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# ENGLISH-MALAY CODE-MIXING INNOVATION IN FACEBOOK AMONG MALAYSIAN UNIVERSITY STUDENTS

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## **ABSTRACT**

This study investigated the occurrences of code-mixing insertion of English morphemes into Malay lexical items in Facebook postings by university students from a few universities in Malaysia. A collection of 80 postings dated between January 2011 and January 2012 were analyzed to identify: 1) areas of language alternation where Malay and English grammar display lack of congruence; and 2) the reasons for the English-Malay language alternation in online postings via Facebook among university students. The findings suggest that the two areas where Malay and English grammar display lack of congruence are pluralization of nouns and continuous tense. In conclusion, the most dominant reason for this language alternation among the students is to amplify and emphasize a point. This study proposes that the phenomenon of code-mixing insertion of English morphemes into Malay lexical items is indeed an innovation towards English language usage in Malaysia.

**Keywords**: English-Malay, Code-mixing, Computer-Mediated Communication (CMC), language innovation, Facebook.

#### **INTRODUCTION:**

University students in the early twenty-first century use home computers and notebooks for communication at remarkable rates in ever-enlarging virtual communities (Tagliamonte, 2008). Taking into consideration, Facebook - the largest virtual community, has become one of the main communication media which university students utilize to keep in contact with friends and acquaintances. Thus, this makes it an appealing medium of spoken-written language to identify trends of code-mixing among university students in informal social domains.

This paper aims to scrutinize a current language phenomenal trend in Malaysia by investigating Malay-English language alternation in the spoken-written language through the medium of Facebook. This is in contrast to previous research, which has mostly studied language alternation in face-to-face informal conversations (Chan, 2004; Muysken, 2000; Myers-Scotten, 1992; Wei, 1998) with few studies in the context of Computer Mediated Communication i.e., CMC (Danet & Herring, 2003; Durham, 2003; Goldbarg, 2009; Ho, 2006; Huang, 2004).

#### LANGUAGE ALTERNATION:

The distinction between code-switching and code-mixing is one of the most perplexing debates in the study of language alternation (Cárdenas-Claros and Isharyanti, 2009; Myers-Scotton, 1993). Clyne (1991 as cited in Cárdenas-Claros and Isharyanti, 2009) claimed that code-switching and code-mixing refer to the same phenomena in "which the speaker stops using language 'A' and employs language 'B" (p.161). Wei (1998) clarified that if language alternation occurs at or above clause level, it is considered as code-switching and if it occurs below clause level then it is considered as code-mixing which are the definitions adopted in this study.

#### **CODE-MIXING:**

Code-mixing is the change of one language to another within the same utterance or in the same oral/written text. Muysken (2000) defines code-mixing as the lexical items and grammatical features of two languages that in the same sentence. According to Li (1998; 2000), "code-mixing refers to any admixture of linguistic elements of two or more language systems in the same utterance at various levels: phonological, lexical, grammatical and orthographical".

According to Muysken (2000), the term code-mixing can be referred as when the features of grammar and lexical items of two or more languages are in the same sentence. In a multilingual society such as in Malaysia, code-mixing is regarded as a common phenomenon which generates mixed language or the localized term 'rojak' language. This phenomenon has given significant impact not only among language users in their daily normal day conversations, but have influenced sentence use in online social network such as Facebook. In this study, the narrow focus is on the language alternation of English morphemes into Malay lexical items where patterns of language choice are investigated. Language choice depends on the participants whether to choose Malay or English for their online postings, whilst morpheme insertion is in English language.

Such communicative functions of code-switching can also be listed according to the functions that they try to accomplish. Among these, the following ten functions have been described in a study (Malik, 1994): Lack of Facility, Lack of Register, Mood of the Speaker, To emphasize a point, Habitual Experience, Semantic significance, To show identity with a group, To address a different audience, Pragmatic reasons and To attract attention.

#### STATEMENT OF THE PROBLEM:

In the past decade, people are communicating around the world without boundaries with the aid of technology. According to Crystal (2001), this type of communication has prompted new concepts of language contact. This has attracted many researchers to study on language contact via Computer-Mediated Communication (CMC) especially in bilingual communities (e.g., Paolillo, 2001;Su, 2003; Hinrichs, 2006 as cited in Huang, 2009). She further adds that the language contact phenomena include code-switching and code-mixing.

