Abstract

This paper attempts to examine the intrinsic relationship between lexicology as a branch of linguistic study, lexicography or dictionary-making and translation which is, par excellence, an exercise involving macro and micro-linguistic features at an inter-lingual level. Through such an account, this paper aims to show, more particularly, the role of Lexicology as the science of lexis, i.e., the study of the various morphological and semantic processes by means of which the lexicon of a language is structured, in lexicography and the significant role they both play in translation theory and practice. Therefore, lexicology and lexicography are considered here at the bilingual level resulting in contrastive lexicology and bilingual lexicography respectively.

As specified in the abstract, the present account focuses on the interdependence of contrastive lexicology, bilingual lexicography and translation which all represent inter-linguistic enterprises. Contrastive lexicology compares and contrasts the lexicons of the source language and the target language by identifying the various processes of lexical formation in the two languages for the purpose of shedding light on the dominant tendencies in each language; bilingual lexicography compiles in terms of meaning and use the lexicons of the two languages in a systematic way; and finally, translation which is, by its very nature, a hybrid linguistic activity. It should be specified, however, that lexicology and lexicography at the monolingual or intralingual level will be referred to whenever necessary as they constitute, at least as far as certain languages are concerned, the standard models which the studies at the bilingual and multilingual levels are expected to reach. In what follows, these intimately linked branches of general and applied linguistics will be discussed and the exploitation of the results of each one by the other will be highlighted.

I. Contrastive Lexicology

As part of contrastive linguistics, contrastive lexicology studies the morphological and semantic aspects of the lexical units or lexemes at the cross-language level. It compares and contrasts the various lexicalization processes, i.e., the form and meaning realizations at the word level without neglecting the syntactic environment which specifies the distribution of such realizations. The realizations at the level of the form constitute the object of study of what is referred to as lexical morphology and the realizations at the level of meaning are the object of concern of what is referred to as lexical semantics. These complementary levels of the linguistic approach to the study of lexical systems are defined by Lehmann and Martin-Berthet (2000, XIII) as follows:

- La sémantique lexicale étudie l’organisation sémantique du lexique: elle analyse le sens des mots et les relations de sens qu’ils entretiennent entre eux.
- La morphologie lexicale étudie l’organisation formelle du lexique: elle analyse la structure des mots et les relations de forme qui existent entre eux.

Drawing from contrastive linguistics methodology, these various types of relations can be accounted for by considering the syntagmatic and paradigmatic structures of lexical systems. Consequently, the following models which constitute the most significant theoretical framework for lexical studies, particularly as far as the contrastive dimension is concerned, have been opted for: the lexical field approach, the componential approach together with the lexico-semantic approach. In what follows, we are attempting a brief discussion of each of these approaches which, as the present paper aims to show, do not exclude one another but are rather complementary in the sense that they all play different but necessary parts in an adequate cross-linguistic account of the lexicon.

The lexical field approach which is based on the conception that the lexicon of a language is structured just as the phonology and the grammar of a language are structured is the first step of the procedure. In this initial part, the vocabulary of a language is viewed as a system in which each lexical item has its well defined position and its meaning is determined by its relative position in the system, i.e., with relationship to the other lexical items which are also members of the system. Before arriving at the whole vocabulary or lexical system, the lexemes of a language may be classified first into sub-systems or fields. Each field is thus composed out of a group or set of lexemes meaningfully related and which may or may not be covered by a general basic lexical term. Among the fields investigated, we can give the classical examples of kinship terms and colour terms and other recently studied areas such as motion and other scientific and technical domains. However, current research at the intra-lingual or cross-language level has shown the validity and generalizability of this approach to other fields or domains within various registers from the general to the specific as illustrated with the specialized dictionaries compiled in different scientific fields.

Even dictionaries such as the Roget’s Thesaurus and the Longman Lexicon in English are based on concepts or word-fields, semantic or notional areas and therefore contrast with the conventional or usual dictionary which is based on alphabetical principles. The contrastive study of lexical fields or sub-sets of the lexicon is not limited purely to determining the various meaning relations that hold between the
Contrastive lexicology, bilingual lexicography and translation.

members of the field such as similarity of meaning or synonymy, contrast or incompatibility, opposition or antonymy, inclusion or hyponymy but also examines other distributional properties such as syntactic characteristics, collocational restrictions and even metaphorical extensions, hence both the paradigmatic and syntagmatic relations within the field are accounted for and this leads inevitably to the other approaches which constitute the remaining steps or complementary parts in the whole procedure for the analysis of the lexicon.

