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Evaluation of Translation output of Arabic News Headlines via Free Online Machine Translation Systems

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Abstract

This study focuses on evaluating Free Online Machine Translation Systems; namely Google Translate and Microsoft Bing Translator. It aims to evaluate to what extent that translations produced by Google Translate and Microsoft Bing translator systems compared to human translation acceptable in terms of clarity, accuracy and style. A questionnaire is designed and distributed to (54) university staff of languages at Sudan University of Science and Technology, and professional and free lance translators at translation institutions. The study uses the descriptive analytical method and SPSS to analyze the data statistically.

The study concludes that Google Translate is better than Bing Translator in terms of clarity, accuracy and style. The study recommends conducting further studies with a larger number of news headlines to present a clear picture of the investigated phenomenon. Further studies and researches can be carried on to disprove or verify these findings. Further studies may be carried on to investigate other MT systems to uncover their linguistic features.

Keywords: Machine Translation Evaluation, Free Online Machine Translation Systems, Professional Translator and News Headlines.

المستخلص

تركز هذه الدراسة على تقييم نظامين من نظم الترجمة الآلية على الانترنت, وهما مترجم جوجل و مترجم مايكروسوفت بنيج. وتهدف الدراسة إلى تقييم هذين النظامين و معرفة إلى أي مدى أن ترجمة هذه النظم مقبولة مقارنة بالترجمة البشرية الاحترافية من حيث الوضوح والدقة والأسلوب. تم تصميم استبيان وتوزيعه على عدد (54) مستجيب من أساتذة اللغات في جامعة السودان للعلوم والتكنولوجيا و عدد من المترجمن المحترفين في مؤسسات الترجمة المختلفة بولاية الخرطوم. استخدمت الدراسة المنهج الوصفي التحليلي، و برنامج *SPSS* للتحليل الإحصائي.خلصت الدراسة إلى أن ترجمة جوجل أفضل من ترجمة من حيث المعايير الثلاثة التي استخدمها الباحث؛ وهي الوضوح والدقة والأسلوب. و قد أشارت الدراسة إلى أن هنالك فروقا دالة بين نظامي الترجمة قيد الدراسة. يوصي الباحث إجراء المزيد من الدراسات لعدد أكبر من عناوين الأخبار لتقديم صورة واضحة عن الظاهرة المدروسة. ويمكن إجراء داراسات و بحوث أخرى للتحقق من هذه النتائج. كما يمكن إجراء المزيد من الدراسات حول أنظمة الترجمة الآلية المجانية من و إلى اللغة العربية في مجالات أخرى للكشف عن خصائصها اللغوية.

الكلمات المفتاحية: تقييم الترجمة الآلية, نظم الترجمة الالية المجانية على الانترنت, المترجم المحترف والعناوين الرئيسة للأخبار.

Introduction

Machine translation (MT) is one of the technologies that is becoming common practice in the professional translation field Koponen, Daems et al. (2015), and translators' productivity gains using MT have been broadly demonstrated Guerberof, Ana. (2009). MT with post-editing that is, with a revision by a professional is already part of the work flow of many translation service providers dealing with technical texts and also of public administrations aiming "to quickly check the general meaning of incoming information.

Free Online Machine Translation Systems

Broadly speaking, Free Online Translation Includes any free online resource used by translators, such as Internet search engines, monolingual and bilingual dictionaries, glossaries, parallel corpora, peer-to-peer language usage forums, sophisticated computer-assisted translation (CAT) suites that combine multiple functions (terminology management, translation memory, etc.), and FOMT solutions, such as Google Translate.

It has been observed that news headlines also have a special grammar, and style as stated by Swan (1996). Additionally, Iarovici and Amel (1989) define headlines as "a special kind of text, which cannot have an autonomous status". The selected news headlines in this current study are from Arabic source language. That is, Arabic language has its unique features, which distinguishes it from other languages, Arabic has its importance and has been subjected to some experimentation in MT, especially in the US, in the very early days of MT, (Zughul & Abu-Alshaar (2005). Izwaini (2006) states that, "*Since it was developed, Arabic machine translation has been subject to description and evaluation*" (Chalabi 2001, Farghaly & Senellart 2003, Al-Salaman 2004).

