1982).

An altogether different style of dictionary preparation flourished in ancient India. It started with the collection of obscure words as exemplified in the Nigahantru,
continued with formation of one of the bases of Nirukta and the Padaparha during the first millennium BC, and ended with a large group of Kasas composed during the past fifteen to seventeen hundred years after the Christian era began. Thus, a continuous activity of dictionary making in ancient India provided models for later lexicographical works in the Indo-Aryan and Dravidian languages in India (Katre, 2003). Both Nighantru and Nirukta are monumental examples of early Indian efforts in dictionary making. Since then a large number of dictionaries and glossaries are prepared in Sanskrit as well as in Pali, Prakrit, and Apabhramsha. Some of them are general purpose dictionaries like Amarakosa, while some others are partial ones like Deshi Namamala, and still others like Dharuparha and Ganaparha fall under the category of technical glossaries. These dictionaries and glossaries follow different criteria and bases - semantic as well as alphabetic - in their structure and text representation.

In Nighantru all the designations used for a particular word in Vedic literature were included in the list. The ordering was known as Paryay, which was an essential part in the practice of dictionary making in ancient India. There were another two phases known as Nanartha that contained various meaning of words, and Lingo that contained the gender information of words. Each paryay had dictionary of various types. For instance, the Kalpadrumakos and the Abhidhana Chinramani belonged to Paryay group, Nanartha Shabdaratna, Nanarrha Manjari, Anekartha Cintamani, and Nanarrha Shabda belonged to Nanartha group, while Lingadi Sangraha fell in Lingo group.

Although there were well-defined schemes of classification of words according to their gender, meaning, and usage as well as the classified dictionaries, which would include words according to the predefined criteria, there were some dictionaries which included all the three types of information of words within a single volume. The best
examples of this kind are *Amarakosha* that included all these three phases of words within three parts conglomerated within a single volume. Due to this fact, this dictionary is known as *Trikanda* (there parts). According to the historical evidences, it was compiled between 400 A.D. and 600 A.D.

The most notable aspect of Sanskrit dictionaries is that these were composed in poetic form and words were not arranged in alphabetical order. Among some of the working principles that had been adopted in the construction of lexicons in verse forms may be mentioned the grouping of words according to the number of syllables, and in a few cases, on the basis of the final syllable. Words are most often divided into various classes or groups based on certain features that forced the words to be included in particular groups. This norm of compiling dictionaries in Sanskrit as well as in other vernaculars was practiced not only in ancient India but also in medieval India for a long period of time. The Sanskrit model also provided the basis of similar works in some of the modern Indian languages, particularly for some Dravidian languages (Katre, 2003).

Although there was a rich Indian tradition of lexicographical works, it was hardly ever adopted for modern Indian languages. The opening of the ‘western windows’ (i.e. the advent of European scholars - missionaries as well as non-missionaries) helped the Indian scholars to adapt an altogether new method for dictionary compilation in modern India. In fact, the production of several bilingual and trilingual dictionaries in various Indian languages with direct involvement of the Western missionaries had a lasting impact on Indian scholars who applied the Westernized lexicographical tradition to the Indian languages. The format of presentation, ordering of lexical entries, and the composition of dictionaries were more or less modeled after the dictionaries produced in the west.
The lexicographic tradition in Iran dates back to the pre-Islamic period. The oldest dictionaries are the Qim and Pahlavic dictionaries, both of which were compiled during the Sassanian Dynasty between the first and seventh centuries. The first dictionaries of modern Persian (or Farsi) were compiled in the 9th ‘century due to the growth and spread of Persian literature (Nafisi, 1999). The history of Persian lexicography is divided into three periods. In the first, prior to the 14th century, Iran and Central Asia were the main centres of dictionary making, and Persian dictionaries were compiled in Farsi-speaking regions. With the spread of Persian to neighboring countries and its acceptance as the language of the royal court and literature in the subcontinent and Turkey, India became the major center of lexicographic activity. This second period lasted from the 14th century to the 19th ‘century. Since the second half of the 19th century, there has been continuous growth of lexicographic work and research in Iran. Different kinds of dictionaries have been compiled and published and their main characteristic being a strong encyclopedic orientation. These efforts have resulted in the formation of hundreds of monolingual and bilingual dictionaries (Taherian, 1998).

In Europe, "the earliest list of words' constituted the beginning of English lexicography were the glossaries of Anglo-Saxon priests and schoolmen, compiled to enable those whose competence in Latin was lacking to read Latin manuscripts" (Jackson 1988). These glossaries were essentially lists of Latin words with English glosses. The Promptorium Parvulorum (Storehouse [of words] for children'), published around 1440, was an English-Latin dictionary that contained around twelve thousand entries in alphabetical order with verbs and nouns listed separately. One of the first printed English-Latin lexicons is known as John withals Shorte Dictionarie for Young Beginnners (1553) which had a thematic arrangement of words. The term _dictionary_ in
the title of this book was a sixteenth-century borrowing from the Latin dictionaries (the collection of words'). It is in these English-Latin dictionaries of the Renaissance period that we should perhaps recognize the beginnings of the lexicography of English (Jackson, 1988).

Sir Thomas Elyot compiled the first Latin-English Dictionary entitled Bibliotheca Eliotae in 1538. It was followed by a French-English dictionary, Thesaurus Linguae Romanae et Britannicae which was published in 1556 by Thomas Cooper. Other dictionaries followed, such as Richard Mulcaster's Elementarie (1582), John Florio's A World of Words (1598), Randie Cosgrave’s A Dictionaries of the French and English (1617).

The first monolingual English dictionary is attributed to Robert Cawdrey, the author of A Table Alphabetical (1604). It contained nearly 3,000 lexical items with short definitions. Other monolingual dictionaries followed, including John Bulloker’s ‘An English Expositor’ (1616), Henry Cockerman’s The English Dictionary (1623), Thomas Blount’s Glossographia (1656), Edward Phillips’s The New World of English Words (1658), John Kersey’s A New English Dictionary (1702), and Nathan Bailey’s Dictionarium Britannicum (1730).

The credit for the first most comprehensive, reliable and exemplary dictionary in English always goes to Samuel Johnson’s The Dictionary of The English Language (1755). It was followed by a series of dictionaries published in English during the 18th and the 19th century. Some of the most notable examples were James Buchanan’s Linguae Britartnicae (1757), William Johnston’s Pronouncing and Spelling Dictionary (1764), John Enticl’s Spelling Dictionary (1764), and Thomas Sheridan’s A General Dictionary of the English Language (1780). This history of
English lexicography took a completely new turn with the publication of the Oxford English Dictionary (1882) under the competent editorship of John Murray. Detailed information on the history and the diversity of English lexicography are available in McDavid and Duckert (1973), Hartmann (1983), Ilson (1986), Hausmann et al. (1989-91), Béjoint (1994), Béjoint (2000), Jackson (2002), Hartmann (2003), and others.

2.9.1 The History of Persian Lexicography in Iran

After opening the frontiers of Iran by Arabs and the invasion of foreign tribes such as Mongols and Timorians and through contacting of people with them and new cultural and social happenings, the scientific and literal attempts started and researchers feel the need for single topic and multi topic books, in the form of lexicon or encyclopedias made them to start such works to open a way to this purpose for researchers. A study on lexicography indicates that after the beginning centuries of Islam there have been lexicons like todays without a name on them. As an example “Dinkert” a lexicon like work that was written in Pahlavi Sasanian (Parsic) about customs, narratives and literature history of Zoroastrian religion in 10\textsuperscript{th} century B.C. (Sabur, 2007).

