

## **Componential Analysis and Translation Accuracy**

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### **Abstract**

Componential analysis (CA) is a technique which can usefully be applied to the process of translation to choose the most accurate and closest lexical equivalents. The purpose of this study is: (1) to demonstrate the significant role of this technique in translation accuracy, and (2) to reveal that inaccurate lexical equivalents are a real problem in Farsi translations.

### **Introduction**

Translation, an intercultural activity, is often a source of controversies on the language into which a text is rendered. Those who are involved in such an activity are not always aware of the complexity of the task; therefore, they unintentionally create some problems by their awkward translations.

Research on the processes and problems involved in translation as well as application of linguistic theories to translation is undoubtedly a field of interest for those who want to become prospective translators or teachers of translation.

The amount of translation across languages has tremendously increased during the last forty years. However, the pre-theoretical discussions of the art of translation have not provided a satisfactory basis for the field of translation. Therefore, linguistic theories have come to help translation and translators in order to provide a sound basis for this skill. Although these theories have not been very successful, they have met the most needed task of translator training efficiently.

There is a wide agreement that the present situation of translation in Iran, though exhibiting promising signs, is poor and unsatisfactory. Najafi (1986:4) asserts :

During the recent years, this kind of translation (word for word), along with the mistakes committed by translators who often did not know the foreign language and were not able to use their own mother tongue correctly, gradually led to incomprehensible phrases and sentences. This type of translation, without any exaggeration, forms ninety percent of today's translation of us.

This status, along with the necessity of the application of translation theory into the process of translation, in order to perform more accurate and faithful translations, motivated the subject of the present research.

The main purpose of this study is to demonstrate the application of translation theory to the process of translation in general, and the

application of componential analysis, in particular. Most Iranian translators are not aware of a translation theory, and thus, cause the present poor and unsatisfactory situation of translation in Iran.

Lexical inaccuracy is a serious problem in most Farsi translations. Being aware of componential analysis, which is a technique used in translation to choose the most accurate lexical equivalents, the translator will be more accurate in selecting the equivalent lexical items of the receptor language.

As an example, consider the following English sentence and its Farsi translation :

Could go through dry leaves, and make no rustle.<sup>(1)</sup>

میتونن بی اینکده هیچ صدایی در پیاد از وسط برگهای خشک رد شن.<sup>(2)</sup>

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The translators, ignoring the meaning components of the word "rustle", have chosen the general word "صدا" as an equivalent for "rustle". Oxford Advanced Learner's Dictionary (1990) defines "rustle" as: "(cause sth to) make a dry light sound, esp by friction or rubbing together". If the translators had been aware of the meaning components of "rustle", they would have chosen "خش خش" as its closest equivalence.

Due to the above-mentioned problems, the following research questions would arise:

1- John Steinbeck ; *Grapes of Wrath* (Translated by A. Ahmadi & Sh. Meskoub)

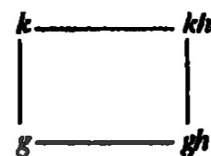
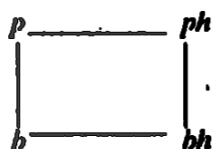
2- [mitunessan 'bi ?inke seda?i dar biyâd ?az vasate barghâye xoshk rad šan]

1- Does componential analysis and its application to translation improve the amount of the accuracy of translation?

2- Are the majority of Iranian translators well aware of the meaning components of lexical items of both SL & TL, and thus, choose accurate equivalents?

### CA in Linguistics

Within modern linguistics, the componential analysis of meaning was adapted from distinctive feature analysis in morphosyntax which in turn had its roots in the methodology of Prague school phonology (Allen 1986). In *Principles of Phonology*, Nikolai Trubetzkoy (1969: 86) analyzed Sanskrit stop phonemes into the four-member bundles as:



[Taken From Allen, 1986, p. 166]

The bundles at each place of articulation—bilabial, dental, velar—are correlated with the distribution of components of aspiration and sonority, so that each stop within a bundle can be differentiated by a conjunction (symbolized "&") of oppositions (symbolized "Vs"), Versus. (ASPIRATED Vs UNASPIRATED) & (VOICED Vs VOICELESS) thus :

/bh/ is BILABIAL, ASPIRATED & VOICED

**/p/ is BILABIAL, UNASPIRATED & VOICELESS**

**/gh/ is VELAR, ASPIRATED & VOICED**

From these descriptions we can see at a glance e.g. what components /bh/ and /gh/ have in common, and where they differ.

CA was first used by anthropologists to compare kinship terms in different languages. Lyons (1986) states that it was first proposed, not by linguists, as a general theory of semantic structure, but by anthropologists as a technique for describing and comparing the vocabulary of kinship in various languages.

Allen (1986:168) states that anthropologists had for many years been comparing widely differing kinship systems in culturally distinct societies by interpreting them in terms of universal constituents that we might reasonably equate with semantic components.

