
RESEARCH ARTICLE

Time Metaphors in English and Arabic: Translation Challenges

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ABSTRACT

Time metaphorical expressions are common in all languages and in general as well as specialized contexts. This study explores the similarities and differences between English and Arabic time metaphorical expressions containing , and the difficulties that student-translators have in translating them; the translation strategies they use and the causes of translation weaknesses. A sample of English and Arabic general and specialized time metaphors containing second ثانية, minute دقيقة, hour ساعة, day يوم, year عام, سنة, age, era, and epoch الدهر; عصر, حقبة, eternity; time زمن, وقت, was collected, analyzed and compared. It was found that time metaphorical expressions fall into 4 categories: (i) those that are identical in form and meaning in both languages (golden age, around the clock); (ii) those that are similar in meaning but differ in wording (wait for ages); (iii) those that exist in English, but have no equivalents in Arabic (time is money); and (iv) those that exist in Arabic but have no equivalents in English (الساعة زلزلة tremors of the day of judgment). Specialized expressions used in both languages are exact translations (Stone Age). Student-translators could translate fewer than 20% of the test items correctly and left many blank. Time metaphorical expressions similar in both languages were easy to translate, whereas opaque ones with an idiomatic or metonymic meaning and culture-specific ones were difficult (أكل عليه الدهر وشرب) too old, obsolete; الروبيضة insignificant people talking about crucial issues). Those that require a specialized background knowledge (العصر الطباشيري Cretaceous Period) were difficult as well. Numerous strategies were utilized in translating the time expression as literal translation, partial translation, paraphrase, using synonyms and extraneous translations. Results and recommendations for translation pedagogy are given.

KEYWORDS

Time metaphors, Arabic time metaphors, English time metaphors, temporal metaphors, translation problems, culture-specific metaphors, specialized metaphors, general metaphors, time units

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1. Introduction

Time is one of the most abstract concepts of the human mind. According to Lakoff and Johnson (1980), the perception and expression of time are mostly metaphoric due to its connections with other concepts like space, action and events. The concept of time is universal. In its perception and expression, there are personal, cultural differences and universal styleic differences (Erdem, 2010). Time is a concept that has been used in many metaphors throughout history. It is metaphorically structured in different ways among languages and cultures.

Due to the extensive use of time expressions in languages, numerous aspects of time metaphors were investigated by prior studies such as the associations between the chronotype (Morningness–Eveningness) and the dimensions of time Metaphors by Pruszczak, Stolarski and Jankowski (2018) who found that college students' preference for 'morning' was associated with a more positive, friendly view of time, whereas the evening preference was related to the conception of time as negative and hostile.

Another study focused on the spontaneous use of spatial TIME metaphors in the language of older children and adolescents aged 10–13 years, 14–16 years and 17–19 years to find out if and how types of spatial TIME metaphors and the metaphorical strength of their tokens develop across time focusing on the syntagmatic co-occurrence of multi-word units. Results showed that all children and adolescents, irrespective of their developmental stage, use only highly conventionalized metaphors such as *long time* or *on Monday*. This result suggests that to explain the (developing) use of spatial TIME metaphors. We must turn more to socio-communicative practices and lexical co-occurrences than to purely cognitive accounts emphasized by the Conceptual Metaphor Theory (Graf, 2011).

In three experiments, Hendricks and Boroditsky (2017) taught English speakers to talk about time in different ways to find out how new space-time metaphors foster new non-linguistic representations. The researchers found that learning new metaphors created new space-time associations that could be detected in a non-linguistic implicit association task. The newly learned representations were not susceptible to verbal interference. With respect to verbal and visual interference, representations that were newly learned from linguistic metaphors behaved just like those that the learners had acquired through years of visual-spatial experiences. All in all, these findings imply that learning a new relational language can be a powerful tool for constructing new representations and expanding the cognitive repertoire of the students.

As for motion time expressions in television news, it was found that motion verbs that are not conventionally associated with time expressions, such as *crawl* & *roll* are used together with more typical ones such as *come* & *approach*. The results suggest that language users are far more creative than has been assumed so far, thus challenging what is typically perceived as an everyday metaphor of time (Valenzuela & Castillo, 2022).

A study by Duffy, (2014) revealed that people automatically access and use spatial representations of absolute time, whereby moving forward in space is parallel with moving later in time. Use of a reverse space–time mapping by the participants caused interference, which is reflected in their temporal reasoning. English exhibits two deictic space–time metaphors: the “*moving time*” metaphor which conceptualizes time as moving forward towards the ego and the “*moving ego*” metaphor that conceptualizes the ego as moving forward through time. Moreover, engaging in certain types of spatial-motion thinking may influence how people reason about events in time. This is confirmed by recent research that revealed that people’s interactions with cultural artifacts can influence their representations of time.

