

## Referential Components Analysis and Translational Equivalence

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**Abstract :** *This paper attempts to establish a methodological approach by which accurate bilingual equivalence can be achieved. This approach views the meaning of the lexical item as an extra-linguistic (or real world) reference, composed of various referential components. The process by which bilingual equivalence of this reference can be achieved is called the Referential Components Analysis Method (RCAM). The prospective gains in applying this method consist in enhancing the quality of translation, in relation to accuracy and speed, and in facilitating grounds for the compilation of a comprehensive translator-based dictionary.*

### 1. Introductory Notes

As far as Arabic is concerned, some of the most sensitive texts are religious texts, particularly the holy texts (the Holy Quran and the Prophet's Hadith). The translations of these texts into other languages encounter great problems in relation to both form and content. Let us examine a virtual case. A famous book in Urdu, *faza-el-a'mal* (The Virtues of Good Deeds), by Sheikh Muhammad-Zakariya Al-Kandahlawi, (1990), containing numerous Arabic quotations has been translated into English and other languages. In spite of the great efforts made by the translators, their communication of Islamic meanings to speakers of modern Western languages does not seem to be as successful as they initially wanted it to be. For example, the English translation of the Arabic Hadith of Prophet Muhammad (pbuh) below has a serious problem, which involves the translation of the word راع. The ST of the Hadith reads as follows:

(ألا كنكم راع وكنكم مسنول عن رعيتيه ، فالأمير الذي على الناس راع وهو مسنول عنهم  
والرجل راع في أهل بيته وهو مسنول عنهم والمرأة راعية في بيت بعلها وولده وهي مسنولة  
عنهم والعبد راع في مال سيده وهو مسنول عنه فلكم راع ومسنول عن رعيتيه)

The word راع is repeated six times in the ST but is given four different translations in the book (TT), as underlined below:

“Lo! All of you are leaders and shall be questioned on the Day of Judgement in respect of your trust. So, the king is a head unto his subjects and shall be questioned in respect of them; the husband is a head unto his wife and shall be questioned in respect of her; the wife is a head unto her husband's house and the children, and shall be questioned in respect of them all; the slave is a watchman unto his master's effects and shall be questioned in respect of those. So you are all shepherds, and you shall be questioned in respect of that entrusted to you.” (ibid: 16).

In another citation of part of the same Hadith in a different section of the book, the word عاجل is given even a fifth translation, ‘guardian’ (ibid: 95), which is not included in the translation of the complete Hadith.

It seems clear that the translator has failed in acquiring the appropriate BE and was not properly guided by any of the Arabic-English dictionaries that he might have consulted during translating the ST. He seems to be unsure or confused about the exact English IE of the word عاجل in this context, which he translated, quite strangely, as ‘leaders’, ‘a head unto’, ‘a watchman’, ‘shepherds’ and ‘guardian’. The meaning to which the Hadith refers by using the word عاجل is that of responsibility. The common factor to all of the mentioned roles of responsibility is that every person in his or her role is responsible before God as to how much they had satisfied their responsibilities in these respects.

The secret behind this error may be revealed once we look at the entry of عاجل in different Arabic-English dictionaries. First, none of the eight dictionaries mentioned in the list of references below includes the lexic item ‘responsible’ as a possible IE for عاجل. *HW*, for instance, gives the following entry:

- عاجل = shepherd, herdsman; guardian, keeper, protector, patron, sponsor; pastor (Chr.)

As can be seen, the BE ‘responsible (for)’ is missing. Moreover, there is nothing in the entry that may indicate the difference in usage between the given BEs, which partly explains the reluctance of the translator to stick only to one of the five BEs he used.

