

MEANING IN MALAY-ENGLISH DICTIONARIES: AN APPLICATION OF FRAME SEMANTICS AND THE FRAMENET

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A literature review of bilingual dictionary research in Malaysia shows that most research has focused on the problems of equivalents recorded in bilingual dictionaries. What is lacking is proper linguistic analysis of the discrimination of meaning for the source language entry and the findings of the target language equivalents. This paper attempts to fill this research gap by investigating the problems that arise in the discrimination of meanings of two Malay-English dictionaries, and the English equivalents. The analysis adopts the methods of frame semantics in describing the Malay verb memberi, assessing the different senses of meaning through the frames that are available. The theoretical framework of Frame Semantics has successfully helped the writer to reorganise the meaning of the Malay transitive verb memberi (translation in English "give") from the different frames evoked by the entry. Meanwhile, the information of the lexical units (LU) provided by the frames, for example the LUs from the frame of GIVING in the FrameNet database have contributed to a list of English equivalents that can be used in the Malay-English dictionary entry. This frame-based analysis relies on the 5 million words Dewan Bahasa dan Pustaka-Universiti Kebangsaan Malaysia (DBP-UKM) Malay corpus while all the English equivalents are sourced from FrameNet and English dictionaries.

Keywords: bilingual dictionary, discrimination of meanings, Frame Semantics, FrameNet, corpus based analysis

INTRODUCTION

Bilingual dictionaries play an important role as a reference for information related to a specific pair of languages. Bilingual dictionaries not only provide information on the equivalents and meanings of a word but also other linguistic information including morphology, syntax, contexts of meaning as well as the socio-cultural information. Despite its important contribution to the field, research on bilingual dictionaries has received little attention in the Malaysian context. A review of research, particularly on Malay-English bilingual

dictionaries suggests that there is still much to be explored. As Ibrahim (2005) argues, Malay lexicography focuses solely on compiling rather than researching dictionaries.

Research on bilingual dictionaries primarily focuses on the problems and the lack of equivalents for the entries (Noresah and Fadilah, 2003; Fadilah, 2005). Given this, the present study looks at another aspect of a bilingual dictionary namely, the meaning discrimination of an entry that includes semantic information of the senses that belong to an entry of the source language as well as suggested target language equivalents.

The development of the *Collins Cobuild English Language Dictionary* at the University of Birmingham in the 1980s was the turning point in the field of lexicography when the Bank of English was utilized to generate attested data for the COBUILD dictionary entries (Sinclair, 1987). Corpus based lexicography in Malaysian began with the production of the Malay monolingual *Kamus Dewan* 4th Edition (KD4) that was based on the Malay corpus developed by Dewan Bahasa dan Pustaka (DBP) or the Malaysian Institute on Language and Literature, a government body that is responsible of monitoring the Malay language. The 120 odd million words of DBP Malay corpus consists of sub-corpora of books, magazines and newspaper sourced from local Malay publications. Although the KD4 new entries were derived from the DBP corpus, there was no specific linguistic framework that was adopted in compiling the dictionary (Rusmadi, 2003).

In view of this, this article focuses on utilising a corpus-based analysis in finding a solution to the meaning discrimination of the entry *memberi* in two selected bilingual dictionaries; namely *Intelek Malay-English Dictionary* (IMED) and *Kamus Perwira Bahasa Melayu-Bahasa Inggeris* (KPBMBI). This article will describe how Frame Semantics can be used to analyse the semantic content of the entry *memberi* in the bilingual dictionaries. The verb entry *memberi* is chosen as it is one of the highest frequently used Malay verbs in the corpus (Intan Safinaz, 2011).

FRAME SEMANTICS

Frames are seen as concepts that are systematic and inter-connected. To understand a concept, we must understand the systematic concepts that are rendered automatically in a text, or a conversation (Fillmore, 1982). According to Fillmore, Johnson and Petruck (2003: 235) "frames are schematic representations of the conceptual structures and patterns of beliefs, practices, institutions, images that provide a foundation for meaningful interaction in a given speech." Fillmore's frame theory has undergone an evident development from the year 1975 until 2003. In 1975, Fillmore used the meaning of a frame as a system of linguistic choice as a scene or situation. Later years, frames were perceived as a

bulk of knowledge or a coherent schema. More recently, frames are considered a structure of cognitive representations.

In Frame Semantics (henceforth FS), the basic unit is the lexical unit or LU. Therefore a word such as "bake" is polysemous because it is linked to three different frames; APPLY-HEAT, COOKING CREATION and ABSORB-HEAT. A frame is made up of certain frame elements. For instance, the Discussion frame contains the elements of two interlocutors and a Topic. The word "bargain" for example can evoke the DISCUSSION frame. The frame elements, especially the core ones support the meaning of each frame.