The history of dictionary writing dates back far in the past. The first Persian dictionary which has been left from the past is Faras-e Asadi’s Dictionary known as Asadi’s Dictionary by Asadi Toosi the epic poet from the 12\textsuperscript{th} century B.C. This dictionary has 3500 words and is arranged alphabetically by the last word. The reason of this kind of strange arrangement is that he organized this lexicon for those poets who are in shortage of rhyme when writing poems. Several copies of handwritten Asadi’s lexicons are available from which one is in Vatican library (Sabur, 2007).
Apparently lexicography Dari Persian (Sanskrit) has been started in 10\textsuperscript{th} century. Biographers named two lexicons in that century, one is the handbook of Aboohafz-e Saghdhi and another is Tafaser fe Loghatelfors compiled by Sharafoddin Ghatran Mansoor Ermavi the famous poet in the 11\textsuperscript{th} century of which no one is available to us. Hakim Ghatran Tabrizi has a lexicon of 300 Persian words that is called Hakim Ghatran’s Lexicon.

Dehkhoda’s great and magnificent lexicon by Ali Akbar Dehkhoda is the great work and the outcome of 45 years attempt with 30 million draft papers. He used all the handwritten and printed, Arabic, Persian, and all the fields in history, geography, medical, math, astronomic, discourse and philosophy. The first print of lexicon was in 19\textsuperscript{th} century in 2657 pages. Because of Dehkhoda’s recommendation, Dr. Mohammad Moein and et al. attempted to have a more complete lexicon. This lexicon has some advantages as showing the pronunciation and bringing poetic and prosaic examples with their grammatical notes for better understanding.

Moein is the first lexicon that is compiled based on the scientific method of lexicography principles in advanced countries and is a mixer of Almonjad (Arabic) Webster’s, Whitingas (English) Laroos (French), Breckhouse (German), Miler (Russian) and based on the previous lexicons with pictures. Its chapter was organized by or. SeyyedJafar-e SAhahidi. Other advantages of this lexicon are: providing the correct pronunciation, transcription, origin, grammatical function of the words, existence of proper evidences and examples.

2.9.2 The History of Persian Lexicography in India

The relationship between our Persian antecedents with Indians has resulted in a longer cultural relationship and friendship between these two Aryan races. The Persian
Lexicography in India is one of the resources that documents this relationship and friendship. Even Indians are still more willing than Iranians in Persian lexicography (Ashraf Khan, 2008). History evident that the Iranian civilization was so flourished in India that Persian language was spoken in this subcontinent more than any other language and was the language of culture, literature and science. This development of the language brought the necessity of lexicons. Therefore there was an extensive tendency for lexicography in subcontinent of India and lots of lexicons have been created. Each of these lexicons had a great role in maintaining Iranian language, culture, folklore and customs. According to Jalaloddin Homaei the Indians’ attempt to in Persian language and literature especially in lexicography is even greater than Iranians themselves have done.

The most comprehensive and accurate Persian lexicon that has been compiled in India is the lexicon of Jahangir Mire Jamaloddin Hossein-ebneFakhroddin-e Shirazi which was started during the kingdom of Shah in 1596 and finished in the time of his son Nooroddin Mohammad-e Jahangir in 1608. This lexicon is the most complete poetic lexicon.

Anend Raj is one of the lexicons that have been compiled in subcontinent of India. This book is a work of Mohammad Padeshah son of Moheyyoddin titled Shad which was compiled by the suggestion and help of one of the Indian Rajas named Anend, the then governor of Vijayanegar state. The author endeavored for a long period of ten years and finished it in 1888 and he ornamented it with the name Maharaja Anend Raj. The main purpose of compiling Anend Raj was to create a comprehensive lexicon of Arabic and Persian terminology. As a matter of fact this book is a collection of several great books and from the view of comprehensiveness and content in Persian, Arabic, Turkish, Mongolic and Indian terminologies common in
Persian language is of great importance (Rezaei, 2006). Sarajoddin Ali Khan Arezoo had a great role in spreading lexicography in the subcontinent of India. He was the first person that noticed the linguistic rules and formulas and similarities between Persian and Sanskrit and he started some creative actions. He compiled his book ‘Sarajolloghat’ based on the incisive logics. BharAjam is one of the well-known lexicons that were compiled in India during the second period of lexicography. Bahar Ajam was compiled by Lalehtik Chand Bahar. Lalehtik Chand Bahar was from Delhi was from an ordinary family. He got a trip to Iran and visited Iran and got familiar with Iranian culture and customs. The initial compiling year is not known but apparently it took him 20 years to create BahaAjam (Taghavi, 1962). BaharAjam is one of the poetic lexicons which contains about ten thousand Persian simple, compounds, phrases and proverbs and in most of them the meanings are provided which are based on poetic evidences and examples. One of the characteristics of this valuable lexicon is that most of the Persian compounds are explained in an independent entry and mostly are provided with poetic evidence using 200 poetical works and prosaic books.

Lalehtik Chand Bahar used a lot of evidences from the poems of many poets and by this he made his book very valuable. His book has always been marked by later lexicographers. Ali Akbar Dehkhoda in Dehkhoda Lexicon, Nazemoliateba in Nafisi Lexicon and Mohammad Moein in Moein Lexicon made use of this book greatly.
2.10 Contributions to Persian Lexicography in India

2.10.1 Persian Language in India

The Nobel Laureate Professor Amartya Sen has pointed out that one of the distinctive features of Indian civilization is its inclusive, interactive openness. The Indian subcontinent has experienced one of the most creative and ingenious experiments in cultural cross-fertilization. The fabric of Indian civilization has been woven from strands, pigments and designs drawn from a variety of sources. Close interaction and exchange between Hindus and Muslims as well as other communities gave rise to a magnificent composite heritage. This heritage is reflected in languages and literary compositions, arts and crafts, architecture, etiquette and manners, music, cuisine and dress patterns.

Commercial and cultural relations between India and Persian go back to ancient times. Persians are frequently mentioned in Sanskrit literature, especially in Vishnu Puran, as Parasika. The cult of sun-worship was brought to India by the Magas who migrated from Sakadvip or Persia around the first century B.C. Initially they were not admitted into Hindu rituals and ceremonies but in the course of time they were absorbed into Vedic society and came to be known as Sakadvip or Maga Brahmans. It is interesting to note that the word Hindu is of Persian origin. The Persepolis and Naqsh-e-Rustam inscriptions of Emperor Darius .

Sociolinguistics and ethnolinguistics inform us that language and culture are closely intertwined, the language reflects the world-view, epistemology and cultural patterns of society, and also language significantly conditions our perception and thought processes. India is perhaps the most diverse country in the world. This diversity
is reflected in the ethnic composition of population, languages and its dialects, religious beliefs and practices, customs and traditions. For nearly six hundred years Persian enjoyed a position of cultural, political and literary pre-eminence in India. Consequently, it influenced, to a greater or lesser degree, a large number of Indian languages. It is no exaggeration to say that no other language, apart from Sanskrit which is the mother of all modern Indo-European languages in the country, has left such a deep and enduring influence on Indian languages as Persian. There exist nearly 90 complete or partial translations of the Ramayana in Persian.

Some years ago, Dr. Ata Karim Barq of Calcutta University had submitted a doctoral thesis to a German university on the influence of Persian on the Bengali language. Among other things, Bengali borrowed from Persian 19 forms of metre and the ghazal form. A similar kind of work has been done in respect of Assamese, Hindi, Punjabi, Gujarati and Marathi have a substantial vocabulary of Persian words. What is remarkable is that all such words have become an inseparable part of the vocabulary of these languages. A large number of Arabic words, which are found in Indian languages, found their way through the medium of Persian. In some cases, Persian and Arabic words were adapted to local usage or combined with words from local languages. Hundreds of Persian words are still in use in Indian languages in respect of household utensils, ornaments, flowers, fruits, animals, plants and trees, occupational categories, agriculture, music, trade and commerce, architecture and legal and administrative matters (Momin, 1971).

Significant to note that the influence of Persian is not confined to Muslims alone but has also encompassed other communities. For example, the commonly used word in Bengali and Assamese for consecrated food—which is known as prasad in northern
and western India—is shirini, which is of Persian origin. The influence of Persian is also reflected in personal names among Hindus and Sikhs.