## 2. Bilingual Equivalence

It is interesting to note that 'bilingual equivalence', the core issue in translation, has not yet been successfully identified, as the so far proposed methods to achieve BEs have not been methodological. Al-Kasimi (1977), for instance, does not exactly pinpoint what it is that the lexicographer/translator needs to translate and what method should be used for this form of translation. Of course, neither do the linguists he cited. Jakobson (1959:58) distinguishes between three different kinds of translation: intralingual translation, interlingual translation or translation proper and intersemiotic translation, of which the second type, i.e. translation proper, is what the bilingual lexicographer needs to work with. However, Jakobson and many others who attempted to define translation, such as Catford (1967) and Oettinger (1960), do not explain how to 'transcode' or 'transform' the 'symbols', or in other words, how to find equivalent elements in another language that can replace the elements of one language (cf. Oettinger, *ibid*) and on what criteria would this choice of equivalence be based.

One method to establish BEs is given by Al-Kasimi, based on Catford (*op. cit.*), which relies on the judgement of certain bilingual informant(s) used by the lexicographer. Along the same line Nida (1961) had urged the lexicographer to seek the help of a native informant of the language that is foreign to him regardless of his competence in it. But this method is far from being practical and methodological (see Hafiz 1996). Moreover, a native informant has his own (personal) conceptions and misconceptions about the lexical meanings of many L1 and/or L2 vocabulary items from/into which he is required to translate the given sentences. Questions like 'what level of education should this informant have?' and 'what class or region should he belong to?' may not be objectively answered. Even in a standard language such as Standard Arabic, it is not possible to claim authority for the translation given by a native Arab informant to a particular item without having to check it with at least one of the recognized references. This is of course in addition to the regional and educational (and personal) differences between the native speakers of Arabic, as naturally exist between speakers of any other language.

This situation has motivated and prompted the author of this paper to introduce a new method by which the translator and bilingual lexicographer

are expected to perform more translationally accurate matching between the lexical units concerned in a pair of languages. The method can be called the Referential Components Analysis Method ( henceforth RCAM). In particular, this method is expected to improve the degree of semantic equality and conformity between many of the lexical items in a pair of languages that had been previously thought to lack close equivalence (CE). The method by which this CE could be achieved consists in decoding the referent (R) of the given SL item and analysing its referential components regardless of its semantic components that compose its general designation, which explains the name of the method, the 'Referential Components Analysis Method'.

### 3. Selection of Translational Equivalents (TEs)

In the context of a bilingual source, unlike a defining source, '*what does x mean?*' is equivalent to '*what is the referent of x?*' in the real world. The referent of *citron*, for example, is the actual tree bearing large lemon-like fruit, and the referent of *airline* is any organization providing public air transport. In other words, translation is concerned with how can one express the reality of x in L2 as referred to in L1. The important relevant question in this context is: *How can we select the appropriate TE(s) of a lexical item?* To do this , we need to realise the exact identity of the L2 equivalent to the L1 item entered in the TD. Let us first agree that the TE of any L1 lexical item is not necessarily equal to the lexical meaning (LM) of that item, and the TE may have a different LM from that of the L1 item. For example, the items (1) '*the morning star*' and (2) '*the evening star*' have different LMs. The monolingual definition (MD) of (1) is "*a planet or bright star, usu. Venus, seen in the east before sunrise*", while the MD of (2) is "*a planet, esp. Venus, conspicuous in the west after sunset*" (COD). Both items, however, refer to one reality (i.e., referent) in the extra-linguistic world. In order to find an appropriate Arabic equivalent for (1) and (2), an Arabic item that has the same LM of the combination *morning* and *star* or *evening* and *star* is not necessarily the proper TE. It would rather lead to giving a translation of either the MD of these items or of their lexical components instead of a proper TE. *Al-Mawrid (AMEA)* falls into this pit by translating these items as نجم الصباح *najm alsabah* and نجم المساء *najm almasa*, respectively, thereby making them two different realities. In the Arabic lexicon, there are no such things as نجم الصباح *najm alsabah* and نجم المساء *najm almasa* and therefore these items do not signify the same referent as that of (1) and (2)

above. To avoid this problem, the TD should indicate a TE, which is the Arabic item that signifies the same referent of both (1) and (2), الزهرة *al-zuhra*, the Arabic equivalent of *Venus*, as both (1) and (2) refer to this planet.