*They (Interlocutor 1) **bargained** with the police (Interlocutor 2) over the release of the hostage (Topic).*

Fillmore also introduced the "valency theory" which is a description of a lexical and how the frame elements may be expressed in a pattern of grammatical constructions in its context (Atkins, Fillmore and Johnson, 2003). The FS analysis comparing two languages is based on Boas's approach (2001). He compared and analysed English "run" with German *rennen*. In his findings, Boas discovered that FS analysis contributed to a detailed semantic and syntactic information of the English verb "run" and German *rennen*.

This article adopts the FS approach in analysing the Malay word *memberi* based on the 5 million word Dewan Bahasa dan Pustaka-Universiti Kebangsaan Malaysia Malay corpus (henceforth DBP-UKM corpus). Further information on the DBP-UKM corpus will be discussed in the Methodology section.

FrameNet

FrameNet is an online English language lexical database. FrameNet is based on the principles of FS (Baker et al., 1998; Baker et al., 2003) and can be accessed at <https://framenet.icsi.berkeley.edu>. The FrameNet project was set up at the International Computer Science Institute in Berkeley, California with a database that describes several thousand words of English language that are taken from a variety of semantic domains from the British National Corpus and other corpora. FrameNet identifies and describes semantic frames and analyses the meanings of words by appealing directly to the frames that underlie their meanings. Isolated corpus sentences are utilised to support the meaning of each frame and its frame elements.

METHODOLOGY

Fillmore's theory has been applied in various linguistic analyses related to lexicals and dictionaries. The analyses include Atkin and Fillmore (1994) discussion on the importance of frame semantics and corpus analysis for lexicography, Atkins, Fillmore and Johnson's (2003) study on the verb "argue" for the benefit of acquiring lexicographic relevant semantic information from corpus analysis, Boas's semantic and syntactic descriptions of English "run" and German *rennen* (2001), Atkins and Rundell's FS analysis in lexicography (2008) and many others.

For the purpose of this article, the DBP-UKM 5 million Malay corpus was utilised and the FS approach was implemented. The DBP-UKM 5 million corpus was developed by a team of researchers from DBP and UKM, a Malaysian public university (Zaharani, 2007). The 5 million corpus was extracted from the then 100 million DBP corpus. The extraction of the corpus was based on the principle that the smaller corpus must be a balanced and representative corpus from the bigger 100 million corpus. The 5 million corpus consists of sub corpora of magazines, books and newspaper.

Below are the steps on how the FS approach can be adopted for the Malay corpus:

1. Compare the semantic description of a Malay entry from the chosen dictionaries.
2. Refer to the corpus data, note the most frequent constructions.
3. Identify the frame and frame elements.
4. Identify the valence group.
5. Identify the description of the frame, the frame elements, and the example Malay sentences that are suitable to be suggested for the dictionary entry.
6. Identify matching English frames from FrameNet that can be mapped on to the Malay frames.
7. Source the English equivalents from the mapped English frames.
8. Translate the Malay corpus sentences into English as example sentences.

The frames are presented in smaller font upper case for example GIVING PHYSICAL and the frame elements are usually capitalised for example the frame element Donor. After the analysis, findings comprised of semantic information will be collated for a new edited dictionary entry for *memberi*.

ANALYSIS

In analysing the meaning discriminations for the word *memberi*, two bilingual dictionaries were selected, i.e., the Intelek Malay-English Dictionary (IMED) and the Kamus Perwira Bahasa Melayu-Bahasa Inggeris (KPBMBI). The Kamus Dewan 4th edition (KD4) will be utilised as a reference Malay dictionary. Table 1 presents a comparison of the entries for *memberi* from the two bilingual dictionaries and the KD4.

All the three dictionaries agree on the first sense of *memberi* as giving or delivering an item to somebody as the core meaning. KD4 provides five senses of *memberi*, IMED and KPBMBI each provides three senses. This analysis focuses solely on transitive verbs; therefore KD4 sense meaning number 6 that is an adjective meaning of *kenyal* (see Table 1) will not be analysed. When comparing the entry of *memberi* from the three dictionaries, there are a few incomplete information. For example, KD4 for the sense number three, four and others do not provide meaning information and clear example sentences to differentiate each sense. For IMED, only English equivalents are provided, followed by Malay sentences and translations in English. For KPBMBI only the phrases of meaning of each sense are available with Malay sentences and equivalent English phrases, not full sentences. The polysemous meaning of each sense is not well explained as well as the example sentences that can aid understanding of the meaning of the entry. In both bilingual dictionaries only English equivalents are provided without any grammatical information about the usage in a sentence. The meaning discrimination that includes semantic information of the senses in the bilingual dictionaries and the English equivalents are not provided in full sentences.

