

The Nature of Ambiguity across Languages

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Abstract

Ambiguity is a universal phenomenon in processing natural language which is present at phonological, lexical, and grammatical linguistic levels in languages in general and in Arabic and English in particular. A breakdown of communication may take place because of the different interpretations of ambiguous sentences. This paper investigates the interpretations of some Arabic ambiguous sentences in relation to their linguistic content of both English and Arabic languages and it is also an attempt to trace the common ambiguous patterns. It is hypothesized that similar structures of ambiguous sentences may have serious consequences in the intercultural communication. This paper examines Arabic sentences with lexical and structural ambiguity in order to know exactly how the speakers¹ understand these sentences. It is also an attempt to idealize the pragmatic functions of these sentences. Results are evident that factors causing ambiguity are shared among languages, and ambiguity is transferable².

Keywords: structural ambiguity, lexical ambiguity, interpretation, antecedent.

1- Methodology

It has been recognized that Arabic users of English and English users of Arabic encounter problems with the sentences which involve structural or lexical ambiguity during the encoding/decoding processes. This study is conducted in This study is conducted in College of Arts and Science (Wadi Addawasir) - University of Prince Sattam bin Abdalaziz (the academic year 2017- 18)³. Different ambiguous sentences were collected from different sources such as directive boards, mass media, social networks, films and T.V movies.

Linguistic analysis of sentences and cognitive translation with regard to the context of situation are applied to find out about the interpretation of ambiguous sentences. Translation helps to examine whether the grammatical forms are prone to the transfer of ambiguity across culture.

¹ of both Arabic and English

² Arabic and English in this case

³ the data was tested with the students studying various translation courses

2- Literature review

The term ambiguity is generally used to describe a word, phrase, or sentence with more than one interpretation. Lexical ambiguity which occurs at the level of the word is very common. Structural ambiguity occurs at the level above the word where the structure has more than one deep or underlying structure.

[Chomsky, 1965] mentioned that each sentence in a language represents two levels i.e. a deep structure (DS) and a surface structure (SS) . The first accounts for the sounds in the utterance or the letters in writing, while the second accounts for the meaning. Structural ambiguity takes place when the surface structure is prone to more than one underlying structure. [Gentzler, 1993] stated that some modern theories of translation agree with the idea of equivalence between the (ST) source text and the (TT) target text but one of the modern theories, namely the ‘deconstruction’ objects the idea. [Palmer,1984] stated that IC analysis proves that meanings of structurally ambiguous sentences are represented in different IC analyses. According to [Daimi, 2001] the process of translating sentence from a source language to a target language fall under one of the four probabilities shown in the following table.

Table (1) The relation between a text and its translation.

SN	Source language text	Target language text
1	Unambiguous	Unambiguous
2	Unambiguous	Ambiguous
3	Ambiguous	Unambiguous
4	Ambiguous	Ambiguous

Translating the English sentence into Arabic or vice versa can be of a difficult nature. According to [Othman et al., 2003] the difficulty of the Arabic structure can be referred to several reasons:

- 1) the length of the Arabic sentence and
- 2) the complex nature of Arabic syntax,
- 3) The omission of diacritics (vowels) in written Arabic.
- 4) The free world order of Arabic.
- 5) The presence of an elliptic personal pronoun.

Not much work has been done in the syntactic analysis of Arabic. [Otham et al., 1999] stated that little efforts in Arabic syntactic analysis have been made in recent years. Arabic syntactic analysis can have a positive influence in the delimitation of ambiguity. In his paper [Freeman, 2001] pointed out that Arabic language has a pro-drop nature, word order flexibility, and the multi-functionality of Arabic nouns are considered weak spots where syntactic ambiguity is very active. Sometimes the use of Arabic diacritics leads to structural ambiguity due to the absence of the phonetic guide of the Arabic diacritics.

3- Discussion

The present paper discusses lexical and structural ambiguity arising during the process of translation from Arabic into English and vice versa.

3.1. Lexical Ambiguity

The following section talks about lexical ambiguity.

I. سقط الولد على الكرسي فانكسرت رجله⁴

sagat	al-	wala	-du	ala	al-	kursi	f-	inkasara	-t	rijlu	-	hu.
fall-Pt	art	boy	Nom	on	Art	chair-Mas	consequently	was broken	-V,Pt	leg-Mas	Nom	-pro,Mas

The boy fell on the chair consequently his leg was broken.

II. العفش داخل الباص مسئولية صاحبه⁵.

al-	afash	dakhil	al-	bus	masoulee-yat	sahibi	hi.
Det	baggage-Mas	inside	Det	bus	[is] the responsibility of-N	owner-Mas	Poss, adj, 3 rd -Mas,Sg

The baggage inside the bus is the responsibility of its owner.