The componential approach which is referred to by some linguists as “Semantic Feature Analysis” (Hatch and Brown, 1995) or “Lexical Decomposition” (Lyons, 1983) is based on the assumption that the meaning of a lexeme or member of a field can be described by means of its breaking down into a set of basic meaningful elements or components. The main idea that underlies this approach is to apply the principle of ‘distinctive features’ used in phonology to the study of semantic structure. In other words, as James (1980, p.89) puts it: “Lexemes can be shown to be composed of semantic features or components” just as “Phonemes may be analysed into phonological features”. On the basis of this technique of decomposing the meanings of words into a set of componential features, a number of clearly definable domains or fields have been investigated as the ones mentioned previously. Consequently, the structure of all the field can be defined in terms of the various relationships that hold among its lexemes and componential analysis can be thought of as a means of stating such relationships, i.e., can be used as a methodological or technical procedure for identifying the specific meaning relations which justify the field membership of these lexemes as stated by Lyons (1977, p.326) in what follows:

Componential analysis can be seen as an extension of field-theory and more particularly as an attempt to put field-theory on a sounder theoretical and methodological footing.

Therefore, sub-sets from the lexicons of different languages have been analysed in terms of universal componential features or semantic components and in terms of characteristic combinations at the collocational and syntactic levels hence the last part of the procedure illustrated with the lexico-semantic approach.

The lexico-semantic approach is concerned with the inherent and acquired properties of lexical items. In other words, it studies the occurrence of a lexeme or lexical unit in a given environment with reference to the intrinsic character of this unit which provides all the necessary information of a morphological, lexical, semantic and syntactic nature and also with reference to what is brought about by the context, i.e., to what is acquired through the interaction of this unit with other units that occur with it. An illustrative contrastive account has been given on a sub-set of the lexicons of English, French and Arabic (Harouni, Z. 1999) and which shows that there is not always a one-to-one correspondence between the word-forms defined in terms of the same basic components. What is realized covertly in one language, i.e., with the information incorporated into the root or primitive form, may be marked overtly in another either through morphological means where the information is incorporated into the non-primitive or derived form or through collocational and syntactic means in which case we have all the lexemes with more than one word form, e.g., the phrasal verbs in English. The first two cases, i.e., the one in which the lexical unit is equivalent or limited to its root is common to all the languages as is the case of most forms,
whereas for the second one in which the lexical unit is morphologically derived, Arabic constitutes a perfect example since morpho-phonological modifications of roots play a significant role as far as the lexicalization of many notions into verbal forms, nominal forms etc., is concerned.

Therefore, contrastive lexicology, whatever the approaches, will certainly reveal significant differences between languages which, inevitably, lead to various types of transfer errors hence the relevance of contrastive lexicology to bilingual and multilingual lexicography for translation purposes.

II. Bilingual Lexicography

As explained earlier, bilingual lexicography is concerned with the compilation or production of dictionaries in which the lexicons of two different languages are described in terms of meaning and use. Other information of a phonetic/phonological and grammatical nature can also be included in varying degrees in different dictionaries. What should be noted, however, is that all the information expected is essentially linguistic completed with extra-linguistic information which is reflected in the illustrations of the various uses of lexical units in typical contexts and situations hence the strong linguistic basis of lexicography as pointed out by Hartmann (1983). The information which is of a micro-linguistic nature can be specified in the dictionary entries defining lexical units and basic words in various ways: first, in terms of the lexico-semantic relations mentioned earlier as synonymous relations, antonymous relations, hyponymous relations and second, in terms of co-occurrence relations, morphosemantic and morphosyntactic relations together with meaning extension and polysemy which are also considered. The information which is of a macro-linguistic nature can explain further the historical and etymological nature of lexical units, their sociolinguistic variety: whether formal or informal, their style or register: literary or scientific and technical together with adding authentic examples and illustrations of the lexical units in various pieces of discourse the aim of which is to give the dictionary user a concrete image of how language is practiced.

