

Japanese-English Children's Code-switching: applying the MLF model to two siblings' data

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0 Introduction

Two siblings' code-switching (CS) data will be analyzed using Myers-Scotton's MLF model. The majority of the data consists of the interactions between the two when they appear to be in the bilingual language mode (Grosjean, 1995; 1997; 2001). In addition CS data in the interactions between a child and parent is analyzed. However in the latter, the siblings are usually in the monolingual language mode which means that the amount of CS data is limited. Theoretical issues will be discussed first (1), the insertion of the singly occurring form (2) and that of the multi-word item (3) will be analyzed and finally problematic data with the MLF model (4) will be discussed.

1 Theoretical Framework

1.1 The unit of analysis

In the study of CS, it is essential to define the unit of analysis. As described in Poplack's (1980/2000) early seminal study, the sentence is usually the unit of analysis and CS is categorized into the intra-sentential CS and extra-sentential CS. The latter is further subcategorized into inter-sentential CS and tag-like switching. Researchers exploring structural constraints on CS have focused on intra-sentential switching and inside the sentence is the unit of analysis of grammar¹. The mastery of the grammar system of a language means that one can construct a sentence in that language. A sentence can include two or more clauses and when CS occurs between clauses there doesn't seem to be any significant interactions between the two grammar systems. For example, a sentence can start with an English clause which is then followed by a Japanese clause comes starting with a conjunction. From the point of view of grammatical constraints, this pattern will fit inter-sentential CS rather than intra-sentential. However term "sentence" is too broad and a more specific term for the unit of analysis is required. The revised MLF model (Myers-Scotton & Jake 1995, Myers-Scotton Afterword in 1997, 2002) further narrows down the unit of analysis to the projection of Complementizer (CP hereafter)².

The syntactic structure expressing the predicate-argument structure of a clause, plus any additional structures needed to encode discourse-relevant structure and the logical form of that clause. (Myers-Scotton, 2002:54)

In this study the CP is adopted as the unit of analysis, although the clause is frequently employed as

¹ On the other hand, researchers with the socio-linguistic perspective focus on extra-linguistic, i.e. the discourse of the CS. (Gumperz 1982, Myers-Scotton 1993, Auer 1988/ 2000, 1995)

² In her recent introductory book (2006), she uses "clause" as the unit of analysis.

a cover term. Myers-Scotton’s MLF model explains CS occurring inside bilingual CP and so this study singles out bilingual CPs from the transcribed interactions and tabulates them on a spread sheet. 340 clauses are singled out from the corpus and the constituents of the two languages are classified as in Table 1

		English→ Japanese		Japanese→English	
Constituent	Classification	Raw Number	Percentage	Raw Number	Percentage
Single-word	Noun	78	32.4%	3	12.0%
	Adjective	14	5.8%	1	4.0%
	Verb	3	1.2%	8	32.0%
	Phrasal Verb	1	0.4%	3	12.0%
	Adverb	2	0.8%	4	16.0%
	Quantifier	4	1.7%	0	0.0%
			102	42.3%	19
Phrase	Noun Phrase	35	14.5%	1	4.0%
	Prepositional Phrase	4	1.7%	1	4.0%
	Adjectival Phrase	2	0.8%	0	0.0%
			41	17.0%	2
Clausal	Verb (Inflected)	19	7.9%	0	0.0%
	VP (VP+NP/PP)	54	22.4%	4	16.0%
	IP (Clause)	25	10.4%	0	0.0%
			98	40.7%	4
Total		241		25	

Table 1 Direction of the CS

This indicates that the majority of the clauses starts in English and then switches to Japanese. One example of the most frequently occurring pattern is as follows.

(1) E > T : it’s going (.) all the way up to the *kumo*
cloud

{It’s going all the way up to the cloud.}

Here the Japanese noun “*kumo* (cloud)” is inserted into the English frame. English is the Matrix language (ML) and Japanese is the Embedded language (EL). However the language starting the CP isn’t necessarily always the Matrix Language. For example, the following CP starts with English and switches to Japanese.

- (2) T>E : *Now GaoChibi mo ishho-da*
 PropN too together-COP
 {Now *Gaochibi* (a robot's name) is with us, too.}

In this example, it doesn't appear that the Japanese IP (Projection of Inflection) "Gaochibi mo ishho-da" (Gaochibi is with us, too)" is inserted into English. The English adverb "now" seems to be inserted into the Japanese ML. This example shows that the bilingual CP starts with EL and switches into ML. If the order can't be the criterion for the distinction of ML / EL, how can we identify ML / EL? We will look at the criteria which the MLF model provides.

1.2 The identification of the ML

A general definition of Matrix Language (ML) is that the ML makes the morphosyntactic frame of the bilingual CP. How can we identify which language makes it? The MLF model provides two principles for such identification, i.e. the Morpheme Order Principle and System Morpheme Principle. If one of the participating languages in the bilingual CP decides the order of the morphemes and outsider late system morphemes (outsider LSMs hereafter) come from that language, it can be identified as the ML of the CP and the other language is the EL. Myers-Scotton (2002, 2006) exemplifies outsider LSMs, such as subject-verb agreement, tense, copula, case-markers. If the bilingual CP is the product of a bilingual speaker who is proficient enough to create the morphosyntactic frame of both languages, the CS is defined as "classic CS" and the MLF model is fully applied. If, however, a speaker is not proficient enough to make the morphosyntactic frame in one of the participating languages, it is called composite CS and the principles are not fully applicable, e.g. the identification of the ML is not possible using the two principles. Later in this chapter, we will employ the two principles and try to identify the ML of each bilingual CP. In the next section we will look at Embedded language.

1.3 The subcategorization of the EL

Whereas the ML is constructed with the same grammatical system and items as the language of monolinguals, the EL can be a word or nearly a clause size item, e.g. an IP (the projection of inflection). The MLF model classifies EL items into two broad categories according to their size, i.e. the singly occurring form and the EL island.

1.3.1 The singly occurring EL form

When a singly occurring EL form, e.g. a word, is inserted into the ML, the inserted item is typically a content morpheme³ e.g. a noun or a verb. The following example like examples (1) and (2) shows singly occurring EL item.

³ The 4M model's classification

(3) T>F : *Chotto ha no shita ni tongue de ana ga feel dekiru*
 A little tooth of under at with hole ACC can
 {I can feel a hole a little under my tooth with my tongue.}

The order of the morphemes complies with the Japanese morphosyntax, i.e. the verb is at the clause-final position, post-positional particles come after nouns, the auxiliary verb comes after the verb. Outsider LSMs come from Japanese, e.g. “ga” (the accusative case particle). On the other hand, English items are content morphemes, i.e. a noun and a verb, which are integrated into the Japanese grammatical frame. If “tongue” occurs in an English phrase, it should take the form of the determiner + noun, i.e. “my tongue”. Here ML (=Japanese) morphosyntax doesn’t require a determiner. Therefore “tongue” appears alone as if it was a Japanese noun. One might argue this should be termed borrowing rather than CS⁴. Indeed established loan words can go in these places e.g. “konpyuutaa de”(with a computer), “dansu dekiru”(can dance).

If we look at the phrasal constituent, there are two kinds of constituents. One kind of constituent consists of only the ML, e.g. “ha-no shita-ni”(under my tooth). The other kind of constituent consists of the EL and the ML, e.g. “tongue-de”(with my tongue). The former is called the Matrix Language Island and the latter is called the ML and EL constituent (the mixed constituent hereafter). The two principles and the MLF model are applied to the mixed constituent. The insertion of an EL word into an ML frame which occupies 45.19% of the corpus and be explained in terms of the mixed constituent in 2.

1.3.2 The EL island

In addition to single words, but also phrases can also be inserted. 16.17% of the data are phrase insertions. This is the third kind of constituent and is called the Embedded Language island as opposed to the ML island and the mixed constituent. An EL island is a constituent consisting of EL morphemes only which has the structural dependency inside itself. The EL island as a whole is typically a maximal projection, e.g. noun phrases or prepositional phrases, and functions as a clause constituent of the ML. At the same time, inside the island is well-formed in terms of the EL morphosyntax. For example, the clause (4-a) as a whole shows the English order of the clause constituents and the ML is English.

(4-a) E>T : I want to do this *jibun-de*
 myself-by
 {I want to do this by myself.}

The Japanese postpositional phrase “*jibun-de*”(by myself) consists of the noun “*jibun*” + the postpositional particle “*de*”. The phrase as a whole functions as the adjunct of the ML clause. On the other hand the morpheme order inside the phrase, i.e. noun + particle, complies with the Japanese (=EL) morphosyntactic pattern. If this was a mixed constituent, it would appear as a prepositional phrase (4-b) in which the EL noun “*jibun*” is inserted in the ML prepositional phrase after the preposition “by”.

⁴ Poplack classifies this as “nonce borrowing”

- (4-b) I want to do this by jibun.
 myself (made-up by the author)

Why does the EL island occur rather than the mixed constituent? Myers-Scotton indicates a number of motivations, e.g. pragmatic functions, activation of the mental lexicon, proficiency of the speakers, incongruence between the morphosyntactic systems of the two languages (2002:140-149). The rich contextual information of the corpus of this study might contribute to finding an answer to this question.

1.4 Which Language?

With regards to the identification of the ML, there are a certain amount of items in the recording which provide some difficulty in determining their language. These are onomatopoeia, proper nouns and loanwords.

1.4.1 Onomatopoeia

The Japanese language is rich in onomatopoeic expressions (Shibatani, 1990:153-157)⁵. They combine with particles and function as adverbs or noun modifiers, or function as predicatives compounding with the copula or the verb “suru” meaning “do” (idid.154). The examples of onomatopoeic expressions are also affluent in our corpus. For example when they are playing with airplane toys, they make sounds such as “kiiin” or “goon”. The source is not language but sounds thus normally it is difficult to classify which language they are. In many cases, these sounds are uttered in isolation, not in a clause hence contact of two grammars is not the issue. Nevertheless, the following example should be taken into consideration in terms of CS phenomena.

- (5) E>T : *sooyatte choo choo* hua ummmm *te yat-ta*
 That way QT do-PAST
 {I did it like “choo choo hua ummmm”}

“Choo choo” is an established English onomatopoeia for describing the train sound. In Japanese, it is “*shuu shuu poppoo*”. Therefore this can be described as a bilingual clause which has Japanese as the ML with the English onomatopoeic words inserted in it. On the other hand, the second half of the onomatopoeic expression, “hua ummmmm”, is the speaker’s own way of copying the sound and we can’t identify whether it is English or Japanese.

1.4.2 Proper Noun

Another item which is difficult to identify is the proper noun. Phonological integration could be a key in monolingual’s utterances. With bilinguals, it is not the case. “If bilinguals can speak the donor language, when they speak it, they would pronounce the words as close as possible to the way a native

⁵ Shibatani points out that “Onomatopoeic expressions permeate Japanese life. They occur in animated speech, and abound in literary works, to the chagrin of the translators of Japanese literature”(1990:157).

speaker of that language pronounces them”. (Myers-Scotton, 2006:223) For example, in my study, when the two siblings call each other by name, there is no difference in pronunciation whether it is in a Japanese or an English clause. Monolingual people pronounce their names differently. e.g. Japanese monolinguals would pronounce Ellis /'eɪs/ as [ɛɾisɯ]. Significant differences are: /l/ will be pronounced as an alveolar flap sound /r/, the vowel /ɪ/ will be a more tense sound /i/, and an rounded vowel /u/ will be put at the end.

Proper Nouns are frequently observed in our corpus when they are engaged in plays with super hero figures, robots or monsters because each figure has a name. They learn the names from Japanese TV programmes but they look and sound like loanwords. If the proper nouns in our corpus are written in Japanese, many of them will be written in katakana, the syllabic script for loanwords. Many words written in katakana in Japanese are not borrowed but actually created in Japan. Katakana is used to look like a foreign word and sound stylish. In the corpus, 35 tokens of Japanese proper nouns are inserted into English clauses. These proper nouns lead us to the issue of borrowing or code-switching.

(7) T>E : Ellis can I have one (.) of(.) of the *ultramans* Ellis?

This example shows that the proper noun “*Ultraman*” is phonologically and morphologically integrated into English as a noun. It is pluralized with “s” and preceded by a determiner. They use two phonological forms of this word. The English one is /'ʌltrəmən/ whereas the Japanese one is /ururɔtəraman/. When they talk to their mother about it the English pronunciation is employed, whereas the Japanese pronunciation is used with their father. The proper noun “*Ultraman*” was created by using English words to sound stylish but the pronunciation was modified into Japanese. The two siblings learned the word from the TV programmes. They used the Japanese pronunciation extensively when they played with the figures. Sometimes they talked to their mother about “*Ultraman*” and their mother used the English pronunciation in her response. They learned that there was an English pronunciation thus it entered their English lexicon. They started to use the two forms of the proper noun according to the situation, e.g. the interlocutor. When it is retrieved from their English lexicon, it shows morphological⁶ as well as phonological integration. This example has shown a very short history of the loanword proper noun “ultraman”. As Myers-Scotton puts it, “borrowed words in a language are evidence of past historical contacts” (Myers-Scotton, 2006:231). The Japanese language has a long history of loanwords. We will focus on the nature of Japanese loanwords next, which seems to be essential to discuss the issue of borrowing and CS including the Japanese language.

1.4.3 Loanwords in Japanese

As mentioned in chapter two, the distinction of CS or borrowing is controversial. From the point of etymology loanwords comprise a significant amount of the lexicon in Japanese. Shibatani

⁶ However, the plural form is not “ultramən” but “ultramang”.

