Code-switching between English and Mandarin Chinese on postings in the college-affiliated bulletin board system in Taiwan
A functional approach

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Abstract

The aim of my study is to contribute new insights in functional approaches of code-alternation on postings in college affiliated bulletin board system, so called BBS in Taiwan. In one bilingual or multilingual community wherever two languages are in contact, the attitudes of favor or disfavor towards the languages involved can be discovered. In Taiwan, although English is not spoken as a native language, with its global importance, English has gradually gained its significance in people's lives. With the necessity for all the students to take English courses and achieve a certain level of proficiency, code-alternation between English and Mandarin Chinese in daily lives becomes frequent. Under such circumstances, will globalization of English influence Taiwanese society, especially its impact on the way college students' use of languages in educational settings? The overarching research question I plan to address in this paper is: *'What underlying pragmatic functions do language or code choices serve on postings of BBS in Taiwan?'*

This study takes a qualitative and ethnographic approach. Data collected include online BBS postings within one year drawn from two different departments in NSYSU. As regards my analysis, I would like to apply a heuristic approach in terms of Gumperz's (1982) theory in conversational code-switching with Chen's (1996) theoretical frameworks, and, concurrently, make allowances for the changes of medium from spoken conversation to written texts. Through observing the phenomenon of code-alternation in students' daily written communicative media, BBS, the features and motivation in various language uses amongst adolescents could be defined.

1. Introduction

Gumperz (1982: 59) defines code switching as "juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or subsystems." In fact, code-switching is not merely a simple phenomenon in bilingual or multilingual society, for it demonstrates something else of importance: one's background and cultural identity. According to Appel & Muysken (1987), the choice of language when speaking is a reflection of a person's identity. In bilingual or multilingual society, language choice is not only an effective medium of communication but also an act of identity. By choosing one or more languages in one's linguistic repertoire, a person reveals his or her social relationships with others and constructs individual identity.

In Taiwan, although English is not spoken as a native language, with its global importance English has gradually gained significance in people's lives. With the necessity for all students to take English courses and achieve a certain level of proficiency in order to graduate from college in Taiwan, code-mixing or code-switching between English and Mandarin Chinese in their daily lives using MSN Messenger or electronic bulletin boards is becoming increasingly frequent. As a consequence, will the globalization of English influence Taiwanese society, and more specifically, will it affect college students' writing in an educational setting? With this question in mind, I would like to investigate language choice in computer-mediated conversation (CMC) in Taiwan. The data will be the genre of written texts surrounding college students' everyday lives: that is, postings on the electronic bulletin board system, or BBS.

BBS, standing for bulletin board system, a relatively new medium on the Internet, is one form of online discussion forum or message board. 'Visitors' have the possibility of registering as users and posting messages on the website, identified by a self-selected nickname (Hinrichs, 2005: 49). BBS is categorised as an asynchronous situation. The interactions are stored in a certain format, and they are available to users upon demand, so the users can catch up with the discussion or add or reply to it at any moment, even after a long period of time (Crystal, 2001). Hinrichs (2005: 30) adds that postings in the discussion forums include interactive characteristics similar to text-type e-mail. The fundamental difference is that in the discussion forums, interaction is of a one-to-many or many-to-many format, whilst e-mail is usually a one-to-one mode.

Although BBS messages are in written form, in fact, they share certain qualities with spoken discourse. People can express their feelings or thoughts by using written-out laughter, verbal descriptions of actions or face marks such as emoticons. Herring (1996) has mentioned that computer-based messages are typed, but in fact exchanges are usually informal and fast, more like spoken conversation. Synchronous chat, e-mail and discussion list postings online tend to have certain speech-like characteristics (Herring, 1996; Yates, 1996).

Emphasizing this point, Sebba (2003: 165) agrees that electronic mail or other CMC keeps the features and spontaneity of spoken discourse with some technological constraints. It is apparent that the writers of e-mail do not feel limited by the constraints applied to other public or formal texts. Spelling in e-mails is less regulated

or formal. It can be said that e-mails, chat rooms or bulletin boards provide a medium for writers to communicate without worrying about conventional constraints on written languages, including the conventions of orthography.

