Malay Translation of Figurative Language in Arabic Syndicated Drama “Shahrazad”

Noor Eliza Abdul Rahman, Tasnim Mohd Annuar, Noor Anida Awang, Nooraihan Ali, Raja Hazirah Raja Sulaiman, Zulazhan Ab. Halim

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v8-i7/4523 DOI: 10.6007/IJARBSS/v8-i7/4523

Received: 07 June 2018, Revised: 02 July 2018, Accepted: 29 July 2018

Published Online: 30 July 2018

In-Text Citation: (Rahman et al., 2018)

Copyright: © 2018 The Author(s)
Published by Human Resource Management Academic Research Society (www.hrmars.com)
This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licences/by/4.0/legalcode
Malay Translation of Figurative Language in Arabic Syndicated Drama “Shahrazad”

Noor Eliza Abdul Rahman, Tasnim Mohd Annuar, Noor Anida Awang, Nooraihan Ali, Raja Hazirah Raja Sulaiman, Zulazhan Ab. Halim

Faculty of Islamic Contemporary Studies, Universiti Sultan Zainal Abidin, Gong Badak Campus, Kuala Terengganu, Terengganu, Malaysia.
Email: nooreliza@unisza.edu.my

Abstract
The study discusses strategies employed in the translation of figurative language from Arabic into the Malay language in a television drama entitled Shahrazad. It focuses on four aspects namely tashbih, isti’arah and mathal. The main objective of the study was to identify the strategies employed by subtitlists in translating the drama. Additionally, the study analysed the appropriate strategies for translating figurative language. The study adopted the qualitative content analysis approach based on Newmark’s framework. A total of eight samples were selected for analysis. The findings indicated that the three most commonly used strategies were the literal translation strategy, interpretation translation strategy, and replacement translation strategy. It was also discovered that the most popular strategy was the literal translation strategy. Moreover, it was found that the interpretation strategy was not supposed to generate lengthy translations, while replacement strategy was deemed appropriate in assisting viewers to grasp the message quickly and easily, given the constraints of space and time imposed in translating dramas.

Keywords: Figurative Language, Translation Strategies, Literal Translation, Interpretation, Replacement

Introduction
Metaphorical language, or so-called figurative language, is a unique language style and is often used by authors to create poetic elements in their work. Arabic has a variety of figurative languages, such as tashbih, isti’arah, majaz mursal, kinayah, tajsid, tibaq, jinas and mathal. The current study selected three types of figurative language for discussion, namely tashbih, isti’arah and mathal. These three types of figurative language are always on the tongues of Arab speakers and are always at the pen tips of Arab writers. However, the process of transferring a dialogue or text message containing these metaphorical elements into another language cannot be considered as easy, especially when it involves audio-visual materials, such as TV shows, VCDs, DVDs, movies, and the internet. Therefore,
in the translation of figurative language, the match chosen between the words of two languages that represents two different cultures should be scrutinized and studied. This is to ensure that the beauty of the original work remains in its translation and at the same time to ensure that the resulting translation does not eliminate the uniqueness of the original work.

**Definition of Subtitle**

The definition of subtitle in Malay, as stated in *Kamus Dewan, 4th Edition* (2007: 1393), is “*pati daripada sesuatu, bahagian yang penting daripada karangan, berita, pelajaran dan sebagainya, inti atau isi*”, which means the essence of something, the important part of a piece of writing, news, lessons, and so on. Subtitle refers to the translation of dialogues in a film that are simultaneously shown while playing the film.

According to Gottlieb (1998: 247), generally, subtitle can be defined as “... the translation of the spoken (or written) source text of an audiovisual product into a written target text which is added onto the images of the original product, usually at the bottom of the screen”. Rahimah (2007: 43) defined subtitles as the translation of dialogues as well as other information that at least involves two elements, namely the spoken and written language, presented in synchrony with the source's dialogue (shown on the screen simultaneously with the source’s dialogue) and is usually shown as one or two lines at the bottom of the screen.