(1990:142-145) indicates that the Japanese lexicon consists of three strata: 1-Yamato-kotoba meaning native Japanese words; 2-Kan-go or Sino-Japanese (S-J hereafter) meaning of words of Chinese origin⁷ 3- Gairai-go meaning words of foreign origin.

The three strata of the Japanese lexicon create a large number of synonyms and the choice has specific connotations. The native words “have broader meanings than their loan counterparts”(ibid.). The S-J words “generally convey a more formal impression, tend to be used with reference to higher quality objects than do the native equivalent⁸”(ibid.). The foreign words are associated with “a modern and stylish flavor”(ibid.). The majority of S-J words as well as other foreign words are nouns. By adding the native word “suru”(do), they function as verbs. Other categories such as verbs, adjectives, adverbs, or conjunctions mostly belong to native Japanese. S-J words are written in kanji the logographic script and the meaning is transparent.

Compared to the relatively stable status and number of S-J, that of “*gairaigo*” or foreign words keeps changing depending on political, economical and other social relationship with other countries⁹. Shibatani (1990:150-153) points out that when foreign words are borrowed and enter the Japanese lexicon they are phonologically and semantically Japanese so that they become incomprehensible to native speakers of the languages from which they were borrowed. For example the word “manshon” (mansion) means a flat in Japanese, which is different from the original English meaning. In many cases, a new Japanese word is created using an English-like word. For example “ofisu redii” (office lady) means a woman working in an office. This word is abbreviated to “OL” and used frequently among Japanese people¹⁰ but doesn’t exist in English.

Besides the social and cultural reasons, there might be a structural motivation in Japanese which allow loanwords to enter the Japanese lexicon without difficulty. Shibatani points out “Since the Japanese does not mark gender, person, or number on nouns, and since cases are indicated by separate particles, a loan word can simply be inserted into any position where a native nominal might appear, with no morphological readjustment”(ibid.:144). Does this flexibility of loanwords also apply to another language contact phenomenon, i.e. CS?

⁷ The borrowing of Chinese started more than sixteen hundreds years ago, when Japanese didn’t have a written form although they had indigenous spoken language, therefore official records were written in Chinese. S-J words, however, are not identical with Chinese. Many of the S-J words in the Japanese lexicon were invented after *Meiji* Restoration when the new government tried to catch up with western modernization (*ibid.*).

⁸ The contrast of S-J words and native Japanese words is quite similar to that of Latinate and Germanic words in English. The proportion of S-J words in Japanese and Latinate words in English is quite comparable and the status is quite similar. S-J words tend to express abstract concepts and mainly comprises academic vocabulary.

⁹ Considering the strong political relation with the United States after World War II and the status of lingua Franca in the flourishing field of information technology, it is natural that more and more English words are being borrowed into the Japanese lexicon.

¹⁰ About 100 years ago when the government promoted modernization, a new idea or terms from western countries were borrowed in two ways. By using *katakana*, they were phonologically borrowed and by using *kanji* they were semantically borrowed into Japanese. Two versions of new word, a foreign word and a S-J word were created as loan words. Recently there is a trend that new words, mainly English ones are borrowed, the S-J form is not employed and just *katakana* is applied. The following made up sentence can be easily found easily in current Japanese language. “Sekyuriti-no tame-ni Anchi-wirusu sofuto-o konpyuutaa-no haado-disuku-ni insutooru-suru.” “For reasons of security, I install an anti-virus software in the hard-disc of my computer”. All the content words consist of English words. National Language Council proposed that unnecessary uses of foreign words should be abstained from especially in public places and made a list of S-J and native words instead of foreign words (<http://www.kokken.go.jp/public/gairaigo/>).

1.4.4 Borrowing or Code-switching

As discussed in 2.2.3.5, from the perspective of the MLF model, code-switching and borrowing are not strictly distinguished since singly occurring CS and borrowing undergo ML morphosyntactic procedures in the same way. The major difference is that borrowed forms have entries in the ML mental lexicon and CS forms in the EL lexicon. This indicates that borrowed forms can be a monolingual speaker's product but CS form is limited to bilinguals'. On the other hand with bilingual's speech, when they are in the bilingual language mode, it is more difficult to distinguish whether a single occurring form is borrowing or CS. One criterion employed here is the presence of the equivalence. If there is no equivalence in the other language, the inserted word has a stronger characteristic of borrowing. In the case of a proper noun, there might be a phonological equivalence. In that case, the insertion of a single item which has the EL pronunciation can be counted as CS rather than borrowing. In this chapter, although the distinction of borrowing or CS is not prioritized because they both subsume the same process, we will pay attention to this issue.

1.5 Specific Research Questions

Based on the theoretical discussion in this section, the following specific research questions are proposed here.

- 1) Does the data of the two siblings fit with the MLF model?
 - a) Are borrowing and CS forms distinguishable or put in a continuum under the same morphosyntactic procedure?
 - b) Does the singly occurring form comply with the Morpheme Order Principle and the System Morpheme Principle?
 - c) Are EL islands grammatical constituent?
 - d) If they are not, what are they?
 - e) What motivations are there to make EL islands instead of singly occurring forms?
- 2) From the socio-political and structural points of view, Japanese seems to allow loanwords more straightforwardly than English. Does this apply to J-E code-switching patterns?
 - a) Are the Japanese frames which accommodate loanwords (S-J, foreign origin) employed for CS as well?
 - b) Do Japanese loanwords occur more often than native origin words in CS?

In order to answer these questions we will examine the data according to the inserted EL items.

2 Single word insertion

First the data provided in Figure 1 is sorted out according to the MLF model (Figure 2). The clauses in which the ML is identifiable through the application of the two principles are selected and the 98 tokens in which the ML was not identifiable (as exemplified example (8)) are excluded for the time

geing.

(8) T>E : Now it's *kaadodekki-wa* *tot-ta-yo*
toy-TOP take-PAST-FP

{and then I took the card-deck (toy's name: the equipment for transforming)}

If we apply the two principles to example (8), the morpheme order of the English part (Adjunct +S+V) and that of Japanese part (Object+Verb) comply with each language (the Morpheme Order Principle) and both languages provide the Outsider LSM, i.e. the English copula “s (is)” and the Japanese tense marking suffix “ta”, which complies with the System Morpheme Principle. Therefore it is difficult to identify the ML of this clause. This pattern will be discussed later in this chapter.

The selected patterns are tabulated according to the ML slot in which the EL item is inserted. Table 2 shows English ML and Japanese EL patterns. The data in the rows indicated as Noun to Adv is a single item insertion whereas the data of the NP to PP rows are defined as a phrase insertion or EL island. We look at the Japanese singly occurring form in the English frame first and the English singly occurring form in the Japanese frame next. After that the multi-word item insertion will be analyzed.

Slot Item	Inside NP											Total
	Sub	Obj	Pred	Adv	P+[]	[]+N	[]+s	D+[]	A+[]	Verb	Others	
Noun	1	7	21		7	3	3	21		1	1	65
PropN	5	8	15		3	1	1	3			3	39
V-N		12			1				1	1		15
Verb		3										3
Adj			11									11
Adj-N			2									2
Adv				1								1
Sub-Total	6	30	49	1	11	4	4	24	1	2	4	136
NP	4	5	18		3			5	1			36
AdjP			1									1
AdvP				1								1
PP				4								4
Others			1									1
Sub-Total	4	5	20	5	3			5	1			43
Total	10	37	67	6	13	4	4	28	1	1	4	175

Table 2

NPs.¹⁷ They have the ML quantifier “some” before them and the ML plural suffix “s” is attached. These inserted EL forms have strong features as borrowed forms rather than CS since there is no equivalence in English. The other EL noun “bariya” has characteristics of CS rather than borrowing. It has an equivalent of the original form in English (actually this is a borrowed form of the word “barrier”) and the form isn’t well integrated under the ML grammar. It has to be either pluralized or a determiner has to be put before it. This is an example of the EL bare form. Other EL items which appear in the ML NPs are listed in figure 1.

“a <i>Pawaa-animaru</i> ” (Power-animal) “some <i>Urutorasenshis</i> ” (Ultra-Fighter) “some <i>Shitappaas</i> ”(Underling) Proper Nouns	“his <i>sensei</i> ”(teacher) “ <i>kaijus</i> ” (monster) “the <i>kumo</i> ” (cloud) “the <i>kosen</i> ” (beam) “some <i>hikari</i> ” (light) “some <i>otona</i> ”(adult) “one <i>ohanashi</i> ”(story) “more <i>okane</i> ”(money) Common Nouns
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Figure 1

As we have seen above, all the Japanese proper nouns listed above on the left are morphologically well integrated into NPs of the ML and there are no equivalents in the ML although most of them were originally borrowed from English into the Japanese lexicon. They are near the borrowing end of the borrowing – code-switching continuum (Figure 2). On the other hand, common nouns listed here show some variation. Whereas “kaijus”(monsters) is pluralized, a noun after “some”, “otona”(adult) is not pluralized despite the ML grammar’s requirement.

Most of the examples here show that the EL provides only content morphemes thus they comply with the System Morpheme Principle. Only the following two examples show system morphemes. Do they violate the System Morpheme Principle?

- (14) T>E : Yes but I’ve got more *o-kane* right?
 HON-money
 {Yes, but I've got more money right?}
- (15) T>E : in one *o-hanashi*, demantor is like this
 HON-story
 {in one story, demantor is like this.}

The prefix before common nouns, “hanashi”(story) and kane”(money), is “o” a Japanese honorific marker¹⁸. They might have learned these words in this form as a whole in Japanese kindergarten. This prefix has a pragmatic meaning and is activated at the lexical conceptual level of the mental lexicon. Its form depends on the content morpheme with which it occurs. Therefore this Japanese prefix can be classified as an Early SM. According to the System Morpheme Principle, “all system morphemes which

¹⁷ Phonologically, “urutora” can be pronounced in English since it is a loanword originated from English as “ultraman” in example (7) therefore not well integrated into English.

¹⁸ Shibatani (1990:356) defines this usage of “o” as beautification, which adds politeness and feminine feeling to the word. This is frequently observed in mother talk therefore small children use it.

have grammatical relations external to their head constituent (i.e. which participate in the sentence's thematic role grid) will come from the Matrix language" (Myers-Scotton, 2002:59). The system morpheme referred here is the outsider LSM (Myers-Scotton, 2006:244). That means other system morphemes such as early SMs and bridge LSMs are allowed in the EL. Indeed early SMs occurring with content morphemes are frequently observed in the literature¹⁹ (Myers-Scotton, 2002). As written in figure 2 these words can be put closer to the code-switching end, since the EL is relatively more activating than in a borrowing form. The following figure summarizes the singly occurring EL nouns observed in this section. The more morphologically integrated a noun is, the closer to the borrowing end it is put. If EL system morphemes occur with content morphemes, there is more EL activation hence the noun is put closer to the CS end. The phonologically and morphologically integrated form "the ultramans" will be put at the closest point to the borrowing end. This figure shows that borrowing and code-switching might be on a continuum of the same process rather than two separate categories.

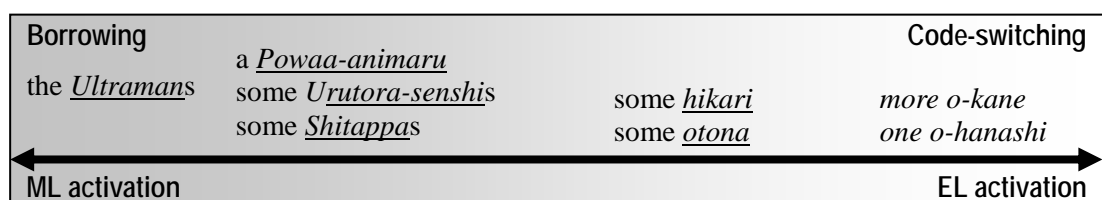


Figure 2 A continuum of ML/EL activation between borrowing and CS of EL nouns

Indeed, with regards to the EL activation, the examples put around the CS end above are not the "end". We will see items which should be put even further to the right end of figure 2.

2.1.1.2 The bare form

A greater number of EL nouns (36 types out of 54) occur without determiners than with determiners and / or plural suffixes. This form is called the bare form (Myers-Scotton, 1993). When scrutinized, seven of them, such as example (16), are defined as proper nouns which are the titles of games and borrowed forms.

- (16) T>E : my favourite one is *gesui*
sewage
 {My favourite one is "sewage"(a computer game in "Finding Nemo CD rom".)}

With these examples we can identify that the bare form is the evidence for proper nouns since they usually appeared in the bare form. Myers-Scotton and Jake (1995/2000:293) proposes that the bare form is one of the compensatory strategies as well as the EL island when there is not sufficient congruence between the ML and the EL. As we have seen in the previous section, the mixed constituent consisting of an ML (=English) determiner + an EL (=Japanese) noun is highly integrated into the ML frame. On the other hand since the bare form is the default of the EL (=Japanese) NP, the occurrence of

¹⁹ This is called the "Internal Embedded Language Island". If a whole NP consists of the EL, it is Embedded Language Island. As the examples above, when an internal item in an ML made by the EL grammar, it is an internal EL island.

the bare form indicates that there is some influence of the EL grammar and the noun is not fully integrated into the ML frame.

If the grammatical incongruence is the sole reason for the occurrence of the bare form, the same form should always occur in the bilingual clause. In order to explore other structural motivation for the bare form, the singly occurring forms with the determiner discussed in the last section and several types of the bare forms are compared.