Within this online community, the talk or communication not only transmits a message, but also demonstrates a writer's characteristics and individuality. However, unlike a face-to-face (FTF) interaction protocol, this so-called 'individuality' may belong to either 'fixed' individuality or 'invented' individuality due to the properties of CMC, in which each individual's identity marker could be highlighted by the linguistic choices whilst simultaneously the role of other identity markers, such as race, gender or class is masked (Warschauer, 2000).

To summarise, the aim of my research, which is fundamentally sociolinguistically based, is to examine the electronic texts on BBS drawn from different departments of colleges at National Sun Yat-Sen University (NSYSU) in Taiwan. As a primary focus, I would like to investigate the sociolinguistic and pragmatic functions of code-mixed electronic texts. Concurrently, I would like to investigate college students' identity construction and how they encode the texts by using different languages or codes to serve as their individual or group identity markers. The overarching research question I plan to address is: What are the discoursal features and characteristics of code-switching in online discussion forums amongst college students in Taiwan?

2. Sociolinguistic background in Taiwan

2.1 Language in Taiwan

2.1.1 Mandarin Chinese

Mandarin Chinese implies the standard Chinese language, literally known as the 'national language' or *guoyu*, which is the official language in Taiwan. When officials make statements on television, or teachers give lectures in school, Mandarin Chinese is their first choice of language. Generally speaking, everyone in Taiwan learns how to speak and write Mandarin Chinese from the beginning of schooling. In fact, since 1946, the government assigned Mandarin Chinese as the common language and made all students in primary school in Taiwan learn and use it (Taiwanese Language, 2000).

On formal occasions, such as official meetings, conferences or broadcasts, participants are accustomed to writing and speaking Mandarin Chinese, which is the language of official transactions and the mass media.

2.1.2 Taiwanese

Originally, Taiwanese meant the language derived from the coastal area of Fu Jian in the southern province in Mainland China. It is known as the dialect *Minnan*, and is used by the majority of Taiwanese residents especially in the south of Taiwan (Background on Taiwanese, 2000). Due to the origin of Taiwanese in the dialect, *Minnan*,

most people 'speak' Taiwanese instead of 'writing' it.

Taiwanese has its own written system, but due to an insufficiency of knowledge about this written system and its dialectal origin, most Taiwanese speakers have not tried writing Taiwanese. According to Hsiau (1997), there are associations between some Taiwanese words and Chinese characters; approximately 70 percent of Taiwanese words can be codified through Chinese characters, but the other 30 percent cannot be written with the characters in current use. Instead, people write Mandarin Chinese and then translate (Writing Taiwanese, 2000). Although it is acknowledged that the mixed usage of Taiwanese and Mandarin Chinese occurs more and more frequently as time goes by, and Taiwanese is even used on formal occasions, usually Taiwanese is reserved mainly for colloquial and spoken purposes. Therefore, Taiwanese generally functions in oracy rather than literacy in society.

2.1.3 Hakka

As well as Mandarin Chinese and Taiwanese, other languages are spoken by residents in Taiwan, including Hakka. This dialect of Chinese kept features of the old Han language, which was formed in the Tsin and Tang Dynasties. Most Hakka people were from the northern part of Mainland China. Due to war, people moved from the north to the south, and then to Taiwan (A Brief Introduction to Hakka, 2000). Most people from the central part of Taiwan are able to write or speak Hakka.

2.1.4 Aboriginal group languages

Aboriginal group languages found in Taiwan include Ami, Puyuma, Atayal, Saisiat, Bunun, Tsou, Paiwan, Rukai and Tao, which belong to the Austronesia group of languages (Taiwanese Language, 2000). Different aboriginal groups spread throughout Taiwan use these languages.

2.1.5 English

English holds an important position in the world. It goes without saying that, as an international and global language, it has become a significant medium for communication. The global spread of English users on the Internet gradually solidifies its role as a lingua franca. To go a step further, people using English to communicate with each other are even categorized as belonging to a higher social group, or highly educated.