Google Translate and Bing Translator

Google Translate (2016) is a free translation tool from Google Company that can be used via browser, mobile browser, Android app, or iOS app. Both the browser and mobile browser versions can translate text and web pages, and the non-mobile browser can also translate some documents. The Android and iOS app can translate text, real-time speech, images, web pages, and even real-time video for some languages.

Microsoft Translator (2016), on the other hand is a free translation tool from Microsoft that can also be used via browser or mobile browser (via Bing Translator), and has apps for Windows, Windows Phone, iOS, Android, and apps for Apple Watch and Android Wear. Additionally, Microsoft Translator can be integrated with other Microsoft applications, like Microsoft Office, Skype, and Visual Studio. The browser versions can translate only text and web pages, but the Microsoft Translator apps can work with text, real-time speech, and images.

Google Translate has long been the favorite when it comes to translation tools where as Microsoft Translator (also known as Bing Translate) has been catching up in the last two years. Now they're both fairly comparable when it comes to functionality.

Google Translate can handle 103 languages, but not every language works with every feature. For example, French can be translated using all six of Translate's features: type, write, talk, snap, see, and offline. Arabic works with everything but snap photos. And the Hausa language, which is mainly spoken in Nigeria, can only be translated via text. So it's cool that Google Translate has such a wide range.

Methodology

The evaluation is restricted on testing the raw outputs of two machine systems, specifically Google and Bing Translator, in reference to the manual translation that is available by the source of the data and to the judgment of professional human translators. The testing focusses on evaluating the quality of raw outputs based on the most basic principles of machine translation evaluation rather than to focus on the operations within the potential environments of systems. The parameters which are used to judge and compare the output translation of these systems are: fidelity, intelligibility as suggested by Hutchins and Somers (1992)

Fidelity represents the accuracy of machine translation performance. It also means to what extent that the translated output has the 'same' information as the original. On the other hand, intelligibility principle expresses the clarity in the translation output. In other words, it represents that the translated output should be free from obscurity, comprehensive, and understandable. The last one is style, which expresses to what extent the translation has used the language, suitable to its content and purposes.

Data of the Study

There are 16 news headlines, which are randomly chosen from seven different Sudanese daily newspapers, which issued in Khartoum in Arabic language, which taken from Sudan News Agency official website in the fifth of June 2016. The choice of these data is based on the availability of their human English translation.

Procedures

The main procedures used in achieving the objectives of this research are stated below:

1. Collecting the data of the study which consist of Arabic news headlines with their English manual translated versions from online sources
2. Each Arabic headline once will run into Google translator, and then into Microsoft Bing Translator, to be translated into English.
3. The outputs of both Google and Microsoft Bing Translator are listed in one table.
4. To fulfill the evaluation objective, the researcher distributes a questionnaire to a group of evaluators. The distributed questionnaire is based on the criteria provided by Hutchins and Somers .The group of evaluators consists of 54 professionals whose native language is Arabic, and who work Sudan University of Science and Technology and Translation Institutions and, have good English and Arabic Language proficiency.

The evaluators' assessment is considered the most important. It calculates the human judgments based on the assigned questionnaire. In this study, sixteen machine-translations of Arabic news headlines into English. The evaluators are asked to consider each Arabic headline and its machine-translated outputs to examine the three parameters which are provided in the questionnaire. The parameters consisted of three criteria: Clarity, Accuracy, and Style. Each criterion is defined according to Hutchins and Somers (1992). in Kasim (2013) For each criterion there are 4 scores. There are 52 evaluators who participated in the assigned questionnaire. The average of each output is calculated based specific statistical equation.

Data Analysis

This section is intended to analyze a set of data through employing descriptive statistics. Frequency distribution is a method used to describe a set of data. The goal is to summarize the data in tables to reveal the shape of data.