An FS analysis reveals that the lexical *memberi* has the following frames: GIVING PHYSICAL, GIVING ABSTRACT, COMMUNICATION, CAUSATION and PERMITTING. The Malay frames are compared and mapped to equivalent English frames from FrameNet. From the matching English frames, suitable English lexical units or LUs were used for the dictionary equivalents. Figure 1 shows the meaning of GIVING taken from FrameNet (<https://framenet.icsi.berkeley.edu>).

Table 1: Entry *memberi* from a monolingual Malay dictionary KD4 and two Malay-English bilingual dictionaries IMED and KPBMBI

KD4 (Reference Malay dictionary)	IMED (Active bilingual)	KPBMBI (Passive bilingual)
<p>beri; memberi</p> <p>1. menyampaikan (sesuatu) kpd seseorang (utk disimpan, digunakan atau utk sesuatu keperluan): <i>kerani itu ~ saya dua helai borang kosong utk diisi; dia ~ adiknya sebuah buku cerita;</i></p> <p>2. bp tidak menghalang seseorang melakukan sesuatu, membenarkan, mengizinkan, merelakan: <i>saya tidak diberinya masuk;</i></p> <p>3. mengakibatkan, menyebabkan, menjadikan: <i>~ malu; ~ bercat;</i></p> <p>4. menunjukkan, membuka: <i>~ jalan;</i></p> <p>5. = <i>~ bahagian</i> bp memukul: awas kau, nanti aku beri;</p> <p>6. kenyal, menganjal: tanah liat yg lembut, <i>~ dan menganjal;</i></p> <p><i>~ bertenggang</i> memberi kelonggaran (kesempatan) utk beriktir; <i>~ hati</i></p> <p>a) memanjakan;</p> <p>b) memberanikan hati;</p> <p><i>~ hormat</i> (salam, selamat);</p> <p><i>~ izin</i> mengizinkan;</p> <p><i>~ muka</i> memanjakan;</p> <p><i>~ telinga</i> sudi mendengar (kan);</p> <p><i>~ barang kpd tangan kera</i> prb menyerahkan sesuatu kpd orang yg akan merosakkannya;</p>	<p>beri, memberi</p> <p>1. to give: <i>Ibu ~ sepuluh sen kpd peminta sedekah itu.</i> Mother gave ten sen to the beggar.</p> <p>2. to result in; to: cause <i>Wahab tak mahu ~ malu kawannya itu.</i> Wahab does not want to embarrass his friend.</p> <p>3. to allow, to permit: <i>Dia ~ saya tempoh sebulan utk membayar hutang itu.</i> He gave me a month to settle the debt. <i>~ hormat (salam)</i> to extend regards; to greet. <i>~ hati</i> to allow; to permit; <i>~ jalan</i> to make way; to move aside (so that someone or something can pass through); <i>~ muka</i> to spoil; to indulge.</p>	<p>beri = memberi <i>kj</i></p> <p>1. membagikan, menyerahkan (lwn ambil) <i>to give, to hand over.</i> Saya akan memberi hadiah itu kepada awak.</p> <p>2. membenarkan, mengizinkan <i>to allow, to permit.</i> Kerajaan memberi peluang kepada kaum bumiputera menyertai kegiatan ekonomi negara.</p> <p>3. mengakibatkan, menjadikan, menyebabkan <i>to cause, to result in.</i> Perbuatan Ah Kong itu telah memberi malu kepada keluarganya.</p> <p><i>~ ingat to remind</i></p> <p><i>~ izin to allow, to permit.</i></p> <p><i>~ kuasa to authorize</i></p> <p><i>~ malu insult</i></p> <p><i>~ memberi give and take, compromise</i></p> <p><i>~ milik alienate</i></p> <p><i>~ sumpah to take oath</i></p> <p><i>~ tabek to salute</i></p>

Note: bp (bahasa percakapan); prb (peribahasa); kj (kata kerja)

Definition:

A Donor transfers a *Theme* from a Donor to a Recipient. This frame includes only actions that are initiated by the Donor (the one that starts out owning the *Theme*). Sentences (even metaphorical ones) must meet the following entailments: the Donor first has possession of the *Theme*. Following the transfer the Donor no longer has the *Theme* and the Recipient does.

Barney GAVE *the beer* to Moe.

\$300 was ENDOWED to the university to build a new performing arts building.

Core Frame Elements:

<u>Donor</u> [Donor]	The person that begins in possession of the <i>Theme</i> and causes it to be in the possession of the <u>Recipient</u> .
<u>Recipient</u> [Rec]	The entity that ends up in possession of the <i>Theme</i> .
<i>Theme</i> [Thm]	The object that changes ownership.

Semantic type:

Physical object

Figure 1: Frame of GIVING based on FrameNet

Frames for *memberi*

The Malay word *memberi* generates five main frames.