**Definition of Tashbih, Isti’arah, and Mathal.**

i. **Tashbih** - The comparison of something with another that has the same characteristics by using the particles that were mentioned with it or not (Shaykhun, 1990: 23).

ii. **Istia’rah** - The use of words that do not carry the original meaning due to the presence of a *mushabahah* relationship (resemblance or similarity) between the transferred meaning and the original meaning, along with the presence of *qarinah* (markers) that prevents the use of the original meaning (al-Hashimi, n.d.: 239).

iii. **Mathal** - *Mathal* is widely and it means example or illustration. It has been extended by the Arabs to all words to give parables, and to compare one thing to another (Azhar, 2008: 2).

**Research Methodology**

The study was qualitative through content analysis. The collected data from corpus studies, which comprised of the source of the dialogue texts and the subtitle texts, were analyzed descriptively to identify the translation strategies used in translating the elements of *tashbih, isti’arah, kinayah* and *mathal*. The research materials of this study were subtitles of Arabic dialogs in the Arabic television drama entitled *Shahrazad*. This drama tells the story of the wisdom of a woman named Shahrazad and the unrest in Karaman. The one-hour episodes of the drama has been aired on Astro (a Malaysian direct broadcast satellite TV Pay TV service), 110 channel, in Ramadan in 2010. Data selection followed a purposive sampling method.

**Newmark’s Metaphors Translation Strategy**

Newmark (1981) presented a strategy for the translation of metaphors in his book *Approaches to Translation*. He discussed strategies or techniques that could be applied in translating metaphors
between French and English. Majdi (2009: 104-109) has elaborated on Newmark’s metaphors translation strategy in his book entitled "ترجمة بين العربية والملاليّة: النظريّات والمبادئ" (Translating Between Arabic and Malay: Theories and Principles) for application when translating figurative language in Malay and Arabic languages. He described the strategies that were termed as “أساليب ترجمة الاستعارة". Furthermore, he pointed out that this strategy is only used in the translation of isti’arah, but it can also in translating other figurative forms, such as majaz mursal, kinayah, mathal, and so on. The strategies are:

a. Bringing matches that are similar in pronunciation and meaning
This strategy is defined as literally translating the source of the metaphorical language into target the language, or word by word translation or a harfiyyah translation. This translation process is performed by reproducing the same image in the target language, provided that the image has a similar use frequency in the corresponding context (Newmark 1992: 136). For example, the phrase "مفتاح النجاح" is translated into Malay as kunci kejayaan, or the key to success, and "طعم السعادة" is translated as rasa kebahagiaan, or the taste of happiness (Majdi 2007: 104).

However, this form of translation is only possible if the figurative form is suitable with the target language, as well as it is being used by the target audience to show the same meaning or message as the translated original text. In the following discussion, the term ‘literal translation strategy’ was used to refer to this strategy.

b. Replacement of the source’s figurative form with the target’s figurative form
This strategy means to replace the image in the source’s language with an image commonly used in the target’s language that does not contradict with the culture of the target’s language (Newmark 1992: 138). In this strategy, the translator replaces the figurative form in the source’s language with the target’s figurative language form that is different in terms of structure but have the same meaning or connotation. This strategy is used when literal translation weakens the values of the metaphorical language and original meaning, or when the harfiyyah translation of the figurative form is not suitable or does not apply in the target language. Thus, translators could find figurative forms in the target language that show the same meaning and can deliver the messages intended by the source texts. This strategy was referred to in the following discussion as the replacement strategy. An example for the application of this strategy can be found in translating the Arabic proverb "من زرع حصد", which means in Malay, siapa yang menanam , akan menuai hasilnya, which means whoever plants, shall harvest the crops. This Arabic proverb can be translated into the Malay proverb “kalau tidak dipecahkan ruyung, manakan mendapat sagunya”, which means without cutting open the stems (of palm trees), the sago shall not be obtained (Sukki 2005: 504).

c. Translation of the Figurative Form According to its Context
In certain situations, translators tend to describe a particular picture by giving more explanations to the picture. Translators can follow this strategy when they find that the replacement strategy is ineffective and unclear (Saifulah et al., 2012: 189). For example, the metaphor "قراءة الكف والفنجال" is translated into Malay with the phrase “menilik perkara ghaib”, or foretelling the unseen (Mohd Sukki 2012: 109). Moreover, the phrase “goyang kaki”, or being relaxed, is translated to Arabic as “لايفعل شيّاً” (Majdi 2009: 107).
According to Asmah (2009: 110), the transfer of information from the language of one text to another in the form of paraphrased explanations and illustrations of meanings is referred to as interpretation. Therefore, the term 'interpretation strategy' was used to refer to this strategy.