Only some years later, was it taken up and generalized by such scholars as Lamb (1964) Nida (1964, 1975), and Weinreich (1963, 1966), as well as by Katz and Fodor (1963), which led to the integration of semantics and syntax within the framework of transformational grammar (Lyons 1986).

What is meant by the term "componential analysis" in semantics is best explained by means of a simple example. Consider the following set of English words:

man, woman, boy, girl

It is clear that the four words do, indeed, form a set of items. They share the feature "human". Man and woman share the feature "adult" and man shares with boy the feature "male". For this set, these three

features are sufficient to create definitions for each which distinguish them unambiguously: man = "human, adult, male", etc. The lexical entries would be :

man	$\begin{bmatrix} +\text{human} \\ +\text{adult} \\ +\text{male} \end{bmatrix}$	woman	$\begin{bmatrix} +\text{human} \\ +\text{adult} \\ -\text{male} \end{bmatrix}$
boy	$\begin{bmatrix} +\text{human} \\ -\text{adult} \\ +\text{male} \end{bmatrix}$	girl	$\begin{bmatrix} +\text{human} \\ -\text{adult} \\ -\text{male} \end{bmatrix}$

[Taken from Bell, 1993, p. 88]

### Kinds of Meaning Components

The shared components of the English words man, woman, boy, and girl is called generic or central component (Larsen 1984), or common component (Nida 1975 a, Newmark 1988).

In addition to the central or common component, each word will have contrastive components (Larsen 1984), diagnostic components (Nida, 1975a), distinguishing or diagnostic components (Newmark, 1988). Nida (1975a) and Newmark (1988) also believe in supplementary components. Supplementary components are those that may be connotatively but not denotatively relevant or that may be denotatively valid but not really necessary or significant for establishing a minimal set of contrasts.

### CA in Translation

Componential analysis was found, by translation theorists, as a useful technique for choosing the most accurate equivalents in translation.

Newmark (1988: 117) asserts that "The only purpose of CA in translation is to achieve the greatest possible accuracy".

Componential analysis in translation is not the same as componential analysis in linguistics; in linguistics it means analyzing or splitting up the various senses of a word into sense - components which may or may not be universals; in translation, the basic process is to compare an SL word with a TL word which has a similar meaning, but is not an obvious one-to-one equivalent, by demonstrating first their common and then their differing sense-components. Newmark (ibid: 114) states that "Normally the SL word has a more specific meaning than the TL word, and the translator has to add one or two TL sense components to the corresponding TL word in order to produce a closer approximation of meaning". Newmark (ibid: 115) holds that:

If one thinks of translation as an ordered rearrangement of sense components that are common to two language communities (such a definition can hardly be challenged) then the value of CA in identifying these components becomes clear. Further, CA attempts to go far beyond bilingual dictionaries; all CAs are based on SL monolingual dictionaries, the evidence of SL informants, and the translator's understanding of his own language.

Componential analysis in translation can be used in translating lexical words, cultural words, synonyms, conceptual terms, neologisms and words that have become symbols of untranslatability and cultural consciousness (Newmark ibid: 117-23).

Newmark (1988:30) enumerates the main uses of componential analysis for the translator. They are as follows:

- 1- To translate an SL word into two or more TL words by distributing its semantic components over a larger TL area
- 2- To distinguish the meaning of two collocated SL synonyms, if the distinction is emphasized in the SL text
- 3- To analyze the content of one or more SL words within a series (e.g. of meals, clothes, etc.)
- 4- To expose and fill in gaps in the TL lexis, due to cultural distance between SL and TL, in the same semantic field
- 5- To analyze neologisms
- 6- To explain cultural differences between one word with one common main component but different secondary components, in SL and TL
- 7- To analyze theme words that require extended definitions in TL
- 8- To reduce metaphor, which always has two or more sense components, to sense.

### **The present situation of translation in Iran**

From the very early years, the well-wishers of the language and literature alarmed the corruption which threatened Farsi as a result of its defenceless exposure to foreign languages and made efforts to preserve Farsi from corruption. "My Message to Farhangestan" by Foroughi, one of the pioneers in this field, is a most comprehensive article written on the subject, discussing from a realistic view toward



language and the factors which are likely to corrupt Farsi. Considering translation as an increasingly important task, Foroughi (1937: 69) maintains:

Nowadays, it often happens that I come across with sentences which are not translated from foreign languages. The sentences are not comprehensible to me even though I am familiar with their source languages and their ways of expression. There are many other sentences whose meanings I can grasp due to my background information, but the other people who lack the background cannot understand them. I do not regret why people do not understand such sentences, on the contrary, I would, by most, grieve if they did understand them. If such sentences appear meaningful to them, it will be an indication that their minds are already acquainted with them and that they have been adopted.