In Pashto, various conceptual time metaphors in language and poetry were analyzed by Sardaraz, Nusrat and Ab Rashid (2021) based on the Conceptual Metaphor Theory. The researchers found eight time metaphors representations: i) time is an object in motion; ii) time is bounded space; iii) time is a thing; iv) time is a person; v) Time is a measurable quantity; vi) time is a valuable commodity; vii) moments of time are landmarks in space with past in the front, and future is at the back; viii) time passing is tasting it. Unlike English, Pashto speakers locate past time in the front and locate the future at the back.

In Indonesian, time is metaphorically expressed in terms of moving objects, quantities, volume objects, and as a living thing and are not treat time as a commodity. Orientational metaphors are not used either (Indirasari, 2018).

In Japanese, Iwasaki, (2009) applied a cognitive grammar approach to temporal expressions, i.e., time motion ‘metaphors to supplement existing metaphor theories. The results emphasized that the order meaning is produced by the ground's objective construal and that this cognitive ability is crucial for comparing two events or persons. The difference between Japanese *saki* and *mae* can be captured by focusing on the ground's subjective/objective interpretation. Thus, it can be said that the Cognitive Linguistic Theory of subjectivity is a useful tool for capturing the properties of Japanese temporal expressions-

A second line of research focused on comparing time metaphors in two or more languages. Time metaphors in the novel Momo by German writer M. Ende are characterized by irreversibility, transience, one-wayness, value, and ability to change the reality. In addition, time metaphors in German and English are not always identical. They are characterized by a careful attitude to the concept of time because people realize its rapidity, and impossibility to stop or turn back. This reflects the inclination of the English and German cultures to punctuality as the highest benefactor, where time is associated with money, and where time is personified. (Dekhnich & Trofimova, 2015)

In American English, Finnish and Hungarian, the two Verbal Time Metaphors (TIME IS A CHANGER and TIME IS A MOVING ENTITY) were compared based on the Cognitive Metaphor Theory to determine which cognitive underpinnings can be traced, with a focus on image schemata, and to find out whether variations in the source domain (CHANGER and MOVING ENTITY) in the three languages is internal. It was found that the source internal variation does prevail over the source external variation. The cross-linguistic differences of such a relevant concept of time do exist but through unique characteristics of the same source domain rather than new, distinctive domains (Máthé, 2021).

In Persian and English, time-related expressions have a very similar conceptualisation. In general, both languages seem to use the same metaphorical structures to express time, with few minor differences. In most cases, both use similar collocations with time words (Golfam, Ghorbanpour & Mahdipour, 2019).

Linguistic structures using phrases and metaphors in English and Uzbek demonstrate that language reflects ethno-semantic peculiarities that are conceptually based on metaphors to express specific cultural meanings of the concept of time in time-specific associations (Djabbarov, 2023).

Analysis of 1,087 Russian and 1,141 Finnish time expressions following the Functional Syntax Approach and the Conceptual Metaphor Theory rendered 56 general meanings that revolve around duration, period of time, point in time, frequency, sequence, passing of time, right time and suitable time, limitedness of time, life as time, and some other notions having less obvious semantic relations to the others. The functional analysis revealed a multiplicity of things that people want to say and actually say about time, the different conceptual metaphors with the help of blending schemata, using them as an aid in explaining hierarchical and other relations between the mappings. The conceptual analysis of time metaphors showed that Time Is Space, Time Is Actor, Time Is Resource, Time Is Life and Time Is Nature. Results show that Russian and Finnish speakers talk about time in a very similar way (Viimaranta, 2006).

Regarding English and Arabic, Hamdi (2008) and Hamdi (2010) reported that both languages share the following conceptual metaphors: time as space, time as a bounded space, time as a moving entity, time as a location, time as a starting point/destination, time as an extension, time as a container, time as a bounded space and a moving entity, time and observer as moving in the same direction, time as an object, time as an object that can be given, time as a possession, time as an object that can be shared, time as an object that can be taken, time as an object that one can look for, time as an object subject to loss, time as an object that is needed, time as a qualifiable object, time as an object collocating with us, time as a precious object, time as money, time as a limited resource and time as a person. Some of these conceptual metaphors display variations at the linguistic level. The researcher concluded that English and Arabic have different congruent, i.e., specific level, metaphors. She explained divergence as stemming from physical and historical differences between the English and Arabic cultures.

Other studies examined time metaphors in the Quranic context. Comparisons of the English usage of 'time' metaphors was compared with the Quranic Arabic realizations and their representations in three English Quranic translations by Pickthall, Yusuf Ali and Asad were conducted using the Cognitive Metaphor Theory to identify the version that conveys conceptual metaphors in both languages accurately. Eweida (2007) found that the Quranic translations yielded by Yusuf Ali and Pickthall were more literal and more accurate in rendering metaphors in the Holy Quran, while Asad's translation was less accurate, containing more paraphrasing and individual interpretation.

Moreover, the concept of time in contemporary Western society was compared with that of Islam as embodied in Al-'Aṣr Sura in the Holy Quran was compared. The semantic analysis showed that Man is a social human being by nature; Man is time; Islam has the best recipe as to how man, by putting himself in the service of the entire society, becomes a winner not only in this life but also in the Hereafter; and the time continuum in Islam does not end with man's death as disbelievers believe; rather, life after death is a continuation of life on earth (Libdeh, 2016).