Rabindranath Tagore is widely known in India and abroad as an authentic symbol of Indian civilization. His father, Maharshi Devendranath Tagore, was very fond of Persian poetry. He knew most of the ghazals of Hafiz by heart and used to recite them with great pleasure and felicity. When he was on his death-bed he requested that one of his favorite ghazals of Hafiz be recited. Someone recited the ghazal which begins with the following verse:

Lo! O bar tender! Draw the goblet and pour,
For love appears easy in the beginning,
But the end of it is hard!

When the ghazal came to an end, he departed for his heavenly abode. Rabindranath Tagore once observed that he and his family were a product of the influence of three cultures, namely, Hindu, Muslim and British. He grew up in a family atmosphere in which a deep knowledge of Sanskrit and ancient Hindu scriptures was combined with an appreciative understanding of Persian literature. The humanistic and cosmopolitan outlook, which is such a distinctive feature of Tagore’s thought, owed a great deal to the emancipatory influence of Persian literature.

The pervasive influence of Persian on Indian languages as well as cultural traditions reflects the interactive openness of Indian civilization. On the other hand, Persian language played an important role in the evolution and enrichment of India’s composite cultural legacy. It served as a bridge of understanding and reconciliation between Hindus, Muslims and other communities in the Indian subcontinent (Momin,1971).
The story of the significance of Persian in India will remain incomplete without recounting the wide-ranging and outstanding contributions of Indian writers and poets to the enrichment of Persian language and literature. These contributions were done by many emperors, kings and princes who commissioned the translation of works from Sanskrit and other Indian languages into Persian. Emperor Firoz Tughluq commissioned the translation of important Sanskrit works into Persian.

Indian writers and poets made seminal and wide-ranging contributions to Persian mystic literature, Persian lexicography, poetry and historiography. The oldest book on Sufism in Persian, *Kashf al-Mahjub* (Unveiling the Veiled), was written in India by Shaykh Ali Hujwiri in the 12th century. The first Persian translation of Shhyakh Shihabuddin Suhrwardi’s classic work *Awarif al-Ma’arif* was accomplished in India. The first complete Persian translation of Imam Ghazali’s magnum opus *Ihya Ulum al-Din* was done in India in the 13th century. A number of commentaries in Persian on Mawlana Jalaluddin Rumi’s classic *Mathnawi* were written by Sufi scholars in India.

The first chronicle of Persian poets, *Lubab al-Albab*, was written by Awfi in 1220. The oldest book in Persian on techniques of warfare—called *Adab al harb wal-shuja’a*—was written by Fakhr Mudabbir in the 13th century. A highly significant contribution of Indian writers relates to Persian lexicography. The second oldest Persian lexicon, called *Farhang-i-Qawwas*, was written in India in the 13th century. Another significant Persian lexicon, called *Farhang dastur al-afadhil*, was compiled by Hajib Khayrat Dehlavi in 1963.

It is significant to note that Hindu writers and poets, for whom Persian was a foreign and secondary language, made a significant contribution to Persian
lexicography, epistlography and poetry. Dr. Sayyid Abdullah of Oriental College, Lahore, has written a learned and comprehensive treatise on the subject. In respect of Persian lexicography, mention should be made of Bahar-i-Ajam by Tek Chand Bahar and Miartul Istilah by Anand Ram Mukhlis. Chandra Bhan Brahman and Jaswant Rai Munshi were accomplished poets in Persian and had a diwan to their credit. Bhopat Rai composed a mathnawi in Persian (Momin, 1971).

A large number of Indian poets made outstanding contributions to Persian literature. Mention may be made of Mas’ud Sa’ad Salman, Amir Khusrau, Amir Hasan Dehlavi, Faizi, Urfi, Naziri, Saib, Kaleem, Bedil, Ghalib and Iqbal. The quantum and range of archival material in Persian, especially manuscripts, that have survived the ravages of time in India, are truly amazing. Half of the eight oldest Persian manuscripts dating from the 10th and 11th centuries are found in India. They are older than any Persian manuscript found in Iran. The Cama Institute in Mumbai has the oldest illustrated manuscript of Firdawsi’s Shahnama. The second oldest manuscript of the diwan of Hafiz, written in 1415, is preserved in Hyderabad.

A number of rare Persian manuscripts were first printed in India. Interestingly, Naval Kishore Press in Lucknow and Lala Chiranjilal in Delhi, both Hindu publishers, have rendered a great service to the printing of Persian books in India. The Persian translation of Tabari’s monumental Tarikh was published for the first time by Naval Kishore and later in Tehran. Fih ma Fih, a collection of Mawlana Rum’s letters addressed to one of his disciples, was edited and published for the first time in India by Mawlana Abdul Majid Daryabadi in 1924.

It is interesting to note that quite a few words of Indian origin have found their way into Persian. Mention may be made of the Persian word qand, which was derived
from the Sanskrit word *khand*. The Persian word, in turn, found its way into several European languages. Thus the English word candy and the German word *kandis* have been derived from the Persian word.

### 2.10.2 Persian Lexicography in India

The sources for compiling a reliable Persian dictionary are the lexicographical works written by Indians. In India, as in Turan, Persian has been a subject of study and the medium of education. The value of the Indian dictionaries is fully acknowledged by the Persians themselves. Sururi’s *Majma’ulfurs* is indeed the only dictionary written by a Persian, which a compiler will have to consult; and even this book is half Indian. The number of Irani lexicographists is small. The better dictionaries written before A. D. 1400 are mostly of Turanjan origin. The very first Persian dictionary was written at Soghd. With 1400 the period of the Indian dictionaries commences. Each is an improvement upon the preceding; in each we find the number of words and quotations steadily increasing, till we see them culminating in the *Farhang i Jahangiri*, which brought the old Turani and frani dictionaries into oblivion. The practical vocabulary, entitled *Burhan i Qati’* (Blochmann, 1868).

### 2.10.3 The Most Comprehensive Persian Lexicon in India

Closes the first period is considered as a period the periodical between the periods of gathering, A. D. 1400 to 1652. With Rashidi commences the second epoch of the Indian dictionaries, the period of criticism. The two dictionaries of this period, though not yet used by European compilers, must be the basis of a critical dictionary of the Persian language. Rashidi’s *Farhang-Iet* compilers like obedient murids follow this murshid!-is a critical work on all Indian dictionaries up to the *Farhang i Jahangiri*, whilst the *Siraj Ullughat* by Khan Arzu is the indispensible Vade Mecum for those who use the *Burhan*, The *Siraj* is at the same time the last dictionary of note for the classical
Persian. Towards the end of the past century at last, when sufficient time had elapsed since the death of Kalim, the last poet of the silver age of Persian literature, there appeared the Muctalahat ushshu'sra and the stupendous Bahar i 'Ajam, two works written by Hindoos on the Isti'mal i Mutaakhkharin or usage of the writers after Jami, the last, though not the least, of the classics. The dictionaries of the present age, with the exception of the Ghias ullughat, deserve no notice. The Shamsullughat compiled under the direction of a gentleman whose family is known in Calcutta for their liberality, and the Haft Qulzum of Lucknow are too full of typographical errors, to render their use desirable (Blochmann, 1868).

We may notice that nearly in every province of India one can point out a lexicographist. The following distributions give a picture on that observation. Bengal is represented by the quaint Farhang I Ibrahimi; Bahar by the Kashf; the Dekkhan by the Burhan; the North-West by the Adat, "primum in Indis," the Muayyid and the Siraj; Sirhind by the Madar; the Punjab by the Farhang i Jahangiri and the Muctalahat ushshu'sra; Sind by Rashidi. Again, four dictionaries are dedicated to princes, and one bears Akbar's stamp.

Persian dictionaries on the other hand abound in ancient words, for which there are no proofs, and for which it is now-a-days impossible to find proofs. This absence of proofs has caused varieties of spellings and meanings which are most perplexing. Many words are hopelessly doubtful. To distinguish such words in some way or other, is the first duty of a future compiler. Another difference is that in Persian dictionaries, the language of the prose is not represented. All quotations are verses. Constructions of verbs with different prepositions are rarely, the phrases are never entered, unless they are poetical metaphors. The Native lexicographists having thus neglected the Persian prose. The modern compilers have still a field left for independent research.
2.10.3.1 Farhang e Jahangiri

The title of the dictionary is a misnomer, and ought to be Farhang i Akbari. The compiler is Nawwab 'Aszad uddaulah Mir Jamaluddin Husain i Anju. He is mentioned in the Ain i Akbari, as one of Akbar's courtiers, holding the office of a Noh Sadi or commander of nine hundred,. He appears to have been a favorite of the emperor (Blochmann, 1868).