d. Translation of Metaphorical Language Using Simile Style
Majdi (2009: 106) mentioned that this method is considered to be a fairly simple technique to prevent clashes between figurative forms by maintaining the original structure, especially if the target text does not give an emotional impression. This is because similes are easier to understand than metaphors or other figurative forms. An example of this strategy is the Arabic proverb that reads “إنك تضرب في حديد بارد” (hammering cold iron) translates into the Malay parable or simile “bagai anjing menyalak bukit”, which means like dogs barking at the mountain (Mohd Sukki 2005: 503). This strategy is referred to as the 'simile strategy'.

e. Omitting of the Figurative Form
This method implies avoiding the direct translation of the metaphor or the figurative form presented in the text. Newmark (1992: 141) mentions that if the metaphor in the text is not important it should be omitted, provided the text of the source language is not in the form of an announcement or presentation of information. Majdi (2009: 109) explains that translators can omit the metaphors in the text if the metaphorical form is an additional element that has no value in the text. This method or strategy is named the 'omission strategy'.

Study Analysis
i) Sari kata Dialogue
Jullanar: Kanda mula melihat tubuh dinda seperti tanah gersang (You will start to see that my body is like a barren land with no plants).

Episode 1 Shahrazad
The above dialogue was a conversation between Sultan Shahrayar and his wife Jullanar. In the dialogue, Jullanar expressed her feeling that she was not receiving attention from her husband Shahrayar because she was unable to give birth.

The tasbih element can be seen in the expression “جسدي صحرا قاحلة”. In this expression, Jullanar compared her body to “سحراء قاحلة”. The word “ صحرا” means padang pasir or desert, and “قاحلة” means yang tandus or arid (Kamus Besar Arab-Melayu Dewan 2006: 1324, 1836). Al-Mu’jam al-wasit (n.d.: 508) gives the definition of “أرض فضاء واسعة، فقرة الماء” (a massive open land, depleted from water). This Tashbih was translated as tubuh dinda seperti tanah gersang, or my body is like a barren land. However, a barren land has a more general meaning than desert, and this word was able to carry the message contained in the word “سحراء قاحلة”. Through this translation, the subtitlist tried to use the literal translation strategy by providing a match that has the same structure and meaning as the source’s word. The subtitlist also added the comparable word “seperti”, or like, in the translation to match the structure of the target sentence.
The translation given for this dialogue was acceptable in the target’s culture, it was able to deliver the source’s messages, and introduced the source’s cultural and metaphorical language to target’s audiences. However, a more accurate and consistent translation with the target’s language is suggested as follows:

“You shall see that my body is like a barren desert with no plants.”

Episode 5 Shahrazad
In the above dialogue, an example of tashbih can be seen in the expression “أنت الأرض التي تشرق”. This expression is addressed to his wife, Jullanar, as a prove that Shahrayar still loves his wife. The word “الأرض”, which means bumi, or the earth (Kamus Besar Arab-Melayu Dewan 2006: 31). According to Kamus Dewan, Edisi Keempat (2007: 220), the word earth also means permukaan bumi atau tanah, or the surface of the earth or land. The words “أشرقت”“شمس، شرق، إشراقا” is exemplified in the phrase “أشرقت الأرض”, which means bumi bersinar dengan cahaya matahari, or the earth shines with its sun. The word “تشرق” comes from “خشبة، يخشبة، خشبة”, which means menjadi subur dengan rumput, or become fertile with grass (Kamus Besar Arab-Melayu Dewan 2006: 1254 and 626).

In this tashbih, Shahrayar compared his wife to a bright and fertile land. This tashbih was translated as “Adinda umpama tanah yang menarik perhatian dan tanah yang subur”, or you are like a land that attracts attention and a land that is fertile. Based on this translation, the subtitlist tried to use the literal translation strategy by matching the same target word in structure and meaning. The subtitlist added the matching word “umpama”, or like, to adjust the sentence with the structure of the target language. The word “تشرق”, which means bersinar, or shining, was matched with the phrase menarik perhatian, or attracts attention. This is because the word land do not fit together with shine. This parable is acceptable in the target language. The entire translation of the above dialogue is considered good and capable of delivering the source’s dialogue message. However, researchers want to provide a more concise translation of the alternative translation and follow the subtitle text rules as follows:

“Adinda wanita. Adinda umpama tanah yang menarik dan subur (You are a woman. You are like an attractive and fertile land).”

iii) Subtitle
Budur: Tuanku dah pulang? (You have returned, your majesty?)
Jullanar: Ya, beta dah kembali dengan api yang membakar dalam diri beta, yang beta tak tahu bilakah ia akan terpadam (Yes, I have returned
with a fire that is blazing inside of me, and I do not know when is it going to be extinguished).