From the above review of studies on time metaphors, it can be noted that time expressions, in general, have been extensively investigated in the literature on the basis of the Conceptual Metaphor Theory whether in one, two or more languages. The most common topic investigated in several languages including Arabic is the conceptual time metaphors. However, studies that investigate time metaphor that focus on different time units such as *second*, *minutes*, *hour*, *day*, *month*, *epoch*, *era*, *age*, *period*, *millennium*, *eternity* and so on in Arabic are few. Therefore, this study aims to explore the following: (i) English and Arabic time metaphorical expressions containing *ثانية* *second*, *دقيقة* *minute*, *ساعة* *hour*, *يوم* *day*, *عام*, *سنة* *year*, *وقت* *time*, *عصر* *age*, *حقبة* *era and epoch*; and *الدهر* *eternity* that are common in general as well as specialized contexts; (ii) the similarities and differences between English and Arabic time metaphorical expressions that contain the aforementioned time units; (iii) the difficulties that student-translators have in translating time metaphorical expressions focusing on the aforementioned time units; (iv) the strategies that students utilize in translating unfamiliar time expressions; and (v) the causes of students' difficulties, i.e., whether mistranslations are interlingual or intralingual.

This study is significant as it sheds light on the different kinds of metaphorical time expressions, focusing on numerous time units, similarities and differences between Arabic and English, in a particular, and problematic areas in translating them.

This study is also significant as it is part of a series of studies conducted by the author with student translators at the College of Languages and Translation that focused on equivalence problems in translating *ibn* (son) and *bint* (daughter) from Arabic to

English and vice versa (Al-Jarf, 2023a); cultural, linguistic issues in translating numeral-based English and Arabic formulaic expressions: (Al-Jarf, 2023b); linguistic, translation and cultural problems in translating Arabic and English dar (house) and bayt (home) expressions: (Al-Jarf, 2022b); translating English and Arabic common names of chemical compounds (Al-Jarf, 2022e); translation students' difficulties with English and Arabic color-based metaphorical expressions (Al-Jarf, 2019b); problems in translating Arabic om (mother) and abu (father) expressions (Al-Jarf, 2017a); difficulties in translating English word + preposition collocations to Arabic (Al-Jarf, 2022h); problems of translating English and Arabic binomials by advanced and novice student translators (Al-Jarf (2016b), in addition to other difficulties such as translating polysemes from English to Arabic and Arabic to English (Al-Jarf, 2022c); interlingual pronoun errors in English-Arabic translation (Al-Jarf, 2010a); English neologisms (Al-Jarf, 2010b); word+particle collocation errors in English-Arabic translation (Al-Jarf, 2009b); SVO word order errors in English-Arabic translation (Al-Jarf, 2007); and grammatical agreement errors in L1/L2 translation (Al-Jarf, 2000).

2. Methodology

2.1 Participants

A sample of 37 senior translation students at the College of Languages and Translation (COLT), King Saud University, Riyadh, Saudi Arabia participated in the study. The Subjects completed 37 hours of language course (Listening, Speaking, Reading, Writing, Academic Writing, Editing and Revising, Grammar, Vocabulary, Syntax and Morphology); 4 hours of Language and Culture courses; 13 hours of linguistics courses (Introduction to Linguistics, Text Linguistics, Discourse Analysis, Semantics and Pragmatics, and Use of Dictionaries in Translation); 35 hours of translation courses (Introduction to Translation, Computer-Assisted Translation, General Translation from Arabic to English, General Translation from English to Arabic, Political and Media Translation, Problems of Translation, Scientific and Technical, Financial and Economic Translation, Medical, Islamic, Literary, Legal Translation, and a Translation Project); 8 hours of interpreting courses (Simultaneous, Consecutive and Liaison); and 8 hours of Arabic language courses (Academic Writing, Syntax, Stylistics Applications). All the subjects are native speakers of Arabic, with English as their second/foreign language. Their language pairs are Arabic (L1) and English (L2).

2.2 Samples of Metaphorical Time Expressions

A sample of 667 English and Arabic general and specialized time metaphorical expressions containing the topical words and conveying the concept of time and time units ثانية *second*, دقيقة *minute*, ساعة *hour/watch/clock*, يوم *day*, سنة/عام *year*, وقت/زمن *time (singular)*, أزمان *times (plural)*, عصر *age*, حقبة *era/epoch*, الدهر *eternity was collected* from several online resources. The Arabic time expressions were collected from Al-Maani online dictionary¹, Arab informants and the author's own collection as a native speaker of Arabic and a translation instructor. Other metaphorical expressions containing the time unit of *moment*, week, decade, *date*, *generation*, *season*, *term*, *period*, *century*, and *millennium* were not included in the study.