From the preface of the dictionary it appears that the labours of the compiler extended over thirty years. A. H. 1000, or thirteen years after the commencement of the compilation, when Akbar was at Srinagar, Mir Jamaluddin received the order to complete his dictionary. Not only did Akbar grant sums for the purchase of manuscripts, but he even called learned men from Persia to assist Mir Jamaluddin in the compilation. The historian Badaoni indeed tells us that many a word was investigated in Akbar's majlis i khac, the emperor himself evincing that taste for the study of word" which Muhammadans so eminently possess. Forty-four dictionaries of those specified above, nine others of which neither the title nor the author's name were known, commentaries, works on science, Zand and Pazand books, the whole Persian literature, yielded the words for this work.

The most ancient dictionaries, of which nothing but the title seems now-a-days to exist, were in Mir Jamaluddin's hands. Among them were-the dictionary of Abu Hafaz Soghd, who according to some made the first Persian verse, that of Asadi, Firdausi's teacher; the vocabulary of Hakim Qatran, the quaint poet; Akbar unfortunately died in 1605 A. D., before the dictionary was completed and when at last, three years later in 1608 A.D., it made its appearance, the compiler thought fit to call it in honor of Akbar's successor Farhang e Jahangiri.
The preface of the dictionary is followed by an Introduction containing twelve chapters which are listed below.

1. On the boundaries of the land Fars.
2. On the Persian language.
3. On the letters of the Alphabet, and the rule of Dal and Zal.
4. On the arrangement of the words in the Farhaug i Jahangiri.
5. On the adverb adopted by the compiler.
6. On the interchange of letters.
7. On pronominal affixes.
8. On certain words, as mar, bar, fara, be, dar.
9. On terminations, as fam, hami, mand, lakh, etc.
10. On the use of the letters A, sh, k, n, va, h ... as far as they are used for Inflections.
11. On the spelling of certain words, chiefly compounds.
12. On the aghd anamel.

The dictionary itself contains only single, Persian words and such Persian compounds as have no iszafat, and the Khatimah is divided into five chapters or doors:

1. Figurative expressions.
2. Compounds with or without the redundancies, of which either one or both words are Arabic.
3. Words which contain any of the eight letters viz (sa: ﺹ, zad: ﺺ, ha: ح), (ghaf: ق), (sad: ﺺ), (ein: ﺔ), (za: ﯾ), (ta: ﺕ) and (ط).
4. Zand and Pazand words.
5. Certain rare words, chiefly proper names of towns, persons, &c. Among the words, a few terms are found of the dialect of Shiraz, to which town the compiler appears to have belonged (Blochmann, 1868).

### 2.10.3.2 Borhan e Ghate

This Dictionary is well known. The first edition was printed in 1818 at Calcutta by Captain Roebuck, and the third and last, with a few corrections, in 1834 by Hakim 'Abdul Majid. The name of the compiler is Muhammad Husain of Tabriz and Burhan is his takhalluc, He completed the dictionary in A. D. 1652, or A. H. 1063, as indicated by the tarikh \textit{Nafe Borhane Ghate}, and dedicated it to a contemporary of Shahjahan, Sultan 'Abdullah Qutbshah of the Dekkhan, where for a time he must have lived. Burhan's object was to compile a practical vocabulary without giving examples. In adopting the order of words as followed in our dictionaries, he arranged them more conveniently than any preceding lexicographer had done. (sample, 5) Nearly all subsequent dictionaries follow Burhan's arrangement. Burhan is a careful compiler; only a few words that are given in the Farhang, appear to have been omitted. (Blochmann, 1868).

The printed editions of Capt. Roebuck and Hakim' Abdul Majid are accompanied by appendices of words not given in the Burhan, These appendices which are known under the name of Molhaghat e borhan ,i Burhan, are not written by Burhan, nor are they found in numerous MSS. of the dictionary; but were made under the direction of Capt. Roebuck from the works of several lexicographers of the 18th and even of the beginning of the 19th century. They are untrustworthy and full of the most glaring blunders. Vullers has embodied them; but we trust that no lexicographer after him will use them. Whatever good they contain, will be found in the original dictionaries written after Burhan, Burhan's dictionary has produced in India a good deal
of critical discussion. During this decade, a book was printed in Delhi, written by Asadullah Khan, known also under the name of Mirza Naushah and, as a poet, under the takhalluc of Ghaleb. The author is the best Persian writer which India now a days possesses. We have from his pen a collection of letters, called panj ahang a Diwan, a historical book on Indian kings, entitled mehr nimrooz, and also a book written in pre-classical Persian on the Indian mutiny of 1857, entitled dastanbo.

The name of the book- in which he attacks Burhan, has the title as Ghateborhan. It has seriously damaged his reputation as a critical scholar. Throughout the book he is abusive, and even obscene. Hence most of Ghalib's attacks are easily refuted by turning up the Farhang or Surtiri. But his book is also full of wilful misstatements, whilst some of his etymologies are even from a native point of view unscholarly like. From a perusal of this reply, it appears that of the four hundred words which Ghalib attacked, about thirty are Burhan's own blunders, and sixty others must be called doubtful words, because they are given in the Farhang and Surriri without proof. Several other mistakes have been discovered by the author of the Siraj but on the whole, the number of mistakes made by Burhan himself is so small, as not to endanger his reputation of a careful compiler. A few were also corrected by Capt. Roebuck in the foot notes of his printed edition (Blochmann, 1868).

2.10.3.3 Bahar e Ajam

Bahar i 'Ajam is one of the grandest dictionaries ever written by one man. The work is so well known that it is unnecessary to say more about it. The name of the author is Monshi tik chand some call him tick chant Munshi is a title given in Upper India to Hindoos acquainted with Persian- and Arabic. There exist seven editions of it revised by the author. The first appeared in 1752; the Delhi lithographed edition of
1853 is taken from the author's last which he completed in 1782, or thirty years after the first edition.

The chief object of the Bahari 'Ajam is to explain the Isti'mdl i mutaakhkhartn. Most examples are therefore taken from the poets after the time of Jami, although quotations and phrases from the older poets are by no means inconsiderable. Raje or ray tik chand was by caste a Khetri. His poetical name is Bahar. He lived at Delhi. From a note at the end of the second volume of the Delhi edition, it appears that he was nearly deprived by one of his pupils of his well merited fame as the author of the seventh revised edition. Tek Chand must have died shortly after 1782, because he was prevented by old age from commencing the eighth revised edition.

In the preface the author states that for the first edition he only used the Tanbihulghafilin by Siraj ushshu'ara (Sirajuddin. the author of the Sirajullughat), and a small treatise written by Mir Muhammad Afzal, poetically styled Sabit. For the following editions Tek Chand used the Mutalahat ushshu'ara, the Risalah i Mukhlisi i Kashi, and another book whose title and author were unknown. The first of these three works Tek Chand embodied almost entirely.

The Jawahir ulhuruf contains two chapters:

1. Expressing the single words...
2. Expressing simple words …

The former part is the completest treatise on the interchange of letters. It forms an excellent basis for the etymological part of a Persian grammar, and is an indispensable Vade mecum for the compiler, as it is of the greatest assistance to him in the numerous spellings of certain words. The second chapter treats the syntax of the Persian prepositions and particles with numerous examples. (sample,3)
2.11 Review of the Previous Works

2.11.1 Part One: Non-Iranian Works

Chan (2012) reports on the results of an empirical study which investigated the use of a monolingual dictionary by advanced Cantonese ESL learners for determining the correct use of a word. Thirty-one students participated in a grammaticality judgment task using a dictionary with and without explicit grammatical information. Two types of self-reporting protocols and a post-task focus-group interview were employed to tap into the participants’ thinking processes. She found that a monolingual dictionary was useful in helping learners determine the correct use of a word, yet it was examples rather than explicit grammatical information which helped them most. Various problems were encountered in dictionary consultation, including learners’ difficulty in identifying the transitivity of verbs and the count ability of nouns. Inappropriate generalizations were occasionally made from learners’ misreading of examples. It is suggested that ESL professionals incorporate grammar training into dictionary training programs, and that lexicographers’ design and compilation of ESL dictionaries should be informed by empirical dictionary research.