The singly occurring forms with determiners (taken from Figure 1)

“his <i>sensei</i> ” teacher	“ <i>kaijus</i> ” monster	“the <i>kumo</i> ” cloud	“the <i>kosen</i> ” beam
“some <i>hikari</i> ” light	“some <i>otona</i> ” adult	“one <i>o-hanashi</i> ” HON-story	“more <i>o-kane</i> ” HON-money

The bare forms

- (17) T>E : Now *Cosmos* gone to *himitsu-kichi*
 ProperN secret-base
 {Now Kosumosu has gone to the secret base}
- (18) T>E : Cause(?) I’m *oo-gane-mochi* right?
 big-money-owner
 {Because I’m a millionaire right?}
- (19) T>E : This is *san-ban*, OK?
 third-position
 {This is the third}
- (20) T>E : if it’s supposed to be *bariya seikoo*
 barrier-success
 {If it’s supposed to be a success in using a barrier}
- (21) T>E : No, it’s *iki-domari*
 go-stop (deadend)
 {No it is a deadend}

The significant difference is that the bare forms are all compound-nouns and the other groups are single-nouns. The occurrence of single or compound nouns are counted (Table 3). It also shows that compound nouns occur significantly in the bare form.

	With ML determiner	The Bare form
Single noun	15	15
Compound Noun	5	20
Total	20	35

Table 3

Shibatani (1990:237) points out that in Japanese “compounding is a particularly productive process for it combines all categories of elements”. The compound nouns shown here also show a variety of

combinations.

- (17) *himitsu-kichi* **Adjectival-Noun+Noun**
secret-base
- (18) *oo-gane-mochi* **Prefix+Noun+Verb**
big-money-owner (millionaire)
- (19) *san-ban* **Quantifier+Noun**
third-position
- (20) *bariya seikoo* **Noun+ Verbal-Noun**
barrier-success
- (21) *iki-domari* **Verb+Verb**
go-stop (deadend)

Although syntactically compound nouns function as nouns, they are different from ordinary single nouns. The constituents of the compound noun have a grammatical relation. For example, “oo-gane-mochi”(millionaire) shows a VP behind it, i.e. “own big money”. They have diachronically become fixed expressions. Here we can hypothesize that compound nouns still maintain the EL (=Japanese) morphosyntactic influence which blocks the full integration of the ML.

2.1.1.3 Verbal-Noun insertion and the Do –construction

There are some Japanese specific word categories in Table 1, i.e. verbal nouns and adjectival-nouns. As the names show, they are mediators between the noun and the verb and the adjective. We will focus on verbal nouns here and introduce a specific form when they occur in the monolingual clause. That will predict their occurrence in the bilingual clause and also account for the verb insertion.

There are twelve out of fifteen tokens of verbal nouns in the same slot, i.e. the object slot. More specifically, they appear as a bare-form after the English “do”. In Japanese verbal-nouns are typically used as a verb by putting the Japanese helping verb “*suru*”(do) after them, e.g. a verbal noun “*gattai*”(combination) is accompanied with “*suru*” and becomes a compound verb “*gattai-suru*”(combine)²⁰.

Shibatani (1990:217) points out that S-J words mainly comprise this category and also a certain number of native and foreign-origin words fall under the category of the verbal-noun. He points out that when new foreign origin verbs are borrowed, they appear as verbal nouns. This can be a strong prediction that EL verbs will occur in the Japanese “*suru*” construction when we look at the Japanese ML data later. If we think the other way round, does the lexical category, which has a tendency to appear in the monolingual Japanese “*suru* construction”, also occur frequently in the English “do construction”? The origin of verbal-nouns in our corpus are categorized as follows.

²⁰ By putting a case marker, they are also used as a subject or an object, e.g. “*Gattai ga muzukashi-katta*”(The combination was difficult.). If the copula “*da*” is attached after it, it can be used as the predicative “*Tsugi wa gattai-da*”(The next thing to do is combination).

S-J words (9 types) : “*hissatsu-waza*”(the final weapon), “*dasshutsu*”(escape), “*gattai*” (combination),
“*jama*”(disturbance), “*san-kaku*”(tri-angle), “*renshuu*”(practice),
“*bakuhatsu*”(explosion), “*kotai*”(shift), “*sankaku*”(triangle)
Native words (2 types): “*zuru*” - nominalized form of the adjective “*zurui*”(sly)
“*yarinaoshi*”- nominalized form of the compound verb “*yari-naosu*”(do-again)
Foreign word (1 type): “*copii*”(copy)
Hybrid for of a foreign word and S-J word: “*bariya shippai*”(barrier+failure)

Figure 3

As Shibatani points out, S-J words dominate the category of the verbal-noun. When native words are inserted, they are nominalized. The most frequently occurring pattern (6 tokens) is “do *sankaku*” (triangle). This means “Press the triangle button (of the video game controller).

Some example clauses of verbal-nouns occurring in the “do” construction are as follows.

(22) T>E : they won’t do *jama* on you right?
Disturbance
{They won’t disturb you, right?}

(23) T>E : Now they did (.) *gattai*
combination
{Now they combined}

If we look at the translation, it is obvious that the combination of the verbal noun and English verb “do” functions as the compound verb. The English verb “do” conveys the tense and subject verb agreement which is classified as the outsider LSM, and the Japanese verbal nouns convey the specific meaning which is the Content morpheme. This “do construction” complies with the two principles of the MLF model.

Another example shows the combination of a different helping verb and a verbal noun.

(24) T>E : He could *bakuhatsu* Ellis?
explosion
{He could explode, Ellis?}

Here the modal auxiliary “could” functions as the “helping verb”. It adds conceptual information to the main verb and classified as an early SM. At the same time it carries the finiteness thus it can be classified as an Outsider LSM. We can see multimorphemic structure here.

Muysken (2000:208) suggests that the foreign noun insertion into the “do-construction” diachronically leads to the foreign verb insertion into it. If we observe the occurrence of Japanese verbs in the do-construction, the existence of the category of the verbal-noun strongly supports Muysken’s argument. We will look at the EL verb insertion in the next section, keeping in mind whether the

“do-construction” is employed.

2.1.2 Verb insertion

The verb plays the central role in the clause. As Muysken (2000:184) puts it, “they function as the core of the clause in their role of case and semantic role assigners, and often subcategorize for specific prepositional phrases. In addition, they are often the flection-bearing elements, marked for person and tense”. The insertion of EL verbs into the ML frame could be a complicated process. Muysken categorizes four main types of EL verb integration into the ML frame.

- a. The new verb is **inserted** into a position corresponding to a native verb, in adapted form or not.
- b. The new verb is **adjoined** to a helping verb.
- c. The new verb is a **nominalized complement** to a causative helping verb in a compound
- d. The new verb is an **infinitive** and the complement of a native auxiliary (original emphasis) (ibid.)

We have seen pattern-c in the last section. Verbal-nouns can be subsumed in the category of the nominalized complement. We’ve also seen pattern-d, i.e. the combination of modal auxiliary “could” + verbal noun (see example 24). Pattern-a hasn’t been observed in our corpus. It would look like the following made up example instead of (23) “*Now they did gattai*”(combination).

* *Now they gattaied*
{Now they combined} (made up by the author)

Pattern-b is most expected in our corpus because loanwords go through this process as discussed in the last section.

Based on Shibatani’s argument(1990:217), a great number of S-J words appear as verbal-nouns which even include the nominalized form of native-words. There is a possibility of the verbalized V-N form occurring in the do construction as follows.

* *I do gattai-suru*
(combination) (made up by the author)

Consequently “do” appears twice and double morphology occurs. This pattern is not observed in our corpus. The reason might be that it is uneconomical. Therefore we are looking at native origin words which are not nominalized or inflected. There are three tokens in the corpus. They occur in the “do”-construction frame, as expected.

(25) T>E : *You must do mamoru you know*
protect
{You must protect, you know?}

(26) E>T : I do *shimeru*
close
{I close it}

(27) T>E : now then that's did *sui-komu* all the stuff in there
suck in
{Now then that sucked in all the stuff in there}

All three examples are native origin words. There are other choices which comply with the MLF model's two principles, e.g. "You must *mamoru*" instead of (25), "I *shimeru*"(26), "now then that *suikom*-ed all the stuff in there (27)" nevertheless the do-construction (ML helping verb "do"+ EL bare verb) seems to be the preferred choice here. Although examples (25) and (26) don't show inflection of the ML verb "do", example (27) shows the inflected ML verb "did". In the same as the verbal-noun insertion into the "do-construction", the EL verb insertion we looked at here complies with the MLF model's two principles. The ML helping verb has the characteristics of the outsider SM, i.e. inflection²¹, but the EL verb doesn't show inflection therefore it is a content morpheme.

In summary, when Japanese verbs are integrated into English ML frames, the "do"construction is the preferred form. S-J and foreign words take the shape of the verbal-noun and are put into the slot after the ML helping verb "do". Native-verbs are put in the slot either in the nominalized or bare form. These patterns comply with Muysken's pattern-b and -c.

2.1.3 Adjective insertion

2.1.3.1 Predicative-Adjective insertion

The Japanese adjective like the English adjective has two functions, i.e. attributive and predicative. The most significant difference from the English counterpart is that predicative adjectives occur without a copula and are inflected like a verb. The following example shows that the verb "*dekiru*" and the adjective "*hayai*" are inflected and attached with the same prefix for the past tense "*ta*".

(28) E>T : now toast (.) is *deki*(.) *deki-ta:::* is *hayakat-ta*
make-PAST quick-PAST
{Now toast is done, it was quick}

As with inflected verbs, inflected predicative adjectives are not analyzed here but examined later.

In the corpus, nine tokens of predicative adjectives (seven types) are observed in the mixed constituents.

(29) E>T : Hey that's *zurui* Toshiya
unfair
{Hey, that's not fair, Toshiya}

(30) E>T : This is *muzukashii* anyway
difficult
{This is difficult anyway}

²¹ That means, ML helping verb is multimorphemic, content morpheme + outsider LSM.

(31) T>E : If it's still *akarui*
bright
{If it's still bright}

(32) T>E : That is so *yarinikui*
difficult
{That is so difficult to do}

All the predicative adjectives occur after either “that’s” or “that is” (5), “it’s” (4), or “this is” (1). This might be the frame for EL adjectives in a similar way as the do-construction is with the EL verb. Insertion of an EL predicative adjective in the ML is a simple process as long as it is not inflected. There is no need for the addition or omission of other elements like nouns. The equivalence of the English adjective is inserted straightforwardly.

Whereas the EL adjectives in examples (29) and (30) are not only words but also function as clause constituents or maximal projections, i.e. adjective phrases, the EL adjectives “akarui” and “yarinikui” in examples (31) and (32) are singly occurring words inserted into the ML adjective phrases. This pattern of insertion also complies with the two principles of the MLF model. Although the ML adverbs are not essential items in adjective phrases compared to the essentiality of the determiner in NPs, the occurrence of the EL Content morphemes after the ML early SMs²², i.e. “still *akarui*” and “so *yarinikui*” show good integration of EL singly occurring forms into the ML frame.

Insertion of the other kind of EL adjectives, namely EL attributive adjectives are not observed in the corpus. In other language pairs, it could be a crucial point to examine the Morpheme Order Principle²³. If it occurs it will look like the following made-up example and will contribute to the discussion of the singly occurring form insertion in NPs.

* I like *akarui* colour.

bright
{ I like a bright colour. }

Instead of attributive adjectives, noun modifiers, which also modify the head noun, as well as attributive adjectives are observed.

(32) E>T : How about *obake* ones?
ghost
{How about the ghost ones?}

(33) T>E : I should have chosen *kasutamu* one
custom-made
{I should have chosen the custom-made one.}

²² They add conceptual meanings to the content morpheme.

²³ i.e. CS between language with the order of Adj+Noun and one with Noun+Adj order. e.g. Poplack and Meechan's Fonbe-French data (1995).

Here the role of the ML frame “[] one” seems to be crucial. This frame also accommodates ML noun modifiers, for example “that card one” is observed in the corpus. As we have seen with the “do-construction”, the role of ML frames consisting of specific lexical items and slots for EL materials deserve more exploration.

2.1.3.2 Adjectival-Noun insertion

Two tokens of a category are observed. They are called “Adjectival-Nouns”(Shibatani, 1990:215-216), which are another “mediator” and they have some characteristics of both adjectives and nouns. The underlined parts of the following three made-up examples contrast the three categories.

**Kare-wa hadaka-da* (adjectival noun)
he-TOP naked-COP
{He is naked}

**Kare-wa sensei-da* (noun)
he-TOP teacher-COP
{He is naked}

**Kare-wa tsuyoi.* (adjective)
he-TOP strong
{He is strong}

In the predicative position the adjectival noun takes the copula in the same way as predicative nouns whereas Japanese adjectives don’t take the copula. On the other hand as the translation, i.e. “naked” for “*hadaka*” indicates, it works in the same way as the adjective semantically.

The examples of EL adjectival-nouns observed in our corpus are as follows.

(34) T>E : Then he is *hadaka*
naked
{Then he is naked.}

(35) E>T : Mummy, are we *o-yasumi?*
HON-absent
{Mummy, don't we have school today?}

The two clauses have the ML copulas and the EL copula²⁴ doesn’t occur. This means the ELs are well-integrated into the ML frames.

Another important role of adjectival nouns is when foreign adjectives are borrowed they occur as adjectival nouns (Shibatani, 1990:217).