1. GIVING PHYSICAL
2. GIVING ABSTRACT – encompasses ATTENTION and ASSISTANCE frames
3. COMMUNICATION
4. CAUSATIVE
5. PERMITTING

Of the five frames, GIVING ABSTRACT, as shown above can be further divided into two, i.e., ATTENTION and ASSISTANCE frames. Only GIVING PHYSICAL, GIVING ABSTRACT and COMMUNICATION frames are discussed in this article.

Giving Physical Frame

The **GIVING PHYSICAL** frame illustrates the meaning of delivering a physical or concrete item to a recipient from a giver. This is the core meaning for the other frames, evoked by the word *memberi*. The giver has or owns a concrete or physical item and gives or delivers it to a recipient. The recipient experiences a positive benefit for receiving a concrete item from a giver. This meaning agrees with the core meaning of *memberi* recorded in KD4, IMED and KPBMBI. The example sentence carrying this frame taken from the DBP-UKM corpus is shown below:

1. *Wakil Rakyat pula **memberi hadiah kain pelikat dan kain batik** kepada penduduk kampung yang miskin di kawasan pilihanraya setiap menjelang hari raya puasa.*
Donor – *Wakil Rakyat*
Recipient – *penduduk kampung*
Theme – *hadiah kain pelikat dan kain batik*

The core frame elements for the GIVING PHYSICAL frame are shown below:

1. Donor – The person that begins in possession of the Theme and causes it to be in the possession of the Recipient.
2. Recipient – The entity that ends up in possession of the Theme
3. Theme – The physical or concrete object that changes ownership

To get a complete FS analysis, Table 2 below provides the meaning description of GIVING PHYSICAL frame, frame elements, valence patterns and other linguistic information. Figure 2 shows the mapping of the Malay GIVING PHYSICAL and the English GIVING. The mapping of the Malay frame onto the equivalent English frame is to ensure that the two frames are equivalent in meaning and the English lexical units can be chosen as appropriate English equivalents for the dictionary entry.

Table 2: The meaning description of the GIVING PHYSICAL frame, frame elements, valence patterns and other linguistic information

LEMMA	beri
Lexical Unit (LU)	<i>memberi</i>
Word class	verb
GIVING PHYSICAL frame	A Donor transfers or gives a Theme of a concrete or physical entity from a Donor to a Recipient.
Frame Elements	Donor, Theme, Recipient
Example Sentence	<i>Wakil Rakyat pula memberi hadiah kain pelikat dan kain batik kepada penduduk kampung yang miskin di kawasan pilihanraya.</i>
The valence patterns	Transitive (Donor/NP/Subject) + <i>memberi</i> + (Theme/NP/Object) + (Receiver/NP/Comp)
English translation	The Wakil Rakyat gave out gifts of pelikat and batik cloth to the poor villagers in the polling area.
English LUs	give, contribute, donate, endow, hand in, hand, hand out, pass, pass out, treat

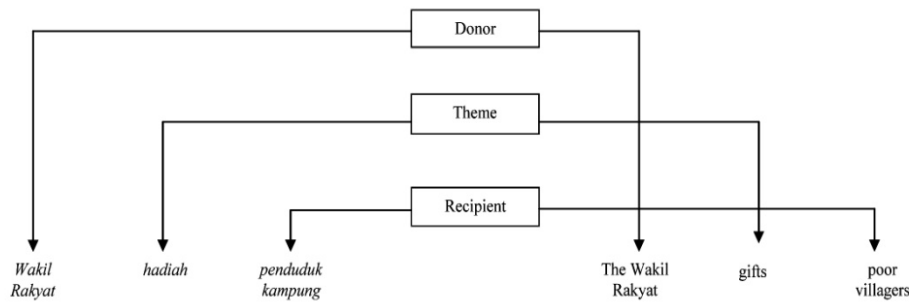


Figure 2: The mapping of Malay GIVING PHYSICAL and English GIVING

Giving Abstract Frame

The GIVING ABSTRACT frame provides the meaning of giving of an abstract entity to a recipient from a giver. This meaning is an extension of the core meaning that the giver gives an abstract entity directly towards the recipient. This frame has the highest frequency of usage. Nearly 50% of the meaning for *memberi* falls under the GIVING ABSTRACT meaning. From the corpus, the abstract themes that are frequently used are noun phrases like *perhatian* (attention), *sokongan* (support) and *bantuan* (help). They usually refer to positive entities or positive experiences of the recipient. This meaning is not captured in all the three dictionaries.

The GIVING ABSTRACT frame cannot be mapped to the English GIVING frame because it involves a physical entity. Instead, as will be shown below, the Malay GIVING ABSTRACT can be mapped to the English ATTENTION and ASSISTANCE frames. The GIVING ABSTRACT defines the frame with similar frame elements as in GIVING PHYSICAL but the Theme is of an abstract entity. The core frame elements for the GIVING ABSTRACT frame are shown below:

1. Donor – The person that begins in possession of the Theme and causes it to be in the possession of the Recipient.
2. Recipient – The entity that ends up in possession of the Theme.
3. Theme – The object of an abstract entity that changes ownership.