The organization of the lexical entries along the linguistic principles explained so far is therefore expected, for instance as far as verbal forms are concerned, to exhibit, beyond semantic definitions, such idiosyncratic properties or discriminating features as types of permissible subject and object collocates together with the semantic roles or functions these collocates play in possible pieces of discourse; extension in syntactic construction specifying the transitivity type and finally extension in meaning. The following examples are illustrative: the verbal lexeme in Arabic هاجر is unmarked with respect to a specific direction. In other words, it is inherently bidirectional in the sense that it incorporates directional opposition since it is generally considered as equivalent to the English pair emigrate and immigrate and the French pair émigrer and immigrer. Therefore, for foreign users of the Arabic language, the suggestion of one sense rather than the other rests entirely upon the context of the discourse and the situation referred to, i.e., upon pragmatic interpretation which must be specified by the bilingual lexicographer together with the transitive use of هاجر which transforms it into a different verbal lexeme, equivalent to leave. It should be mentioned, however, that some bilingual dictionaries propose استوطن for immigrate providing therefore the user or translator with an overt semantic specificity which is context-independent in the
sense that the bilingual dictionary user can derive the meaning without illustrative discourse. On the other hand, the foreign users of English or French, as is commonly observed with students, tend to confuse the two variants and generally substitute *emigrate* for *immigrate*. However, if the dictionary entries in a bilingual or multilingual dictionary specify the distinctive features – here the deictical features of each lexeme within the context of the discourse such as the location of the participants for instance – together with the distributional properties of these units, a great number of transfer errors will be avoided.

Another illustrative case is that of the verbal lexeme *apply* in English whose rich distributional range affects its meaning in the sense that it varies semantically according to whether it takes an animate subject or an inanimate one, whether it takes an object or not, a complement etc., as in the following strings respectively,

a. He will *apply* for the job tomorrow/this course next year,

b. You must *apply* to your employer for a leave,

c. The law/regulations *apply* to all of us,

d. They *apply* scientific discoveries to industrial production methods.

and the French lexeme *appliquer* whose semantic extension is rather limited in the sense that it cannot translate the a. and b. English stings given earlier hence the relevance of the information about the collocational environment in the dictionary entry of units specifying therefore the dominant tendencies in each language. It should be pointed out, however, that these tendencies or idiosyncrasies are affected by the position of each language in the dictionary, i.e., whether each language stands as the source or the target language. In other words, the lexical entries of verbal forms such as *appliquer* and *apply*, for instance, will vary in each case, i.e., whether we are moving from French to English (in which case the meaning of *apply* as exemplified with a and b strings will not be considered and therefore they cannot be part of the dictionary entry of *appliquer*) or from English to French; let alone the forms or lexical units with socio-cultural connotative meanings whose treatment is more complex unless bilingual or multilingual lexicography is conducted along the micro and macro-linguistic frameworks discussed so far.

Consequently, bilingual lexicography should pay more attention to the polysemic nature of lexical units and explicit their meaning extension through linguistically based and logically ordered entries proceeding from the core or basic meaning to the other associated meanings which either may be due, as observed earlier, to the linguistic environment in terms of collocations and syntactic constructions or which may be due to cultural specificity and which can be lexicalized in single word forms, derived word forms or multword forms conform to conventional usage and socio-cultural norms as can be observed with restricted collocations of the type *heavy + sleeper/smoker/drinker* or *run + a business/for the election* or *win + a reputation* etc.; idiomatic expressions such as *this watch works/runs well* (Arabic or French selects *this watch walks well*) or *I saw him cottoning up to the new secretary* (in the sense of trying to start/make a relationship with her) or *he has been circling around the question for two hours* (turning around without trying to answer it) etc. and finally with what some linguists call “syntagmes figés” as exemplified in Paillard (2000, p.64) in what follows:

La lexicalisation de syntagmes figés qui n’est pas inconnue en français (un je
ne sais quoi, le qu'en dira-t-on), est très répandue en anglais (a has-been, a might-have-been, the haves and have-nots), de manière pratiquement illimitée en position pré-nominale: the couldn’t care less brigade, a go-as-you-please ticket, the pay-as-you-earn system...

If the requirements discussed so far have been satisfied, at least to an acceptable degree, in the case of monolingual lexicography and perhaps also in some restricted cases of bilingual and multilingual lexicography, concerning the English-Arabic and Arabic-English dictionary more particularly, we are still far behind. This dictionary does not generally discriminate between the various lexical units at the cross-linguistic level in the sense that it does not provide the syntactic and semantic specificities or distinctive features associated with the units of each language, hence all the problems and difficulties encountered by foreign language users and translators. Before proceeding therefore to the next and final section which is about translation, let us end the present one with Loffler-Laurian (2000, p.135) who, in a similar vein, points out to bilingual lexicography in the following terms:

Je ne suis pas enseignant de langue étrangère, ni traducteur. Je ne me bats pas quotidiennement avec les copies d'étudiants farcies de faux sens et de non-sens dus aux mauvais dictionnaires bilingues ou à une mauvaise utilisation d'un bon dictionnaire bilingue (en existe-il?). Par contre, il m'arrive assez souvent dans ma vie professionnelle de tenter d'avoir recours à des dictionnaires bilingues et je dois avouer que je trouve bien rarement réponse à mes questionnements.