* *Kare-wa tafu-da*
he-TOP tough-COP
{he is tough} (example based on *ibid.*)

²⁴ Notice (35) is the interrogative form which can occur with or without the copula.

In the same way as Japanese verbal nouns and EL verbs, one can predict that the Japanese frames which accommodate adjectival nouns will allow EL adjectives. This will be explored later. As we have seen with the verbal-noun, this can have strong implications.

2.1.4 Adverb insertion

Another Content morpheme is the adverb²⁵. The adverb is a “peripheral” item from the perspective of the predicative-argument structure. There are not strong constraints on its position and morphological change doesn’t occur. Muysken suggests that the adverb has a characteristic of alternation rather than insertion. Muysken’s typology, “alternation” also covers discourse markers, reformulation, and inter-sentential switching amongst others. On the other hand the MLF model is designed for intra-CP switching which includes adverbs and discourse markers. Adverbial phrases, especially prepositional phrases, are the major constituents of EL islands. Therefore there is some part where Muysken’s “insertion” and the MLF model overlap although in other parts they contradict, e.g. adverbs.

The syntactic difference of the Japanese adverbial items from those of English is that they don’t appear after VPs²⁶. For example, the adverbs in (36) “*attchi*” and (37) “*ikki-ni*” will not occur after the verb in Japanese written clauses.

(36) T>E : come out (.) *attchi*
 that way
 {come out that way}

(37) E>T : I cleared *yonban* *ikki-ni*
 the fourth all at once
 {I cleared the fourth all at once}}

Therefore the occurrence of these adverbs at the clause final position indicates that they follow the order of the ML (=English) clause constituents. Furthermore the two adverbs function as adjuncts and are content morphemes. Those bilingual clauses can be classified as the singly occurring form of the MLF model.

Example (37) has two EL items next to each other and both are content morphemes. Muysken (2000:61) proposes the Adjacency Principle for explaining such two or more words insertions²⁷.

If in a code-mixed sentence two adjacent elements are drawn from the same language, an analysis is preferred in which at some level of representation (syntax, processing) these elements also form a unit. (*ibid.*)

If two words don’t form a unit, the possibility is that it is not insertion but alternation or the

²⁵ The prepositional phrase is the biggest among the adverbial items but since it is a phrasal item it will be discussed later.

²⁶ However, in a colloquial setting, it occurs.

²⁷ “Triggering” is also relevant here (Clyne, 1987/2000).

other kind ²⁸of CS. Although the two items of (37) occur one after another, “yonban” is the object and “ikki-ni” is the adverbial so there is no strong “unity” between them. Muysken will call this alternation because it doesn’t comply with the Adjacency Principle. On the other hand, Myers-Scotton will classify this as two singly occurring forms under the MLF model. If two EL items constitute a syntactic unit, it will be called an EL island where the EL morphosyntax is working to a certain extent but not fully. These two content morphemes, however, don’t make an EL island therefore they are two independent singly occurring EL forms.

These two scopes are significantly different nevertheless it is not easy to make a distinction between them. According to Muysken’s definition of “alternation”, these adverbs are not the EL but the ML switches into the other ML. This is a big challenge to the MLF model in which asymmetry is the principal characteristic and ML/EL distinction is crucial.

There is a short pause (0.35 seconds) before “*attchi*” (36). This could be an indicator that alternation occurs here. The discourse surrounding this clause is a mixture of two languages. T is making a house with toy tiles for his brother and his brother is interrupting him. T is telling his brother not to touch it. The words right before and after this clause are “no, no, no”. If Japanese items followed after this clause, alternation would be a better explanation.

The other adverb “*ikki-ni*”(37) is learned in kindergarten. The speaker employs this expression extensively when he eats food abruptly or makes a quick move in a game. He always employs the same prosody. i.e. this is learned holistically, used in a specific situation, and always takes the same form. Therefore this adverb is processed holistically and not much morphosyntactic activation of Japanese seems to be needed. The fixedness of “*ikki-ni*” supports the MLF model, i.e. this is an EL insertion, rather than alternation.

2.2 Singly occurring English EL items in Japanese Matrix Language Frames

Now we’ll examine how and what English single words appear in the Japanese ML frame. English EL items occurred in the Japanese ML frame is tabulated in Table 4.

	Top			Sub		Adj	Verb			Adv		Comp		Total
	-wa	(wa)	-niwa	-ga	(ga)	-ni	-suru	-dekiru	VP	-made	-de	-te	Before	
Noun	1	1		1							1			4
PropN										1				1
Verb						1	4	2						7
P-Verb						2								2
Adj						1								1
DM													8	8
VG													1	2
NP					2									2

²⁸ Congruent lexicalization: the two languages share the grammatical frame, e.g. dialect/standard mixing (Muysken, 2000:122)

VP					1	1		4						6
PP			1											1
Onoma											1			1
Total	1	1	1	1	2	5	5	2	4	1	1	1	9	34

Table 4

We will look at the singly occurring form in this section first.

2.2.1 Noun insertion

Four nouns including one compound noun and one proper noun are observed in the corpus. In Japanese noun + particle is the default structure of a noun phrase. It doesn't need a determiner as the essential element as English NPs. In the following examples (37) and (38), the absence of determiners signifies that the EL nouns "flower" and "tongue" are well integrated into the ML morphosyntactic frame. If determiners occurred with the nouns, e.g. "the flower-wa"(38), "my tongue-de"(39), they would be less integrated into the ML frame than (38) (39).

(38) E>T : *Moo flower wa hen(?) (.) ni ic-chat-ta*
 Already TOP ? LOC go-COMPL-PAST
 {The flower already went to (?)}

(39) T>F : *Chotto ha no shita ni tongue-de ana ga feel dekiru*
 little tooth of under at -with hole ACC can
 {I can feel a hole a little with my tongue under a tooth.}

The Japanese topic marking particle "wa" in (38) can not be translated into English, because the topic is not clearly marked by specific items in English. When the nominative case particle "ga" is not present, "wa" also works as the subject marker. Following Myers-Scotton's 4M model, this "wa" can be classified as an Outsider LSM.

In (39), the instrumental case particle "de" can be translated into the English preposition²⁹ "with". This is also classified as an Outsider LSM. The other Content morpheme insertion "feel" is a verb insertion and is dealt with later. The addressee of this utterance is his father. It is assumed that he is in the monolingual language mode (Japanese). When the bilingual speaker is in the monolingual language mode, only one lexicon is activated and not much CS is expected. When it occurs, the singly occurring form which is close to borrowing is presumed. When he talks to his father, he is not at the "monolingual" end of the language mode continuum. As his linguistic profile shows, he talked to his father in English when he lived in Britain. It would be accurate to mention that when he talks to his father he is closer to the monolingual end of the continuum than when he talks to his brother. He wouldn't produce this bilingual clause to a monolingual Japanese person. We don't classify the occurrence of "tongue" as borrowing.

²⁹ English Prepositions have both characteristics of Content and System morphemes. Myers-Scotton identify "satellite preposition" i.e. particles in phrasal verbs such as "up" in "give up" as Early SMs. Other prepositions such as the head of the prepositional phrase is the thematic role assigner therefore Content morphemes.

Although he knows the Japanese equivalence of “tongue”, he resorts to the more familiar English word “tongue”.

In (40) the proper noun “Mars” is inserted. There is a possibility that this proper noun is a borrowed form. We can apply the no-equivalence principle we employed before.

(40) E>T : *Moo Mars made it-ta*
 already up to go-PAST
 {It already went up to Mars}

The speaker (Toshiya) knows the Japanese equivalence of “Mars”, i.e. “*kasei*”, therefore this is recognized as CS rather than borrowing due to a lexical gap. In the same way as “*de*” (38) the case particle “*made*” can be translated into the English preposition (up to). This is another example of Outsider LSM.

The example (41)³⁰ shows another EL item “missing” in the case particle slot, i.e. in front of the nominative case particle “*ga*”. This EL can be analyzed as a verb + its inflection and inflection is an Outsider LSM. One might argue this kind of example violates the System Morpheme Principle.

(41) E>T : *Kore (.) missing (.) ga aru yo*
 this NOM exist FP
 {There is something missing about this}

Nevertheless “missing” seems to be acquired holistically in this form rather than joining “miss” and “-ing”. When they play for example jigsaw puzzles, he hears his mother or brother saying “Something’s missing.” or “What’s missing now?”. It is plausible that he recognizes “missing” as a whole as an adjective. Although applying an adjective to a noun slot is not perfectly well-formed in the Japanese grammar, it can occur in monolingual Japanese children’s speech, e.g. “*ookii(big) ga aru yo*”. By putting the sentence nominalizing particle “*no*” at the end, it becomes the canonical form, i.e. “*ookii no ga aru yo*”. Regarding the status of “ing” here, Myers-Scotton (2002:95) argues that non-finite forms are acquired early in both child and second language acquisition and located in the mental lexicon as holistic forms. The non-finite particles especially present and past participles are Early SMs, i.e. their forms depend on their heads and add conceptual information. As we have seen in 2.1.1.1, Early SMs often occur with Content morphemes.

In (41) after the demonstrative pronoun “*kore*”, it is presumed that the topic particle “*wa*” is omitted. The ellipsis of “*wa*” can occur in colloquial Japanese. The topic and the subject can be expressed separately in Japanese with the topic particle and nominative case particle respectively.

There is another ellipsis of the case marker “*wa*” in the next example.

(42) T>E : *Kimi-no fire place doko*

³⁰ In (40) after the demonstrative pronoun “*kore*”, it is presumed that the topic particle “*wa*” is omitted. The ellipsis of “*wa*” can occur in colloquial Japanese. The topic and the subject can be expressed separately in Japanese with the topic particle and nominative case particle respectively

you-of where
 {Where is your fire place?}

The EL bare form in (42) can be explained from two perspectives. From the EL’s point of view, “fire place” is an English compound noun which of course doesn’t take any case particle in English. Therefore this is a sort of bare form. No English determiners and no Japanese particles. From the ML’s point of view, as mentioned before, this is an ellipsis which occurs in colloquial Japanese. The interrogative adverb comes at the clause final position. The Japanese interrogative form doesn’t entail the wh- element movement as the English one. This strongly contributes to indicate that the morpheme order of the clause comply with the ML (=Japanese) frame.

2.2.2 Verb insertion

As we have seen in 2.1.1.3 and 2.1.2, the Japanese “do-construction”, “[] *suru*” in which verbal nouns and loanword verbs are inserted, is predicted to allow EL verbs. In the corpus the following examples are observed.

(43) T>E : *ik-kai bounce shi-te*
 one-time do-CONN
 { it bounced once and }

(44) T>E : *kocchi mo follow yat-teru*
 this too do-PROG
 { This one is following, too }

(45) T>E : *Minna-de gattai yat-ta I mean follow yat-ta*
 everyone-by combination do-PAST do-PAST
 { Everyone did combination, I mean followed }

(46) T>F : *Yooshi keep an eye suru-zo*
 Well I'm going to do-FP
 { Well I'm really going to keep an eye on you }

Here, the ML verbs “*suru*” and a more colloquial synonym “*youtu*” both meaning “do”, occur as inflectional forms, whereas the EL verbs occur in the bare form. The ML helping verbs “*suru*” and “*youtu*” come in the final part where inflection occurs in Japanese. They work as Outsider LSMs and play a central role in making the ML frame. On the other hand EL verbs appear as the bare form and therefore are classified as Content morphemes. Therefore the “[] *suru*” construction complies with the two principles of the MLF model. “I mean” in (45) will be classified as interjection. This occurs as a chunk and is used to indicate the reformulation of “*gattai yat-ta*”. This utterance is good evidence that the same construction “[] *yatta*” accommodates the monolingual S-J verbal-noun and the bare form of the English verb in the same way. The loanword of “follow” exists in modern Japanese and occurs as “*foroo suru*”, the same form as the CS form. (46) is not a single word insertion and is therefore explained later.

Another helping verb “[] *dekiru*(can)” also accommodates Japanese verbal-nouns, e.g.

“*renshuu dekiru*”(can practice). Although the meaning of this helping verb is similar to the English modal auxiliary “can”, its category is a verb. Another verb can’t come into this slot. e.g. **“taberu-dekiru*”(can eat) is ungrammatical. Only verbal-nouns or nominalized ³¹verbs can go in the slot. Otherwise the verb itself will be inflected with the suffix “*eru*” working as “can”, e.g. “*taber-eru*”(can eat). The following examples are observed.

(47) E>T : *Abarek iraa ni attack deki-ta*
 PropN DAT can-PAST
 {They could attack *Abare-killer*(Super hero's name)}

(39) T>F : *Chotto ha no shita ni tongue de ana ga feel dekiru*
 little tooth of under at with hole ACC can
 {I can feel a hole a little with my tongue under a tooth.}

(47) shows the inflected form with the past tense suffix “*-ta*” which is an Outsider LSM. “*dekiru*” in (39) is not inflected but the whole clause can be identified as a Japanese ML frame due to the presence of case particles.

The Japanese do-construction - “[]*suru*”, “[]*yaru*”, “[]*dekiru*” examined in this section seems to contribute firm support to the MLF model. EL bare verbs, i.e. Content morphemes are put into the slot and ML helping verbs express inflection, i.e. Outsider LSMs. The existence of this do-construction in the monolingual Japanese language morphosyntax also promotes its occurrence in CS. Moreover the fact that this construction accommodates loanwords in the monolingual context and EL verbs in the bilingual context provides a strong support to the argument that borrowing and CS are in a continuum.