The example sentences carrying the meaning of the GIVING ABSTRACT frame taken from the DBP-UKM corpus are shown below:

2. *Sepanjang petang itu semua lelaki **memberi perhatian** padanya.*
(Throughout the evening, all the men were giving attention to her).
Donor – *Semua lelaki*
Receiver – *nya*
Theme – *perhatian*
3. *Universiti Malaya (UM) bersedia **memberi bantuan** kepada Institusi Pengajian Tinggi Awam (IPTA) tempatan yang lain untuk menjayakan pengajaran mata pelajaran Tamadun Islam dan Tamadun Asia.*
(University of Malaya is ready to assist [give assistance to] the other public institutions of higher learning [IPTAs] to carry out the teaching of the *Tamadun Islam dan Tamadun Asia* subject).
Donor – *Universiti Malaya*
Receiver – *IPTA tempatan*
Theme – *bantuan*

Example number 2 is an illustration of the ATTENTION frame while example number 3 demonstrates the ASSISTANCE frame. Table 3 provides the meaning description of GIVING ABSTRACT frame, frame elements, valence patterns and other linguistic information.

Table 3: The meaning description of the GIVING ABSTRACT frame, frame elements, valence patterns and other linguistic information

LEMMA	beri
Lexical Unit (LU)	<i>memberi</i>
Word class	verb
GIVING ABSTRACT frame	A Donor transfers or gives a Theme of an abstract entity from a Donor to a Recipient.
Frame elements	Donor, Theme (Abstract), Receiver
Example Sentence	<i>Semua lelaki memberi perhatian padanya.</i>
The Valence Patter	Transitive (Donor/NP/Subject) + <i>memberi</i> + (Theme//NP/Object) + (Receiver/NP/Comp)
English translation	All the men were giving attention to her.
English LU	give

Figure 3 shows the mapping of the Malay GIVING ABSTRACT and the English ATTENTION.

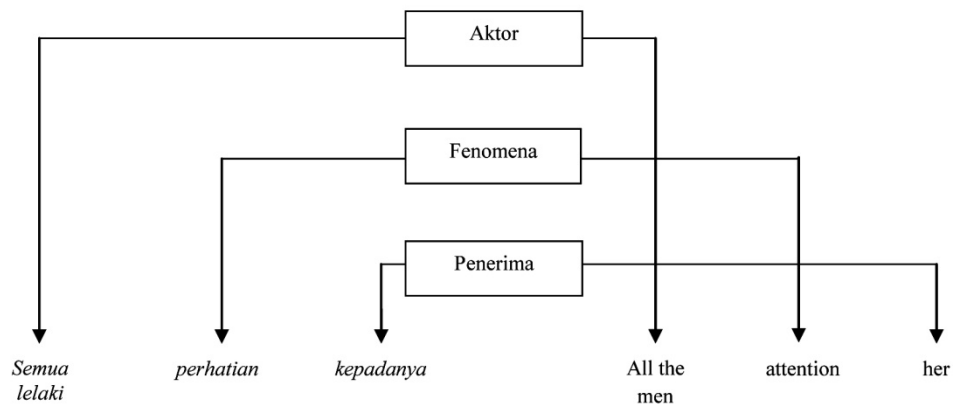


Figure 3: The mapping of Malay GIVING ABSTRACT with English ATTENTION

The example sentence carrying the meaning of the GIVING ABSTRACT frame taken from the DBP-UKM corpus is shown below:

4. *Tan Sri Datuk Dr. Arshad ialah tokoh yang sering **memberi sumbangan** untuk kemajuan pendidikan di kampung saya.*
(Tan Sri Datuk Dr. Arshad is a well-known person who always contributes towards the education development in my village).
Donor – *Tan Sri Datuk Dr. Arshad*
Theme – *sumbangan*
Receiver – *orang kampung*
Purpose – *untuk kemajuan pendidikan di kampung saya*

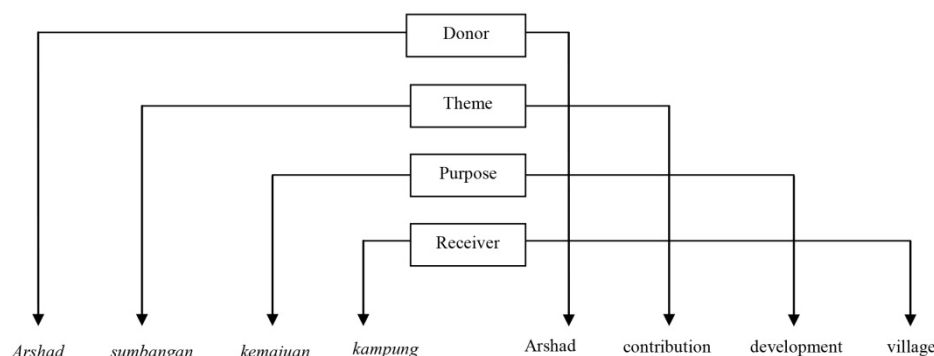


Figure 4: The mapping of Malay GIVING ABSTRACT with English ASSISTANCE

The following frame is the COMMUNICATION frame. The COMMUNICATION frame is an extension of the GIVING ABSTRACT but its main purpose is for communication.