**Episode 5 Shahrazad**

The above dialogue contains an *isti’arah* that can be identified with the use of the word “جمرة”, which is defined as bara api or ember (*Kamus Besar Arab-Melayu Dewan* 2006: 335). The word “جمرة” in this phrase was used instead of its true meaning. This dialogue was by Sultan Shahrayar’s wife, Jullanar, who was in a state of depression because she was not given an offspring to inherit the kingdom of Karaman.

In this dialogue, she compared the burning anger in her with a burning fire. The above phrase was translated as *api yang membakar dalam diri beta, yang beta tak tahu bilakah ia akan terpadam*, or a fire that is blazing inside of me, and I do not know when is it going to be extinguished. Based on these subtitles, the subtitlist used the literal translation strategy, i.e. translating each word into the target language. This translation is considered appropriate because the resulting figurative form from the translation is also used in the target language to show the same meaning as the translated source’s dialogue. The overall translation of the dialogue was also considered good and has given the same impression as the original dialogue.

iv) Subtitle Dialogue

<table>
<thead>
<tr>
<th>Hanthal: Itu adalah kehendak Sultan ... jadi pada malam yang berbahagia itu, baginda akan berada antara dua bulan, satu di langit dan satu di bumi (It is the wish of his majesty the Sultan, so that in that joyful night the will be between two mons, one in the skies, and other on earth).</th>
</tr>
</thead>
<tbody>
<tr>
<td>ي ليلة السعد قمران، حنثل: إنها رغبة مولاي السلطان، ليكون في ليلة السعد قمران، قمر في السماء وقمر في الأرض.</td>
</tr>
</tbody>
</table>

**Episode 8 Shahrazad**

The *isti’arah* element in this phrase can be seen clearly in the phrase “قمر في الأرض”. The word “قمر” here was used not for its meaning. Based on *Kamus Besar Arab-Melayu Dewan* (2006: 1931), this word means bulan or the moon. This dialogue was by Hanthal, the Sultan’s confidant when he announced to the people of Karaman about Sultan Shahrayar’s desire to marry a girl from Karaman on the full moon.

In this dialogue, Hanthal compares a beautiful girl with *bulan purnama* or *the full moon*. This figurative form was translated as *bulan di bumi*, or moon on earth, in the given subtitle. Based on this translation, the subtitlist used the literal translation strategy by matching them word for word from the source’s dialogue.

In Malay, the moon can also became a symbol of women’s beauty, according to the proverb; *bagai bulan di pagar bintang* (*like the moon surrounded by stars*), which means a beautiful woman is
surrounded by other beautiful women, *bagaikan bulan mengambang penuh di kaki awan* (like the full moon in the skies), meaning the beauty of a woman after dressing up, or *bagaikan bulan empat belas* (like the moon of the 14th), which means the beauty of women (*Kamus Peribahasa Kontemporari* 2011: 71). Since the metaphor given for beautiful women is similar in between Arabic and Malay, the use of literal translation strategies was appropriate. However, the given translation for the entire dialogue was incorrect. The translation suggestion for this dialogue is:

“Ia adalah kehendak Sultan, supaya pada malam yang berbahagia itu wujud dua bulan, satu di bumi, dan satu lagi di langit (It is the desire of the Sultan, so at that joyful night two moons shall be present, one on earth, and the other in the skies).”

v)

Sari kata
Rayyan: *Hujan tidak turun dan tanah mereka tidak menjadi* tahun ini (Rain did not fall, and their lands let them down this year).

Dialogue
Ribyan: وقد ضمت عليهم السماء وخزلتهم الأرض هذا العام.