In this section, we focused on the “do-construction”, but this isn’t the only way for EL verbs to occur in ML frames. A certain number of inflected EL verbs and EL VPs are observed. They are not singly occurring forms and will be examined later.

2.2.3 Adjective insertion

Since loanword adjectives enter as adjectival-nouns into Japanese, the Japanese frame which allows Japanese adjectival-nouns is a good place to look for the occurrence of EL adjectives. The resultative marker “*ni*” is such a particle. It is usually followed by the verb “*naru*”(become).

(48-a) *moo chikyuu-wa wet-ni nat-ta*
 Already Earth-TOP -RSL become-PAST
 {The earth already became wet.}

Japanese adjectives don’t occur in this slot. Hence if this clause were uttered all in Japanese, it would look like (48-b).

³¹ Put “*koto*”(thing) and “*ga*”(ACC) i.e. “*taberu-koto-ga dekiru*”

(48-b) E>T : *moo chikyuu-wa nure-ta*
 Already earth-TOP wet-PAST
 {The earth already became wet.}

The adjective itself is inflected and the past tense marker is attached in the same way as the verb.

This “adjectival-noun” slot “[] *ni naru*” allows a variety of items to occur in our corpus. The following example shows the insertion of onomatopoeia.

(49) E>T : *soshite (.) [e soshite guiiiiinn [ni-nat-ta*
 And Airplane sound
 {And, and the airplane went “gueeeen”}

We can’t decide whether this onomatopoeia is Japanese or English. This might be an indicator that not only adjectives but also a wide variety of items occur in the slot. The following examples show the occurrence of verbs and verb phrases.

(50) T>F : *Datte-ne melt ni nac-chau-desho*
 because-FP RSL become-PER-FP
 {because it will melt}

(51) E>T : *Moo give up ni nac-cha-tta*
 already RSL become-PER-PAST (RSL= resultative marker)
 {I’ve already given up}}

(52) T>F : *Daddy doyatte kore o get rid of naru-no*
 how this ACC become-QS
 {Daddy, how can you get rid of this?}

(53) T>F : *Mummy- ni glow in the dark ni naru- tte iw-anaakan*
 DAT RSL become-QT tell-MOD
 {I must tell Mummy that it glows in the dark}

A single word verb- (50), and phrasal verbs- (51) (52), VP (V+PP)- (53) are inserted into “adjectival-noun” slots. Here “[] *ni naru*” means “come to~”. In order for Japanese verbs to occur in this slot another particle “*yoo*”(a sentence modalizer) should put after a verb and before “*ni*” e. g. “*tokeru-yoo-ni-naru*”(come to melt). That is, the ML frame “[] *ni naru*” allows EL (=English) verbs but not Japanese verbs in the slot. Are the EL verbs recognized as adjectival-nouns by their ML frame?

From the point of view of the System Morpheme Principle, (50) shows a singly occurring content morpheme of the EL. With (51) and (52) the inserted verbs are phrasal verbs. The particles at the end of them, i.e. “up” and “of”, are satellite prepositions. They add meanings to the head verbs and are activated at the conceptual level. They are conceptually activated at the mental lexicon but are not a thematic role assigner or receiver and are therefore defined as Early SMs. Myers-Scotton (2002) argues that Early SMs occur frequently with Content morphemes, whereas late SMs especially Outsider late SMs will not occur. (52) doesn’t have the resultative particle “*ni*”. One explanation of the ellipsis is that since the phrasal verb has more words than the singly occurring form, this one consists of three words, there is

more EL morphosyntax activation at the conceptual level. That might have blocked the influence of ML frame to a certain extent and the bare form occurs. (53) is uninflected verb “glow” +PP “in the dark” therefore can be defined as an EL island which will be systematically discussed later.

2.2.4 Discourse marker insertion

The following inserted items can be categorized as adverbs (now, then) and conjunctions (because³²) with the ordinary syntactic categorization.

- (54) T>E : *Now Gao Rainosu su wa kakure-ta*
 (Robot's name) TOP hide-PAST
 {now Gao Rainosu hid}
- (55) T>E : *OK(.) then kimi-tachi-ni makaser-o*
 You- PL-DAT rely-IMP
 {OK then Rely on you}
- (56) E>T : *because kore-ga station-ni hait-te-ta because*
 this-NOM -to enter-PROG-PAST
 {because this was in the station}

These sentence-initial elements for example “now” and “then” function as “discourse marker” rather than expressing “time”. They control the flow of the information and mark the structure of the discourse. Therefore the category “discourse marker” is employed to include these elements. In the MLF model, discourse markers are categorized as content morphemes (Myers-Scotton & Jake, 1995/2000:284), because they assign thematic roles at the discourse level. Discourse markers are outside the predicative - argument structure and relatively free from syntactic constraints. Borrowing of discourse markers is reported in the literature, e.g. “Probably the most common core borrowings are discourse markers” (Myers –Scotton, 2006:216). Therefore the occurrence of discourse marker insertions in CS is also highly predictable. Indeed in many cases, the discourse marker insertion starts as a CS process and later will be integrated into the ML lexicon and established as borrowing.

The three discourse markers, “now”, “then” and “because” are also frequently observed in the English ML frames. They are exhaustively employed regardless of whether the ML is English or Japanese. In example (56), whereas the EL noun “station” is accompanied with the locative particle “ni” and shows a certain degree of integration³³ to the ML frame, the discourse marker “because” isn’t attached to any particles and looks separated from the clause. Indeed the speaker (E) repeated it after the clause as if it were an interjection. Muysken (2000) proposes that the switching of the discourse marker should be accounted for in terms of the framework of “alternation” rather than “insertion”. That means the two languages ‘change’ at the place of switching rather than the EL item is being inserted into the ML frame. At this stage we are not able to decide whether the switching of discourse markers is alternation or insertion.

³² Also Complementizer

³³ However Determiner doesn’t occur.

3 Insertion of Multi-word items-EL island

Having seen the single item insertion, multi-word insertion is explored in this section. With the single EL item, the issue is how they are integrated into the ML frame, e.g. the most integrated item enters the ML lexicon and can be called the borrowed form and items which are not congruent with the ML frame occur as the bare form. With multiword items, the issue is what kind of constituents EL words form and the motivation for the use of multi-word items rather than single items. The following examples are multi-word EL items observed in our corpus.

- (57) T>E : Look I made (.) *motto* *atarashii* *tenraisenpuujin*
more new (a robot's name)
 {Look I made a newer *Tenraisenpuujin*.}
- (5-a) E>T : I want to do this *jibun-de*
myself-by
 {I want to do this by myself.}

Both EL phrases, NP as the object (57) and PP as the adjunct (5-a), comply with the order of the ML (=English) frame. Inside each maximal projection, EL grammar rules, e.g. no determiner in (57) and the order of N+P in (5-a) are followed. Myers-Scotton call them EL island. Although Muysken (2000) supports switching of the Object NP (57) as insertional CS, he argues that switching of adverbial item such as PP (5-a) is a clause peripheral item and is therefore classified as alternation (2000:100).

3.1 Japanese Multi-word item in the English ML frame

3.1.1 NPs as EL islands

3.1.1.1 Modifier+Noun as EL islands

EL NPs occur as a Maximal projection in the ML clause, e.g. the Subject slot (n=4), Object slot(5) and Predicative slot (18) and also inside Maximal projections, e.g. after the preposition (3), after the determiner (5), and after the adjective (1). The latter will be explained as internal EL islands in the next section.

The structures of the NPs can be categorized as seen in the following table.

Modifier+N	Adj+N	Det+N	Qf+N	Qf+Adj+N	
	4	2	2	1	9
N+P	TOP marker	SUB marker	Possessive Pronoun	Example marker	
	2	1	1	1	5
GEN+N	Adj+GEN+N	N+GEN+N	Qf+GEN+N		
	1	1	2		4
VP	Relative C	CP			
	2	1			2

Table 4.5

First we'll have a look at the structure of modifier +noun. Four types of modifiers are observed as follows.

Adjective + Noun

(58) E>T : if *warui yatsu* try(.)ing to(.)u go inside
bad guy
{If a bad guy is trying to go inside}

(59) T>E : next is(.)ookina *Chuuboito*
big PropN
{Next is a big Chuuboito }

(60) T>E : Well I did *tsuyoi fainaru-bento*
strong Prop N
{Well, I did a strong fainaru bento (final weapon)}

Determiner + Noun

(61) E>T : *kono atsu* is
this guy
{this guy is}

(62) T>E : *it's sonna gattai*
such combination
{such combination }

Quantifier + Noun

(63) T>E : No *it's niban-me-no*
two-order-one
{the second one}

(64) T>E : *it's yatsu-no.*
guy thing
{It's his/ that guy's}

Quantifier+Adjective+Noun

(65) T>E : Look I made (.) *motto atarashii Tenraisenpuujin*
more new PropN
{ a newer *Tenraisenpuujin* (robot).}

None of the EL phrases have ML (=English) determiners which would be evidence for integration into the ML. The adjective + noun pattern (58, 59, 60) doesn't have an article before it. Examples (61) and (62) have EL determiners hence the occurrence of ML determiners would cause double morphology and be uneconomical. There are no ML determiners in front of EL quantifiers (63, 64, 65). (63) and (64) would need an article in front of the quantifier if they were English NPs. Compared to the singly occurring form, more activation of EL morphosyntax can be seen in those examples. Still asymmetry between ML and EL are maintained because there are no post-positional EL particles attached to the NPs. For an example the subject NP in (58) would occur as “*warui yatsu ga*”, with the nominative case particle

“ga” in the Japanese morphosyntactic frame. These EL items can be called EL islands rather than alternation. If we put the EL islands in a continuum depending on the degree of integration into the ML or EL, there will not be a clear distinction between singly occurring forms and EL islands (Figure 4).

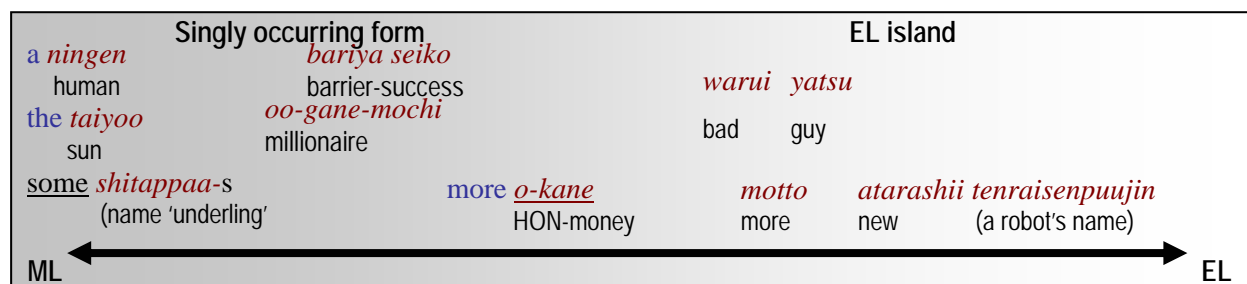


Figure 4

We will look at another kind of EL island which will be put more towards the EL end of the continuum, namely the “noun+ post-positional particle” pattern.

3.1.1.2 Noun+Particle as EL island

There are some examples of EL nouns+ EL particles in the predicative NP slot.

(66) E>T : Now is (.)s *Parasarokiru-wa* (.) now is *mizu-ni yatta*
 (monster)-TOP water-to do-PAST

As we discussed at the beginning of 2, this pattern is problematic. Case markers both of the Morpheme Order and System Morpheme Principles can’t determine the ML. The English copula “is” and also Japanese topic marker “wa” are outsider LSMs. If we look at the two Japanese parts here, the NP “*Parasarokiru-wa*” and the VP “*mizu ni yat-ta*” make a well-formed clause. It is reasonable to recognize that “now is” is employed as a discourse marker here. Our analysis here is that Japanese is the ML and the English discourse item is inserted as the EL. A great number of patterns which include “is” and seem to have strong discourse functions are observed in the corpus and will be analyzed later.

(67) E>T : *Eesu-Robotto toka* is (.) fast
 PropN etc.
 {*Ace Robot* (the name of a robot) and so on is fast}

The particle “toka” meaning “etc.” is identified as an example marker. This particle adds conceptual information to the head and is identified as an early SM.

Particles in the Japanese language have a broad range of functions and forms. The classification of the 4M model can give detailed accounts of them. Although we can’t generalize from these two examples, the occurrence of outsider LSMs in the EL is problematic whereas that of early SMs is not.

3.1.1.3 Noun / Quantifier + Genitive Case Marker “no” + Noun as EL island

Shibatani (1990:258) points out that “nominal modifiers including the ones involving numerals (and classifiers), do not terminate the expansion of a noun phrase” and he goes on to argue that “Japanese has no functional category of determiners comparable to English determiner system”, which “terminates

the expansion of a noun phrase”. For example, the following long NP is possible.

- (68) *Toshiya-no nihongo-no hon-no hyoushi-no jitensha-no e*
 Toshiya-GEN Japanese-GEN book-GEN cover-GEN bicycle-GEN picture
 {The picture of a bicycle on the cover of Toshiya’s book} (made up example by the author)

The function of “no” is similar to the English preposition “of” but it has more flexibility. In the following example (69) and (70), an English noun and adjective is inserted into a slot before “no”.