III. جمعت الكثير من نواذر الكتب⁶.

jama	-tu	al-	katheer	min	nawadir	al-	kutub.
Collect-Pt	I-Nom	Det	many	of	rare-N/Adj,Pl	Det	books-N,Pl

I collected many of the rare books.

Interpretation

The lexical ambiguity can be interpreted in two different ways in Arabic. In (I), the inflectional pronoun 'hu'⁷ attached to the noun 'rijl' 'leg' can refer to either the chair or the boy. The interpretations in the following sentences (1.a and b) show that the pronouns and their antecedents are the same gender:

1. a. Sagatat alwaladu ala alkursi f nkasatat rijlu-hu.

i- 'The boy fell on the chair consequently his leg was broken'

ii- 'The boy fell on the chair consequently its leg was broken'

b. Sagatat albintu ala altawla f-nkasatat rijlu-ha.

i- 'The girl fell on the table consequently her leg was broken'.

ii- 'The girl fell on the table consequently its leg was broken'.

⁴ <http://afid.zakiland.info/t2052-topic>

⁵ A common sentence written in the travelling buses.

⁶ <http://afid-wa-istafid.cultureforum.net/t2052-topic>

⁷ The pronoun 'hu' is the common gender for both, 'kursi' and 'walad'. Arabic language has two gender pronouns only masculine and feminine the third gender (it) is taken care of by the other two.

In 1.a, above, boy and chair share the same (masculine) gender and in 1.b ‘girl’ and ‘table’ share the same (feminine) gender, leading to ambiguity.

This is to be noted that when the gender of the two nouns is not the same, there is no question of ambiguity, as shown in 1.b and 1.b below.

1. a. Sagat alwaladu ala *altawla* f-nkasatat rijlu-*ha*.

‘The boy fell on the *chair* consequently *its* leg was broken’

b. Sagatat albintu ala *alkursi* f-inkasatat rijlu-*hu*.

‘The girl fell on the *chair* consequently *its* leg was broken’.

In 2.a. ‘alwaladu’ and ‘altawla’, refer to masculine and feminine gender respectively. Similarly in 2.b both ‘albintu’ and ‘alkursi’ refer to different genders – feminine and masculine respectively hence there is no scope for ambiguity. Gender agreement give rise to ambiguity.

In (II), the sentence is intended to remind the passengers to keep an eye on their baggage inside the bus but it can be interpreted the other way round. In one interpretation the responsibility on the baggage owner while in the other one the responsibility goes to ‘the bus’s owner’. The common assumption is that the responsibility is the baggage owner’s. Structurally the meaning goes to the bus owner because it is close to the genitive ‘s’ and one cannot attach it to the noun ‘baggage’ which appears at the beginning of the sentence. The cause of ambiguity here is the Arabic inflectional pronoun which may have more than one possible antecedent as shown below.

1. a. The shirt inside the bus is the responsibility of its owner. (ambiguous)
- b. The shirts inside the bus is the responsibility of their owner. (ambiguous)
2. a. The bags inside the bus is the responsibility of their owner. (unambiguous)
- b. The bag inside the bus is the responsibility of its owner. (unambiguous)

Here also Gender agreement gives rise to ambiguity irrespective of the number (singularity, duality, plurality) weather it is a noun or pronoun. When reverse translation is conducted on the English versions no ambiguity has taken place. It is not necessary that target language is ambiguous because the source language is ambiguous or vice versa.

In (III), Owing to the word ‘Nawadir’, the above Arabic sentence contains lexical ambiguity. ‘Nawadir’ means either the noun ‘anecdotes’ or the adjective ‘rare’; the reason behind the lexical ambiguity is homophony. One of the two interpretations is (I collected many of the rare books.) while the second meaning (I collected many anecdotes of books) is probable. In English the expression is not ambiguous, reverse translation has shown that each meaning is conveyed by a separate sentence. When the word ‘Nawadir’ is used in contexts with nouns other than ‘books’ such as ‘alward’ flowers as in ‘*jama-tu al-katheer min nawadir al-ward*’ which means ‘*I collected many of the rare flowers*’ ambiguity is removed. This is to proof that connotation is also playing role in arising or removing the ambiguity.

3.2. Structural ambiguity

The followings are examples of structural ambiguity.

I. من يشجع العرب بعد الموندنال⁸؟

⁸ برنامج اصداء العالم يوم 2018/7/3 الساعة 12:30 ص MBC قناة

mun ushaji' al- Arab ba'ad al- mondial .
 | | | | | | |
who/m encourage -Pr Det Arab after Det world-cup

Who/m will the Arab encourage after the World Cup?