Table (1) Frequency and Percentage Distribution of Valid Qualification for the Study Sample.

Qualification	Frequency	Percentage (%)
PhD in English or translation	15	27.8
MA in English or translation	25	46.3
BA in English or translation	8	14.8
Some Training courses in Translation	6	11.1
Total	54	100

Table (1) Frequency and percentage Distribution of valid qualification for the sample study

The results t in above table (1) point out that the frequencies and percentages of valid qualification show that (%27.8%) of study sample qualification was PhD holder in English translation and (46.3%) was MA in English translation , while (14.2%) of sample study was BA in English or translation and (11.1%) of study sample they have some training as translator .

Table (2) Frequency and Percentage Distribution of Valid Occupation Status for the Study Sample

Occupation Status	Frequency	Percentage (%)
Full time Translator	12	22.2
FreelancTranslator	27	50
University Staff	15	27.8
Total	54	100

Table (2) Frequency and percentage Distribution of valid occupation status for the study sample.

The above table (2) indicates that the frequencies and percentage of valid occupation status that (22.2%) of study sample of occupation status is full time translator and (50%) of occupation status is freelance translator , while (27.8%) from sample study of occupation status is university staff.

Table (3) Frequency and Percentage Distribution of Valid years of Experience for the Study Sample

years of experience	Frequency	Percentage (%)
1-5 years	19	35.2
6-10 years	4	7.4
11-15 years	16	29.6
16-20 years	6	11.1
Above 20 years	9	16.7
Total	54	100

The result in above table points out that (35.2%) of study sample of years of experience ranged from 1 to 5 years and (7.4%) years of experience ranged from (6 to 10 years) and (29.6%) years of experience from (11-15 years)and (11.1%) years of experience

from (16-20years) and (16.7%) of study sample years of experience above than 20 years.

Table (4) Frequency and percentage Distribution of translators' Level for the Sample Study about paragraph (*in the early hours of the morning Dr. Nafie Reveals the schems(100) Day the rebels and the opposition alliance*). في الساعات الأولى من يوم للمترمدين وتحالف المعارضة. الصباح :د.نافع يكشف عن مخطط الـ(100)

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	13	18	3	34
	% of Total	8.0%	11.1%	1.9%	21.0%
2.00	count	41	11	6	58
	% of Total	25.3%	6.8%	3.7%	35.8%
3.00	count	0.0	21	21	42
	% of Total	0.0%	13.0%	13.0%	25.9%
4.00	count	0.0	4	24	28
	% of Total	0.0%	2.5%	14.8%	173%
Total	count	54	54	54	54
	% of Total	33.3%	33.3%	33.3%	100.0%

The pattern which emerged in table (4) above reveals that the majority of respondents 58 (35.8%) were level two, while 42(25.9%) take the second respondents in level three and 34(21%) from respondents in level one and 28(17.3%) respondents in level four and these results revealed that the majority of respondents 58(35.8%) were level tow.

Table (5) Frequency and percentage Distribution of translator ' Level for the Sample Study about paragraph (Juba We will ask for Egypt's helps in getting our share of the Nile water share of Sudan) جوبا سنطالب مصر بالمساعدة في الحصول على نصيبنا من مياه النيل من حصة السودان

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	5	9	0	14
	% of Total	3.1%	5.6%	0.0%	8.6%
2.00	count	28	17	11	56
	% of Total	17.3	10.5	6.8%	34.6%
3.00	count	15	19	14	48
	% of Total	9.3%	11.7%	8.6%	29.6%
4.00	count	6	9	29	44
	% of Total	3.7%	5.6%	17.9%	27.2%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Table (5) displays frequency percentages in which the vast majority of "sample study," 56(34.6%) agreed with response of study sample in level two the second response choice

"level three " 48(29.6%), and then the third response choice "level four" 44(27.2%) and last response choice level one and greater response choices on the level two in thee paragraph.