The English sample consists of 320 time expressions distributed as follows: Time (109); era/age (49); day (44); epoch (31); year (29); minute (27); hour, watch, clock (26); second (5).

The Arabic sample consists of 347 time expressions distributed as follows: The sample consisted of metaphorical expressions containing ساعة *hour*, watch, clock (76); وقت *time/duration* (50); عام *year* (64); عصر *age* (43); سنة *year* (38); زمن *time period* (29); الدهر *eternity* (18); يوم/نهار *day* (13); دقيقة *minute* (9); حقبة *epoch/era* (3); أيام *days* (2); ثانية *second* (2);

The Arabic sample was verified by two professors at the Arabic department to make sure that the sample includes time expressions only with their singular and plural forms and variants and does not include mere phrases consisting of time and words. The majority of the Arabic time expressions are common in Standard Arabic, with few Arabic dialects spoken in different Arab countries. The final sample contains the following: (i) general English and Arabic metaphorical time expressions containing ثانية *second*, دقيقة *minute*, ساعة *hour*, يوم *day*, سنة/عام *year*, وقت زمن *time*, عصر *age*, حقبة *era*, and حقبة *epoch*; الدهر *eternity*; (ii) Specialized time expressions used in astronomy, physics, geology, technology, business, economics, finance, history, Islamic law, and literature and others; and (iii) culture-specific metaphorical time expressions.

2.3 Comparison of the Arabic and English Metaphorical Time Expressions

Each English metaphorical expression containing *second*, *minute*, *hour*, *day*, *year*, *era*, and *epoch*, was translated into Arabic and each Arabic metaphorical expression containing ثانية *second*, دقيقة *minute*, ساعة *hour*, يوم *day*, سنة/عام *year*, وقت/زمن *time*, عصر *age*, *era*, *epoch* حقبة and الدهر *eternity* was translated into English. Then, the time metaphorical expressions were classified and compared. Results of the comparison showed the following:

- 1) About 31% of the total English and Arabic time expressions are identical in their conceptual basis (meaning) and linguistic form (wording) as in:

¹ <https://www.almaany.com/>

The Arabic Subtest (45 items)

ساعة الذّروة; ساعة الجد; ساعات الصفاء; ساعات الازدحام; سابقاً لَعَصْرُه; زمن العار; زمان الوصل; روح العَصْر; رِقَاص السّاعة; زَجَل السّاعة; عام الأمم المتحدة للتسامح; سنة سوداء; ساعاته الأخيرة; ساعة العسرة; سَاعَةُ الصِّفْرِ; ساعة غضب; ساعة شؤم; ساعة الفجر; ساعة الغفلة; زلزلة; مثل الساعة; قضيّة السّاعة; على مدار السّاعة; على رأس الساعة; علامات الساعة; عصر المَعْلُومَاتِيَّة; العصر الجاهلي; عام الجوع العالمي; صاحب العصر والزمان; سوق ما بعد ساعات عمل البورصة. سنة انقلابية; سنة كيبسة; السنّة الشّمسيّة; ساعة رمليّة; ساعة الحساب; الساعة; عَصْرُ المُرَابِطِيْنَ; ابرك ساعة; سنة حمراء; العصر الطباشيري; يوم الظلة; وقت السحر; عقا عليه الرّمن; عَصَّة الدّهْرُ بناه; عام الرمادة; عام الحزن

2.5 Analysis of the Translation Test Responses

The subjects' written responses to the time expressions test were marked by the author. To be marked correct, each English and Arabic time expression had to be translated correctly, either by an equivalent time expressions or an explanatory equivalent. To find out the strategies that the subjects used in translating time expressions, mistranslations were compiled and subjected to further analysis. Translation strategies were classified into: (i) Avoidance, i.e., leaving some items blank with no responses; (ii) literal translation; (iii) use of synonym; (iv) partial translation; (v) Explanation, i.e., paraphrase; (vi) partial translation; and (vii) providing extraneous equivalents. The time metaphor translation error corpus consisted of a total of 1970 blank responses, 363 correct responses and 545 incorrect responses. Results of the students' correct and incorrect responses are reported quantitatively and qualitatively.

2.6 Reliability

Reliability of the metaphorical time expressions test scores was calculated using the Kuder-Richardson 21' formula as it estimates the internal-consistency of the test items from a single administration of the test. The reliability coefficient of the test scores was .72. Inter-scorer reliability was also calculated by having a colleague who taught translation mark a sample of students' responses to the translation test and by comparing both markings. There was a 96% agreement between the two scorers in identifying meanings and expressions available in both English and Arabic and those that are available in one language only and classifying the faulty responses into translation strategies. Disagreements were solved by discussion.