- (69) T>E : *It’s bishop no dai (.) pinchi*
 GEN crisis
 {It’s bishop’s crisis}

- (70) E>T : *And is (.) sharp no mama*
 GEN as it is
 {and it still remains sharp}

These examples have the “nesting” structure. The ML of the whole clauses are English. Japanese EL islands are put inside them. Furthermore English singly occurring forms are inserted in the Japanese EL islands. The two ML structure “it’s []” and “And is []” might have something to do with this “nesting” structure. In addition to that, in (69) “sharp” is used as an adjectival-noun (see 2.1.3.2 and 2.2.3). Japanese adjectival nouns, e.g. “*Hadaka-no-mama*”(remain naked), or nouns, e.g. “*fuku-no-mama*”(remain dressed, with clothes on) goes in this slot.

Since Japanese doesn’t have a plural suffix, plurality is expressed with quantifiers. The most frequently observed pattern is QF + of + Noun which is employed when there is a need for counting mass nouns in English. As the example (71) shows, not only mass nouns (a) but also count nouns (b) take “Qf+of+Noun” when plurality is expressed.

- (71) a) *ni-hai-no koohii* b) *ni-satsu-no hon*
 two-cup-of coffee two-bound-of book
 {two cups of coffee} {two books}

Ordinal numbers are also expressed in the same form.

- (72) T>E : *That’s ichiban-me-no Bludger*
 first-order-one
 {That’s the first Bludger.}

- (73) T>E : *Queen is saisho-no yusho right?*
 first-of-championship
 { Queen is the first ³⁴champion, right?}

Determiners are not in these NPs. English word “Bludger” in the EL island in (72) comes from the book “Harry Potter”.

As well as English “of”, the Japanese genitive case particle “no” can be classified as a bridge

³⁴ Notice there are two forms of “the first” here. The difference can be explained in terms of “*Ichi-ban-me*” as opposed to “the second” and “*saisho*” as oppose to “the last”.

LSM. Unlike the early SMs, they don't add meaning to the concept of the content morphemes but they integrate content morphemes into a larger constituent (Myers-Scotton,2006:269).

3.1.1.4 NP + X as EL islands

In this section we will look at longer phrases than NPs. for example VPs, which express the predicative- argument structure and contain the verb and NPs or PPs. The place where the verb insertion occurs might be a good place to look for the VP insertion. As seen before, the "Do-construction" is the significant strategy to accommodate EL verbs. There is one interesting phrase.

(73) T>E : Look if you do (0.5) *fight deeta ni (.)ni maru* (1.0)
 fight -data at at circle

{ Look if you press the circle button around the *fight data* }
Here "*fight deeta*³⁵ *ni maru*"(put a circle around the fight data) consists of the PP "*fight deeta ni*"(at the *fight data*) + the Verbal-Noun "*maru*"(circle). We have looked at the do construction accommodating singly occurring EL items. This example shows EL islands also occur in the do construction.

Another important aspect to note is that this phrase is a fixed expression they use in the video game (see another example in 2.1.1 "do triangle"). That is, the speaker might treat both a single word and a fixed phrase as one unit. Therefore he is putting one EL unit in the ML frame.

The following examples include another kind of long phrase, the relative clause in the NPs.

(74) T>E : *it's Gatanozooa o taoshi-ta kasutamu*
 (monster's name) ACC beat-PAST custom-made weapon
 { it's the custom-made weapon which beat *Gatanozooa*.}

(75) T>E : *it's koroshi-ta tte iu koto*
 kill-PAST QT say thing
 {it's something you call "killed"}

(74) shows the Japanese relative clause "*Gatanozooa o taoshi-ta*" which premodifies³⁶ the head noun "*kasutamu*". (75) also has the relative clause "*koroshi-ta tte iu*" modifying the head noun "*koto*". Both Japanese EL islands show well-formedness in the EL morphosyntax. They seem more activated than the ML frame "it's". It has been problematic to classify the frame starting with "it's" as the ML so far because the phrase consisting of the other language which comes after "it's" can be also recognized as the ML. Here the relative clauses are embedded in the NPs. NPs are well-formed in "it's + predicative NP" structure. Regarding the two examples here, it is possible to interpret that English is the ML and the Japanese NPs including the relative clauses, are inserted as the EL island. Nevertheless (74) includes the accusative marker "*o*" and the past tense suffix "*-ta*". (75) includes the past tense suffix and the quotation particle "*-tte*" is a complementizer, therefore the phrase "*koroshita tte*" is a CP.

We have looked at a wide variety of NPs as EL islands. e.g. modifiers +nouns, nouns + particles, a VP (NP+V), NPs including relative clauses and a CP. We will look at the inside of NPs next.

³⁵ "fight" is pronounced in English "deetaa"(data) is pronounced in Japanese

³⁶ Japanese doesn't have postmodifiers and relativizers.

This construction “[] *no yatsu*” is employed when they don’t know the name of something .Other examples of “*no yatsu*” are observed in the corpus as follows.

(79-a) T>E : ah *hon-mono* is *orenji no pampukun* *no yatsu* see Ellis ?
 real-thing orange of (character's name) of guy

(79-b) E>T : Now is *ippai yar-are-ta DAI no yatsu*
 a lot beat-PASS-PAST onomatopoeia of guy

In (79-a) the speaker is talking about a game character called “*Pampukun-Daioo*” (made up name for the game meaning “king pumpkin”) which is orange. He can’t remember the second half of the name therefore the “*no yatsu*” construction is employed. (79-b) is a unique example. “*dai*” is a sound which particular TV characters make. They don’t talk but just make this sound all the time. Here the speaker copied the sound and put it in the slot. The prosodic feature tells us that he copied it from the programme. The onomatopoeic word “*dai*” shows prominence in the loudness and the intonation

Now is *ippai yar-are-ta DAI no yatsu*
 (.) (0.1) (0.5)

contour. The 0.5 second gap after it might be an indication that it is processed separately from “*no yatsu*”. The current focus is not the onomatopoeic word but the frame “*no yatsu*”. (79-a) also shows a 0.5 seconds gap before “*no yatsu*” but (77) and (79) don’t show such a gap. The two examples of (79) are not defined as EL islands in the current analysis because the status of “is” and “now is” is not clear and we are not able to determine which is the ML. The gap there might be an implication that Japanese is the ML. With (77) and (79) Japanese islands are the EL. If the ML is more activated in the mental lexicon than the EL , as Myers-Scotton puts it, less processing effort is made to EL. Therefore EL items must have a shape which is easy to handle. Gaps in the phrases might be indicating that relatively complex cognitive processing is going on in that part. The Japanese construction “*no yatsu*” seems to be a fixed expression used in the EL.

As well as (76-a), (78) also shows that the ML plural suffix is not attached despite the requirement of the quantifier “all”. Again this can be an indication that the EL item is not fully integrated into the ML frame.

(80) E>T : A new *bureedo* *no hito* shouldn’t go inside that card one?
 (super hero) of man
 { A new person in the blade (TV programme) shouldn’t go inside that card thing ³⁷}

Here “*no hito*” has a similar function to “*no yatsu*”. Compared to the personal noun “*yatsu*” which implies disrespect to the person, “*hito*” has a relatively polite connotation to the person mentioned. Therefore it is reasonable that whereas “*yatsu*” is employed to describe monsters and bad characters, “*hito*” is used for the super heroes and good people.

The existence of internal EL islands suggests that EL islands aren’t necessarily a grammatical constituent. Some unity between the EL items seem underlying there.

³⁷ In this programme, people transform to super heroes using cards.

(81) T>E : then it's more *hikari o*
 light ACC
 { then it's (that I need) more light }

This is a problematic example. The morpheme order and the presence of the outsider late system morpheme “s” indicates that English is the ML. Nevertheless in the EL, the accusative case particle, which is an outsider late system morpheme, exists. (Accusative case markers are classified as the outsider LSM in Myers-Scotton, 2005:338; Bolonyai, 2000:93) There is another problem. Obviously this clause comes from the phrase used in an impressive scene in a TV programme³⁸, “*motto hikari o*” which means “Give me more lights”. The verb is omitted and (81) looks like this phrase is copied and “*motto*” is translated into the English cognate “more”. The morpheme order cannot be the crucial cue to determine the ML either. On the contrary the fact that the speaker has copied this phrase can be a supportive factor to the idea that English is the ML. He copied this phrase from TV so he is using this phrase without noticing that he is using the accusative case particle. His priority is to say the phrase like the one he heard on TV. If we take into consideration this contextual information it would be reasonable to regard “*hikari o*” as a fixed expression or a holistic unit thus an internal EL island.

3.1.3 PPs as EL islands

Myers-Scotton (1993:144-145, 2006:264) points out that PPs (Prepositional Phrase) are the most frequently observed EL islands because they are adverbials and adjuncts meaning peripheral elements in the clause structure. As introduced in 1.3.2, (5-a) is the typical EL island PP.

(5-a) E>T : I want to do this *jibun-de*
 myself-by
 { I want to do this by myself. }

The PP “*jibun-de*” fits the adverbial slot in the English ML clause and the internal structure complies with the EL grammar, i.e. noun + particle. Contrary to Myers-Scotton’s observation, there are not many EL island PPs in our corpus. The two siblings’ CS patterns seem to prefer keeping English prepositions. Thirteen tokens of the bare form, i.e. “preposition + noun bare form”, e.g. (16) and four tokens of the singly occurring form i.e. “preposition + determiner + noun”, e.g. (1) are observed.

(16) T>E : Now Cosmos gone to *himitsu- kichi*
 (Proper Noun) secret-base
 { Now Kosumosu has gone to the secret base }

(1) E>T : it's going (.) all the way up to the *kumo*
 cloud
 { It's going all the way up to the cloud. }

The bare form is the most occurring pattern in our corpus. If we look at the ML part around the preposition, two tokens of “go (gone / went) to” e.g. (16), three tokens of “do something / this as

³⁸ They are actually playing that scene here.

nisemono”, three tokens of “up to”, e.g. (1), and one token of “far from” -(10) below are observed. (N=14) These examples show collocation or strong ties between the preposition and the item before it.

(10) T>E : but a *ningen* stay for quite far from the (.) *taiyoo* right?
 human sun
 {but a human stays for quite far from the sun, right}

For example, in (10) it is reasonable that the speaker prefers keeping the phrase “far from” to using an EL island “*taiyoo kara*”(from the sun). For, “far from” as well as “go to” is not a grammatical constituent but a collocation. This is another example of formulaic language (Wray, 2002). We can’t expect the formulaicity will explain all the problems but it is certainly one factor to take into consideration.

There are several Japanese PPs and an adverbial phrase occurring after “is” “it’s” and “That’s”.

(82) T>E : That’s *hajime kara*
 beginning from
 {That’s from the beginning.}

(83) E>T : is *uchuu made*.
 space up to
 {(It is) up to the space}

(84) T>E : is *karada no naka ni*
 body of inside to
 {(It is)inside the body}}

As we have seen in 3.1.1.3 and 3.1.1.4, the status of the English elements are not clear and it is difficult to distinguish which language is the ML. If we assume that English is the ML, the EL (=Japanese) PPs express time and place and appear as predicative.

3.1.4 Adjectival phrases as EL islands

A typical adjectival phrase might be “*totemo hayai*” (very fast) an emphasizing adverb + adjective. We haven’t found this kind of example in the corpus but the following inflected adjective meaning “too fast” is observed.

(85) T>E : Oh I just think I’m (.) *haya-sugiru* right?
 fast-too
 {Oh I just think I’m too fast right?}

This EL phrase consists of two morphemes. The first part “*haya*” is the stem of the adjective “*hayai*” meaning “fast” and a content morpheme. The second part “*sugiru*” meaning “too” is an inflectional suffix which is attached to adjectives. This suffix is formed because of the relation with the head (*hayai*). It adds conceptual information to its head and is therefore defined as an early system morpheme. One might argue that this is a singly occurring form because the EL is a word. Some Japanese EL words consisting of an early system morpheme + content morpheme was classified as the singly occurring form, e.g. “*o-kane*”(HON+money)- early + content morpheme (see 2.1.1.1 example (13)). That early system

morpheme “o” is a derivational prefix and the current early system morpheme is an inflectional affix which can also be multimorphemic and include an outsider system morpheme, i.e. “*sugiru*” is a basic form but also “*ru*” means the present tense which is an outsider late system morpheme. Since Japanese doesn’t have “present tense subject-verb agreement” we can’t distinguish whether this is the base form or present tense form. If this clause were the past tense, it would be “*haya-sugi-ta*” which has the structure of content morpheme - early system morpheme -outsider system morpheme.

The other example contains a different kind of system morpheme.

(86) E>T : *Windom is warui to yasashii*
 PropN bad and good
 {Windom (monster’s name) is bad and good.}

This can be analyzed as follows: two adjectives, i.e. content morphemes are connected by a coordinating particle, i.e. a bridge system morpheme. Whereas the English coordinating conjunction “and” links clauses, phrases and words as long as they are the same grammatical type, the Japanese coordinating particle “to” links nouns or noun phrases. Adult Japanese speakers would say “*waru-kute yasashii*”(bad and good): “*waru*” is the stem of “*warui*”, “*kute*”is a connective inflectional morpheme. The presence of this form implies two reasons. First this phrase sounds somewhat “childish”. The speaker of this clause is at the age of 4;6, and is still in the process of acquiring both first languages. Rather than using the inflectional form, linking the two uninflected adjectives is simpler. Second this might be a sign of influence³⁹ from English. The surface structure of “*warui to yasashii*” consists of only Japanese lexical items but the construction of the morphosyntactic frame is under the influence of English. The use of “to” is used in the sense of “and”. This phenomenon is called “convergence” (Clyne: 1987, Myers-Scotton, 2002). Myers-Scotton (2002) emphasizes the similarity and relation between convergence and attrition. With the case of a child’s bilingual acquisition, convergence can be one of the developmental factors. Clyne suggests that the syntactic convergence occurs to “ease code-switching”(1987/2000:271). Here the scenario might be that the speaker prefers using the two Japanese adjectives because they are attached to the Japanese monsters, but the linking of two adjectives is difficult, therefore “the easier solution”, the English adjective linking structure, is employed at the morphological realization level and “to” is assigned the new role of the English “and”. The phrase “*warui to yasashii*” is uttered in monolingual speech and then also appears as the EL island in CS.