With the upsurge in the significance of English, more and more people in Taiwan tend to mix in English terms frequently to 'emphasise' their social status. Generally speaking, English in Taiwan is learned compulsorily in primary school. Students are required to learn English from their third year of primary school (10 years old); then, depending on the type of school they go to, the opportunities to learn and use English will vary.

Nevertheless, in the Taiwanese educational system, the ability to communicate in

written English is more highly prized than the ability to speak it. Usually, schools offer written examinations only. Oral ability in English is usually neglected. Under such circumstances, reading and writing become the major focus for students to learn English. As for Taiwanese people in general, it can be said that usually those who accept further English teaching have the ability to write in English with facility, although most of them still lack the ability to speak English properly.

2.2 Writing and word processing in Taiwan

According to DeFrancis (1984), the Chinese writing system is morphosyllabic. Each character has its meaning, with a single-syllable pronunciation. Since Chinese characters are completely different from the roman alphabet, the keyboard used in word-processing contrasts as well. Some special software is required. Su (2003) points out that, in general, there are two main popular programmes for computer users. One is called *Zhuyin*, input by sound, which is probably the most accessible to the public; the other one is called *Cangjie*, input by shape. *Zhuyin*, or Mandarin Phonetic symbols, is composed of 37 symbols, each of which is part of a Chinese character in phonetics.

As for *Pinyin*, this is a Mandarin Romanization system created in the 1950s in China (DeFrancis, 1984). The *Pinyin* system remains unused by most Taiwanese. In reality, Pinyin is rarely used on the Internet in Taiwan.

3. Literature review

The terminological issue concerning 'code-switching,' 'code mixing' or 'borrowing' is always debated. As for the relation between 'code-switching' and 'code-mixing,' Romaine (1989) mentions some researchers consider these two terms share a similar definition, whilst others argue differences exist between 'code-switching' and 'code-mixing.' The difference is that 'code-switching' means an inter-sentential switch, where one sentence is followed by another sentence in a different language. 'Code-mixing' involves intra-sentential switches, meaning switches within the same 'sentence'.

Blom & Gumperz (1972: 422-423), relying upon empirical data from their study, proposed two types of code-switching practice. The first one is *situational switching*, caused by a change in the situation or social setting such as topic, setting, and relationship between participants, community norms and values. In a particular situation only one language is appropriate, and people need to change their choice of language to match changes in situational factors, in order to maintain that appropriateness.

Another type is *metaphorical switching*, where speakers switch the language when the situation remains the same. In some situations, speakers switch from one language to another in order to achieve particular communicative results without a change of setting. Gumperz (1982) regards *metaphorical code-switching* as symbolic of alternative interpersonal relationships, and this is of relevance to the sociolinguistic focus I am

going to discuss later. Building upon Gumperz's (1982) research on code-switching, Myers-Scotton (1983) and Auer (1988) further develop theories of language choice.

Myers-Scotton (1983: 116) suggests the 'Markedness Model (MM)' of language choice in terms of sociolinguistic perspective. In this theory, people use language choice to negotiate interpersonal relationships. Myers-Scotton (1983: 116) stated that MM directs speakers to "choose the form of your conversational contribution such that it symbolizes the sets of rights and obligations which you wish to be in force between speaker and addressee for the current exchange." MM is focused on the idea that speakers make language choices because of their own goals. Speakers make language choices or switches to promote their own self-identities.

A more recent development in language choice is by Auer (1998). He criticizes fixed categories in functions of code-switching, and argues that code-switching is used in a creative manner, so indeed its functions are in principle *infinite*. Therefore, instead of characterizing speaker's language choices according to well-tailored functional categories, Auer (1988) proposes that code-switching should be analysed as a *contextualisation cue*.