Later, many articles, sharing Foroughi's concern and anxiety, prevailed the intellectual magazines of the time, having a tone indicating pity for the corruption of Farsi. At the end of one of such articles by Sheykhoh-Islami (1973: 395), the editor, thanking the writer, expresses his utter pessimism in this way:

It is a pity that those to whom these articles are addressed, they do not read them. More pity still, if they happen to read, they do not understand them, and once understood, they are never put into practice.

More recently, Najafi (1982:101), a prolific writer on the problems of translation in Iran, referring to this persisting corruption, brought about by mistranslations, as "calamity of thought", contends:

There are many, especially the young generation who, reading an incomprehensible translation, presume that they have understood it. They do not understand, in other words, that they have not understood. This is calamity of thought, which, in my view, must be regarded as a dangerous social phenomenon.

### **Method**

This study has attempted to fulfill two goals. The first one was intended to investigate the role of componential analysis in lexical accuracy of English while translating it into Farsi, and the second one was to show that one of the problems of Farsi translations is inadequacy in the selection of lexical equivalents.

To materialize these objectives, 10 American and English novels were randomly selected. The next step was to contrast these novels with their corresponding translations by different Iranian translators. Since contrasting the whole novels with their corresponding translations was time-consuming, different chapters of each novel were randomly chosen and then contrasted. The data collected in this way, provided a source of materials for a twenty-question test which was given to two groups of subjects under two different situations : To the first group, i.e. the experimental group, componential analysis and its application in the process of translation was taught, whereas the second group, i.e. the control group, was completely unaware of componential analysis.

## Subjects

The subjects were selected from the undergraduate students. They were 80 male and female students majoring in English translation who had passed about 50 credits in the Islamic Azad University, the south branch of Tehran and Arak. The rationale behind selecting sophisticated English students was to have more proficient students, and at the same time, the students who have passed some translation credits.

The number of subjects who participated in this study was 170 male and female students. After giving them the Michigan English Language Test (Form P), and calculating the mean score, the researchers could select 80 students. The rationale behind selecting subjects suitable for this study was to select homogeneous subjects regarding their language proficiency.

These subjects were randomly assigned into two groups. Both groups were taught translation for 10 class sessions. They practiced translating different sentences from English to Farsi. For one group, CA and its application in translation was also explained while it was not mentioned to the other group. The former group was considered to be the experimental group and the latter one the control group.

In the first phase of the study, the Michigan Test of English Language Proficiency was distributed among the subjects. The allowed time for this test was 100 minutes. To choose 80 subjects required for this study from 170 participants, those who gained the scores  $\bar{X} \pm 3$  were selected.

The second phase of the study was the treatment. All the subjects in both groups were taught translation. Both groups were given different sentences to translate into Farsi. They were given different theoretical

and practical guidelines while translating the sentences. CA was only mentioned to the experimental group. This instruction and teaching took 10 class sessions.

Posttesting was the final phase of the study. Both the experimental and the control groups were given a twenty-question translation test. The sentences included in this test were all selected from the Farsi translations of the 10 American and English novels.

### Data Analysis of Hypothesis I

Research Hypothesis: Being aware of the meaning components of the lexical items of both SL & TL and applying CA in the process of translation have a significant role in translation accuracy.

The following table represents the information obtained from comparing the mean scores of the two independent groups regarding their performance in the posttest.

	N	$\bar{X}$	SD	df	Significance
Experimental Group	40	13.95	5.2401	78	t-crit < t-obs
		t-obs=3.1877		t-crit=2.000	
Control Group	40	10.025	2.6936		

Considering the significant difference between the observed-t and the critical t ( $2.000 < 3.1877$ ), the first null hypothesis is strongly rejected at the level of  $P < 0.05$ .

## Discussion

One of the findings of the present study, which is, indeed a logical answer to the research question, is that awareness of the components of meaning of the lexical items of both SL & TL and of the application of CA in the process of translation increase the accuracy of translation. In other words, it was determined that the subjects to whom the componential analysis was taught performed significantly better than those to whom CA was not introduced.

## Conclusion

It goes without saying that accuracy is an inseparable characteristic of a satisfactory translation. In his strive, the translator's main concern is to achieve the most possible accuracy. This accuracy may be at different levels which are somehow interrelated. These levels may be word level, sentence level, discourse level, etc. For example, if a translator translates the verb **decide** to **خواستن**, some meaning components will be lost. **خواستن** is a general word which can be a suitable equivalent for the word "want" in English. So, in choosing lexical equivalents, a translator has no way but identifying all the meaning components of the SL lexical item, and then, trying to find an equivalent in the TL which is as close as possible to the SL lexical item.

The present study is an attempt to : First, present the usefulness and applicability of a technique, called CA, to achieve the most accurate lexical equivalents, and second, to reveal that inaccurate lexical equivalents are a real problem in Farsi translations.

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