Table (6) Frequency and percentage Distribution of translator ' Level for the Sample Study about paragraph (*the escalation of difference in RUF after the defeat of Abu Karashowla*).تصاعد الخلافات في الجبهة الثورية عقب هزيمة ابو كرشولا

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	3	9	0	12
	% of Total	1.9%	5.6%	0.0%	7.4%
2.00	count	16	10	2	28
	% of Total	9.9%	6.2%	1.2%	17.3%
3.00	count	25	21	34	80
	% of Total	15.4%	13.0%	21.0%	49.4%
4.00	count	10	14	18	42
	% of Total	6.2%	8.6%	11.1%	25.9%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Table (6) explain that the highest choice in Likert-type scale is recognized by the frequency and percentage distribution 80 (49.4%) in level Three take the grater Criteria the frequency percentage and The next response choice 42 (49.4%) in level four. third and last response choice on Likert-type scale is the level two 28(17.3%) and level one with the percentage 12 (7.4%) in paragraph

Table (7) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph (Muslim *leaders and MPs are demanding the lifting of subsidies on goods and fuel.).قيادات إسلامية وبرلمانيون يطالبون برفع الدعم عن السلع والمحروقات

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	7	5	0.0	12
	% of Total	4.3%	3.1%	0.0%	7.4%
2.00	count	14	11	0.0	25
	% of Total	8.6%	6.8%	0.0%	15.4%
3.00	count	21	20	18	59
	% of Total	13.0%	12.3%	11.1%	36.4%
4.00	count	12	18	36	66
	% of Total	7.4%	11.1%	22.2%	40.7%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Table (7) Frequency and percentage Distribution of translator ' Level for the study Sample Study about paragraph(Muslim leaders and MPs are demanding the lifting of subsidies on goods and fuel.).قيادات إسلامية وبرلمانيون يطالبون برفع الدعم عن السلع والمحروقات

The above table clarifies *"level four"* 66(40.7%), "level three" 59(36.7%) and *"level two"* 25(15.4%) and level one12 (7.4%) In the first response choice "level four takes the highest frequency and percentage respondents in paragraph.

Table (8) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph (North Gaza topples justice and quality and the sons of the leadership of kordufan (Revolutionary) قطاع الشمال يطيح بالعدل والمساواه وابناء كردفان من (قيادة الثورية)

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	9	9	0.0	18
	% of Total	5.6%	5.6%	0.0%	11.1%
2.00	count	20	18	8	46
	% of Total	12.3%	11.1%	4.9%	28.4%
3.00	count	18	15	19	52
	% of Total	11.1%	9.3%	11.7%	32.1%
4.00	count	7	12	27	46
	% of Total	4.3%	7.4%	16.7%	28.4%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Table (8) emphasizes that respondents are 52(32.1%) in level three and second respondents 46(28.4%) in levels two and four and the last respondents in the level one 18(11.1%) in the paragraph.

Table (9) Frequency and percentage Distribution of translator ' Level for the study Sample abut paragraph (the declaration of acceptance in secondary schools in Khartoum)إعلان القبول بالمدارس الثانوية في الخرطوم

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	5	5	0.0	10
	% of Total	3.1%	3.1%	0.0%	6.2%
2.00	count	15	15	12	42
	% of Total	9.3%	9.3%	7.4%	25.9%
3.00	count	17	19	10	46
	% of Total	10.5%	11.7%	6.2%	28.4%
4.00	count	17	15	32	64
	% of Total	10.5%	9.3%	19.8%	39.5%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

The pattern which emerged in table (9) above revealed that the majority of respondents 64(39.5%) were level four, while 46(28.4%) take the second respondents in level three and 42(25.9%) of respondents in level two and 28(17.3%) last respondents in level one and These results revealed that the majority of 64(39.5%) were level four in the paragraph.

Table (10) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph (*Sudanese proposal four Egyptian about the (Millennium)dam*)مقترح سوداني لمصر حول سد الألفية.