*Episode 1 Shahrazad*

In the above dialogue, there are two examples of *isti’arah ma’niyyah* that are recognized from the phrase “ضمت عليهم السماء” and “خزلتهم الأرض”. The word “ضمت” means *mengambil*, *menga*mbil *kesemuanya*, or to take, take everything, and the word “خزل” means *mempersulit* and *menahan kehendaknya*, or to be secretive, and preventing its needs (*Kamus Besar Arab-Melayu Dewan* 2006: 1417, 612).

This dialogue was by the Vizier Rayyan who tried to stop Sultan Shahrayar’s intention to take hold of the people of Karaman’s money and property. In his statement, Rayyan used “السماء” (langit, sky) and “الأرض” (bumi, earth) as an analogy for “الإنسان” (manusia, human) in terms of ability to give ease and cause distress. However, the word “الإنسان” was omitted and replaced with the normal traits of humans, i.e. taking and suppressing the needs of others. This figurative form was subtitled as *hujan tidak turun dan tanah mereka tidak menjadi* (Rain did not fall, and their lands let them down). From this translation, the subtitlist used the metaphorical translation strategy. The subtitlist described the implicit meaning in this *isti’arah* without translating every word in the *isti’arah*. This translation is considered good and helped the target audience to effectively understand the source’s message.

vi)

Sari kata
Itab: *Saya nak beritahu awak, membunuh sesoarang walaupun Sultan tidak akan mendatangkan kebaikan. Hutang darah dibayar darah*. Darah menggumpal, dicuci dan kesannya terpadam. Namun keadaannya tetap sama (I want to tell you that killing one person, even if was the
Sultan, will not bring any good. **Blood will have blood.** Blood will clot, washed, and its stains shall be erased. However, its condition will remain the same).

*Episode 5 Shahrazad*

The above dialogue contains a *mathal* in the phrase “يذهب الدم بالدم”.. This phrase was expressed by the ‘Itab, the former palace concubine, for Sindibad who is a young man from Karaman who wanted to kill Sultan Shahrayar for the good fate of the Karaman people. This *mathal* describes the act of killing that will result in revenge, which would lead to continuous killings.

This *mathal* was translated into Malay as *hutang darah dibayar darah* (The dept of blood shall be paid with blood). Based on this translation, the subtitlist applied the replacement translation strategy with the source’s metaphor. The subtitlist replaced the figurative form with a figurative form from the target language that is different in pronunciation but the same in meaning as the source’s figurative form. This translation is a Malay proverb that is commonly used within the community of the target group. It means that the verdict of killing, is also killing (Kamus Peribahasa Kontemporari 2011: 170). This translation is easy to understand and capable of effectively delivering the message. However, an alternative translation is suggested as follows:

"Saya nak beritahu awak, membunuh seseorang walaupun Sultan, tidak ada gunanya. **Hutang darah dibayar darah**. Darah yang tumpah kemudiannya dibersihkan, lantas kesannya terpadam. Namun keadaan tetap tidak berubah (I want to tell you that killing one person, even if was the Sultan, is useless. The dept of blood shall be paid with blood. Blood will clot, washed, and its stains shall be erased. Nonetheless, its effect will remain unchanged)."

**vii**)

*Sari kata*  
'Itab: Awak bercakap lagi tentang tindakan yang tidak berguna itu. **Kematian hanya akan membawa kematian dan kehidupan membawa kehidupan** (You are still talking about that useless action. **Death will only bring death, and life will only bring life**).

**Dialogue**  
"عتاب: عدت إلى حديث الذي لا طائل منها، الموت لا يستقلب إلا الموت، والحياة تستجلب الحياة."

*Episod 8 Shahrazad*

In this dialogue, there is a *mathal* in the phrase “الموت لا يستجلب إلا الموت، والحياة تستجلب الحياة”. The word "استجلب، يستجلب، استجلابا“ means *meminta supaya ia didatangkan kepadanya*, or asking for something to come (Kamus Besar Arab-Melayu Dewan 2006: 321). This expression means solving the problem without bloodshed is the best way and promises a safer and happier life. On the contrary, killing will result in endless revenge and will cause more lives to be taken.