Communication Frame

The COMMUNICATION frame gives the meaning of a Communicator who delivers a Message with a certain topic to the receiver with the purpose to communicate. This frame can be an extension of the earlier GIVING ABSTRACT frame but the Theme is a message with the purpose to communicate. Twenty five percent of the corpus data with the verb *memberi* carries the meaning of the COMMUNICATION frame. The example sentence carrying the meaning of COMMUNICATION frame taken from the DBP-UKM corpus is shown below:

5. *Dato' Abdullah Ahmad telah **memberi maklumat** baru tentang episod perlantikan Timbalan Perdana Menteri dalam tahun 1976.*
 (Dato' Abdullah Ahmad gave new information on the appointment of the Deputy Prime Minister in 1976).
 Communicator – *Dato' Abdullah Ahmad*
 Message – *maklumat baru tentang episod perlantikan Timbalan Perdana Menteri dalam tahun 1976.*

The core frame elements are Communicator and Message. The frame elements of Receiver, Purpose and Location are peripheral so that the absence of any of these does not change the meaning that is carried.

The core frame elements:

1. Communicator – Somebody or an entity that uses a written or spoken language to deliver a message.
2. Message – Message is an information or a proposition delivered by Communicator to the Receiver. The message is usually in an abstract entity with the purpose of communication.

For a complete FS analysis of example 5, Table 4 provides the meaning description of the COMMUNICATION frame, frame elements, valence patterns and other linguistic information. Figure 5 shows the mapping of the Malay COMMUNICATION and the English COMMUNICATION frame.

Table 4: The meaning description of the COMMUNICATION frame, frame elements, valence patterns and other linguistic information

Lexical Unit /LU	<i>memberi</i>
Kelas kata	verb
COMMUNICATION frame	Communicator who delivers a Message with a certain topic to the receiver with the purpose to communicate.
Frame Elements	Communicator, Message
Contoh ayat	<i>Dato' Abdullah Ahmad telah memberi maklumat baru tentang episod perlantikan Timbalan Perdana Menteri dalam tahun 1976.</i>
The Valence pattern	Transitive (Communicator/NP/Subject) + <i>memberi</i> + (Message//NP/Object)
English translation	Dato' Abdullah gave new information on the appointment of the Deputy Prime Minister in 1976.
English LUs	give, provide, convey, indicate, signal, communicate

The Malay COMMUNICATION can be easily mapped onto the English COMMUNICATION frame due to its similarities in meaning as shown in Figure 5.

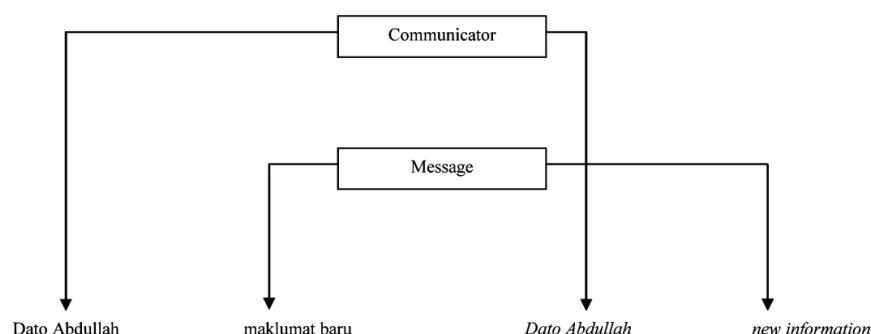


Figure 5: The mapping of Malay COMMUNICATION with English COMMUNICATION

DISCUSSION

An analysis of *memberi* (giving) in the corpus using FS reveals that the word has five frames: GIVING PHYSICAL, GIVING ABSTRACT, COMMUNICATION, CAUSATION and PERMITTING. The GIVING PHYSICAL is the core frame generated from the word *memberi*. This frame carries the most basic meaning and is recorded as the first sense in KD4, IMED and KPBMBI. Despite its core meaning, the corpus data only shows a one percent frequency use of this frame. This frame is chosen as the core meaning because it represents the most prototypical meaning of *memberi*.

The Malay frame GIVING PHYSICAL is similar to the English frame GIVING as both involve a physical Theme. Given this, the Malay frame GIVING PHYSICAL can be matched with the English GIVING which has three core frame elements: Donor, Theme and Recipient. The lexical units supporting the English GIVING are verbs like bequeath, contribute, donate, endow, give, give out, hand in, hand, hand out, hand over, pass, pass out, and treat. These verbs can be suggested to become equivalents for the Malay *memberi*.