III. Translation

It should be specified that the previous sections have shown strong applications to and implications for translation. In this connection, translation can be considered as the first and immediate field of application of contrastive linguistics in general and contrastive lexicology in particular and the first and immediate objective towards which bilingual lexicography is undertaken. It goes without saying therefore that translation theory draws heavily from linguistic theory and also from other disciplines as literature, history, anthropology, ethnology etc. The micro-linguistic and the macro-linguistic knowledge of the source and the target languages constitute the foundation of translation studies in the sense that the micro-linguistic level provides the necessary information about the languages as systems, shows their respective patterning and functioning and the macro-linguistic level provides the necessary information about the context of situation in terms of psycholinguistic, sociolinguistic, anthropologico-linguistic and ethnolinguistic backgrounds. Consequently, this hybrid domain needs, in theory and in practice, to be equipped with appropriate and adequate material which provides all the necessary tools and devices for understanding that the word class of prepositions, for instance, plays a very significant role in English in the sense that it can replace major word classes such as nouns and verbs in French as in the following examples respectively:

e. - Which job are you after?
   - Vous êtes à la recherche de quel emploi?
f. - The big house over there/across the road.
   - La grande maison que vous voyez/qui se trouve là-bas/de l'autre coté.
Contrastive lexicology, bilingual lexicography and translation.

Let alone the major role of prepositions and adverbs within English phrasal verbs as can be observed in the dictionary of phrasal verbs in English with "the women spend hours in the market bargaining about the goods (trying to reach an agreement on the price of something); three prisoners broke loose as they were being taken to another prison this morning (escaped)" and as exemplified in Paillard (op.cit., p.69) with nouns used as verbs in "boss people around (mener les gens à la baguette); chicken out (se dégonfler); wolf down one's food (engloutir sa nourriture)" etc.

Along the same lines, this material, if it is to be an efficient pedagogical tool, should help the user distinguish, as observed in earlier sections, the dominant tendencies or characteristics of each language such as the preference generally for the passive voice in English in scientific registers and in a certain type of general discourse as exemplified respectively in:

- g. Important side-effects have been reported by the patients who followed this treatment,
- h. Decisions have to be made quickly on this matter.

Finally, this material should enable the user in general and the translator in particular to distinguish between lexemes which contract a near-synonymy or co-hyponymy relationship thus forming a lexical set in one language but which are generally listed under only one and the same equivalent in the other language. The following examples from Harouni, Z. (2000 p.2) illustrate the point:

The Arabic verbs قدم اقبل اتى جاء are listed under the English verb come without further information as to the context in which one is preferred to the other or one is more appropriate than the other and without information as to their collocational behaviour, i.e., their possible co-occurrences and restrictions.

These examples illustrate the entry of the verbal lexeme come in an English-Arabic dictionary ( Elias Modern English-Arabic Dictionary). For the purpose of the present article, an Arabic-English dictionary has also been consulted (El-Mawrid Modern Arabic-English Dictionary) and the entries of the four Arabic verbs examined. In each lexical entry, we find a series of possible English equivalents such as come, arrive, show up, advance, draw, near, approach, attend, proceed to, reach, get to, attain, hit, etc. without further specification of a micro or macro-linguistic nature as observed earlier. Consequently, the bilingual dictionary is transformed into a thesaurus in the sense that the user will find only words or lists of words but no meanings in context and will therefore not be able to select the appropriate equivalent.

Conclusion

The foregoing discussion has therefore attempted, as aimed, to put into focus the major role of these interdisciplinary branches which constitute the premises for advanced research in terms of provision of data bases (a translation corpus, a text corpus, a piece of discourse, a language production) and in terms of methodological procedures for investigating such data or language corpora within various registers and fields and at all levels of linguistic description. The main goal of such investigations is to provide the users of a foreign language, whatever their field of activity, and particularly the translators with the relevant information and knowledge which enable them to interact, interpret and translate with idiomaticity and naturalness, i.e., with native-like fluency in the sense that they will be able to identify not only
straightforward language structures and meanings but also collocational patterns or characteristic combinations and idiomatic features across languages as these illustrate the highest degree of insights into the language, hence the relevance of the following statement (Paillard, op.cit., p.21) to conclude the point:

Surtout, le choix de la bonne collocation, quand il s'agit de s'exprimer ou de traduire, est un problème constant et délicat jusque dans la langue maternelle. Les collocations forment le tissu même de la langue. Leur emploi spontané représente le stade le plus avancé et le plus difficile à atteindre dans la maitrise d'une langue étrangère.

References

Dictionaries