The notion of *contextualization cues,* in which listeners find social meanings in conversations by paying attention to various pointers in the discourse, was first proposed by Gumperz (1982: 131). The *cues* give listeners the context in interpreting the speakers' meanings. Auer argues that code-switching should be analysed as a *contextualisation cue* by interpreting 'discourse-related code-switching' and 'participant-related code-switching'. 'Discourse-related code-switching' contributes to the organization of ongoing interaction, whilst participant-related code-switching depends on participants' preference for or competence in one language or another. In order to view code-switching as contextualization cues, conversation analysis or CA (Levinson, 1983) should be applied. CA views social meanings as a product of the conversation itself as they are constructed by participants. Language choice serves as part of participants' identity construction.

Auer (1988) argues that code-switching is used in a creative way and its functions should be infinite without a pre-established set of functional categories. Nevertheless, I am going to employ Gumperz's (1982: 75-81) taxonomy of functions in conversational code-switching in order to link them to my study as a basic analytical framework. However, Gumperz admits (1982: 82) that his taxonomy of functions lacks precise explanation in terms of listeners' and receivers' perceptions. Therefore, I would like to build a typology of pragmatic functions in code-switching that particularly exist in written texts in CMC.

Based on Gumperz's (1982) categories, firstly code-switching is usually used to show *reported speech* or *quotations*. Gumperz (1982: 82) illustrates that "the speech of another person which is reported in a conversation will be in a different language." Code-switching in quotations or reported speech may be related to what Labov (1982) highlighted as "the most reportable events" for a bilingual speaker to make use of his bilingual repertoire. The second function proposed by Gumperz (1982) is called *addressee specification.* The purpose is to direct the message to one of several possible addressees. In this function, a particular code should be used to include or exclude a

group of readers and concurrently, to ensure that messages are addressed to a specific group of people. Thirdly, code-switching may serve as *interjections* or *sentence fillers*. These fill a linguistic need for lexical markers, such as discourse markers. The next function is *reiteration*. Switches between different codes are used to reiterate or repeat what has just been mentioned or said, in order to amplify a point or emphasise a message. In relation to my study, I intend to examine whether or not, in CMC texts, posters repeat texts by switching languages or codes. The fifth one is called *message qualification*. It involves switches consisting of qualifying constructions such as sentence and verb complements or predicted following a copula (Gumperz, 1982: 79). The last function is *personalisation vs. objectivisation*. Participants are likely to interpret personalisation as a 'we' code (minor group) to show involvement, whilst objectivisation s labeled as a 'they' code (major group) in order to indicate objectivisation of speaker distance.

Although I adopt Gumperz's (1982) taxonomy of conversational functions in code-switching in my research, I have to admit that his categories are less informative in terms of recipients' perceptions and interpretation process. Heller (1990) argues that Gumperz's taxonomy lacks a social framework, and has been less successful in linking the interactional level with broader questions of social relations and social organization.

Therefore, beside Gumperz's (1982) categories, I am also going to adopt Appel and Muysken's (1987) taxonomy of code-switching in spoken discourse to build my own pragmatic functions in written code-switching on a sociolinguistic basis. The first one is the *referential function*. It involves lack of knowledge of one language on certain subjects. Some subjects or topics may be more proper in one language, and the introduction of such a subject or topic may result in a switch. The second one is the *expressive function*. Speakers emphasize their perceptions through the use of two languages in the same single discourse. The next one is the *phatic function*, indicating a change in tone of the conversation in order to highlight the information being conveyed. This is followed by the *metalinguistic function*, in which code-switching involves commenting directly or indirectly on the languages concerned. Speakers may switch between different codes to impress others with a show of linguistic skills (Myers-Scotton, 1979). Usually this function can be found in public domains. Finally, there is the *poetic function*. Switching in this case involves puns or jokes in different languages in order to make fun or jokes in the context.

In my study, I assume that the pragmatic functions proposed by Gumperz (1982) and Appel & Muysken (1987) may also be applicable to written electronic texts in part, since their theories are fundamental and generally applicable in spoken discourse. I therefore employ the aforementioned categories as the basic theoretical frameworks to examine the data I collected. To a certain extent, I would also like to identify particular pragmatic functions that exist only in written texts in online discussion forums.