Kwary (2012) explores that increase in the quantity of online dictionaries does not seem to go together with an increase in the quality of these dictionaries. This may be due to a lack of focus on dictionary users and the insufficient incorporation of the latest technological features. He tries to formulate some proposals for future online dictionaries in his paper. He started discussion from an explanation of the user profile, user situation, and user needs. He then discusses the basis to review the lexicographical solutions offered by current online dictionaries, and to create proposals for future dictionaries. His discussion includes considerations for using adaptive hypermedia and user-oriented data to create a dictionary which can better meet the various needs of the
dictionary users. His article concentrates on an English Dictionary of Finance for Indonesian students, but the principles proposed may also be applicable to other types of online dictionaries.

Russell (2012) reports that feminist dictionaries published between 1970 and 2006 have received little attention in the world of lexicography. Feminist dictionaries are shown to propose a form of lexicography that (1) foregrounds the material and personal circumstances of dictionary production, (2) fosters active, opinionated, and exploratory dictionary consumption, and (3) highlights meaning as contextual, contested, personal, and perspective. This article suggests that remembering and reviving the lexicographical priorities of feminist dictionaries is valuable for telling the history and imagining the future of the dictionary genre.

Cronin and Conchubhair (2011) explore the relationship between the game of cricket and the Irish language in Ireland. In their analysis, dictionaries are invoked as indices of formations of cultural purity and political power, documents of defiance, tools of codification, assertions of confidence, and representations of linguistic identity. By examining the treatment of the term “cricket” in Irish language dictionaries from the eighteenth-century to the present day, we find an index of cultural values, responding and adapting to ongoing changing cultural power and capital. This demonstrates how the game, and its translated presence in the lexicography of the native language, functions as a form of cultural hybridist in the nineteenth-century, yet is cleansed in the twentieth as part of the process of Irish cultural purity (as it fights for an established postcolonial nationhood).

The article offers a new way of understanding social and linguistic conventions, in the context of the colonial/postcolonial, and how such conventions function in the
field of sport. Given the dominance (with the exception of India) of English as the lingua franca of sport’s colonial and lucid diffusion, the article’s ability to access and interrogate the processes of inclusion/exclusion in the linguistic and sporting Irish setting and marks it out as an original and innovative way of understanding how cultural transfers occurred and were later annulled.

Ogilvie (2011) reports that there is greater awareness now than ever before that language are dying at an alarming rate. Hence, there is urgency among linguists and indigenous communities to document, describe, archive, and revitalize endangered languages. Dictionaries play an important role in this process and, within the last decade, field linguists have developed innovative lexicographic methodologies, policies, and practices from which all lexicographers can learn. These dictionaries are written for a varied audience; they use technology in new ways, draw on oral as well as written sources, incorporate pedagogic materials, and involve indigenous community members throughout their compilation. Dictionaries of endangered languages are no longer merely static records that preserve language but are now being developed as dynamic, multi-functional tools for language maintenance and revitalization.

Seargeant (2011) in a research paper or presupposition about language upon which lexicography is built, examines the linguistic ideologies to which dictionary projects in turn contribute. The contention is that dictionaries produce and reproduce specific and historically contingent beliefs about language, which are then coped into wider social and political practice such as the reflection of national linguistic difference by national dictionary projects. To explore this contention, the article surveys the claims made by lexicographic projects and analyses the ways in which this ‘lexicographic ideology’ is invoked in a selection of political initiatives and philosophical works.
Ings (2010) discusses words from the argot of the New Zealand male prostitute in relation to environments in which he works. The language form has absorbed into itself elements of prison slang, pig Latin, Polari, gay slang, Maori and localised dialect. The article is divided into six sections, each concerned with a different form of male prostitution. While the public toilets, wharves, prisons, streets, agencies and private brothels are not mutually exclusive environments, a consideration of their nature is helpful in understanding words and the contexts in which they operate.

Poon (2010) explores the strategies that should be employed when processing legal terminology in a bilingual legal dictionary. The viability of a bilingual law system depends on the consistent use of standardized Chinese terms in courts and their ease of use by general users. Semantic equivalence of a term, however, is not achieved through a literal translation of an English term, and how a term is defined in both statute law and case law must also be taken into consideration. This paper argues that instead of targeting only legal practitioners, the bilingual system of Hong Kong should also aim at educating the public in the general concepts of law and in the use of Chinese legal terminology.

Verlinde, Leroyer and Binon (2010) briefly outline the evolution of lexicographic reference works from stand-alone to multifunctional lexicographic tools, and they describe the theoretical principles and innovative functionalities of a new task and problem-oriented lexical database, the Base Lexical du François, in line with Tarp in (2006), a tool that should be truly regarded as a 'lexica'.

Fuertes-Olivera (2009) explores that the function theory of lexicography argues that specialized lexicographical products must help learners to transform their information needs into aspects of knowledge of the discipline, and of its discursive
properties. Lexicographers, then, must combine information and data access with the user’s need for information and knowledge. To achieve this aim the need to devise theories providing solutions to different lexicographical problems have to be developed. Recently been proposed by Tarp (2008), who claims that there are four categories which are central to a general theory of learner’s lexicography: users, user situation, user needs, and dictionary assistance. On this paper he focuses on dictionary assistance and addresses several lexicographical issues connected with polysemy: the selection of the lemmas of some printed English-Spanish/ Spanish-English business dictionaries, their entry structures, sense differentiation, and sense ordering. The analysis leads the author to discuss some proposals with the aim of making business dictionaries more pedagogically oriented, and to include a set of principles pedagogically-oriented business dictionaries must have. They are illustrated in a model entry which has been compiled by rearranging one of the entries studied according to the proposals and principles previously discussed.

Atkins, Rundell and Sato (2003) demonstrate the way in which the Frame Net database has the potential to support, accelerate and enrich traditional lexicography. They did this by discussing several of the most difficult and time-consuming tasks of the corpus lexicographer (sense differentiation, establishing the combinatory properties of the keyword, selecting from the mass of detail the facts appropriate to the entry being written) in the light of case studies drawn from corpus data.

Schryver (2003) explores that the arrival of the modern computer set in motion a series of lexicographers’ dreams without equal in the history of dictionary making. Achieving the wildest of those electronic-dictionary vistas has the potential to result in reference works beyond all recognition. This potential, alas, remains to be realised. The aim of his article is to analyze the major achievements and future prospects when it
comes to ‘human-oriented electronic dictionaries’ (for short EDs). In the first two sections the scene is set by revisiting this article’s title. In the third section various ED typologies are presented, including a new three-step access dictionary typology. The latter is used as a frame in section four, where forty pros and cons of paper versus electronic products are reviewed. This study clearly shows that ED dreams are indeed not without a solid basis. The next two sections then deal with the ED dreams proper, first in the form of a brief diachronic perspective singling out main dreams and main actors (section five), then in a much more detailed fashion sorting and scrutinizing one hundred and twenty dreams found throughout the literature (section six). Section seven concludes with some observations on the way ahead.