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	7	4	0.0	11
	% of Total	4.3%	2.5%	0.0%	6.8%
2.00	count	18	21	0.0	39
	% of Total	11.1%	13.0%	0.0%	24.1%
3.00	count	20	18	24	62
	% of Total	12.3%	11.1%	14.8%	38.3%
4.00	count	9	11	30	50
	% of Total	5.6%	6.8%	18.5%	30.9%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Results in table 10) above indicate that respondents were 62(38.3%) in level three and second respondents 50(30.9%) in levels four and 39 (24.1%) in level and last respondents in the level one 11(6.8%) in the paragraph.

Table (11) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph(*North sector in control of the RUF leadership and excludes the children of south kordufan*) قطاع الشمال يسيطر على قيادة الجبهة الثورية ويقصي ابناء جنوب كردفان.

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	17	10	0.0	27
	% of Total	10.5%	6.2%	0.0%	16.7%
2.00	count	18	23	11	52
	% of Total	11.1%	14.2%	6.8%	32.1%
3.00	count	14	12	18	44
	% of Total	8.6%	7.4%	11.1%	27.2%
4.00	count	5	9	25	39
	% of Total	3.1%	5.6%	15.4%	24.1%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Results in table (11) above emphasize that respondents were 62(38.3%) in level three and second respondents 50(30.9%) in levels four and 39 (24.1%) in level and last respondents in the level one 11(6.8%) in the paragraph.

Table (12) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph(selva kiir reveals African efforts to collect basher s

leadership of north gaza next month) سلفاكير يكشف عن مساع افريقية لجمع البشير بقيادات قطاع الشمال الشهر المقبل

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	12	12	0.0	24
	% of Total	7.4%	7.4%	0.0%	14.8%
2.00	count	17	18	5	40
	% of Total	10.5%	11.1%	3.1%	24.7%
3.00	count	17	15	23	55
	% of Total	10.5%	9.3%	14.2%	34.0%
4.00	count	8	9	26	43
	% of Total	4.9%	5.6%	16.0%	26.5%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Results in table (12) above emphasize that respondents were 55(34%) in level three and second respondents 43(26.5%) in levels four and 40(24.7%) in level two and last respondents in the level one 24(14.8%) in these paragraph.

Table (13) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph (Morsi what issued by officials in Egypt towards Sudan does not reflect the government position) مرسي ما صدر عن مسئولين بمصر تجاه السودان لا يعبر عن موقف الحكومة.

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	5	6	0.0	11
	% of Total	3.1%	3.7%	0.0%	6.8%
2.00	count	14	18	3	35
	% of Total	8.6%	11.1%	1.9%	21.6%
3.00	count	27	13	20	60
	% of Total	16.7%	8.0%	12.3%	37.0%
4.00	count	8	17	31	56
	% of Total	4.9%	10.5%	19.1%	34.6%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Table (13) explains that the highest choice in Likert-type scale is recognized by the frequency and percentage distribution 60 (37%) in level three take the grater Criteria the frequency percentage and The next response choice 56 (34.6%) in level four. third and last response choice on Likert-type scale is the level two 35(21.6%) and level one with the percentage 11 (6.8%) in paragraph.

Table (14)Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph(finance Minster Economic situation is under control despite the challenges) وزير المالية الوضع الاقتصادي تحت السيطرة رقم التحديات

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	7	3	0.0	10
	% of Total	4.3%	1.9%	0.0%	6.2%
2.00	count	16	15	0.0	31
	% of Total	9.9%	9.3%	0.0%	19.1%
3.00	count	19	19	21	59
	% of Total	11.7%	11.7%	13.0%	36.4%
4.00	count	12	17	33	62
	% of Total	7.4%	10.5%	20.4%	38.3%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Table (14) reveals that the highest choice in Likert-type scale is recognized by the frequency and percentage distribution 62(38.3%) in level foure take the grater Criteria the frequency percentage and The next response choice 59 (36.4%) in level three. third and last response choice on Likert-type scale is the level two 31(19.1%) and level one with the percentage 10 (6.2%) in paragraph.