4. Data and methodology

As for the texts, all the postings that I draw on are on the West Bulletin Board System from National Sun Yat-Sen University, located in Kaohsiung in the south of Taiwan. The West BBS is not only the principal bulletin board system in National Sun Yat Sen University, but also the most significant one amongst most southern Taiwanese colleges. The majority of the students will chat or post messages related to their daily lives on this bulletin board. In this system, students from each department in each grade have their own individual board to post messages. In most cases, students will not use their real name on the board. They will register on the system with a pseudonym or anonymously. Those who have not registered yet, so-called guests, can only browse messages without making any postings. In computer terms, they can also engage in "lurking."

I intend to draw on two different groups of subjects for my study. The postings were collected from late August 2005 till early June 2006. My hypothesis is that students with longer hours of exposure to English environments tend to apply more inter-sentential switches, while students who lack the opportunity to speak or write English display less frequency of code switching with English in everyday communication. This assumption is similar to Poplack's theory that "an inter-sentential switch can be thought of as requiring greater fluency in both languages than tag switching since major portions of the utterance must conform to the rules of both languages (Poplack, 1980).

Therefore, in my research, my primary focus is to investigate grammatical and pragmatic functions of language choices and codes in two groups with distinctive educational backgrounds, in response to my empirical research questions on BBS texts.

> *Group 1*
> Analysis will be based on 25 postings from the Department of Foreign Languages and Literature (DFLL). The class has been exposed to an English environment since the first year. All the classes are conducted in English with the exception of a compulsory Chinese course in the first year.

> *Group 2*
> Here I intend to draw on 25 postings from the Department of Materials and Optoelectronic Engineering (MSOE). It is compulsory for them to attend English classes only during the first year; in the remaining three years, they do not have to take any English courses. The rest of the lessons are all conducted in Mandarin Chinese.

In the examples in the following analysis section, an English translation is provided in parenthesis, and bold-faced type indicates words or sentences being switched.

The ethical issues of the internet require special consideration. Although Herring (1996) agrees that messages posted on boards are public, he argues that if the researchers avoid mentioning specific messages or information, the posters' privacy is

not violated. Privacy problems could happen in my data because each individual pseudonym could be recognised by each student within his or her class. In order to maintain participants' anonymity, I have removed the usernames of the sender of the posting and specific places, people or events within the text.

As for my consent form, I registered in the system and posted a statement of consent form to illustrate that the board was going to be observed for research purposes. I personally posted a message which stated the purpose of the study on each board. As for the role of researcher, my participation was on the basis of an outsider (teacher) to insider (student) relationship. Instead of being a member of a peer group, I conducted research in their 'private space.'

5.   Analysis and results

5.1   Linguistic/grammatical function

In my analysis, I found that most of the words being switched are single items, particularly switches of nouns. According to Poplack (1980), nouns accounted for the largest proportion of switches. As for discourse markers, in spoken discourse, there are several frequently used ones, such as *well, now, I mean, you know,* or *then*. In my data, amongst all the common discourse markers, the most frequent markers in written electronic discourse are *oh, and, or,* and *so. Oh* is viewed as an exclamation or interjection. When it is used alone, without any sentence following, *oh* is said to indicate strong emotional feeling, such as surprise, fear, or pain (Oxford English Dictionary, 1971, Fries 1952). According to Schiffrin (2001), *oh* has a role in information state transitions because it marks a focus of the participant's attention.

The second frequent use of discourse markers is categorised as discourse connectives, such as "and," "but," and "or," and with grammatical function in English including exchange and action structures or in participation frameworks. For example, *and* is a coordinator of ideas which has pragmatic function as a marker for continuation. *but* also marks a contrasting action. As for *or*, it is used as an option marker in the discourse (Schiffrin, 1987). Like the previous connective markers (*and*, *but* and *or*), *so* has a grammatical function and belongs to the markers of cause and result. The above discourse markers perform linguistic functions in spoken discourse; and they are frequently applied in written electronic discourse as well.