3. Results

3.1 Students' Responses to the English and Arabic Time Expressions Test

The translation test results showed that undergraduate translation students rendered 1970 blank responses. The typical student in the sample left 62% of the English test items and 70% of the Arabic test items blank. Examples of the test items that many students left blank are *a devil of a time*; *a legend in one's own time*; *dog days of summer*; *senior year*; *the golden hour*; *time steals*; *day in and day out*; *a minute-by-minute account*; *a whale of a time*; *a year in review*; *t[0] have too much time on your hands* and ساعة العسر; عام; يوم الظلة; صاحب العصر والزمان; زلزلة الساعة; عقا عليه الرّمن; عَصَّة الدّهْرُ بناه; ساعة رمليّة; سنة انقلابية; ساعة الغفلة; علامات الساعة; زمن الروبيضة; الرمادة.

In addition, student translators in the current study responded to 35% of the items on the test of which 15% were correctly translated (8% of the English items and 7% of the Arabic items) and 20% were incorrectly translated. These include *time* expressions that are identical in form and meaning English and Arabic as in the following examples: *a race against time* زمن; *An Edwardian era*; *Around the clock* على مدار الساعة; *Dark ages* العصور المظلمة; *Day of Judgment* يوم القيامة; *Day off* اجازة; *Every minute counts* كل دقيقة تفرق; *From this day forward* فصاعدا; *only time will tell* سيظهر مع الوقت; *Peak hours* الذروة; *The happy hours of life* الأوقات السعيدة في الحياة; *The minute you walk in the door* حين تصل; *time is fleeting* بسرعة يمضي; *time stops for no man* الوقت لا ينتظر أحدا; *Time Tells all* يظهر مع الوقت كل شيء; *waited for ages* انتظرت سنة; *man of the hour*; *around the clock*; *zero hour*; *signs of the end of times*; *on the hour*; *issue of the hour*.

It is noteworthy to say that few students gave remarkable translation such as *at the end of the day* في نهاية المطاف; *The good old days* استبدي لك الأيام ما; *this day forward* فصاعدا; *time tells all* بكل شيء; *Year of Grief*; *Age of Informatics*.

On the contrary, time expressions with an idiomatic meaning were more difficult than those that have a more transparent meaning as in the following cases:

- (i) **Opaque** expressions as *a devil of a time* صعبة/أيام صعبة; *a whale of a time* خاص; *Dog days of summer: The hottest days of summer*; *seven-year itch* مدتها 7 سنوات; *the golden hour* قبل الوقت; *time steals*; *infected with problems*; *became obsolete*; *a very old person*; *a devil of a time*; *a legend in one's own time*; *a whale of a time*; *buy time*; *Dog days of summer*; *Every dog has its day*; *time steals*; *To have too much time on your hands*; *To turn back the hands of time*.

- *rush hours; peak hours; peak time; rush time.*
- ساعة الجد *serious time; Serious hour;*
- ساعة الفجر *morning time; morning hour; early morning hour.*
- ساعة شؤم *unlucky hour; unlucky time; bad hour.*
- عام الحزن *Year of sadness; Year of sorrow; year of upset;*
- عام الأمم المتحدة للتسامح *United Nations forgiveness year; United Nations forgiving year*
- عام الجوع العالمي *International Hunger Year; Starvation Year*
- العصر الطباشيري *chalk period; chalk age*
- عصر المعلّوماتية *Information Age; Information time; information period.*
- على مدار السّاعة : *around the hour; all the time;*
- قضية السّاعة *case of the hour;*
- مثل الساعة *accurate; on time*

4) Paraphrase where the students gave several explanatory equivalents with varying syntactic structures. Here the students knew what the expression means but failed to provide an exact equivalent as in the following examples:

- اليوم الذي يتذكر فيه الامريكان من ماتوا في الحروب *Memorial Day*
- يوم يخرج فيه الناس للنزهة والترفيه *day out*
- ينتظر مدة طويلة *Waited for ages*
- *Dark Ages: time long ago when Europe was backward.*
- على مدى 24 ساعة *Around the clock*
- يجب استغلال الوقت لأنه وسيلة لكسب المال *Time is money*
- حين تكون الساعة 6 أو 7 أو 8 *On the hour*
- ما بعد ساعات عمل البورصة *a market that starts after the stock market is closed*
- العصر الجاهلي *non-Muslim period; before Islam period; before Islam age; before Islam time.*
- ساعة رمليّة *clock in the sand;*
- ساعة الفجر *early morning*
- ساعات الازدحام *crowded streets; heavy traffic; bad traffic.*
- عام الجوع العالمي *hunger in the world*
- تقلّبات الدّهر *problems in life*
- زمان الوصل *when people communicated with each other.*
- ساعة الحساب *when people account for they have done*
- ساعة العسرة *difficult times during Prophet Mohammad's time*

5) Partial translation where the students translated part of the expression only as in:

- الاكتشافات، الاكتشاف *The epoch of exploration*
- عصر الطاقة الجديدة، الطاقة *The epoch of renewable energy*
- الأيام القديمة ، الأيام الحلوة: *The good old days*
- لديه الكثير من الوقت *To have too much time on your hands*
- *eat and drink* أكل عليه الدهر وشرب
- *changes* تقلّبات الدّهر
- *crowded* ساعات الازدحام
- *Starvation Year* عام الجوع العالمي
- *Information* عصر المعلّوماتية
- *right now* قضية السّاعة
- *forgiveness year* عام الأمم المتحدة للتسامح