This *mathal* was translated as *kematian hanya akan membawa kematian dan kehidupan membawa kehidupan* (Death will only bring death, and life will only bring life). The strategy used in this
translation is the literal translation strategy. The sustitlist translated the text into the target language with a figurative form that has the same utterance and meaning with the source dialogue. The use of this strategy is considered appropriate and capable of delivering the message of the dialogue to the target audience. However, the translation given to the word “تستجلب” was less accurate. It is suggested that the word “تستجلب” is better suited to match the word *mengundang* (summons), while the second “تستجلب” is matched with *menjanjikan* (promises). The translation of this entire dialogue is suggested as follows:

“Awak masih lagi bercakap tentang tindakan yang tak berguna itu. *Kematian hanya akan mengundang kematian. Kehidupan pula menjanjikan kehidupan* (You are still talking about that useless action. *Death will only summon death, and life will only promise life*).”

viii) Sari kata

‘Itab: *Saya dah tua dan jadi lemah dan melihat kebaikan dan keburukan dalam hidup. Kebaikan akan berlalu cepat, tapi keburukan yang akan kekal* (I am now old and weak, and I have seen the good ad the bad in life. *The good will pass on quickly, but the bad will remain*).

Dialogue

عبات: قد كرت وهمت وأطلت من الدنيا حلوها ومرها، أما الحلوة فقد كان عابرا، ومرها فهو مقيم.

Episode 6 Shahrazad

The *mathal* element in this dialogue can be seen in the expression “أما الحلوة فقد كان عابرا، ومرها فهو مقيم”. The word “عابر” is derived from “عبر، يعبر، عبرا“ which means *menyeberangi* (to cross) and the word “مقيم” comes from “أقام، يقيم، إقام” which means living and settling there (Kamus Besar Arab-Melayu Dewan 2006: 1500,1956). This expression was expressed by ‘Itab when he said that in his life he often faced sadness and difficultness, while happiness was experienced only briefly.

This expression was translated as *kebaikan akan berlalu cepat, tapi keburukan yang akan kekal* (The good will pass on quickly, but the bad will remain). Based on this translation, the subtitlist used the literal translation strategy. Each word was given a one-on-one match. This translation was seen to accurately conveying the message of the above expression. However, an alternative translation is suggested by applying the replacement strategy on the target’s metaphor as follows:

“This saya dah tua dan semakin lemah. Saya dah banyak lalui asam garam kehidupan. *Langit tidak selalu cerah. Mendung kelabu sentiasa setia menunggu* (I am now old and getting weaker. I have experience the sour and the salty (the good and bad) in life. *The sky is not always clear. The dark clouds are always relentlessly waiting*).”

Findings

The current study acknowledges that the translation of figurative language is not limited to with use of only a single strategy. There are three main strategies used by subtitlists in translating figurative language, namely literal translation strategy, interpretation strategy, and replacement strategy.
Literal translation strategy is used if there is a similarity in terms of pronunciation and meaning between the source language and the target language. The replacement strategy is used if there is a metaphor in the target language that can deliver the message of the source’s figurative language, whereas the interpretation strategy is applied when literal translation is not appropriate and there is no suitable metaphor in the target’s language that can substitute the metaphor in that source’s language.

Conclusion
In conclusion, in the context of this study, subtitlists successfully translated and delivered messages in the figurative language found in these dramas. The use of literal translation strategy, interpretation strategy, and replacement strategy succeeded in transferring the messages in the source’s dialogue. Only small segments of the dialogues were not handled well, but this errors did not affect that drama messages because they does not involve important dialogues. It is recommended that the use of the replacement strategy should be prioritized while the translating this figurative language if there are appropriate matches in the target language. The resulting translation with this strategy helped viewers understand the source’s dialogues easily and channeled the messages more effectively to target audiences while preserving the figurative form and beauty of the language.

Strictly speaking, the subtitle serves as a medium that can bridge the communication gap between nations and communities around the world. Since subtitling is a process of language transfer that is not an easy, audiovisual translation courses involving Arab-Malay subtitling should be given to the subtitlists so that they are exposed to the techniques of producing quality subtitles, which are simple, easy to read, easy to understand, capable of delivering the messages of the source’s dialogues, and does not disturb the audience while viewing.

Acknowledgement
This article is part of a research fund sponsored by Center for Research and Innovation (RMIC), Universiti Sultan Zainal Abidin (UniSZA), Gong Badak Campus 21300 Kuala Nerus, Terengganu.

References