Temmerman (2003) intends to convince the reader of the qualities of the analytical dictionary of retailing terminological, the content of which is based on an intelligent analysis of the needs of potential users: translators. He relates his analysis to the discussion of the similarly remarkable *Dictionnaire d'apprentissage du français des affaires* (DAFA) (2000) by Jean Binon, Serge Verlinde, Jan Van Dijck and Ann Berets, a learner’s dictionary aimed at those who want to learn business French. He reports in the summary that they can say that the dictionaries that discussed to open up perspectives for future lexicography and terminology projects. Both teams proved how a careful analysis of potential dictionary users enhances the quality of the work. They also benefited from the use of corpora (at least partly) in electronic format. Bison et al. brought out in electronic format in order to offer the user an access to more information. He found out that Dinette & Restore are preparing an electronic version of their work as well (Dancette & L’Homme, 2001). Dictionaries like these could be made more ‘performative’ and more user-friendly still, in making them semi-intelligent, i.e.
supported by knowledge bases like anthologist. One of the challenges remains how to implement knowledge bases in combination with terminological databases.

2.11.2 Part Two: Iranian Works

Mansoory, Shamsfard & Rouhizadeh (2012) discusses some linguistic issues in developing the Persian WorldNet of verbs with a special focus on Persian compound verbs. They begin with describing different types of compounding mechanisms in verbs and the grammatical structure and semantic properties of each type. Then they continue with discussing the lexical and conceptual relations between compound verbs in the Persian WorldNet and, finally, they talk about the way that properties are used in the semi-automatic extraction of compound verbs and their relations from dictionaries and text corpora.

Delavari (2011) conducted a research to discover the existing condition of the specialized lexicons on political science, international relations to better understand the status of these lexicons, to identify their diversity, and the potential damages, and also to spot the existing problems. In this studied, he aimed to study the specialized lexicons including descriptive, bilingual, political/press, and also lexicons, on political science and international relations. Findings of this study indicate that the most crucial damages in political science and international lexicography are:

- Political orientations in lexicography,
- Explaining and defining the political terms in a way to serve political wings and propaganda,
- Lack of attention in choosing the proper meaning,
- Not entering the political science and international relations scholars in Lexicography,
• Lacking knowledge on the cultural aspects of political science in both the Original and target language,

• Lack of knowledge on modern techniques and methods of lexicography,

• Lack of the specialized team to do the publications in political science field, lack of team work in lexicography, and

• Failure in considering the international standards along with localization.

He also presented strategies to reinforce the lexicography in political science and international relations.

Manssori (2010) in a research studied the compound verbs in the propositions and how they are introduced in Persian lexicons. In the analysis on a kind of compound verb in Persian language prepositions, he showed that the combination of prepositional group and verb, makes a compound verbs that regarding their meaning, they should be considered as lexeme. He stated that in lexicography it is necessary to treat these combinations as lexeme and their constructional components have to be seen as components of a lexeme. Therefore, entering these combinations in the entries for prepositions doesn’t seem defendable. Moreover, based on a short study on inserting the prepositional compound verbs in a number of Persian lexicons have revealed that these lexicons do not follow the same regulations and methods based on scientific explanations.

Noorian, Aghahosseini and Salemian (2010) in a glance at the general and specialized terms in the book (Kefayata Ta’lim Fi Sana’ata Tanjeem) report that a number of words in this book are not registered in Persian lexicons. They also assert that in Persian lexicons such as Dehkhoda there is no evidence for some rare terms whereas we can use the book (Kefayatot Talim) for this purpose
because it comprises many of these Persian scientific terms. By elicitation and classification of the terms in this book and other old scientific books, we can compile a lexicon for scientific terms which can pave the way for word formation and word substitution for scientific terms.

Bakhtiyari (2009) in a research study first studied the relationship between etymology and lexicography and found out that although these two are separate issues, they can cooperate with each other in lexicography. Then he emphasized the necessity of registering the etymology in lexicography.

In his article, Bakhtiyari (2009) presented a list of lexicons in which etymology could be embedded and provided explanations related to them. These lexicons are *Etymology lexicon*, *Loan words lexicon* and *Historical lexicon*. He underlined the need of etymology registration in specialized and general monolingual lexicons as a necessity which is in close relationship with the construction of lexicon and can determine the correct orientation of information for lexicon development. This fact especially occurs in entering homo-phonemic (واه) and homo-graphic (هم نویسه) terms. On the other hand, registering the etymology information in monolingual general lexicons can result in promoting the knowledge of users and prevent the clumsily etymology interpretations.

Khatibi (2009) in his article ‘*Shahnameh and Persian lexicography*’ states that developing a comprehensive Persian lexicography based on the appending verses in Shahnameh will incorrectly lead to numerous pitfalls in results. For example, all the six verses used as meaning evidence for the term ‘Asabi’ meaning (damage) in Persian lexicons derived from Shahnameh are either appending or are not found in none of the versions of Shahnameh. He believes for developing a comprehensive Persian
lexicography, we should try to elicit the meaning of the words based on the criticizing and research revision of Shahnameh by Jalal Khaleghi and combination of the original verses. In this way, we will provide more exact picture of words and their applications. He also adds that the transferred verses from Shahnameh in old lexicons such as Faras Lexicon which are not found in any old versions of Shahnameh, should be kept and not forgotten.

Davari and Davari (2009) in their research, study the necessity of an overview on etymology in lexicography. They state that despite various studies on language family’s especially Indo-European language such as Persian language by etymologists and historical linguists, few references are seen to these works particularly in etymology. Among these, the only work which referred to more than 100 works on etymology in Indo-European and Iranian languages is *Etymology Lexicon* by Dr. Mohammad Hassandoost which was the only published once. In their research, they mentioned the three shortcomings in the lexicography regarding etymology:

1. The inferring terms introduced in these lexicons,
2. Terms with Persian root which are considered as inferring, and
3. Terms that are correctly considered as inferring but they have faced pitfalls in distinguishing the source language and etymology.

They also asserted that these shortcomings are in the etymology function of these lexicons.

In another study Rezaei (2009) introduced and criticized the principles of lexicography based on Naseri Votes Association. He reported that Naseri Votes Association is one of the lexicons that is compiled in 20th century. To study this work, he described the structure of this lexicon in introduction, entries, pronunciation,
etymology, grammar, meanings, evidence, and resource sections and in a separate section entitled ‘structure deficiencies of Naseri Votes Association’ he discussed the deficiencies of this lexicon. Rezaei looked at the whole lexicon to study the advantages and disadvantages it, but altogether, he chose 300 entries from ( ,b,s.sh). The results of the study indicated that the author surveyed only 24 out of 32 Persian letters and other pitfalls are also seen such as: not providing the whole meaning of some entries, incorrect etymology, using mythological terms, and so forth make its correction necessary.

Selseleh Sabzi (2009) devoted his work to deal with definitions in Amsale Sokhan Lexicon. He reports that in both general and specialized lexicons different methods are used for providing definitions. The method of giving definition depends on the type of word, goal, addressee, and voluminosity. In defining terms and expressions usually functional and applied definitions are used and even at times the examples themselves served as definitions.

Sadeghi (2009) studied the methods of lexicography. He found out that Dehkhoda Lexicon can be undoubtedly considered as the most detailed and comprehensive Persian lexicon. The first sketch of this lexicon has been taken from the late Ali Akbar Dehkhoda. He could publish part of his lexicon in 17 volumes in 4264 pages during 1946-1956 when he was alive. After his death, his old colleagues some other scholars under the supervision of late Dr. Mohammad Moein and later 1967-1981 under the supervision of late Dr. Jafar Shahidi started to organize Dehkhoda’s notes. In his article, Sadeghi continues to discuss the head entries and the combinations of lexicon’s entries, shortcoming in definitions, separation in the definitions regarding head entries and sub-entries, poetic evidences applied in the lexicon, referencing methods and citations, dialectic words and symbols in the body of Dehkhoda’s lexicon.
Najafi (2009) studied colloquial words existing in the comprehensive Persian lexicography. In his article, he mentioned most of the common problems in lexicography. He added that any entry prepared for a lexicon has seven parts:

1. Entry,
2. Pronunciation,
3. Grammatical identity,
4. Origin or root,
5. Meaning differentiation and classification,
6. Definition, and
7. Evidence or example.