Table (15) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph (Detection of irregularities in the Emaar middle fund الكشف عن تجاوزات في صندوق إعمار الشرق

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	8	9	0.0	17
	% of Total	4.9%	5.6%	0.0%	10.5%
2.00	count	12	18	1	31
	% of Total	7.4%	11.1%	0.6%	19.1%
3.00	count	21	16	22	59
	% of Total	13.0%	9.9%	13.6%	36.4%
4.00	count	13	11	31	55
	% of Total	8.0%	6.8%	19.1%	34.0%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Table (15) above explains that the highest choice in Likert-type scale is recognized by the frequency and percentage distribution 59(36.4%) in level three take the grater Criteria the frequency percentage and The next response choice 55(34%) in level four third and last response choice on Likert-type scale is the level two 31(19.1%) and level one with the percentage 17 (10.5%) in this paragraph

Table (16) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph(*Medical Supplies an imbalance in the distribution of malaria and lack thereof free treatment*) الانعدام الإمدادات الطبية خلل في توزيع العلاج المجاني للملاريا

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	13	10	0	23
	% of Total	8.0%	6.2%	0.0%	14.2%
2.00	count	16	26	3	45
	% of Total	9.9%	16.0%	1.9%	27.8%
3.00	count	12	10	20	42
	% of Total	7.4%	6.2%	12.3%	25.9%
4.00	count	13	8	31	52
	% of Total	8.0%	4.9%	19.1%	32.1%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Table (16) indicats that the highest choice in Likert-type scale is recognized by the frequency and percentage distribution 52(32.1%) in level four take the grater Criteria the frequency percentage and The next response choice 45.(27.8%) in level two third and last response choice on Likert-type scale is the level three 42(25.9%) and level one with the percentage 23. (14.2%) in paragraph

Table (17) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph (*A lightening visit to the Egyptian intelligence chief*) زيارة خاطفة لمدير المخابرات المصرية للخرطوم

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	13	6	0.0	19
	% of Total	8.0%	3.7%	0.0%	11.7%
2.00	count	17	23	2	42
	% of Total	10.5%	14.2%	1.2%	25.9%
3.00	count	16	19	27	62
	% of Total	9.9%	11.7%	16.7%	38.3%
4.00	count	8	6	25	39
	% of Total	4.9%	3.7%	15.4%	24.1%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	33.3%

Results in table above show that respondents are 62(38.3%) in level three and second respondents 42(25.9%) in level two and 39(24.1%) in level four and last respondents in the level one 19(11.7%) in these paragraph.

Table (18) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph (*Al aharam today) reveals details the Egyptian intelligence chief)* الاهرام اليوم تكشق تفاصي زيارة مدير المخابرات المصري

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	14	9	0.0	23
	% of Total	8.6%	5.6%	0.0%	14.2%
2.00	count	21	20	7	48
	% of Total	13.0%	12.3%	4.3%	29.6%
3.00	count	11	17	13	41
	% of Total	6.8%	10.5%	8.0%	25.3%
4.00	count	8	8	34	50
	% of Total	4.9%	4.9%	21.0%	30.9%
Total	count	54	54	54	162
	% of Total	33.3%	33.3%	33.3%	100.0%

Results in table (19) above emphasize that respondents are 50(30.9%) in level four and second respondents 48(29.6%) in level two and 41(25.3%) in level three and last respondents in the level one 23(14.2%) in these paragraph.

Table (19) Frequency and percentage Distribution of translator ' Level for the study Sample about paragraph(*the islands farmers are demanding secure water)* مزراعوا الجزيرة يطالبوت بتأمين المياه

Criteria					
Levels	**Statistics**	**Clarity**	**Accuracy**	**Style**	**Total**
1.00	count	22	7	0.0	29
	% of Total	13.6%	4.3%	0.0%	17.9%
2.00	count	13	23	10	46
	% of Total	8.0%	14.2%	6.2%	28.4%
3.00	count	13	17	19	49
	% of Total	8.0%	10.5%	11.7%	30.2%
4.00	count	6	7	23	36
	% of Total	3.7%	4.3%	14.2%	22.2%
	count	0.0	0.0	2	2
	% of Total	0.0%	0.0%	1.2%	1.2%
Total	count	54	54	54	162

	% of Total	33.3%	33.3%	33.3%	100.0%

Results in table (19) above emphasize that respondents are 49(30.2%) in level three and second respondents 46(28.4%) in level two and 38(23.4%) in level four and in the level one 29(17.9%) in this paragraph.