The data corpus also shows that GIVING PHYSICAL has the valence pattern of (Donor/NP/Subject, Theme/NP/Object, Receiver/NP/Comp). The use of prepositions like *kepada* (to), *pada* (at), and *terhadap* (for) signals the Receiver of the Theme or noun phrase. From the corpus data, the syntactic structure described in the valence pattern of *kepada* (to) after the Theme to signal the Receiver, shows a high 30% usage and this is a prominent pattern. Other use of prepositions that include the use of *untuk* (for), *agar* (so that) is meant to introduce a non-core frame element that is the Purpose. However, the data corpus shows a lower frequency.

The object or the noun phrase of the verb *memberi* or the Theme is the most important collocate to be provided in the dictionary entry. The GIVING

PHYSICAL frame only involves Theme that is physical and concrete. This is similar to the English GIVING frame from FrameNet. Basically, the GIVING PHYSICAL frame has three core elements. They are the Donor, Receiver and Theme that is physical and concrete in nature.

The GIVING ABSTRACT is similar to the GIVING PHYSICAL but the Theme is an abstract entity. The corpus data shows that this frame has the highest number of use. For example, the abstract Theme is recorded as in the use of the nouns *peluang* (opportunity) at 338 occurrences, *tumpuan* (attention) at 201 occurrences, *sokongan* (support) at 167 occurrences, *perhatian* (attention) at 161 occurrences, *jaminan* (guarantee) at 144 occurrences and *sumbangan* (contribution) at 133 occurrences. This high frequency of Theme that follows after the verb *memberi* has realised another two specific frames namely, the Malay ATTENTION frame with Themes of the lexical *perhatian* (attention) and *tumpuan* (focus of attention), whereas the Theme of *peluang* (opportunity), *sokongan* (support) and *sumbangan* (contribution) realise the Malay frame ASSISTANCE. These two frames and the meanings are not captured in KD4, IMED or KPBMBI. These two meanings must be recorded in a dictionary entry as they deal with abstract Themes.

The corpus data shows that about 50% use of *memberi* involve the Theme or object of the verb which is abstract. This Theme is important to be recorded because it is not physical in the core meaning. Furthermore, it is not meant for the purpose of communication, nor to show cause and effect, nor to give permission as in the other *memberi* frames. There is no equivalent frame in English. Therefore the matching frames are the ATTENTION and ASSISTANCE frames. The GIVING ABSTRACT frame has a similar valence pattern like the GIVING PHYSICAL (Donor/NP/Subject, Theme/NP/Object, Receiver/NP/Comp) as discussed earlier. The preposition *untuk* (for) is used to show a contribution from Donor to the Receiver in the ASSISTANCE frame.

In short, the GIVING ABSTRACT frame is similar in structure and valence pattern to the GIVING PHYSICAL frame but the Theme is abstract in nature. Even though the evident from the data corpus shows higher frequency usage of abstract frames, the abstract frames namely GIVING ABSTRACT and COMMUNICATION are still an extension from the core frame GIVING PHYSICAL.

The COMMUNICATION frame is another meaning to show how the verb *memberi* records the purpose of communication. In the corpus data, 25% of the usage of *memberi* shows the meaning of relaying information for the purpose of communication. There is a high frequency use of nouns like *gambaran* (picture) at 104 occurrences, *keterangan* (explanation) at 102 occurrences and *amaran* (warning) at 98 occurrences that follow the verb *memberi*. The COMMUNICATION frame consists of two frame elements: Communicator and Message. This can be shown by the valence pattern of (Communicator, Message). There are other variations that still carry the same meaning for example (Topic,

Message) or (Communicator, Message, Situation). In short the COMMUNICATION frame depicts the meaning of a Communicator who delivers a Message to fulfil the purpose of communication. This Malay frame can be mapped to the English COMMUNICATION frame. The connector *bahawa* (*that*) is frequently used to signal the information in a situation that follows the Theme of this COMMUNICATION frame. Table 5 shows all the meaning divisions presented in the three dictionaries as compared to the frames from the FS analysis.

Table 5: The coverage of meanings in the three dictionaries and the Frames

Meanings	KD4	IMED	KPBMBI	Frames in Malay from the FS analysis
1. To present / provide a physical entity to someone.	√	√	√	√
2. To present / provide an abstract entity to someone.	–	–	–	√
3. To allow, give permission, not stopping anyone to do something.	√	√	√	√
4. To cause something.	√	√	√	√
5. To show the way, to give way.	√	–	–	√
6. For communication purposes.	–	–	–	√

The corpus-based FS analysis has aided the researcher in reorganising the meaning of *memberi* from the most basic to other extensions of meanings. The analysis has helped in the mapping of the Malay and English frames that contributed to the English equivalents that need to be provided in a dictionary entry. The FS analysis reveals the abstract sense of the object of the verb in the GIVING ABSTRACT frame with an addition of the communication sense of meaning in the COMMUNICATION frame. The frame-based analysis helped to describe in detail the meaning discrimination of the senses for *memberi*. As shown in Table 5, three extra senses are discovered and as suggested earlier they are important to be recorded in the entry of *memberi*. Apart from the analysis of the Malay *memberi*, the English LUs sourced from FrameNet contribute to the English equivalents that can be added into the entry as well. A revised entry of *memberi* is suggested in Figure 6.