Code-mixing is a common phenomenon in Malaysia (Halim et al., 2015) in present days, precisely among university students. Thus, problems might occur in accordance to these circumstances. Since many universities in Malaysia use English as the medium of instruction while the students use Malay as their mother tongue in daily conversation of informal domains, the occurrence of code-mixing is rapidly spreading. Hence, this created the objective of this paper as the imposing of morphemes into Malay lexical items.

In examining this spoken language phenomenon, Facebook is the ideal social network for the context in Malaysia. This is due to its rapid display of communicational patterns that exist within a community (Bloor, 2010). Many other researchers have also used Facebook to study trends of language in Malaysia (Halim et al., 2015; Shafie & Surina Nayan, 2013; Nur Syazwani Halim and Marlyna Maros, 2013).

This language alternation has long been spoken about where the alternation brings corruption to the language. This is supported by purists who describe as "the deliberate attempt at reducing the number of foreign words or avoiding their use altogether" (Adamson, 1999; as cited in Cser, 2009). Purists believe that language should stick to its standards where there is no such thing as code alternations be it code-switching or code-mixing. Bhatia and Ritchie (2004; as cited in Kim (2006) stated that "language mixing/switching is a sign of "laziness", an "inadvertent" speech act, an "impurity," and instance of linguistic decadence and a potential danger to their own linguistic performance".

Nevertheless, there are proponents (Kim, 2006; Cárdenas-Claros and Isharyanti, 2009) who have diverse opinions with these purists where language alternation is seen as an innovation and assumed human creativity to express their feelings and thoughts. The result to corruption of both languages in Malaysia is widely known as 'Bahasa rojak'. 'Bahasa rojak' indicates the language alternation by the Malaysian locals whether in spoken or written form. This might result to the usage of 'Bahasa rojak' in academic domains. Thus, this study aims to investigate English-Malay code mixing patterns of language alternation used by Malaysian university students and the reasons behind this code-mixing occurrence among these students.

# **PURPOSE OF THE STUDY:**

This study aims to examine the phenomenon of code-mixing that exists in Facebook among university students, hoping to identify the features of Malay lexical items that have been code-mixed with English morphemes. The first objective is to classify patterns of Malay code-mixed lexical items; Jacobson's (1996) classification of code-mixed spoken interaction, Sebba's (1998) areas of lack of congruence, and Musyken's (2000) categories of code-mixing will be employed for this purpose. The second objective is to investigate the reasons behind university students' code-mix in Facebook using Malik's (1994) ten reasons for code-switching for spoken discourse.

Taking into account that code-switching and code-mixing are only different in the place where language alternation occurs, there is no hindrance in using Malik's reasons for code-switching in achieving the study purposes. In addition, language used in Facebook postings is considered as spoken language (Cuonzo, 2010), hence both Malik's (1994) and Jacobson's (1996) models of spoken discourse are employed.

### **RESEARCH QUESTIONS:**

This paper addresses two research questions:

- 1) What are the areas in which language alternation is achieved among university students, where Malay and English grammar display lack of congruence?
- 2) What are the reasons for the English-Malay language alternation in online postings via Facebook by university students?

#### LIMITATIONS:

One of the main limitations lies in the small number of participants. They were selected according to the postings in Facebook. Hence, two to three postings might have been taken from the same participant. Thus, it lessens the number of participants involved.

The second limitation is that this study only focused on Facebook. This is due to the common use among Malaysian students. Nevertheless, there are many other social networks which may be included for any further studies.

Another limitation is the diversity of universities involved in this study. Students from only three Malaysian universities were involved. Therefore, the results obtained from the research may not be generalised to all Malaysian university students.

# LITERATURE REVIEW OF STUDIES ON LANGUAGE ALTERNATION:

Many studies have been conducted on language alternation in Computer-Mediated Communication (CMC) environments. In Taiwan, Huang (2004) examined code choice and language use in the emails used for interpersonal communication written by 8 Chinese-English bilinguals in Taiwan. He accounted that from the analysis of a corpus of 223 emails gained with interviews and questionnaires, participants adopted three modes of email communication: Chinese/English bilingual mode, Chinese monolingual mode, and English monolingual mode. The Chinese monolingual mode was used when participants wanted to express their most personal thoughts and feelings. Another study by Huang (2009) which was also conducted on Chinese-English bilinguals examined the use of languages in social network emails and Bulletin Board System (BBS) website postings. Data revealed two levels of code-switching exists: between languages and between writing systems.