6) Extraneous translation (faulty guessing) was a strategy that some students resorted to in translating the English and Arabic time expressions. Here the students gave a translation that is too far-fetched and has nothing to do with the denotative nor connotative meaning of the time expression as in the examples below:

- *(gain time).* يكسب الوقت *Buy time*.
- يوم الموظفين، استراحة من العمل، يوم التوقف عن العمل *Labor Day*
- سنة سابقة، سنة كبيرة *senior year*
- انتهى الوقت *Time out*
- *eat and drink for a long time.* أكل عليه الدهر وشرب
- *crowds* ساعات الازدحام
- *hard working; it's time to work hard* ساعة الجد
- *early morning prayer* ساعة الفجر

- ساعة سوداء *black watch; black clock; black time.*
- عام الرمادة *Year of ashes*
- العصر الجاهلي *Ignorance Year; non-Muslim period; before Islam period*
- قضية الساعة *right now*
- مثل الساعة *like clock; on time; like hour*
- وقت السحر *magic time rather than dawn time*

7) In the case of some time units, there is no one-to-one correspondence as in translating *epoch, era, period & age* into عصر; and *minute & second* into لحظة; زمان, زمن, وقت, into time; عام & سنة into year as in: The epoch of exploration عصر الاكتشافات, عصر الاكتشافات; non-Muslim period; before Islam period; before Islam age; before Islam time; Before Islam era; عصر المعلوماتية era of information, information age, information period; or none as in صاحب العصر والزمان that refers to Imam Mahdi.

3.3 Sources of Translation Difficulties

The students' translation errors reflect lack of proficiency, inadequate linguistic and translation competence and insufficient background knowledge in both Arabic and English. Expressions that were left blank, extraneous equivalents, and literal translations reflect problems in comprehending the semantic meaning of the source expression, i.e., the students have semantic problems. Here, the students looked at each time expression as consisting of discrete words, rather than a whole unit with a specific idiomatic and/or metonymous meaning. This means that some students looked at the surface structure of the time expression and ignored its underlying meaning. For example, some students had semantic problems with some English expressions as *a devil of a time; a legend in one's own time; a whale of a time; buy time; dog days of summer; senior year, the golden hour* and others. Similarly, they seem to be unfamiliar with some Arabic expressions and concepts which have an idiomatic meaning and should be translated as a bloc sequence without breaking the compound into single words as in, صاحب العصر والزمان, زمن الروبوتية, أساطين الزمان, أساطين الزمان, صاحب العصر والزمان, يوم الظلة, عصر المُرَاطِيبِ, and others shown in section 4.1 above.

Moreover, analysis of the translation errors revealed that more than 85% of the students failed to give the correct equivalent to Edwardian Age, as they could not access their English equivalents which are probably not in their specialized lexicon. Translation errors also show lack of background knowledge of the Arabic culture and history (عام الرمادة، عام الحزن) related to some old expression (أساطين الزمان، تَقْلِبَاتِ الدَّهْرِ، أكل عليه الدهر وشرب) on the test. Likewise, the students had difficulty accessing the meaning of specialized expressions, although many have a one-to-one correspondence in English and Arabic (See section 4.1 above).

In some cases, lack of comprehension of the source expressions and structures, especially in the case of compounds, resulted from inadequate syntactic and morphological knowledge. The students had problems comprehending the word order of the English expression, the function of each element of the compound to be translated and matching the correct part of speech of the English source expression with that of the Arabic equivalent. Some compounds consist of a Noun + an Adjective as in السنة الشمسية but was translated into *sun year* (Noun + Noun) rather than *solar year* (Adjective + Noun). *Renewable energy* was translated as الطاقة الجديدة instead of الطاقة المتجددة as they had problems understanding the prefix *re-* and the suffix *-able* and their equivalents in Arabic, in addition to their unfamiliarity with the correct form of the technical term that is commonly used in Arabic.

Similarly, the students seem to be unfamiliar with and have inadequate knowledge of Arabic derivation and the difference between different derived nouns/forms such as اكتشافات & استكشافات, which one is commonly used in a particular context especially in technical terms and should be used as an equivalent to *epoch of exploration* which is استكشافات. Likewise, they should know the difference in meaning between مستجدة & متجددة in *renewable energy*.