#### 4. What is RCAM?

The basic idea of RCAM is that each L1 lexical item is composed of one or more semantic elements which together refer to a specific referent in the extralinguistic reality, and it is this referent that must be transcoded to L2 speakers. In other words, to use the terminology of modern semantics, out of the three main elements of designation, as illustrated by the triangle of Ogden and Richards (1923) (the (form of the) word, the designatum and the denotatum), it is the denotatum, "the respective segment of the extralinguistic world" (ibid: 33), that the TL-recipient needs to know about most accurately.

The idea of R relies on the semantic features or components of a SL lexical item in as much as they signify an extra-linguistic reality which counterparts a similar referential reality expressed by a lexical item in the TL. If we can speak of extra-linguistic realities simply as 'things', then the R of a lexical item, or of any form of sign, is a 'thing' symbolised by that structure. The SL item can only be equivalent to the TL item if they both have the same R(s). For example, كرسي *kursi* and 'chair', although claimed by many lexicographers to have the same meaning, do not have the same Rs and hence are not TEs. To explain this matter further, let us look at what each of these two lexical items refer to in the extra-linguistic world. The Rs of كرسي *kursi* are:

- (1) s.th. to sit/lean on.
- (2) s.th. used to support other things.
- (3) God's Magnanimous Power which encompasses the universes (and where His 'Feet' lay).

Although they can be considered as polysemous meanings of the same lexical item, the RCAM views them as three different Rs: (a) 'chair/sofa', (b) 'a material support', and (c) God's See. Therefore, 'chair' can be the TE of كرسي *kursi* only in sense (1); senses (2) and (3) should be then naturally equalised with other English items which can be their own TEs.

The concept of R leads us to distinguish between the semantic component (SC) and the referential component (RC) of a lexical item. The importance of this distinction lies mainly in that the SCs of an item may not always correspond with the RCs which constitute the denotatum of the item, hence it is the RCs, not the SCs, that are of interest to the translator and, naturally, the bilingual lexicographer. The difference between the SCs and the RCs of a lexical item can be clearly identified in the following examples:

(1) The Arabic noun مال *mal* is actually composed of ما *ma* meaning *that, which* and ل *l* meaning *belongs to*, which constitute the SCs of the word. In standard Arabic, مال *mal* refers to money, property and all other kinds of belongings, and thus the RCs of مال *mal* can be translated as: *money* (cash, in account, debts, etc.) + *property* + *business* + *belongings*, and therefore the English TE of مال *mal* are: *possessions* and *money*, whose RCs are similar to those of مال *mal* but do not share similar SCs.

(2) The English noun *holiday*, means 'a day/period of festivity or recreation without having to work'. It is obvious, according to RCAM, that the SCs of *holiday* relate to the original linguistic components of the word, which are *holy* and *day*, while its RCs relate to the above definition that constitute its meaning in Modern English. The lexicographer therefore is required to translate the RCs, not the SCs, in the form of a TE to be entered in the dictionary.

(3) The above analysis can be extended to account for many types of lexical items, including compound items, such as *carrier pigeon*. The SCs of *carrier pigeon* are 'doer + carrying + pigeon', while its RCs are 'pigeon + trained to carry + messages', and hence its obvious Arabic CE is حمام زاجل *hamam zajil* which is also composed of the same RCs 'pigeon + trained to carry + messages'. The appropriate TE is therefore not a translation of the SCs of the item, 'doer + carrying + pigeon' حمام حامل *hamam hamil*, as this item is not used in Arabic to refer to the extra-linguistic reality of 'carrier pigeon'.