As for internet chatting mediums, Cárdenas-Claros and Isharyanti (2009) investigated the occurrences of code-switching and code-mixing in a chatroom based environment over a two-month period. They examined chatroom conversations of twelve non-native speakers of English from Indonesian and Spanish backgrounds. The study discovered that technology-related terms, along with introductory terms, initiated more instances of code-switching and code-mixing regardless of the linguistics background of the participants.

In the Malaysian context, Kia, Cheng, Yee, and Ling (2011) examined code-mixing of English in the entertainment news of Chinese newspapers in Malaysia. This study highlights the identification of the features of English lexical items that were code-mixed into Chinese entertainment news from the linguistics perspective. A total of 1,000 sentences from Chinese entertainment newspapers from January to May 2007 were collected. It was identified that English abbreviations such as "CD" and "SMS" were inserted into Chinese entertainment news making the sentences simpler and easier to understand. Regarding reasons and functions for code-switching among Malaysians, Muthasamy (2009) conducted a study on Tamil speaking undergraduates in Universiti Putra Malaysia. The participants in this study all use Tamil, Malay, and English in their interactions for different domains. It was found that code-switching was mostly used to fulfill the relational and referential functions of language that amounts to effective communication and interlingual unity.

Concerning CMC, McLellan (2009) investigated Malay-English code-switching of Bruneians in their message postings on asynchronous on-line discussion forums. This study examined language choice in a corpus of texts from two Brunei discussion forums, and it also examined three specific areas where Malay and English grammatical subsystems display lack of congruence: noun-phrase constituent order, and nominal and verbal inflectional morphology. The findings from McLellan's (2009) study can be situated within ongoing debates in the field of code-switching and language alternation research. Myers-Scotton (1993, pp. 59-61) insists that there is always inequality between the matrix and embedded languages in codemixed environments. Jacobson (2001, pp. 63-69), following Bentahila and Davies (1998), claims that there can also be language alternation in which both languages play an equal role, and offers evidence of this from Malay-English code switching in Malaysia.

Despite the thorough literature on language alternation in online contexts, there is still modest attention given to research in Facebook using English-Malay language alternation patterns of university students in Malaysia. Studies on the widely used social network website, Facebook where language alternation patterns and reasons of the occurrences of language alternation is concerned, is also needed further investigation. The younger generation is a significant focus group for it is this generation that brings new trends for future everyday routines.

#### **MATERIALS AND METHODS:**

Data in the form of online spoken-written texts was collected from Facebook, a social networking. The primary source of this study is taken from participants' profile pages on Facebook where participants can share information posting status updates. A total of 80 postings dated between January 2011 and January 2012 were collected through participants' profile pages based. The participants were Malaysian university students from three different universities in Malaysia.

In order to achieve the objective of the present research, the features of English morphemes inserted into Malay lexical items were observed. The primary model applied was Jacobson (1996, p. 85) for code-mixed spoken interaction which are monolingual English (E-), main language-English with some Malay (ML-E), equal language alternation of Malay and English (=LA), main language-Malay with some English (ML-M) and monolingual Malay (M-). This study only focuses on two categories which are main language-English with some Malay (ML-E) and main language-Malay with some English (ML-M) as data collected chosen only for these particulars. Taking into account that language used in Facebook postings is considered as spoken natural language (Cuonzo, 2010), this model of spoken interaction can be applied to this study.

Further, Muysken's (2000) classification of code-mixing which are insertion, alternation and congruent lexicalization was employed to this study. However, only insertion wasapplied as the description is compatible with the current study. Based on Musyken (2000), insertion occurs when lexical items from one language are incorporated into another, which what this paper focuses on based on the data collected in Facebook. Additionally, this study focuses on code-mixing, akin to Musyken's.

For more detailed investigation, English morphemes on grammatical items are examined at the level of the Malay lexical items. Sebba's (1998) areas of lack of congruence in both languages were used as the conceptual framework in interpreting the data. This analysis focuses on areas where there is lack of congruence between Malay and English which has been defined by Sebba: noun phrase structure, pluralization of nouns and verb inflections. This study only focuses on two of these elements which are pluralization of nouns and verb inflections since data collected were only on both areas, which are the insertion of English plural morpheme –s into Malay nouns and English verb (continuous tense) morpheme -ing into Malay verbs.