II. كان عقاب علي شديدا⁹

kana iqabu Ali shadeed-an.
 | | | |
be-Pt punishment[of] Ali severe-Adj,Sg

Ali's punishment was severe.

III. ضرورة معاقبة قتلة أبي علي مصطفى و المناضلين الفلسطينيين.¹⁰

Daroorat mu'aqabat qatalat Abi-Ali wa al-munadleen al-filisteeni-een.
 | | | | | | | | | |
The necessity[of] punishing those who kill Abi-Ali and Det militants Det Palestinian -Adj

IV. ممنوع الاقتراب و التصوير.¹¹

mamnu ' al-iqtirab wa at- tasweer
 | | | | |
No coming [near]-N and Det photographing-N

V. هل قرأت قصيدة رثاء عمر لزيد؟¹²

hal qara' -tu qaseedat ritha Omar li- Zeid.
 | | | | | | | |
Have-Int. Pro read-V,PP you-Pro,S poem lamentation-N Omar to Zeid

Have you read Omar's lamentation to/on Zeid.

VI. انقاذ اهرامات مصر القديمة.¹³

inghaz ihramat Misr al- qadeema.
 | | | | |
rescue [of] N pyramids-N,Fem,pl Misr-Fem Det ancient-Adj, Fem)

[It is necessary] to rescue the ancient Egypt pyramids.

Interpretation

The question in (I) above was taken from MBC TV channel during the functions of the world cup when the Arab teams lost their matches. In Arabic, 'Who will the Arab encourage?', is prone to two interpretations; the first; 'the Arab will support someone' and the second; 'the Arab will be supported by someone'. The existence of ambiguity in Arabic is due to the use of the Arabic interrogative pronoun (من,

⁹ fid-wa-istafid.cultureforum.net/t2052-topic

¹⁰ <http://afid-wa-istafid.cultureforum.net/t2052-topic>

¹¹ A common sentence in Sudan military areas.

¹² <http://afid-wa-istafid.cultureforum.net/t2052-topic>

¹³ National Geographic- Abudhabi. Documentary film.

mun) which can stand for both the English relative pronouns “who and whom”. In addition to that, the absence of the diacritic marker so, contextual ambiguity arises.

In (II), the sentence leads to two interpretations. Ali punished someone or someone punished Ali. This type of lexical ambiguity generally hits Arabic nominal sentences because the antecedent for ‘ighab’ which means punishment, is experienced by Ali or someone else, and thus more than one superficial structure can be drawn. The reason behind the transference of such ambiguity relies behind the possessive marker because the noun reference is not clear.

The Arabic compound ‘igab Ali’ is translated as ‘Ali’s punishment’ in English. ambiguity is transferred to the English sentence, because of the complex NP, absence of diacritics and connotation that gives rise to ambiguity. The loss of argument is typical to the English sentence ‘flying places can be dangerous.

In (III) the following interpretations are possible.

a. *daroorat muaqabat [qatalat abi-Ali wa al-mundleen al-filisteeni-een]*

[The necessity of punishing those who kill] [Abu Ali Mustafa and Palestinian militants].

b. *daroorat mu’aqabat qatalat [abi-Ali] [wa] [al-munadl-een al-filsteeni-een]*

[The necessity of punishing those who kill Abu Ali Mustafa] [and Palestinian militants].

The English sentences (a and b) above represent the two interpretations for the Arabic nominal sentence(III). The first one takes the noun ‘muagabat’ (punishing) as a modifier for both killers of those who kill both (Abu Ali Mustafa and the Palestinian militants) as a compound noun. The second interpretation refers to punishing both the [killers of Abu Ali Mustafa] and [Palestinian militants]. It takes the same noun ‘muagabat’ (punishing) as a modifier for killers of Abu Ali only but not the Palestinian militants. In such case the killers of Abu Ali are to be punished and Palestinian militants are to be punished also. The sentence is ambiguous in English.

The conjunction 'and, (و) has given rise to ambiguity. The English sentence ‘Tall men and women’ leads to the same type of ambiguity so the adjective can go to men only, or men and women together.

The following interpretations are of sentence (IV) above “Don't come near the[place] and don't photograph [it]”.

a. *mamnu [al-iqtirabwa at-tasweer]. Don't [come near and photograph].*

b. *mamnu' [al-iqtirab] wa [at-tasweer.] Don't [come near] and [photograph].*

The sentence is a military message which is meant to warn people not to come near and not to photograph either. But it can also be interpreted as come near without photographing or photograph without approaching. The reason behind the two different interpretations above in (a and b) of the nominal sentence (IV) is the compounding which is the main reason behind the laxity.