Another group of lexical items whose RCs are more important in designating the R of the item consists of the specialised and technical items in the language, e.g. قمر صناعي ، حاسوب ، مرید *mureed*, *qamar sina'ee*, *hasoob*, etc. In Islamic Sufism, for instance, the word مرید *mureed*, although still retains its general SCs 'doer + to want/seek', has a different R. The item's RCs are 'seeker + spiritual enhancement + follower + mentor'. Similarly, the modern term حاسوب *hasoob* consists of the SCs 'performer + counting', but its RCs ('electronic + device + store + process + data') refer to a totally different reality, a 'computer', from that referred to by the item's

SCs. The other modern term قمر صناعي *qamar sina'ee* can be analysed in the same way where its SCs designate 'artificial moon', while its RCs, 'man-made + revolving body + in space', refer to 'satellite', which is the R intended in modern usage.

It is therefore essential to determine the R of the lexical item in L1 by analysing its RCs and then to search for a lexical item in L2 that consists of as many similar RCs as possible. The stronger the conformity between the RCs of the items in the different languages concerned the closer they are as TEs of each other.

This method of identifying meaning as R is even more significant in cases where one word-form refers to different things which are not directly semantically related to the basic lexical meaning of the form, that is, they are not necessarily metaphorical usage of the same word. Therefore, to find the English CE(s) of the Arabic verb دس *dassa* for example, the translator will need to make the following analysis in table-form, as shown below.

First of all, we need to identify the RCs of دس *dassa*, as known in the Arabic lexicon, so as to exactly identify what it refers to in the extra-linguistic world, i.e. to identify its R(s), and then translate these components into a metalanguage. Here, English is used as the metalanguage of the analytical process.

SL word *	its RCs
دس <i>dassa</i>	a. to put X in, under, behind Y -> to hide X.
p. tr.	b. to insert X in Y -> roughly + forcefully.

**Table 1**

**Meanings of symbols and abbreviations used in Table 1:** p. = past tense; tr. = transitive verb; the letters (a., b., etc.) indicate the different Rs of the given item; the comma means 'or'; the arrow sign -> indicates separation between the different RCs in one R of the item; the plus sign means 'and'.

It is obvious from **table 1** above that دس *dassa* has two Rs:

1. A hid X (e.g. *دس كتابه في التراب* *dassa kitabhu fit-turab* he hid his book in the sand),
2. A inserted X forcefully (e.g. *دس يده في النار* *dassa yadahu fin-nar* he thrust his hand in the fire).

A similar analysis of the potential equivalents (PEs) must also be done to find out which of them has the same and/or the closest RCs as those of the SL word. Here we have taken the PEs (1-14) from *Hans Wer's dictionary (HW)* where all entered as appropriate BEs of the Hw *دس* *dassa* (PE 15 is my addition). The analysis will show how that some of these PEs can be 'close equivalents' (CEs) and 'secondary equivalents' (SEs), while others can be 'contextual equivalents' (XEs), and yet others cannot be considered BEs at all, which can be categorized as 'false equivalents' (FEs). Before we move to Table 2, it is expedient to explain the major terms that we will be using in our discussion.

**CE** = The close equivalent is the TL item that most corresponds to the given SL item in its lexical meaning, which is the nearest (in its RCs) available TL item from among the PEs to the SL item.

**SE** = The Secondary equivalent is the TL item which is equal at least in one of its meanings (i.e., one of its Rs) with one of the meanings (Rs) of the given SL item.

**XE** = A contextual equivalent is that where the SL and TL referents are equal only in a particular given context.

**PE** = Potential equivalents constitute the group of selected TL items initially thought of as BEs and which constitute the linguistic material to be analysed according to the RCAM in order to discover the TL CE(s) of the SL item.

**FE** = The false equivalent is that TL item among the selected PEs whose R is not equivalent to that of the given SL item.