In identifying reasons for code-mixing, data is analyzed and categorized based on Malik's (1994) ten reasons of code-switching for spoken discourse. Inaccordance to Bokamba(1989), code-switching is the mixing of words, phrases and sentences from two distinct grammatical (sub)systems across sentence boundaries within the same speech event. Thus, this model of code-switching can also be applied in this code-mixing study as code-switching is part of mixing the language.

#### **RESULTS:**

**Table 1: Presence / Absence of Language Insertion in 80 Postings** 

Language classification	Number of postings	Percentage (%)
Main-language English (ML-E)	53	66.25
Main-language Malay (ML-M)	27	33.75

Over the whole collection of postings there is a predominance of English over Malay as the choice for the main language, 66.25% to 33.75 %. It shows that code-mixing insertion is often occurred in the setting of Main Language English (ML-E). This code-mixing occurred, based on McLellan (2009), not due to low proficiency of students, in fact, the students possess high proficiency of English that lead to this language alternation. Thus, it contributes to the high percentage of students' postings more in Main Language English. (See Table 1)

# ANALYSIS OF TWO AREAS OF NON-CONGRUENCE BETWEEN MALAY AND ENGLISH: MORPHEME INSERTION OF PLURALIZATION OF NOUNS:

With plural marking of nouns, there is a comparable pattern of variability in Malay words using English grammar. Out of forty messages, there are sixteen examples where the English plural -s morpheme is retained on Malay nouns in main language-Malay contexts, and twenty four examples in main language-English. The examples show English plural morpheme affixed to Malay nouns. The plural English morpheme is present, thus resulting in the occurrence of modified Malay nouns. (See Table 2)

Table 2

Plural marking	
Malay nouns with English plural –s in main language-Malay contexts	16
Malay nouns with English –s plural in main language-English contexts	24

- 1. Examples of Malay nouns with English plural –s in main language-Malay contexts.
  - a) Seri **pengantins!** Nampak?

(Gorgeous brides! See?)

- b) Aunty2 kaknams! Nasibbaikdapat baby boy! (The Nam sisters are aunties! Luckily it's a boy!)
- 2. Examples of Malay nouns with English plural –s in main language-English contexts.
  - a) Survey bajus for raya. Yay!

(Survey clothes for raya. Yay!)

- b) For those who are going to take **jubahs**or graduation and interested in doing graduation pictures- kindly please register with us.
- (For those who are going to take the robes or graduation and interested in doing graduation pictures, kindly please register with us)
- c) To all my **sayangs**, congratulations on ur C-Day(u know who u r). (To all my dearest, congratulations on your convocation day (you know who you are))

## **MORPHEME INSERTION OF CONTINUOUS TENSE:**

Verbs in Malay do not inflect for tense, which is marked adverbially (Cumming, 1991 Svalberg & Fatimah, 1998). In this study, there are twenty one examples where the English verb -ing morpheme is retained on Malay verbs in main language-Malay contexts, and nineteen examples in main language-English. The verb English morpheme is present, hence resulting in the occurrence of modified Malay verbs. (See Table 3)

Table 3

Verb marking	
Malay verbs with English continuous tense –ing in main language-Malay contexts	21
Malay verbs with English continuous tense -ing in main language-English contexts	19

- 1. Examples of Malay verbs with English continuous tense –ing in main language-Malay contexts:
  - a) Lepakingktrumhkakakaku.

(Loitering at my sister's house)

- b) Merindu-ing him inimlm!
  - (I am missing him tonight!)
- 2. Examples of Malay verbs with English continuous tense –ing in main language-English contexts
  - a) Enjoy **lepaking!** :D

(Enjoy hanging out!)

b) I am not tiruing you!

(I am not copying you!)

c) I won't be available for **lepaking** during the weekdays!

(I won't be available for hanging out during the weekdays!)