3.2 English Multi-word items in the Japanese ML frame

Now we will explore how English EL islands look in Japanese ML frames. The part of the table for the English insertional items in the Japanese ML is as follows.

	Top			Sub		Adj	Verb			Adv		Comp		
	-wa	(wa)	(-niwa)	-ga	(ga)	-ni	-suru	-dekiru	VP	-made	-de	-te	Before	Total

³⁹ This is traditionally called “language interference”. Linguists who perceive the negative connotation in the phrase employ “language transfer”.

NP					1			1						2
VP						1	1		4					6
PP			1											1
Total	0	0	1	1	1	1	1	1	4	0	0		1	9

Table 4.7

3.2.1 English NPs as EL islands

Whereas NPs are dominant in Japanese EL islands in English ML frames, NPs in English EL islands are few. The following examples are observed:

- (2) now that part *sui-kom-are-ta*
suck-in-PASS-PAST
{Now, that part was sucked in}

Although the English part consists of three words and only one word is Japanese, if we apply the two principles to this clause, Japanese is the ML. The order fits both English and Japanese but the outsider late system morpheme only comes from Japanese. A question raised here is whether these three English words make one EL island or not. Muysken (2000:61) proposes the Adjacency Principle suggesting that “if in a code-mixed sentence two adjacent elements are drawn from the same language, and an analysis is preferred in which at some level of presentation (syntax, processing) these elements also form a unit”. The first item “now” is an adjunct and used as a discourse marker meaning “and then”. The next item “that part” is a noun phrase and functions as the subject and the thematic role is the patient. From the syntactic and semantic point of view, we can’t say they are one unit. It would be reasonable to regard that “now” is a singly occurring form which functions as a discourse element and “that part” is an EL island which functions as a syntactic element. The occurrence of “now” has probably triggered⁴⁰ the occurrence of “that part” but “triggering” alone can’t be evidence for a unit. From a different perspective, Halliday’s (1994) Systemic Functional Grammar gives an account for these three words. In the SFG, the clause has three metafunctions, i.e. the experiential function with which we encode our experience of the world; the interpersonal function with which we encode our interaction; and the textual function with which we manage the information of the discourse. From the perspective of the textual function, the clause is separated into two elements, Theme and Rheme. The Theme signals to the audience what the message is about and the Rheme is the actual message which the speaker or writer intends to inform. The dichotomy of Theme-Rheme can be related to given –new information. According to the SFG’s definition, “now that part” is the Theme. This can be further subcategorized into the textual theme which links the current message of the clause to the neighbouring clause, i.e. “now” and the topical theme which is the starting point of the experiential meaning, i.e. “that part”. Auer (1995:120) and Karrebæk (2003) also point out the relevance of the code-switching phenomenon and the information structure. Considering the salience of the topic-comment structure in the Japanese language (Shibatani, 1990), the perspective of the information management or the textual function in terms of the Halliday’s SFG can be very useful.

⁴⁰ Clyne (1987)

(87) Kedo **nine in a row** deki-ta

but make-PAST
{but they answered correctly nine in a row}

This clause is taken from speech when the speaker was watching a quiz programme “The Weakest Link”. He is commenting on the fact that all the nine contestants answered the questions correctly. From the syntactic perspective, the English NP “nine in a row” is the subject and the Japanese ML verb “*deki-ta*”(made, done, completed) comes next. The absence of the Japanese nominative marker “*ga*” after this NP indicates that this is an EL island and the influence of the ML grammar is minimized. In this programme, “nine in a row” means all the contestants can answer in a row therefore the phrase has a special meaning compared with “eight or six in a row”. It is not just the number nine it also means “everyone answered”. Therefore this has a specific fixed meaning which can be called a formulaic sequence in Wray’s (2002) framework, which has been observed frequently in EL items so far. The Japanese verb “*dekiru*” which subsumes under “do-construction” verbs and accommodates Japanese verbal-nouns and singly occurring English verbs (see 2.2.2) also takes the English NP. Therefore we can interpret “nine in a row” *deki-ta* as an extension of the mixed verb construction.

3.2.2 English VPs as EL islands

A typical Japanese “do-construction” is “[] *suru*”(do[]). In the last section we observed an EL island NP inserted in the slot with “[] *dekiru*”. In 2.2.2 we have seen another phrasal constituent VP (V+NP) as follows.

(46) T>F : *Yooshi keep an eye suru-zo*
Well do-FP
{Well, I’m really going to keep an eye on you}

This shows that not only verbs but also VPs can be inserted into a “[] *suru*” construction. The phrase “keep an eye” seems to come from “keep an eye on you”. Therefore it is part of the formulaic sequence.

Another EL VP “glow in the dark” occurs in the different kinds of ML slots. Here the speaker is talking about a toy which has a luminous eye.

(53) T>F : *Mummy ni glow in the dark ni naru-tte iwa-na-akan*
 DAT RSL become-QT tell-MOD
{I must tell Mummy that it glows in the dark}

(88) T>F : *kono me ga glow in the dark*
 this eye NOM
{This eye glows in the dark}

(89) T>F : *kono masuku o toru to glow in the dark*
 this mask ACC take CONJ
{If you take this mask, it glows in the dark}

This VP appears in a slot for words (53), VPs (88) and clauses (89). The Japanese frame “[] *ni naru*” is

known to accommodate Japanese adjectival nouns and loan word adjectives (see 2.1.3.2 and 2.2.3). In this study English verbs including phrasal verbs occur in the slot (2.2.3). Are English verbs and VPs employed as adjectives or adjectival nouns in a Japanese frame? Regarding the VP “glow in the dark”, it functions as an adjective in monolingual English usage, e.g. “a glow-in-the-dark sticker”. The VP has become formulaic and is recognized as a single word. In (88) and (89) it functions as the main verb. In both examples, the phrase “glow in the dark” is not inflected and no Japanese morphemes are attached therefore it can be called the bare form. After this conversation with his father, the speaker turned to his mother and uttered the following clause.

(90) *Mummy, this eye glows in the dark*

The “s” signifying Subject- Verb agreement is attached to the verb “glow”. This element is the archetypal outsider late system morpheme. If “glow” occurred in this form in (88) and (89), it would be difficult to decide which language is the ML⁴¹. Therefore the bare forms in (88) and (89) shows that the ML is Japanese and the EL is English. The interlocutor is his father thus he consistently uses Japanese as the ML.

The following example is also from a conversation with his father. He is watching a TV programme and commenting on it. The Japanese focus particle “*dake*” (only) accommodates Japanese VPs as well as nouns, therefore the English non-finite VP “just playing dead” is well-formed in this slot.

(91) T>F : *Just playing dead dake da*
 FOC COP
 {They are jus playing dead.}

One might call the English adverb “just” and the Japanese focus particle “*dake*” double morphology or doubling but the ML-Japanese takes two items meaning “just”, e.g. “*tada (just) shinda huri o shiteiru (playing dead) dake(FOC: just) da (COP)*”. Hence we can’t decide whether this is an example of double morphology or not. Of course “play dead” is formulaic and he might have chosen this phrase his English lexicon because of the lexical gap in his Japanese lexicon.

4 Problematic Data

In this section we will examine the data excluded from the analysis in 2 and 3. As mentioned at the beginning of 2, the presence of outsider LSMs and the correct morpheme order in both English and Japanese parts make the ML-EL distinction difficult because both languages can be identified as the ML. There are several accounts for those forms. 1) They show the limit of the MLF model therefore additional different scopes are needed. 2) They are not the insertional CS but the alternational CS in Muysken’s (2000) typology and the ML is shifted from one language to the other. The MLF model and the two principles which are designed to explain the intra-CP switching are not able to account for the extra-CP switching. Now we will explore the data classified into four patterns.

⁴¹ Indeed in (89), CS occurs at the boundary of the CP, therefore this is an example of inter-CP switching, which should be treated differently from insertional CS and the ML itself switches.

4.1 Inflected Verbs and Adjectives

When verbs (and also adjectives in Japanese) are inflected, there is a strong possibility that the inflected part is an outsider LSM because its form is decided structurally. The following clause is observed when Ellis saw a zone for pedestrians in the middle of the road.

(92) E>F : *Soko wa moo trapped ya*
 there TOP now COP
 {That place is already trapped}

The Japanese topic marker “*wa*” and the copula “*ya*” are Outsider LSMs. The verb comes at the final part of the clause which complies with the constituent order of the Japanese language. The ML is clearly Japanese. This clause is uttered by Ellis and the addressee is his father, which means he is closer to the monolingual (Japanese) language mode. When the two siblings interact with their father, the unmarked CS pattern is Japanese ML + English EL. Is the occurrence of the inflected verb form “trapped” problematic? In this case, “-ed” doesn’t mark the tense but the aspect. Here “trapped” means “someone will be trapped”. That is the passive voice, therefore “trapped” is the past participle form. The participle suffixes add conceptual information to the content morphemes and are classified as early SMs. The insertion of the Early SM and Content morpheme combination doesn’t violate the System Morpheme principle.

The following example has already been introduced to show that, in the Japanese language, adjectives and verbs are similarly inflected with the past tense suffix “*ta*.”

(28) E>T : *now toast (.) is deki(.) deki-ta::: is hayakat-ta*
 make-PAST quick-PAST
 {Now toast has been made, it was quick}

Here the tense, which can be classified as an outsider LSM is not expressed in the English copula but in the Japanese inflected verb and adjective. This is evidence that the copula isn’t working as an outside LSM. Then what is “is”? It seems to function as the Japanese topic marker “*wa*”. Is “is” inserted as an EL item with the discourse marker “now”? We have other examples of the use of “is” in the place of “*wa*” and we will look at them later.

The following examples show other kinds of inflections.

(93) T>E : *but you’re (1) you’re yar-are-sou*
 beat-PASS-seem]
 {but You seem to be beaten}

(94) T>E : *You know because you’re still iki-teru*
 live-PROG
 {You know because you’re still alive}

(95) T>E : *You can do ganbar-eru Ellis ?*
 try hard-can
 { You can try hard , Ellis}

(Azuma 1996, Nishimura 1997, Takagi 2000). This is a threat to the MLF model since the model is founded on the premise that when CS occurs, the bilingual CP has an asymmetrical structure. Indeed (93) is a reformulation. The speaker thinks he is talking to his mother and starts the clause in English but in the middle of the clause he realizes that his father has come to see him and restarts the clause in Japanese. Reformulation is a common strategy in CS (Auer, 1995). Therefore both languages are the ML. Myers-Scotton's frame work explains this as inter-CP Code switching, i.e. two clauses switch and Muysken's typology alternation fits this structure. (93) is the obvious case of reiteration because of the contextual information that he changes the language according to the interlocutor. Nishimura (1997:139) explains this structure as the reach-out strategy from the functional point of view. When a bilingual speaker talks to two different monolingual speakers, s/he tries to communicate with the both addressees and employs this repetition strategy. The previous example (92) occurs when he is talking to his father who is normally his Japanese interactant. This utterance occurred when they visited his Welsh grandmother's house. Everyone except for his father speaks English there. He naturally starts speaking in English and notices the interlocutor is his father and switches to Japanese at the word "*goorukeepar*". He had just started playing soccer in Japan hence he only knows the Japanese word "*goorukeepaa*" instead of the English "goal keeper". This word might have triggered the other Japanese part. We can see formulaicity in "I want to be" and "[]*ni nari-tai*". By exploring the role of formulaicity, this structure might be clarified.

4.3 "it's []" structure

The most frequently occurring frame in the corpus is the "it's []" structure. 106 out of 340 clauses are observed. If we look at the inside of the slot 23 clauses are nouns, NPs and adjectives. These are subsumed under the singly occurring EL form or the EL island. 64 clauses, however, have inflected verbs or adjectives, VP (V+NP/PP) or IPs. As shown in 3.1.1.4, "it's" has the copula "'s", the outsider LSM, and it seems to be functioning as the ML frame when nouns, adjectives or some NPs are inserted. In (69) the NP "bishop-*no dai pinchi*" fits in the ML frame "it's [Predicative NP]". The ML-EL distinction is clear with this example.

(69) T>E : **It's bishop** *no dai- (.) pinchi*
 GEN BIG-crisis

In (81) the morpheme order of the whole clause seems to indicate that English is the ML.

(81) T>E : **then it's more** *hikari o*
 light ACC
 { then it's (that I need) more light }

Nevertheless the internal EL island "*hikari-o*" has the outsider late system morpheme "*o*" which makes the distinction of the ML-EL difficult. If we turn to verb or VP insertion, the role of "it's" is further weakened. Our analysis was that this phrase is formulaic and occurs as an internal EL island after the quantifier "more". As we have seen in the last section, if the Japanese part has a tense particle, i.e.

outsider LSM, it is extremely difficult to argue that “it’s” is the ML.