However, the most salient markers in spoken discourse such as *you know* and *well* are rarely displayed in the written data. The result exactly matches what Crystal (2001) mentions: "studies of email and chatgroup interactions have shown that they generally lack the very features of spoken language which indicate most spontaneity - notably, the use of reaction signals (*m, mhm, uh-huh, yeah*…) and comment clauses (*you know, you see, mind you*…).

Furthermore, one exception which occurs in written discourse is in the application of verb tense. The switch to English words is used to show the tense, since in Mandarin Chinese, no precise rule for verb tenses can be applied and demonstrated. Therefore,

students tend to add 'ing' directly to emphasize the action happening at that moment. For example:

(1) 荷包縮水 ing. (DFLL)
     (A pouch is decreas**ing.**)

(2) 恭喜可愛的亭吟學妹當選第一屆的校園親善大使啦啦啦~超開心 ing. (DFLL)
     (Congratulations on cute TinYin being selected as the first campus cheer leader~ so happy-mak**ing.)**

5.2 Pragmatic/discourse function

After I analysed the data I collected, I mainly classified the discourse functions into four categories: expressive function, referential function, phatic function and metalinguistic function. Since the expressive functions account for the largest proportion, I classify the data into another category when they indicate more than simply the expressive function on the postings.

5.2.1 Expressive function

The following examples possibly demonstrated that the poster felt bad about making a mistake, so s/he switched to the word *sorry* in English. In MC, two expressions are used to show 'sorry': '對不起 (Dui Bu Qi*), '抱歉 (Bao Qian*). For example:

(3) 搞錯了啊, sorry! (DFLL)
     (My mistake, **sorry**!)

(4) 可能沒記到, sorry (MSOE)
     (Maybe I forgot to jot it down, **sorry**)

(5) 然後延期的時間會在 po 版跟大家說~ 嗯哼 再次 sorry~ (MSOE)
     (Then, the date will be announced to everybody and **po** it on board~ Again **sorry**~)

In order to modify the feeling of apology, the poster switches to English. In Taiwanese society, the verbal expression of an apology in English would become less strong and alleviate the embarrassment of interlocutors in conversation. I presume there is a similar effect in online texts as well. Saying *sorry* in English might make posters feel less guilty, and connote the meanings without blaming themselves directly as well - although I have to emphasise that the right interpretation still needs to be verified through interview follow-up.

The expression in MC to show 'apology' or 'regret' is straightforward and formal in spoken discourse in Taiwanese society. Presumably, the addressees are supposed to be the ones being respected, such as elders or members from a higher social status. If adolescents post '對不起 (Dui Bu Qi*), '抱歉 (Bao Qian*) to peers, social distance between each other will be built.

In the three examples above, the poster was trying to express an apologetic feeling to peers instead of elders, so s/he switched in English to alleviate the sense of guilt and strengthen intimacy. The language use in MC to show apology might be due to the requirement of sincerity.

The second expressive function is served when there is a use of tabooed topic or words. Mandarin Chinese will be replaced with English equivalents. In the example below, the sound 'song' is a very impolite, vernacular and rude usage in spoken discourse in Taiwanese, the equivalent of 'shit' in English. The student took the similar phonologic word 'song' to replace it. In this group, the class board in the Department of Materials and Optoelectronic Engineering, the male-dominated group tends to demonstrate more examples of taboo language. For example:

(6) 熱火贏了, song! (MSOE)
(Heat wins 101:100, **song**!)