4. Discussion

The translation problems that undergraduate student at COLT have in translating time expressions in the current study are similar to those that other groups of translation students at COLT have in translating other types of formulaic, idiomatic and metaphorical expressions such as translating *ibn* (son) and *bint* (daughter) fixed expressions (Al-Jarf, 2023a); numeral-based formulaic expressions (Al-Jarf, 2023b); *dar* (house) and *bayt* (home) expressions (Al-Jarf, 2022b); color-based metaphorical expressions (Al-Jarf, 2019b); *om-* and *abu-*expressions (Al-Jarf, 2017a); *English and Arabic binomials* (Al-Jarf, 2016b); and common names of chemical compounds (Al-Jarf, 2022e). Similarly, the strategies that undergraduate student translators in the current study employed in translating time expressions are partially similar in type but differ in frequency to those that other groups of translation students at COLT utilized in translating other types of multi-word expressions as in translating polysemes (Al-Jarf, 2022c); English word + preposition collocations (Al-Jarf, 2022h); word+particle collocations (Al-Jarf, 2009b); English and Arabic plurals (Al-Jarf, 2020c; Al-Jarf, 2022d); English suffixes and derived forms (Al-Jarf, 2019a; Al-Jarf, 2016a); Arabic equivalents to English medical terms (Al-Jarf,

2018); English neologisms (Al-Jarf, 2010b); interlingual pronoun errors (Al-Jarf, 2010a); SVO word order errors (Al-Jarf, 2007); and grammatical agreement errors (Al-Jarf, 2000). In all of those studies, the most common translation strategy was literal translation, partial translation, use of synonyms, paraphrase, and extraneous translation. In all the studies, the students tended to translate multi-word expressions and structures imitatively rather than discriminately.

In addition, the strategies used in translating time expressions in this study are partially similar to those employed in translating idioms in other prior studies such as Smadi and Alrishan's (2015) study which found that paraphrase was the most efficient strategy utilized by EFL Jordanian graduate students in translating opaque idioms. Smadi and Alrishan added that the variety of strategies used in translating English idioms to Arabic reflected differences in the students' linguistic and pragmatic competence and their unfamiliarity with those idioms. Moon (1998) emphasized that "*opaque metaphors*" cannot be understood without knowledge of their historical origins. This is true of some Arabic and English time expressions in the current study that require historical knowledge of the expressions as in the examples given above.

Moreover, findings of the current study are consistent with a study by Alsadi (2016) in which Qatari EFL students had difficulties in comprehending and producing English metaphorical expressions due to their unfamiliarity with the English culture, and their inability to distinguish metaphorical and literal structures. In Zibin's (2016) study, Jordanian EFL college students had difficulty in comprehending metaphorical expressions in English. The students' receptive knowledge of metaphors varied according to the metaphor type. The easiest for Jordanian students were those that have the same conceptual bases and linguistic expressions in English and Arabic (85%). Metaphorical expressions that have equivalent conceptual bases in English and Arabic, but completely different linguistic expressions were easy to recognize as well (81%). Those that have different conceptual bases and linguistic expressions in English and Arabic, and those in which the conceptual bases are culturally neutral elicited a good number of correct responses (71%). Metaphorical expressions that are conceptually and linguistically different in both languages resulted in a significantly lower number of correct translations (52%). Those that have a completely different conceptual basis in English and Arabic, but are similar in linguistic expression, i.e., form, were the most difficult. Zibin asserted that formulaic expressions with a metaphorical meaning are opaque as their conceptual basis reflects the encoding of a culture-specific meaning.

Charteris-Black (2002) found that figurative expressions, with an equivalent linguistic form and conceptual basis, were easier for Malaysian EFL students, whereas those with a different conceptual basis and an equivalent linguistic form and with culture-specific expressions that have a different conceptual basis and a different linguistic form were difficult. In processing unfamiliar metaphorical expressions in L2, the students referred to the conceptual basis in their native language.

The translation strategies that students in the present study employed in translating time expressions are similar in type but differ in the degree of difficulty compared to those utilized by Jordanian students in Zibin's (2016) and Smadi and Alrishan's (2015) studies, by Swedish students in Sandgren and Stewart's (2014) study and by Malaysian students in Charteris-Black's (2002) study.

Other prior studies in the literature revealed that L2 students find formulaic expressions difficult in listening to academic lectures in English (Littlemore, Chen, Koester & Barnden, 2011; Littlemore, 2004) and in reading specialized academic material (Sandgren & Stewart, 2014). Foreign language and translation students, in general, face challenges in comprehending and translating metaphorical and fixed expressions regardless of their proficiency levels in L1 and L2.

Furthermore, the most common cause of comprehension problems was cultural richness, not the type of metaphorical expression because comprehending metaphorical expressions in two languages requires the utilization of four main strategies that L2 readers use: (i) prior knowledge; (ii) Context decoding; (iii) guessing, and (iv) translation. Such strategies require bottom-up and top-down processing. Prior knowledge includes everything that a reader may bring to the text, such as general knowledge of the world, cultural knowledge, topical knowledge, specialist knowledge and (Sandgren & Stewart, 2014). Background knowledge, in particular, is extremely important for translating time expressions. In this respect, Anderson, Reynolds, Schallert, and Goetz (1977), argued that "language comprehension always involves utilization of one's knowledge of the world", and that "many problems in reading comprehension result from inadequate background knowledge rather than inadequate linguistic skills".