Najafi (2009) believes that the last three components are the most significant and complicated part of a lexicon. He continues to list the existing problems in lexicography and affirms that he is going to study each of these problems in Persian lexicography. Problems regarding: pronunciation, colloquial Persia, grammatical identity, etc after tackling each problem, he provided suggestions as solutions.

Panahi (2007) in a research study presented a scheme for a lexicon for antonyms. To this end, as the first step, he presented the concept of antonym –as expressed in Persian grammar and the works by Iranian and non-Iranian linguists and then based on the theories by Jackson and Amula and Morfi, he commends some new viewpoints on the concept of antonym. Later he continues to provide some notes on lexicography for antonyms in Iranian and western works. The author finally emphasizes on the necessity for providing a lexicon on antonyms with detailed information which should be considered.
In an article entitled ‘the importance and function of example in monolingual lexicons’ Jafari (2007) listed the functions of example and studied the importance and necessity of example in the structure of monolingual general lexicons. He states that ‘example’ is the usage of a word in context which clarifies the meaning when accompanied by definition. In his article, he first presented a definition for ‘example’ and then studied the roles and functions of example and emphasized that they are necessary to be provided in monolingual lexicons. The author provided a definition and description of an ideal example in lexicography by attributing evidences and documents from the existing English, French, and Persian lexicons.

Hassani (2007) studied the ‘Elaam Persian Lexicon’ and named it as ‘a new work with new features’. He asserted that this lexicon is an encyclopedia comprised of particular encyclopedic information about Elaam (proper nouns). His findings revealed that this lexicon contains 14 thousands entries and the criteria for choosing these entries were features as follows:

1. Belonging to the contemporary era or near past,
2. Belonging to Iran, in its historical concept,
3. Belonging to the adjacent terrains,
4. Belonging to the cultural or mental creativity, and
5. Popularity in Iran (especially in written works).

Khatibi (2007) presented an introduction on the sketch of a comprehensive Persian language lexicon and a review of the activities of the team of authors and then discussed about the body of the most important significant Persian to Persian lexicons from the oldest to the latest. At the end of his article he introduced the most important element of a comprehensive Persian language lexicon i.e. the computerized body of lexical units in Persian texts and explained its outstanding features.
Sharifi and Fakhaamzadeh (2007) studied the nature of selecting entries in monolingual general lexicon. They believed that ‘word’ is the first constructing element of a lexicon. They added that a word whether simple or compound can be treated as a separate entry. Therefore, the most important constructing element of any lexicon that all other elements are applied to explain and clarify is the ‘entry’. Later he presented a brief definition of monolingual lexicons considered lexicon users and the range of lexicon as the key criteria in selecting entries. They also presented a detailed explanation for the type of entries applied in lexicons.

Sabur (2007) investigated the lexicon and lexicography and the influence of contemporary lexicons in literature and sciences. In his study, he discussed the history of lexicography, works, written alphabetically on the culture issues, science and techniques, biographies and works of great figures, the nature of lexicons and encyclopedias, the names of valid lexicons and their features from the 12th century to the present, and especially the impact of contemporary lexicons on literature and science.

Tabibzadeh (2007) investigated the types of complement clauses and their appearance in lexicons. Following the dependent grammar, he considered all the verb complements like complement clauses as lexical categories. He investigated the complement clauses based on personal and non-personal verbs and also suggested methods of displaying their complement clauses in verb formation.

Abbasi (2007) studied the generativity of words in selecting entries in monolingual general lexicons in five sections. He explained about the generative of words, frequency and generative relationship, generative and meaning clearance, and types of generativity. His findings indicate that comparing the 8 volume and 2 volume
Sokhan lexicons, the decrease in the number of entries and making the original 8 volume into 2 volume lexicon hasn’t been done correctly. The results also reveal that most of the head entries are selected from the non-mono-frequent words existing in the linguistic body of the original source.

Ghatreh (2007) investigated the role of linguistics in modern lexicography. In her investigation she expressed that today in compiling lexicons, achievements from different fields such as semantics, grammar, phonetics, morphology, corpus linguistics, cyber-linguistics, historical and comparative linguistics, sociolinguistics are used. Because of this, whether to see lexicography as a branch of linguistics or as an independent field, there is no difference in essence, since in all the compiling steps the role of linguistics is so vital that it can’t be ignored. Referring to the lexicons today and investigation on its different sections reflect the linguistics’ achievements. However, in some lexicons the traditional viewpoint is dominant. Whereas, to compile a valid lexicon, the lexicographer has needs to enjoy the specialized knowledge, basic linguistics concepts, and the latest achievements in different fields. By the same token, the outcome will be both theoretically and technically in accordance in the modern lexicography and will meet the users’ requirements.

Hashemi Minabad (2007) surveyed the classification of lexicons in bilingual lexicons. In this research on typology of lexicons, he used linguists, lexicographers and lexicologists’ view but because of the significance and extensive application and the special condition of bilingual lexicons in Iran, he emphasized on the typology of these lexicons from the viewpoint of Ali Mohammad Ghasemi, (professor at Riyadh University and member of scientific and Islamic culture education). He stated that in typology the suggestions of Alghasemi Association seven bilingual interactions to distinguish the lexicons. These suggestions are as follows:
1. A lexicon for the source language speakers versus a lexicon for the speakers’ of target language.

2. The literature lexicons versus colloquial lexicons.

3. Lexicon for language production versus lexicon for language understanding.


5. Lexical dictionaries versus encyclopedic dictionaries.

6. General lexicon versus specialized lexicon.

7. Historical lexicon versus descriptive lexicon

In another research entitled ‘lexicography by students’ Hashemi Minabad (2007) asserted that the best way to understand and comprehend the lexicon and its nature is that the students themselves compile their own special lexicon. In this program, the students selectively compile a lexicon on their own interest in which they gather specific words and combination through which they can produce an innovative and novel lexicon. He added that this design can be used for different grades of schools. The lower grade students can do this design simpler and only contain the words and definitions they agreed on. The author counted the advantages of this design as:

- The student get interested in the words and language
- Get the picture of the lexicon and its role and nature
- Get familiar with the forms of entries and their components
- Get familiar with the information about words
- Understand that language is a communication tool in the community and people solve their problems with the help of language
- They become enthusiastic to analyze the language as they use
- Learan that language helps create the collective and cultural identity
• Find out that people use different language in different situations
• Discover that language reflects the values of its speakers
• The students understand that language is constantly changing.

He continues to give a thorough explanation on how to execute this design. He further investigated the use of dictionaries in language learning and doing Persian book activities. In his study, Hashemi Minabad first provides an explanation for the term *Lexicon* and then studies the language and also parts and levels of language. He relates the language level with exercises and information in the Persian books and also exposed to discussion cases from the books that can be explained by lexicons and presented exercises that can be appropriate for this purpose. He states that since the value and usefulness of dictionaries are undoubtedly clear to anyone in language learning, and doing exercises in Persian school books and helping the students with lexical, conceptual, phonetic, and spelling, a systematic planning is needed to pave the way for using dictionaries in school classes. Suitable student dictionaries are needed to answer students, teachers and also parents’ needs.

Radfar and Rezaei (2006) studied the principles of lexicography in Anand Raj Lexicon. They claimed that their purpose to do this investigation was to analyze the structure of Anand Raj Lexicon based on lexicography principles. To this end, while describing the structure of this lexicon related to entries, pronunciation, concepts, etymology, grammar, evident words, references and they also accounted for deficiencies in these sections. For their study they selected 400 entries from different letters of ‘B, S, K, and M’ for their statistical analysis. Their findings indicate that in this lexicon the words are arranged alphabetically and every letter is given a separate section. 57 per cent of the words are displayed with their pronunciation guides, but the
authors didn’t use the same method for all parts. In 94 per cent, the etymology of the words are provided in which 84 per cent of the words are Arabic and Persian and the rest of the words are Turkish, Seryani, Saghdi, Dasatiri, Zand, Pazand and Greek. Moreover, in this lexicon the author explained a little about the grammar and only in 10 per cent of the entries the author provided explanation for the entries grammatical points. 57 per cent of the words carry single meaning and the rest mostly have more than one meaning. In 17 per cent of the entries, evident is provided for meaning clarification. The references are introduced in the introduction with their abbreviations.