**C** = The context in which the SL item can be used to give a distinguished meaning from that of its R.



**Table 2**RCs analysis of the PEs of *دس* *dassa* (from the Oxford English Dictionary)

TL PE	its RCs
1. put	move to -> a specified place.
2. slip	release from -> restraint.
3. shove	a. push -> vigorously. b. move -> by hard: rough pushing.
4. thrust	push -> with a sudden impulse: with force.
5. insert	a. place: fit X -> into Y. b. thrust X -> into Y.
6. bury	a. put -> under ground. b. hide -> in the earth. c. place -> a dead body -> in the earth.
7. instill	introduce -> a feeling: idea: etc. -> into a person's mind: etc. -> gradually.
8. infuse	inspire: permeate -> with feelings: opinions: qualities.
9. foist	present X -> falsely -> as genuin: superior.
10. smuggle	a. import: export -> illegally. b. convey -> secretly.
11. intrigue	arouse -> the curiosity of.
12. interpolate	a. insert -> words -> in a book: etc. b. interject -> a remark -> in a conversation.
13. scheme	plan -> to bring about -> esp. artfully: deceitfully.
14. plot	plan: contrive -> secretly -> a crime: etc.
15. hide	put: keep -> out of sight: etc.

**4. Results**

1: 6b and 15 conform closely and freely with the referent (a) of the SL word.

2: 3a, 3b, 4 and 5b conform closely and freely with the referent (b) of the SL word.

3: 1, 2, 5a, 7, 8, 9, 10, 11 and 12b do not contain any of the RCs of the SL item in neither of its two Rs, i.e., the notion of *hiding* and the notion of

*forceful insertion*, nor can the SL word be used metaphorically to express any of the meanings of the above TL PEs.

4: Although 6a, 6c, 12a, 13 and 14 do not directly refer to either of the two Rs of *دس*, they can translate the SL item as used in certain, esp. metaphorical, contexts, as for example in *دس كلمات صعبة في مقاله* *dassa kalimat sa'bah ti maqalih* *he interpolated difficult words in his article* and *دس جثمانها في الأرض* *dassa juthmanaha fil-ard* *he buried her body in the ground*, although it is also possible to translate it as *he hid her body in the ground*, depending on the contextual meaning of the verb. It can be concluded from this analysis that:

- (a) Only items 3a, 3b, 4, 5b, 6b and 15 are CEs of *دس* *dassa*
- (b) Items 1, 2, 5a, 7, 8, 9, 10, 11 and 12b are FEs of *دس* *dassa*
- (c) Items 6a, 6c, 12a, 13 and 14 are XEs of *دس* *dassa*

5: In other words, only *bury* and *hide* can convey meaning (a) of *دس* *dassa*, which qualifies them to be its CEs. However, because *bury* in Rs a and c refers to slightly different meanings from R b, it may take a secondary position to *hide*, which then enjoys the level of CE1, hence taking priority over *bury* which may be recognized as CE2. It should be noted that in a translator's dictionary (TD) the order of the BEs in the entry would be enough to indicate such prioritization.

For the second R of *دس*, only *shove*, *thrust* and *insert* are able to convey its meaning in the closest possible way. There seems to be no significant referential difference between *shove* and *thrust* except that the former has more colloquial usage than the latter. The verb *insert*, on the other hand, is definitely different from both words in that its significant RC 'use of force' is not necessarily intended in all the possible ways of the word's usage. For instance, there is no clear notion of using force or vigour in *he inserted the gum in the hole*. It would be then more appropriate to regard *insert* as a SE in comparison with *shove* and *thrust*. In the TD, the TE *thrust* is entered first in the order as CE1, followed by *insert* as CE2 and then *shove* as CE3 due to its colloquial usage.

6: The words *put*, *instill*, *infuse*, *foist*, *smuggle*, *intrigue* and *interpolate* (in the sense of *interject a remark into a conversation*) are FEs in the context of the AETD and therefore must not be entered in the entry as they contain no similar RCs to either of the two Rs of *دس* *dassa*.