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- Memberi 1.** kk. Tr. Seseorang atau satu pihak menyerahkan barangan yang konkrit kepada penerima, *give, contribute, donate, endow, foist, hand in, hand, hand out, hand over, pass, pass out, treat*. Wakil Rakyat pula memberi hadiah kain pelikat dan kain batik kepada penduduk kampung yang miskin di kawasan pilihanraya. *The Wakil Rakyat gave out gifts of pelikat and batik clothes to the poor people in the polling area.*
2. Seseorang atau satu pihak menyerahkan barangan yang abstrak kepada penerima memberi perhatian, sokongan, *to give attention, support, assistance*. Semua lelaki memberi perhatian padanya. *All the men were giving attention to her.*
3. Seseorang yang menyampaikan sesuatu maklumat, berita atau gambaran untuk tujuan komunikasi, *give picture, display, convey, indicate, signal, communicate, confer, negotiate, warn*. Hal ini sudah tentu memberi gambaran yang tidak sihat dan mempamerkan tindakan menindas ke atas sesama manusia. *This matter has given an unhealthy picture and display of human's oppression.*
4. Sesuatu atau seseorang membawa kesan dan akibat kepada seseorang atau sesuatu yang lain, *cause, lead (to), impact, influence, inspire*. Pencemaran air yang disebabkan oleh sisa-sisa toksik daripada kilang-kilang mengakibatkan kematian ikan-ikan di laut, ini akan memberi kesan kepada industri yang mengetin ikan yang merupakan sumber pendapatan mereka. *The water pollution caused by toxic waste from the factories have caused the diminishing number of fishes and will affect the fish processing industry that has been their means of income.*
5. Seseorang memberi kebenaran untuk sesuatu berlaku atau dan laluan kepada sesuatu atau seseorang, *give in, give way, relent, capitulate, yield, allow, approve, clear, greenlight, let, permit*. Jika hakim mendapati ada sebab-sebab yang membolehkan ia berpoligami, hakim akan memberi kebenaran walaupun si isteri tidak bersetuju. *If there are reasons to allow polygamy the judge will allow him even if the wife disagrees.*
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Figure 6: A revised entry of *memberi*

The frame-based analysis helped in reorganising the meaning division of *memberi* in the two bilingual dictionaries as well as capturing three additional meanings based on the corpus data. The analysis is not only beneficial in providing new data for updating bilingual dictionaries, but also for updating the existing entry of *memberi* offered by KD4, the Malay monolingual dictionary. The study shows that a FS analysis can be utilised in analysing meaning discrimination of Malay entries as well as in looking for English equivalents from matching English frames. Another important contribution of the findings of FS analysis is that it provides essential semantic information for building a database for Malay or a Malay Framenet (Intan Safinaz, 2013). According to Intan, the setting up of the Malay FrameNet can be seen as an effort towards processing the digitized Malay language and at the same time developing Malay computational lexicography.

CONCLUSION

This article looks at the discrimination of meaning for *memberi* and the target language equivalents presented in two Malay-English dictionaries. The analysis adopted a Frame Semantics approach in describing *memberi* and in assessing the

different senses of meaning through the frames that are available. The theoretical framework of Frame Semantics has proven to be effective reorganising the meaning of the Malay transitive verb *memberi* (equivalent to English "give") from the different frames evoked by the entry. In addition, the information on the lexical units (LU) provided by the frames, for example the LUs from the frame of GIVING in the FrameNet, forms the reference for English equivalents that can be used in the Malay-English dictionary entry. The frame-based analysis relies on the 5 million words DBP-UKM Malay corpus while all the English equivalents were sourced from the FrameNet and English dictionaries. Based on the findings, a revised entry for *memberi* is suggested. This article shows clearly that Frame Semantics is most suitable in reorganising systematically the meaning of Malay entries. This is important and benefits the efforts of updating entries in bilingual Malay-English dictionaries, as well as Malay monolingual dictionaries. This research is beneficial to lexicographers because it enables them to evaluate and upgrade bilingual Malay-English dictionaries as well as Malay monolingual dictionaries. This research also highlights the importance of selecting suitable example Malay sentences from the corpus to illustrate the meaning as well as the ability to search for English equivalents from matching English frames.

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