(94) T>E : It’s *minna waru-ku nat-ta* except for *sono futari* right?
 everyone bad-ADV become-PAST those two
 { Everyone became bad except for those two, right?}

Here, if the ML is English, the frame is “it’s [] except for [] right?” which is fine with the MLF model’s principles. On the other hand the Japanese phrase in the first slot is an IP and the tense is expressed with the outsider late system morpheme “*ta*”. Japanese can be the ML as well⁴². Three explanations are possible here.

1) As suggested in (3.1.1.4), the IP is a formulaic sequence as well as the NP “*hikari o*” and is treated as if it were a single word. We have seen that formulaicity could be a key to support the MLF model through this chapter, the problem is, however, the criteria to decide what is formulaic or not is not established. At the moment just subjective and descriptive comments are made. This will be the theme of the next chapter.

2) “it’s” might not be the ML. If the examples above are closely examined, “it’s” is almost a dummy. “it” doesn’t refer to any thing and the past tense isn’t expressed. In most cases “it’s” is put at the initial position (94) or right after a discourse marker (81). Normally it works as subject + finite verb which accommodates the predicative NP or adjective after that. Nevertheless it drops that role and gains the role of a discourse marker with the function of CS indicator. The discourse marker is categorized as a content morpheme in the MLF model therefore it can be inserted as EL items.

Karrebæk (2003) points out the special status of initial constituents which are relevant to point 1) and 2) above. They are often followed by CS and are not integrated propositionally or grammatically. There is “a striking correlation between this extrasentential position and a small heterogeneous group of words with the special discourse function of encoding the speaker’s attitude” (*ibid.*:436) She also indicates that the initial position is “the canonical position of holophrases, that is, grammatically unstructured linguistic forms serving as whole utterances”(*ibid.*). She gives account for the function of the initial constituents as follows.

It seems probable indeed that it be effective communicatively to initiate a turn with an independent linguistic construction which indicates that the speaker has an opinion (about certain matters), and that important information is to follow. (*ibid.*)

Although the MLF model includes discourse markers as one subcategory of the content morpheme, it is based on the morphosyntactic structure and the discourse elements are not accounted for extensively. The role of discourse markers in the CS should be the theme in one of the following chapters.

3) This can be the composite CS. The ML frame consists of two languages. Since the speakers are still in the process of language acquisition, this possibility cannot be denied.

⁴² Notice the nominative marker “*ga*” is omitted after “*minna*”. The ellipsis of nominative marker occurs often in conversational Japanese.

4.4 “[]is[]” structure

Furthermore “is” alone has the same problem. The archetypal outsider LSM, “is” is used extensively in the bilingual clause.

- (86) E>T : *Windom is warui to yasashii*
 PropN bad and good
 {Windom (monster’s name) is bad and good.}

In (86), it works as the copula and there aren’t any problems. However in the following example, it doesn’t work as the copula.

- (95-a) T>E : *e is kai-ta zo*
 picture draw-PAST FP
 { I painted a picture }

- (95-b) *e wa kai-ta zo*
 picture TOP draw-PAST FP
 {Talking about the picture, I drew it. }

It is reasonable to regard (95-a) as a clause consisting of the Japanese ML frame and the English “is” used as the topic particle. This can be explained as a phenomenon of convergence. Both “is” and “wa” come at the second position and usually Japanese second language learners of English consider they are cognates. Therefore they put the copula after the subject excessively in English, e.g. *I am eat lunch. The two siblings can use the Japanese topic particle “wa” and English copula “is” correctly. Therefore this misuse of “is” is only observed in their CS utterances. This might be another CS indicator.

As mentioned in terms of Halliday’s SFG, the information structure can be a cue for CS. Theme or topic can be a factor of motivation for switching. Since the current ML-EL distinction is based on morphosyntax, we need to explore whether there is any relation between the information structure and the ML-EL distinction. This is crucial in analyzing the Japanese language since the information structure is overtly expressed in the morphosyntax in Japanese, e.g. the topic particle “wa”.

4.5 “it’s [] is []” structure

The two problematic patterns “it’s []” and “[]is[]” explained above are sometimes combined as follows.

- (96) T>E : *And it’s shurikenjaa is waru-ku nat-ta too*
 PropN bad-ADV become-PAST
 {and then *shurikenjaa* (super hero’s name) became bad, too}

- (97) T>E : *For Marlin it’s oyo-ideru toki-ni boonasu hitode is gon te butsukat-ta right*
 swim-Prog time-at bonus starfish ONM QT bump-PAST
 {For Marlin, when he was swimming, a bonus starfish (game character) bumped into him “gon” right?}

- (98) T>E : *Oh (.) then it’s (.) naka-ni hait-teiru hito is shin-da right?*
 inside-at enter-PROG person die-PAST
 {Oh then the person inside died right?}

The combination of the two patterns doesn't make things more complicated but shows the role of English and Japanese more overtly. As observed before "it's" and "is" are semantically and grammatically empty. "is" seems to be used as a topic marker. The semantic message seems to be expressed by Japanese. On the other hand the discourse message is expressed by English. The sentence final English words also contribute to the construction of the pragmatic discursal message. If we follow the MLF model, Japanese might be the ML and English might be the EL. For the outsider LSMs "is" and "it's" to occur as EL items, formulaicity account is needed.

5 Summary

In this chapter, we have scrutinized the two siblings' CS data from the perspective of the MLF model. The items we have examined can be put in a continuum according to the activation of ML and EL in the EL. The ML end should be borrowing because the inserted item belongs to the ML. The more an inserted item is integrated into the EL, the closer to the EL end the items is put. The other end-the EL end should be alternation because the inserted item is too far integrated into the EL and it can't be called the EL any more.

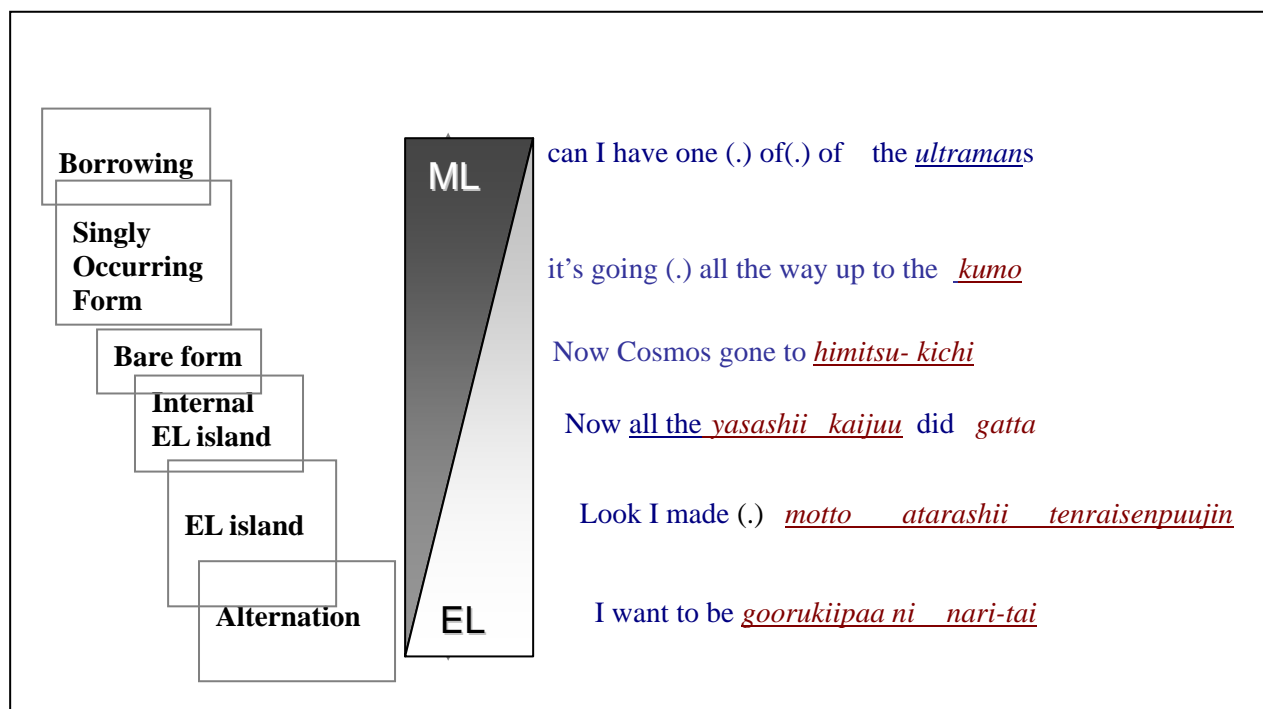


Figure 4.5 Activation of the EL and ML in the EL

The answer to the question of whether borrowing and the singly occurring form can be distinguished or not can be drawn from here. Some borrowed forms are well established in the ML. They are morphologically and phonologically fully integrated. Nevertheless the ML integration can vary. Some singly occurring EL forms are fully integrated into the ML and it is impossible to distinguish by the form. In this study the existence of the cognate is employed as the criterion for checking CS- borrowing distinction. Some singly occurring forms show less ML integration. The bare form is such an item.

Owens (2005) proposes that the bare form should be recognized as “a third broad category”⁴³. In our corpus the bare form is frequently observed especially when Japanese nouns are inserted into an English ML frame. The overt reason for this is that Japanese NPs don’t require determiners.

EL islands are put toward the EL end of the continuum because they are more integrated into the EL compared to the singly occurring form. Still there is a variation in the ML integration. Internal EL islands can be put in the continuum between the single form and the fully integrated EL island.

Further strong evidence showing the relation between borrowing and CS is some frames which are originally employed to accommodate loan words. For example the “do construction” and “[]*suru*” frame. In Japanese, this frame accommodates verbal-nouns and loan verbs. This offers strong predictions that Japanese verbal-nouns occur in the English do-construction and that the “[]*suru*” frame will accommodate English verbs. This is supported empirically in our corpus. The insertion of verbs is not as straightforward as nouns because verbs “not only have their own semantic content, but they control the number and type of nouns that are present as ‘arguments’ in a clause”(Myers-Scotton, 2006). The do-construction seems to alleviate the burden of complicated verb insertion and is employed extensively whether the ML is English or Japanese.

The Japanese adjectival-noun frame “[]*ni naru*” also functions as loan adjectives accommodator. The fact that the same ML frame accommodates loanwords and EL items shows that the two phenomena go through the same process. Since the Japanese language has the systems, e.g. the three script writing system, verbal-nouns and adjectival nouns, to accommodate loan words due to its long history of taking them in, occurrence of CS items in the same slot is highly predictable.

The new sub-model of the MLF model, the 4M model has been efficient in examining the System Morpheme Principle in which the EL outsider LSMs’ occurrence is not allowed in the ML frame. Japanese is an agglutinative language and a great number of particles and morphemes are attached to content morphemes. As Myers-Scotton points out, EL early SMs, e.g. present and past participles in English and honorific prefixes in Japanese, occur frequently with their head content morphemes in our corpus. A bridge LSM “*no*” (of) also occurs as part of frames. It appears in two forms. 1) “quantifier + *no* []”. 2) “[] + *no yatsu*” The EL items which have outsider LSMs, e.g. the accusative and nominative particles and the tense suffix in Japanese, and the copula in English are problematic, because the existence of outsider LSMs is the sign of the ML and it is difficult to decide which language is the ML.

The two problematic frames “it’s []” and “[]is[]” are frequently observed. Although copula “is” has the characteristics of the outsider LSM in the English monolingual clause, the two forms seem to be formulaic and have a discourse function. The MLF and 4M model classifies discourse markers as content morphemes because they assign thematic roles at the discourse level and can occur as EL items.

⁴³ 1. Processing time increases with decreasing lexical frequency.
2. Processing of bound inflectional morphology is more demanding than processing whole words, as measured by reaction time to a given stimulus.
3. When code-switching, speakers basically maintain the same rate of speech as when they are speaking in a monolingual mode. (*ibid.* 30-31)

Our focus is on the morphosyntactic structure of CS and the pragmatic - discursal aspect has been regarded as a separate aspect (Romaine-1995, 121). Nevertheless the Japanese language overtly expresses pragmatic and discursal items and the functional account is necessary. As Karrebæk argues (2003:407), both form and function of language are essential parts and shouldn't be analyzed separately. Functional grammar which focuses on the pragmatic and discourse structure of language, e.g. Halliday's SFG should be explored to support the morphosyntactic based model.

Why do some EL items occur as a single item and others as an EL island? Myers-Scotton and Jake accounts for the EL island as "the radical solution to a mismatch" (1995/2000:306). That is a lack of congruence between the EL material and the ML slot causes the occurrence of the EL island as a compensatory strategy. From the observation of our corpus, formulaicity seems to play a salient role. Backus (2003) proposes the "unit" hypothesis saying "Every multimorphemic EL insertion is a unit, inserted into a ML clausal frame". Myers-Scotton (2002) cites Backus's notion of "unit" and indicates that "there are no clear bounds on those combinations that are conventional and those that are not" (2002:141) whereas she emphasizes (2006: 263) the importance of formulaicity in EL islands arguing "Many of the Embedded Language islands can be considered collocations, combinations of words that often appear together as single phrase". The problem with formulaicity is identification. If we can establish robust criteria for the identification of formulaicity, it will be applied to CS and solve some puzzles we confront at the moment.

In this chapter, the MLF model and the 4M model are applied to the two siblings' CS data. As we have seen, the continuum between the singly occurring form and the EL island can be set as the framework to explain the structural perspective of code-switching but additional accounts is needed. In the next chapter, the frame work of formulaic language is explained and applied to our CS corpus.

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