The third expressive function is to switch to English in order to emphasise strong feelings, such as surprise or sending greetings or wishes. In written electronic texts, exaggerated use of spelling and punctuation, and the use of capitals, spacing and special symbols or marks for emphasis are applied. Examples such as repeated letters (*aaaaahhhhh, hiiiiiii, ooops, sooo*), repeated punctuation marks (*no more !!!!!, whole ????, hey!!!!!*) are included (Crystal, 2001). For example:

(7) 我也不是很確定 ^^**a** Good luck! :) (DFLL)
(I am not so sure ^^**a Good luck!** :)

(8) 喔耶! So happy!!!!!! (MSOE)
(Oh! **So happy!!!!!!**)

(9) 我期待我們下次的暢談 Happy Birthday!!!! (DFLL)
(I expect our meeting next time **Happy Birthday!!!!)**

The next expressive function is to form a special code by using English, similar to emoticons. This one is distinct from the feature in spoken discourse and occurs quite frequently in written electronic texts, whether in e-mails or postings. Gumpert (1990: 151) defines it as "electronic paralanguage". "Electronic paralanguage" is "emotive icons". According to Metz (1994: 40), there are several different forms of "emoticons": those used to verbalize physical cues, such as *hehehe* (laughter); those used to capture the physical actions in words between two asterisks, such as **hug** and **kiss**", those used for emphasis, such as *no, I *won't* go*; and those used as a shorthand form for the description of a physical condition, such as ':)' for a smiling face. The following examples belong to the fourth one: used for the description of a physical condition. For example:

(10) **:P** or 學長姐
(**:P or** second year students)

(11) 我好像忘記拿錢給你了喔 XD
    (It seems that I forgot to give you money **XD)**

(12) 真是對不起各位.... orz
    (Sorry for everyone.... **orz)**

In the first example, the colon stands for eyes; while *P* stands for a mouth with a tongue. As for *XD*, it is a very common usage amongst college students in my data collected in both classes, which means a laughing face, and better than 'lol' (laugh out loud)". The vast majority (80%) of postings include the usage of *XD* symbolizing a smiling face. As for *Orz*, it is a Japanese-based emoticon of a man pounding his head on the floor.

5.2.2 Referential function

As for the referential function, I classify this function into four subcategories. The first one is to use English words and letters due to the lack of readily available Mandarin Chinese equivalents. Those English words are usually jargon or acronyms. NBA stands for National Basketball Association, and MSN refers to Messenger. For example:

(13) 我要去睡覺了, 先看場 NBA. (DFLL)
    (I want to go to bed, and watch **NBA** first.)

(14) 8:00--8:30 (大一 vs 大二) (MSOE)
    (8:00--8:30 (first year **vs** second year) (MSOE)

(15) 開始期待今天的 MSN 發燒星了吧~~ (MSOE)
    (Look forward to the discussion of today's **MSN**~~)

(16) P.S.有任何問題請向各直屬學長反應. (DFLL)
    (**P.S**. If there is any question, contact senior directly.)

The second referential function involves English terms whose Mandarin Chinese equivalents lack semantically equivalent connotations, including switching when giving titles of original English textbooks. This function is similar to research on features existing in code-mixing in Mandarin Chinese popular songs (Wang, 2006) in which some Mandarin Chinese words are switched into English because of the lack of proper semantic equivalents in Mandarin Chinese. For example:

(17) 疲憊 but still high. (DFLL)
    (exhausted **but still high**.)

(18) The norton anthology of world masterpieces mythology 就這兩本囉. (DFLL)
    (**The norton anthology of world masterpieces mythology.** The answer is those two books.)

(19) 喔! by the way, 請給我十顆球. (DFLL)
(Oh! **by the way**, please give me ten balls.)

(20) 我記得我撞球系運很早就 PO 了吧 (MSOE)
(I remember that I **PO**sted another activity about pool competition a long time ago)

(21) 我可以先 check. (MSOE)
(I can **check** first.)

(22) 今天真的是很 high 耶! (DFLL)
(I feel really **high** today!)

College students also tend to use English terms which posters are more familiar or acquainted with in English than in Mandarin Chinese, or to refer to an Anglophone-culture origin. Examples include the name of a brand, or the usage of 'pass' and 'fail' in a course, or the size of clothes. For example:

(23) 只要給我回條就 Ok! (DFLL)
(Give me the receipt **Ok**!)

(24) 聖誕 party!!! (DFLL)
(Christmas **party!!!)**

(25) 各位填一下營服的 size 吧! (DFLL)
(Everyone tells me what your **size** is!)