Finally, mistranslation strategies that students in the current study used reflect insufficient knowledge of English and Arabic time expressions, what they mean, lack of conceptual basis and historical knowledge which have resulted in an inadequate ability to comprehend, match and transfer meaning from Arabic to English and vice versa. In addition, the subjects had insufficient knowledge of both English and Arabic cultures and history. In this respect, Al-Kharabsheh (2003) asserted that the students' poor linguistic competence, their poor contrastive analysis skills, poor translation competence, the varying degrees of opacity, insufficient translation experience and practice give rise to a wide range of mistranslations of Arabic and English metaphorical expressions. Students' difficulty with time expressions may also be due to inadequate instruction or no instruction on such topics and issues.

5. Recommendations and Conclusion

Undergraduate student-translators in the present study have considerable difficulty in providing correct English equivalents to Arabic time expressions and correct Arabic equivalents to English time expression, especially those that have no one-to-one correspondence, are metonyms, idioms, culture-specific, have a specialized meaning and/or are unfamiliar lexical items. To help the students translate time expressions correctly, the current study recommends that translation instructors raise students' awareness of the similarities and differences between English and Arabic time expressions, their idiomatic meaning, and how to translate those that do not exist in English and/or Arabic (Al-Jarf, 1994; Al-Jarf, 1996; Al-Jarf, 1994).

Translation students should take into consideration that there is no one to one correspondence in the translation of time units used in English and Arabic. For example, *minute* and *second* may be translated as *moment* in Arabic; ساعة may be translated as *hour, watch or clock* in English; in some contexts, نهار in some Arabic dialects means *day*; *age, era, epoch, and time period* may be interchangeably translated into عصر حقبة; and وقت زمن can be translated as *time, or times*.

In translating time expressions to Arabic, students should take into consideration their idiomatic meanings. Since in most expressions, there is no on-to-one correspondence between Arabic time expressions and their English equivalents, fixed equivalents should be used without translating each word in the phrase. That is, students should translate time expressions as bloc sequences without breaking the compounds into single words. They may use explanatory equivalents in transferring the meaning of metonyms and idioms and pay attention to the syntactic and morphological structure of the English expression-

When confronted with unfamiliar time expressions, the students can look up their definition in English and Arabic online dictionaries to understand the meaning and convey it in the target language (Al-Jarf, 2022g; Al-Jarf, 2020a; Al-Jarf, 2014). They should not resort to Google Translate as it gives the literal meanings of metaphorical expression, idioms and metonyms as discrete words, not as a block sequence that has an idiomatic and metonymous meaning especially in the case of English and Arabic, where compounds differ in word order (Al-Jarf, 2021; Al-Jarf, 2016a).

English and Arabic time metaphorical expressions can be integrated into Contrastive Analysis, Semantics and Pragmatics courses that the students take. Some English and Arabic time expressions can be added to the English vocabulary courses and the Arabic language courses that students take in the translation program at COLT. Direct instruction on expressions of time expressions in translation and interpreting courses should be given.

To promote students' proficiency level in English grammar, syntax, morphology, spelling, Arabic derivational patters and their competence in translating time expressions, online grammar tasks, combining writing and grammar activities, online courses, video-conferences using Elluminate, Zoom, WebEx, Microsoft Teams, google Classroom and so on, social media networks such as Platform X and Facebook, blogs, mobile apps and YouTube videos can be used for extra practice individually and collaboratively, in and outside the classroom. A multiple-associations approach to teaching and learning terminology containing time units, grammatical structured and time expressions can be followed (Al-Jarf, 2005; Al-Jarf, 2006; Al-Jarf, 2009a; Al-Jarf, 2017b; Al-Jarf, 2013; Al-Jarf, 2020a; Al-Jarf, 2022a; Al-Jarf, 2020b; Al-Jarf, 2022f). Language and translation instructors can use mind-mapping software to connect time expressions, terminology containing the different time units, derivatives, homophones, homographs, metonyms, suffixes, prefixes and roots which the students confuse (Al-Jarf, 2015; Al-Jarf, 2011; Al-Jarf, 2006).

The students may read literary and specialized material in technology, business and others in both English and Arabic and note the usage of second, minute, hour, day, month, year, era epoch, age, time period, eternity. They should also note the usage of time expressions in everyday language and keep a note of them. They are advised to make their own categorized lists and glossaries of different kinds of English and Arabic metaphorical expressions, including kinship terms such as second, minute, hour, day, month, year, epoch, and age expressions (Al-Jarf, 2018).

Finally, other multi-word and fixed temporal expressions that contain English *millennium, century, centennial, period, decade, duration, season, term, time period, a while, interval, stage, phase, date* and Arabic, ألفية، عهد، دورة، فصل، فترة، عقد من الزمن، فترة، مئوية، قرن، مرحلة، أمد، مئوية، and others in the light of theories such as the Functional Syntactic Approach, the Conceptual Metaphor Theory, and the Cognitive Grammar Approach are still open for investigation by Arab researchers in the future.

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