7: The words *bury* (in the sense of *putting under ground*, and *placing a dead body in the earth*), *interpolate* (in the sense of *inserting words in a book, etc.*), *scheme* and *plot* are XEs, as they contain an element of *hiding* or *secrecy*, which enables them to translate some metaphorical uses of *دس* *dassa* in certain Arabic contexts, as in *دس لهم أمرا فيه هلاكهم* *dassa lahum amran fihi halakuhum* *he plotted a matter against them in which lies their destruction*. These XEs must be included in the entry after both the CEs and the SEs, which can be arranged alphabetically as there is no significant semantic prioritization between them.

8: The final resulting arrangement of BEs in the entry of *دس* *dassa* would be, in the light of the above analysis, as follows: CEs: to hide; to bury. SEs: to thrust; to insert; to shove. XEs: to scheme; to plot

## 5. Main Stages

The RCAM consists of five main stages:

1. Establish the R(s) of the SL item by analyzing its RCs, (note that a SL or TL item may contain only one RC and that some items may have only one R).
2. Translate the RCs of the SL items into English (as metalanguage).
3. Collect the TL PEs of the SL item (mainly from existing bilingual dictionaries).
4. Establish the R(s) of the TL item by analyzing its RCs.
5. Matching and grading: Find out which SL and TL items share common RCs, to establish different grades of equivalence between their Rs.

Important results of the last stage constitute the following three findings:

1. The CE(s), including the SEs, of the SL item
2. The XE(s) of the SL item
3. The FE(s), initially suspected as PEs but now proven non-equivalent

By comparing the RCs of the Arabic lexical item with the RCs of its given English PEs, the translator will be able to draw clearer lines between the different meanings of the PEs so as to determine the different types of BEs and hence their suitability for entry as TEs in the TD.

It should not be assumed from the above example, however, that the RC is equal to the linguistic meaning of the lexical item. The RC is an independent semantic unit within the linguistic meaning of an item, i.e., a component of it. For example, the denotation of *pessimism* is a RC of the lexical item *بومة*, which along with other RCs constitute the R of *owl*, even though *owl* does not contain this RC in its R.

Let us, for the sake of illustration, look more closely at the RCs of the lexical item *حجفة hajafah*

حجفة	<i>shield + made of leather</i>	ترس + من الجلد
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The difference between *حجفة hajafah* and *ترس tirs* is not reflected in English as there is no single lexical item denoting a type of shields that contains as one of its RCs *made of leather*. In such cases, the lexicographer must transcode this RC in any other way, preferably by introducing short and direct forms of word-combinations, as for instance *leather-shield* for *حجفة hajafah*, while reserving *shield* to be a TE of *ترس tirs*.

Let us also see how the RCAM method can be used to achieve more accurate BEs for collocations. Let us take the Arabic collocation *بيت أمرا bayyat amran* (meaning *دبر شيئا ليلا dabbara shay'an laylan*) and see how we could achieve *plotted by night, schemed by night* as the collocation's TEs.

From the Arabic definition of the collocation, its RCs could be identified as *made plans + at night*. It was then possible to identify its R as *made secret plans (conspired) to do s.th. (to s.o.)*. Secondly, I searched for a TL verb whose R was equal to the SL R, which I found in *to plot* and *to scheme*, whose relevant R is *plan or contrive secretly*. Thirdly, I noted down the CE of *ليلا laylan by night*, which is indicated in the definition of the verb *بيت bayyata*, although not specifically mentioned in the collocation, and hence achieved the CE of the collocation *plotted (or schemed) by night*. This way, the TD user would not feel obliged to accept a literal translation of the linguistic elements of the collocation and, at the same time, find a ready TE to use in his target text.

## 6. Summary

It is often the case that translators rely on their subjective judgements, especially when it comes to translation problems of sensitive nature, and often their judgements fail to achieve the desired success.

The RCAM is a systematic method that assists different types of translators to acquire bilingual equivalence more accurately and with high degree of objectivity. It can be used in a large-scale project to compile a complete bilingual dictionary that is specifically purposeful for translators, and it is also beneficial for individual translators handling problematic or sensitive texts.

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