The ambiguity is also transferred to the English version for the same reason of compounding. The actual Arabic sentence should appear as '*mamnu' al-iqtirab wa mamnu' a-t-tasweer'* meaning ‘Don't come near and don't photograph’ as a compound sentence but the second 'don't' was deleted, resulting in a simple ambiguous sentence. In English the deletion of the 'don't' creates a compound verb conjoined by the 'and' (و) has given rise to ambiguity because two antecedents are there. The Arabic version can also be modified by '*al-iqtirab wa at-tasweer yomna'an'* which is to be interpreted in English as (coming near

and photographing are both forbidden) because the verb that appears at the end of the sentence is dual and it agrees with the compound noun.

In the above Arabic nominal sentence (V) there is a structural ambiguity. It is due to the use of the Arabic phrase 'Omar's lamentation'. In one interpretation, Omar is the poet who wrote the poem' in another interpretation 'Omar' is the subject matter of the poem. For the same context, another interpretation is concerned with 'of Omar to Zeid' which means 'written by someone on Omar and had been read to Zeid'. The interpretations can be summarized as follow; [Omar: poet and Zeid, subject matter, Omar: subject matter, Zeid: listener]. Ambiguity arises here because of the phrase 'lamentation poem', where the reader or the listener are not sure whether 'the dead person is Omar, Zeid or someone else. The Arabic sentence includes three nouns respectively; qaseedat, ritha and Omar this arises ambiguity in addition to the free nature of Arabic prepositions. Some prepositions can replace one another. When the Arabic preposition 'li' is replaced by 'fi'¹⁴ ambiguity is removed and it leads to only one English interpretation 'Have you read Omar's lamination poem on Zeid'. The English version does not imply ambiguity.

The above nominal Arabic sentence (VI) includes three consequent nouns 'inghaz, ihramat and misr' followed by an adjective. And the language allows the two nouns 'ihramat misr' either to be taken together as one antecedent modified by the adjective 'al-gadeema' meaning 'ancient', or to take the second component only. The meaning rely behind 'aliihramat misr algadeema or misr algadeema' is Egypt ancient or the pyramids of Egypt. This is a cross reference ambiguity. The English interpretation is also ambiguous. The English sentences 'I met old men and women' and the 'English teacher is having her tea' express the same kind of ambiguity

Gender and number agreement plays a significant role to give rise to and remove any chance of ambiguity as shown in the following sentences;

1. a. qara'atu hykay'yat Al-Sudan al-qadeem. 'I read the tales of old Sudan'. ambiguous
- b. qara'atu hykay'yat *Misr alhadeetha*. 'I read the history of modern Egypt'. ambiguous
2. a. qara'atu *tareekh* Misr *Alhadeeth*. 'I read the modern history of Egypt'. unambiguous
- b. qara'atu *hykay'yat* Al-Sudan *al-qadeema*. 'I read the Sudan old tales'. unambiguous

In (1.a and 1.b) one noun agrees with the adjective in 1.a 'Al-Sudan and al-qadeem' and in 2.1 'Misr and al-hadeeth' so that ambiguity arises. In (1.a and 1.b) one noun agrees with the adjective in 2.a 'tareekh and al-qadeem' and in 2.b 'hykay'yat and al-qadeema' so that no ambiguity arises.

When the two nouns are the same gender (male or female) and the same number (singular, dual or plural) ambiguity arises but when they are different gender or number, ambiguity is reserved.

4. Conclusion

In English and Arabic, ambiguity is a common phenomenon. Factors of lexical ambiguity are shared between English and Arabic. It is found that almost all ambiguous Arabic sentences lexical or structural and contextual are also ambiguous in English but not vice versa. It seems that the situation is also the main clue in the interpretation of ambiguous sentence.

¹⁴ as in (هل قرأت قصيدة رثاء عمر في زيد)

Like English, Arabic language has several factors that cause structural ambiguity but with few differences. These factors are the nature of the Arabic sentence, connotation, referents and antecedents, the deletion of words, absence of diacritic markers, use of prepositions, possessive, interrogative pronouns and compounding. Gender agreement (male and female), number (singular, dual and plural) noun and pronoun can be one of the main causes of ambiguity.

One's being linguistically competent can help avoiding ambiguity because human's cognitive ability can remove confusion among sentence. Disambiguation depends on linguistic competence.

5. Acknowledgement

The author is very thankful to Dr. Harish Kumar Khanna and all the associated personnel in any reference that contributed for the purpose of this research.

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Abbreviations used

Pr	present
Pt	past
Mas	masculine
Fem	feminine
Adj	adjective
V	verb
N	noun
Prep	preposition
Pro	pronoun
Con	conjunction
Int. pro	interrogative pronoun
Adv	adverb
pc	place
inf	inflectional
pl	plural
Det	determiner
Nom	nominal
Sg	singular