# MALIK'S (1994) TEN REASONS FOR CODE-SWITCHING (CODE-MIXING):

Four (40%) out of the 10 reasons can be applied to the occurrence of code-mixing in communication via social networking website. Out of the 82 occurrences of code-mixing, 44 occurrences (55%) fit into the category of 'to amplify and emphasize a point'. 'Semantic significance' accounted for 19 occurrences (23.75%) while 'mood of the speaker' accounted for 14 occurrences (17.5%). Besides that, 'to address a different audience' accounted 5 occurrences (6.25%). The remaining six categories which are 'lack of facility', 'lack of registral competence', 'habitual expressions', 'to show identity with a group', 'pragmatic reasons' and 'to attract attention' did not account for any of the occurrences. (See Table 4).

Functions of code switching (code mixing)	Number of occurrences	Percentage (%)
Lack of facility	0	0
Lack of registral competence	0	0
Mood of the speaker	14	17.5%
To amplify and emphasize a point	44	55%
Habitual expressions	0	0
Semantic significance	19	23.75%
To show identity with a group	0	0
To address different audience	5	6.25%
Pragmatic reasons	0	0
To attract attention	0	0

Table 4: Reasons for Code-switching (based on Malik, 1994)

44 out of 80 occurrences reported as to 'emphasize a point': mixing is also used to emphasize a point. Gal (1979) reports a number of instances in which a mix at the end of an argument not only helps to end the interaction but may serve to emphasize a point. For instance, here, the English plural morpheme –s is inserted into Malay noun (baju) as to emphasize the object.

Survey **bajus** for raya. Yay! (Survey clothes for raya. Yay!)

And the English continuous tense morpheme –ing is inserted into Malay verb (lepak) as to highlight the action done.

**Lepaking** kt rumh kakak aku. (Hanging out at my sister's house)

Nineteen (19) occurrences accounted for 'semantic significance'. According to Gumperz (1982) and Gumperz and Hernandez (1972), switching at any particular position in a sentence expresses semantically significant information. This is based from the participant's perception of two languages which generate communicative resource. In this case, the significance is in grammatical view. For example, the Malay noun (sayang) is inserted with English plural morpheme –s as it grammatically conveys the pluralism of the noun.

To all my **sayangs**, congratulations on ur C-Day (u know who u r). (To all my dearests, congratulations on your convocation day (you know who you are))

And the Malay verb (makan) is inserted with English continuous tense morpheme -ing as it grammatically conveys the action that is being done.

Makaning with my family mlm ni. (Eating with my family tonight)

Fourteen (14) occurrences accounted for 'mood of the speaker' as claimed by Malik (1994) that usually when bilinguals are tired or angry, code switching takes place with a new dimension. This means, when the speaker is in the right state of mind, he/she can find the appropriate word or expression in the base language. As the example shown, the Malay verb (marah) is inserted with English continuous tense morpheme –ing to express feeling or emotion.

Marah-ing all the students! (Getting angry at all the students!)

5 of the 80 occurrences were identified 'to address a different audience': Malik (1994) states that code switching is also used when the speaker intends to address people coming from various linguistic backgrounds as the main reason for the habit. The speaker clearly distinguishes whom he/she addresses and what should be communicated. For instance, the Malay verb (kawad) is inserted with English continuous tense morpheme to convey the message to only his social context.

Jom kawad-ing tomorrow utk KESAT! Aiyak! (Let's march for KESAT tomorrow! Sigh!)

#### **DISCUSSION:**

The highest occurrence to indicate the reason for code-mixing is 'to emphasize a point' (55%). The English verb morphemes help to emphasize a point where the Malay grammatical units seem to lack this. In order to justify the points, the users inserted the English verb morphemes into Malay lexical

The positive impact of this phenomenon is that it is clearly an innovation to the language where the users creatively inserted and mixed the English verb morphemes into Malay lexical items. This language alternation exists not due to low proficiency of students; in fact, McLellan (2009) explains that high level of proficiency in both Malay and English is a requirement for this language alternation to happen. This phenomenon shows how the users are in the process of adapting the use of English in daily and informal conversations, yet still maintaining close relationship with the native language.

Duran et al. (2005) mention that the other way to view this language alternation other than corruption to language "is to recognize the cultural, social, and communicative validity of the mixing of two traditionally isolated linguistic codes as a third legitimate code." Kim (2006) claims that this phenomenon may influence bilinguals' language positively. This can be seen through the usage of the language alternation when users intelligently insert English verb morphemes into Malay lexical items. The users understand greatly how both languages work.