(26) 想參加的都算 ok (MSOE)
(Everyone willing to go is **ok**)

(27) 補考分數 PASS 標準 (MSOE)
(The criterion to **PASS** is announced)

The final referential function is transition to English to change the tone or connect to a previous or later sentence. I categorize those coordinators in this last referential category. *So*, *or*, and *and* are discourse connectives and perform important pragmatic functions in conversation. However, in written discourse, these functions are applied as frequently as in spoken discourse. For example:

(28) 不知道你是學弟 or 學妹? (DFLL)
(I don't know whether you are male **or** female)

(29) 報告是書面 or 口頭 or 分組? (DFLL)
(The presentation will be paper **or** oral **or** group one?)

5.2.3 Phatic function

The next category is called the phatic function, involving repetition or reiteration of one single word in a sentence. This function is similar to Gumperz's (1982) analysis that code-switches sometimes repeat what has just been said; the purpose is to clarify or emphasize a message. For example:

(30)　nonono 那個感覺不一樣　(DFLL)
　　　　(**nonono** That feeling is different.)

(31)　拜...託....了...please (DFLL)
　　　　(pl..ea....se...**please**)

5.2.4 Metalinguistic function

As for the last one, it is called the metalinguistic function. In other words, in some examples, teenagers tend to switch from Mandarin Chinese into English for quotation or reporting a speech. Gumperz (1982: 82) explained that "often the speech of another person which is reported in a conversation will be in a different language". For example:

(32)　感動感動 學長姐超優的 ～;)
　　　　"It's time to toss the dice.
　　　　- Motto of the Band of the Red Hand."
　　　　(The second year seniors are awesome ~ ;)
　　　　 "**It's time to toss the dice.**
　　　　- Motto of the Band of the Red Hand.")

(33)　我覺得綁一百顆鉛球都不夠　Lebron SHU!!!!!!!!!!!!!
　　　　"I surprise myself every morning when I wake up..."
　　　　(I feel even one hundred is not enough. **Lebron SHU!!!!!!!!!!!!!**
　　　　"I surprise myself every morning when I wake up...")

6.　Conclusion

In this study, I analysed the linguistic and discoursal functions of code-switching between Mandarin Chinese and English in the written electronic texts of two groups of college students with contrasting backgrounds in English. I found that having a greater degree of English education influences code-switching between Mandarin Chinese and English in some aspects, including the choice of the words in English, or the length of English expressions. For example, students from the Department of Foreign Languages and Literature (DFLL) have a greater tendency to switch the whole sentence in English if compared to students from the Department of Materials and Optoelectronic Engineering (MSOE). The theoretical and methodological approaches

in previous studies related to functions in code-switching are still applicable to the data I have collected, although some unanswered questions are acknowledged including gender issues in online discussion forums.

In the Department of Foreign Languages and Literature (DFLL), the class is female-dominated. In such a board, the switches to English are more related to English words with referential and the expressive functions. On the other hand, the switches in the Department of Materials and Optoelectronic Engineering (MSOE) are more related to tabooed language in single nouns or items. As for emotive icons, such as *XD* or *Orz*, the percentage is quite similar (and shows quite a high frequency) in both groups of college students.

In terms of discourse markers, the switched words demonstrate a difference between spoken and written discourse. In spoken discourse, *you know*, *I mean* or *well* accounts for quite a high percentage of all switches. On the contrary, in written electronic discourse, words most often used as switches are *and*, *or, so*, and *because* as coordinator connectives.

After analysing the data, in addition to Mandarin Chinese and English, I further discovered code-switching occurring in other languages and dialects, such as Taiwanese written in English or *Zhuyin* (37 phonetic symbols in Mandarin Chinese). Some French or Japanese is even 'playfully' written with Chinese characters on BBS postings. To a certain extent, the creativity of language use amongst college student would be another intriguing aspect worth exploring; and the idea of an in-group online community should be considered, too. Viewing BBS as an in-group practice should not be neglected, since a new user has to undergo socialisation to learn to be a fully competent participant in that community. Then, the analysis would be more convincing.

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