Table (20) demonstrated that the independent sample T. test between two valid (Google and Bing translation)

Independent sample T .test Clarity

Valid	N	Mean	Std.	T.test	Sig
Google	27	44.70	15.54		
				3.156	0.003
Bing	27	33.74	9.17		

The results in above table(20) pointed out that there are significant different between the means of the degree of the Google and Bing translation in clarity test ,it has been noticed that the means of degree of Google clarity (44.70() greater than mean of Bing Clarity (33.74) , and showed significant different between the means degree of (Google and Bing translations) at T.test equal (3.156) at the sig .value equal(0.00) less than (0.05) and the lastly notice that Google is better in clarity than Bing translation.

Table (21) demonstrated that the independent sample T. test between two valid (Google and Bing translation)

Independent sample T .test Accuracy

Valid	N	Mean	Std.	T.test	Sig
Google	27	45.85	7.31		
				2.131	0.038
Bing	27	37.66	18.57		

The results in above table(21) pointed out that there are significant different between the means of the degree of the Google and Bing translation in Accuracy test ,it has been noticed that the means of degree of Google Accuracy (45.85) greater than mean of Bing Clarity (37.66) , and showed significant different between the means degree of (Google and Bing translations) at T.test equal (2.131) at the sig .value equal(0.00) less than (0.05) and the lastly notice that Google is better in Accuracy than Bing translation.

Table (22) demonstrated that the independent sample T. test between two valid (Google and Bing translation)

Independent sample T .test Style

Valid	N	Mean	Std.	T.test	Sig
Google	27	60.55	6.02		
				4.93	0.000
Bing	27	50.25	9.01		

The results in above table (22) pointed out that there are significant different between the means of the degree of the Google and Bing translation in Style test ,it has been noticed that the means of degree of Google Accuracy (60.55) greater than mean of Bing Style (50.25) , and showed significant different between the means degree of (Google and Bing translations) at T. Test equal (4.93) at the sig .value equal(0.00) less than (0.05) and the lastly notice that Google is better in Style than Bing translation.

Findings

The study concludes to some findings which can be briefly listed as follows:

1. As far as clarity is concerned, the study reveals that there are significant differences between the means of the degree of the Google and Bing translation in clarity test, it can be noticed that the means of degree of Google clarity (44.70) which is greater than the mean of Bing Clarity (33.74)
2. Regarding the second parameter; the study shows that there are significant differences between the means of the degree of the Google and Bing translation in Accuracy test. It seen that the means of degree of Google Accuracy (45.85) is greater than the mean of Bing Clarity (37.66)
3. As for the third parameter, the study concludes that there are significant differences between the means degree of Google and Bing translation in Style. It shows that the means of degree of Google Accuracy (60.55) which is greater than the means of Bing Style (50.25)

Recommendations

The finding of the present study also indicates that Google Translate is acceptable in producing Arabic news headlines translation output in regard to th assigned parameters; clarity, accuracy, and style) . Abu-Al-Sha'r & AbuSeileek (2013) support these findings by stating that Google Translate advancement in producing satisfactory Arabic translation has exceeded expectations, due to the better understanding of the unique characteristics of Arabic language and adopting and applying the most suitable processing approaches.

The findings of the current study recommend that there is critical need for further research in this area to fill the gap in research. The researcher recommends conducting further studies with a larger number of news headlines to present a clear picture of the

investigated phenomenon. Further studies and researches can be carried on to disprove or verify these findings. Further studies may be carried on to investigate other MT systems to uncover their linguistic features.

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