However, as interesting and innovative as it can be, this phenomenon might be viewed by the linguists of both languages as corruption to the language as asserted by Thomas (1991) "purism is an aspect of the codification, cultivation and planning of standard languages" (as cited in Cser, 2009). Other than corruption to the language, this phenomenon might worry academicians if students apply this language alternation in academic domains.

Therefore, this study is aimed to fulfill the gap in the availability of limited studies on language alternation between English and Malay in Malaysia. This study will help future researchers in conducting further studies apart from clarifying to the public on this current culture among university students in language alternation.

#### **CONCLUSION:**

In this study, the phenomenon of code-mixing in messages posted in Facebook by Malaysian university students were analysed using several functional approaches; to investigate the pattern of this codemixing, these models were employed: Jacobson (1996, p. 85) for code-mixed spoken interaction, Muysken's (2000) classification of code-mixing and Sebba's (1998) areas of lack of congruence in both languages and the functions and reasons for code-mixing were identified and classified based on a framework adapted from Malik's (1994) ten reasons of code-switching for spoken discourse.

Findings suggest that code-mixing does occur in spoken-written discourse and the functions and reasons for mixing codes are similar to those of verbal communication for code-switching as some models used are based on spoken discourse models. The language alternation among university students achieved is an innovation in areas where Malay and English grammar display a lack of congruence. The main reason for English-Malay language alternation in online postings via Facebook of university students is 'to amplify and emphasize a point'. As stated by Gal (1979), a number of instances in which a mix at the end of an argument not only helps to end the interaction but may serve to emphasize a point.

In future studies, the occurrences of code-mixing in Facebook can be observed among a larger number of participants containing students from more universities so that the results are more substantial. Other than that, studies can be undertaken to explore the occurrences of code-mixing and the different functions that it might serve in topic-specific context. As this study is aimed to add to the limited studies on language alternation between English and Malay in Malaysia, it is hoped that this study will help future researchers in conducting further studies apart from clarifying to the public on this current language trend among university students in language alternation.

#### **REFERENCES:**

- [1] Bloor. C. (2010). What are friends for? In Wittkower, D. E. (Eds.) Facebook and philosophy: What's on your mind? (147-158), United States of America: Carus Publishing Company.
- [2] Cárdenas-Claros, M.S. & Isharyanti, N. (2009). Code switching and code mixing in internet chatting: between 'yes', 'ya', and 'si' a case study. The JALT CALL Journal 2009: Forums, 5(3),
- [3] Chan, H.Y. (2004). English-Cantonese code mixing among senior secondary school students in Hong Kong. Linguistics. Hong Kong, University of Hong Kong. Master of Arts in Applied Linguistics, 122.
- [4] Crystal, D. (2001). Language and the Internet. Cambridge: Cambridge University Press.
- [5] Cser, A. (2009). English purist tendencies in a comparative perspective. Selected Proceedings of the 2008 Symposium on New Approaches in English Historical Lexis (HEL-LEX 2), ed. R. W. McConchie, Alpo Honkapohja, and JukkaTyrkkö, 36-40. Somerville, MA: Cascadilla Proceedings Project.
- [6] Cumming, S. (1991) Functional change: The case of Malay constituent order. Berlin: Mouton de
- [7] Cuonzo, M.A. (2010). Gossip and the evolution of Facebook. In Wittkower, D. E. (Eds.) Facebook and philosophy: What's on your mind? (173-180), United States of America: Carus Publishing Company.
- [8] Duran, L., Kan, P. F., Kohnert, K., Nett, K., & Yim, D. (2005). Intervention with linguistically diverse preschool children: A focus on developing home language(s). Language, Speech & Hearing Services in Schools, 36(3), 251-263
- [9] Gal, S. (1979). Language Shift: Social Determinants of Linguistic Change in Bilingual Austria. New York: Academic Press
- [10] Gumperz, J. J. (1982). Conversational Codeswitching. In Discourse Strategies. Cambridge, England: Cambridge University Press.
- [11] Gumperz, J.J., E. Hernández Chávez (1972). Bilingualism, bidialectalism and classroom interaction, in J.J. Gumperz (ed.), Language in social groups, Stanford, Stanford University Press, 311-39.
- [12] Halim, H.A., Nadri, H.N.A., & Mahmood, F. (2015). Code Mixing on Facebook among Malaysian Tesl Students. Advances in Social Sciences Research Journal, 2(5). 27-33.
- [13] Huang, D. (2004). Code switching an language use in emails. Unpublished PhD thesis, The University of Melbourne, Melbourne.
- [14] Huang, D. (2009). Language use in asynchronous computer-mediated communication in Taiwan. Australian Review of Applied Linguistics, 32(2), 12.1-12.22.