On the other hand, there are some deficiencies in this lexicon such as:

- incorrect pronunciation guides in some entries,
- incorrect entries,
- entry repetition,
- incorrect etymology,
- not mentioning the root of some words specially Hazvaresh words,
- incorrect analysis of word structure,
- mistake in determining the word formation,
- imperfect and vague meanings, no coordination between meaning and evidence,
- providing evidence for a synonym instead of the entry itself, and
- no coordination between entry and evidence.

Ghayyem (2006) studied the development of Arabic-Persian lexicography and stated that bilingual lexicography as a subcategory of linguistics, like other sciences, is experiencing changes and development and everyday it experiences a breakthrough. These changes are mostly in the structure and the arrangement of entries, to the purpose of making it easier and more user friendly. Despite the antiquity of Arabic
lexicography, it experienced a decline till last century. From the late 19\textsuperscript{th}, lexicography has experienced prosperity and got refreshed. In the second half of the 20\textsuperscript{th} century the alphabetical lexicons with pronunciation started to be welcomed increasingly and in spite of oppositions and resistance by traditional lexicographers, at present it is the most accepted method by Arab lexicographers. He also discussed the structure of Arabic-Persian lexicography and believed that translation is a great pitfall in Arabic-Persian lexicography.

Bakhtiyari (2005) studied the etymology data in Persian to Persian lexicons. The results of his study reveals that the lexicographers after Daei Assalam and Moein either ignored to talk on this important issue or if they discussed it is to the repetition of what Daei Assalam and Moein mentioned before such as So khan Lexicon. They didn’t discuss it because either they were afraid of large number of non-Persian roots or they didn’t have enough knowledge about it. Even some authors didn’t get benefit from the findings of the previous authors and some even totally avoided talking about it. As a matter of fact, although Persian lexicography used the scientific and linguistic methods in the long past (middle Persian up to now), it has not experienced any advancement in the issue of etymology.

Khazaeifar (2005) studied the compound verbs from the view of lexicography. He discussed the guidance provided by Dr. Dabir Moghaddam for lexicographers. His findings indicate that unlike Dr. Dabir Moghaddam’s view who believes that some compound verbs should not be included in lexicons, if a verb is a compound, it is a verb anyway and then it should be treated as a verb and there is no reason not to include it in lexicons. Furthermore, these verbs that are considered as compound verbs by Dr. Dabir Moghaddam like \textit{to eat} (ماهی (ماهی خوردن (وخت کل بودن به خود) to be happy \textit{(to be happy) to buy fish \textit{(to buy fish) خریدن}) are learned as a unit by the learners and they are not considered as a verb with two
components. Grammarians and linguists also didn’t look at these verbs as unit and the word to be in to be happy (خلاصد بودن) was not considered as part of a verb. He states that to buy fish and to eat fish are not compound verbs because they bear different meanings in our mind. In these verbs the words buy, fish, and eat carry different meanings and can stand alone, therefore, they are different. To sum up, we should say that whatever the compound verbs are, they should not include the combination of two different grammatical components such as to buy fish, to eat fish, and to be happy.

Hodaei (2005) conducted a research entitled “an irrecoverable damage to Persian Lexicography: compact disk for Amir Kabir (Moein) Comprehensive Lexicon”. In this study he asserted that creating CDs for Persian lexicons have been already started such as Dehkhoda Lexicon and Moein Lexicon under the new name of Amir Kabir (Moein) Comprehensive Lexicon by Amir Kabir Publications. The results of this study mention that this lexicon is unorganized because it is suffering from disorderliness in both database structure and content. This disorder in database structure brought negative effects on its applications and on the other hand, there are lots of mistakes in concepts, spelling and the omission of pronunciation changed this great work into an unreliable source. He believes that based on the results of this research eliminating the present CD and compiling a new one seems inevitable.

Tarobordi (1992) in his master's thesis on “language learners’ lexicon and its theoretical consideration” states that as we know a lexicon is a reference book that usually selectively chooses a part of terminology and provides information about its spelling, pronunciation, grammar, meaning, context, semantics, etymology,… in each entry. Lexicons play an important and irrefutable role in language learning. Language learners can use the bilingual dictionaries at the beginning levels but after a while they are suggested to use the monolingual dictionaries in higher level of language learning.
Language learners’ dictionaries are because of the characteristics of their users are different to a great deal from general lexicon in determining the entries and related information. These lexicons are moreover different in the method of providing the meaning of entries and grammatical information from general lexicons. Students’ lexicons need to include cultural information about the target language community whereas; general lexicons do not have to include this cultural information. On the other hand, students’ dictionaries use examples and illustrations abundantly to make the meaning of the entries more clear and understood while this never seen in general lexicons.

Hamidian (1998) in a study investigated the principles and regulations of Basmati lexicons and also studies the Hafiz Basmati lexicons. He discusses that a Basmati lexicon is a comprehensive and exact lexicon that includes all the words in a certain poem or verse such as simple and compound words, lexical and grammatical elements, along with their usages based on their appearance in the text. In this study, in addition to discussing the principles and methods of compiling Basmati lexicons, the author provides common norms and standards of similar lexicons in Europe and also mentions their most advanced methods which is as a result of a prolonged experience in this field. He also investigates the two existing Basmati lexicons about Hafiz and makes a comparison between their principles and regulations.

Pirooz (1992) in a research started to gather and present principles of vocabulary listing for the purpose of lexicography. To this end, he presented principles based on which lexicon are established by reviewing the existing Persian and English references and also English prospered dictionaries and because of the need of Persian language community. He presented a long and detailed explanation on ‘general and educational lexicons’ in a form of bilingual dictionaries. In a similar track, two groups
of leading bilingual lexicons from the first publication to now that were mostly used by people were analyzed and some deficiencies were also pointed out. At the end he presented a small sample of bilingual lexicon in which the entries were taken as samples from the fourth edition of Oxford dictionary as a practice.

Moshiri (1990) studied the structure of specialized lexicons and states that in compiling the specialized and technical dictionaries two kinds of structure are used. One is the major and the other is minor structure. In his work the author first presented a definition for specialized lexicons and then provided a detailed explanation on macro and micro structure of lexicons and also about the characteristics of each structure.

Mir Hadi (1988) reports that because of the need of a comprehensive standard lexicon for researchers and in general the agricultural science, translators, and other users of English sources after copious survey and considering the pitfalls of the present works, and using the experiences by academic publications, a new design has been introduced. This new design with the help of potential facilities and experiences of agricultural and scientific documents and data central office, proficiency of faculty members in research institutes related to agricultural researches and natural resources organization, establishment of a high rank council for agricultural lexicon and special groups in different fields of agriculture within 6 years after conducting the first steps of ‘collecting resources’, ‘preparing terms’, ‘Supreme Council and Community Groups’, word selection and standardizing the terms’ preparation for publish’ started to create a book entitled “Agricultural Lexicon” an English to Persian and Persian to English Dictionary by agricultural and scientific documents and data central office will be administered. To attain the above mentioned goals, based on the time table in 1992 and recognizing and collecting the books with glossaries, registering and coding the related words, the related agricultural terms will be extracted and saved in the software.
Samei (1987) investigated the principles and methods of lexicography in a master’s thesis. Using the modern knowledge of linguistics, he tried to explain the lexicography principles. The author first presented a definition for lexicon and introduced types of lexicons and surveyed the exiting Persian, Arabic, English, and French lexicons and the different sections of this lexicon are:

- **entry** which is the term that is going to be explained
- **pronunciation** which shows how the word should be pronounced
- **etymology** shows the historical development of the word from one form to another form
- **grammatical** category which is displayed through an abbreviation and determines the type of the word based on grammar.

The lexicographer’s job can be multi fold and can be considered finished by only after the presentation of different meanings of a word with a definition for each meaning. Therefore, a lexicographer has to work extensively and collect necessary information from various sources, so that the work satisfy / fulfill the needs of the user.