- [15] Jacobson, R. (1996) In search of the deeper message: Codeswitching rationales of Mexican-Americans and Malaysians, in M. Hellinger & U. Ammon (Eds.) Contrastive Sociolinguistics. Contributions to the Sociology of Language 71, pp.77-102. Berlin: Mouton de Gruyter.
- [16] Jacobson, R. (2001). Language alternation: The third kind of codeswitching Mechanism, in R. Jacobson (ed.) Codeswitching Worldwide II, pp. 59-76.Berlin: Mouton de Gruyter.
- [17] Kia, L.S., Cheng, X., Yee, T.K., & Ling, C.W. (2011). Code-mixing of English in the entertainment news of Chinese newspapers in Malaysia. International Journal of English Linguistics, 1(1), pp. 3-14.
- [18] Kim, E. (2006). Reasons and Motivations for Code-Mixing and Code-Switching. *Issues in EFL*. *4*(*1*), pp. 43-61.
- [19] Li, D. (1998) The Plight of the Purist. In Pennington, M. (ed.) Language in Hong Kong at Century's End, pp. 161-190. Hong Kong: Hong Kong University Press.
- [20] Malik, L. (1994). Socio-linguistics: A study of code-switching. New Delhi, ND: Anmol Publications Pvt. Ltd.
- [21] McLellan, J. (2009). When two grammars coincide: Malay-English code-switching in public online discussion forum texts. The University of Waikato, Aotearoa, New Zealand.
- [22] Muthusamy, P. (2009). Communicative functions and reasons for code switching: A Malaysian perspective. Unpublished dissertation, Universiti Putra Malaysia, Malaysia.
- [23] Muysken, P. (2000). Bilingual speech: A typology of code-miixing. United Kingdom: Cambridge University Press.
- [24] Myers-Scotton, C. (1992). Comparing code switching and borrowing. In C. Eastman (Ed.), Codeswitching (pp. 19-41). Exeter, UK: Multilingual matters Ltd.
- [25] Myers-Scotton, C. (1993). Duelling languages: Grammatical structure in codeswitching. The United States: (pp. 59-61)Oxford University Press.
- [26] Nur Syazwani Halim and Marlyna Maros. (2014). The Functions of Code-switching in Facebook Interactions. Procedia - Social and Behavioral Sciences 118 (2014). 126 – 133.
- [27] Paolillo, J.C. (2001). Language variation on internet relay chat: A social network approach. Journal of Sociolinguistics, 5 (2), 180-213.
- [28] Sebba, M. (1998). A congruence approach to the syntax of code switching. *International Journal* of Bilingualism, 2 (1), 1-19.
- [29] Shafie, L.A. and Surina Nayan. (2013). Languages, Code-Switching Practice and Primary Functions of Facebook among University Students. Study in English Language Teaching, 1(1),
- [30] Su, His-Yao (2003). The multilingual and multi-orthographic Taiwan-based Internet: Creative uses of writing systems on college-affiliated BBSs. Journal of ComputerMediated Communication 9: 1. http://jcmc.indiana.edu/vol9/issue1/su.html
- [31] Svalberg, A.M-L., & Fatimah Haji AwangChuchu, Hajah (1998) 'Are English and Malay worlds apart? Typological distance and the learning of tense and aspect Concepts', International Journal of Applied Linguistics 8 (1), 27-60.
- [32] Tagliamonte, S.A. & Denis, D. (2008). Linguistic ruin? LOL! Instant messaging and teen language. *American Speech*, 83 (1), 1, 3-34.
- [33] Thomas, G. (1991). Linguistic purism. London; New York.
- [34] Wei, L. (1998). The 'why' and 'how' questions in the analysis of conversational code switching. In P.Auer (Ed.), Code switching in conversation Language, interaction and identity (pp. 156-176). London, UK: Routledge.