

Japanese/English Code-mixing

Part I: Language Assignment

Cynthia Patschke

Abstract:

この論文では、コード混合データを分析する際の統語的問題を考える。議論では、書記および発話に見られる日本で育ったアメリカ人二言語使用者による日本語・英語のコード混合のデータを対象とする。まず基底言語の決定の問題を取り扱う。データが示すように、構成要素の配列に従って基底言語を決定することが多くの文において実に困難な問題となっている。構成要素がお互いに一致しない節を占める不適合を調べ、その存在を立証するために、仲介節が必要となることを述べる。それらは、身体や精神に関する表現、擬態語、所有を表わす「の」などを含んでいる。我々のデータにてらして、Nishimura (1985) の、交替不可能なものの表を調べたところ、使われている語彙素に関係無く、構成要素配列によって基底言語が決定されていることが明らかになった。しかし、後置詞、助動詞、関係代名詞のようないくつかアイテムは、埋め込まれない傾向にある。

Contents

1. Introduction
 - 1.1 Statement of Purpose
 - 1.2 Subjects and Data
 - 1.3 Terminology
2. Literature Review
 - 2.1 Linear vs. Hierarchical Approach
 - 2.2 Constraints and Generalizations
 - 2.3 The Japanese Language Typology
3. Language Assignment
 - 3.1 Subject-Predicate
 - 3.2 The Use of Discourse-related Elements
 - 3.3 Topic-Comment Sentences
 - 3.4 Overlapping Clauses
 - 3.5 Complex and Compound Sentences

4. Mismatches
 - 4.1 Expressions of Body and Mind
 - 4.2 Mimetics
 - 4.3 Genitive *no*
 5. Nishimura's Nonswitched and Nonswitchables
 6. Conclusion
 - 6.1 Determining the Matrix
 - 6.2 Readdressing the Terminology
- List of Abbreviations Used in the Glosses*

1. Introduction

1.1 Statement of Purpose

The use of two or more languages in a [bi] lingual community of speakers is generally referred to by linguists as *code-switching*. While acknowledging that this is the common term used, I will be making a distinction between *code-switching* and *code-mixing*. In this Part I: Language Assignment, I will discuss issues that make determining the language base a sometimes arbitrary and futile task, and thereby advocate the distinction of these terms. I hope to do so by reviewing influential literature on code-mixing, and responding to it with data from my own research on Japanese/English written and spoken code-mixing by American bilinguals raised in Japan. In particular, I will discuss Nishimura's (1985) work at some length to highlight syntactic considerations in determining a base language.

In Part II: Sublexical Switching, next issue, Myers-Scotton (1990) will be reviewed for morphological considerations in analyzing data involving switches across morpheme boundaries.

Other terminology particular to this topic is discussed in 1.3 below.

All code-mixed sentences used in this study are from the corpus described in 1.2 unless otherwise noted.

1.2 The Subjects and Data

Though the postwar "missionary kids" in Japan varied in their

bilingual abilities, they had a general tendency to speak Japanese to their parents even when being spoken to in English once they became sociable outside the home, e.g. in kindergarten. Most went to Japanese kindergartens and then were sent to the closest international school for grade school where English became their dominant language. These international schools staffed mostly monolingual teachers (either Japanese or English) and had rules which prohibited code-mixing in the classroom. However, socially, among the missionary kids, code-mixing was the norm, and helped to define their sub-culture.

As the data will reflect, these missionary kids often exhibited a hostility towards America and a loyalty toward Japan. Perhaps it was their way of fighting against their 'foreignness'. On the other hand, there is some indication that there was a rejection of the sociolinguistic expectation of female speech among the female missionary kids. Perhaps as a way of neutralizing the Japanese language system which has a complex set of features to mark social hierarchy, the female missionary kids in this study spoke the language expected for males in an informal setting. To a Japanese bystander it may be considered not only lacking in respect, but at times vulgar, especially in the junior high years. The kind of code-mixing described in this paper was a major part of what formed a kind of sub-community which excluded not only monolingual 'business kids' who occasionally came for a year or two, but also Japanese school children.

The data include utterances from letters, notes, and tapes exchanged between three female missionary kids from fourth grade through twelfth grade. The portions of the letters written in the Japanese writing system are treated as Japanese and the portions written in the Roman alphabet are treated as English. Personal names have been altered to protect identities.

1.3 Terminology

With a quick overview of the literature on code-mixing, it is immediately evident that there is disagreement concerning the terminology used for discussing this phenomenon. It would be appropriate,

then, at this point to define the terms used in this paper.

Switching refers to a lexical switch from one language (L1) to another (L2) in the linear production of speech, regardless of the constituent structure. However, those specified as a **syntactic switch** refer to the juncture point at which one language constituent ordering changes to another language constituent ordering regardless of the language of the lexemes.

Mixing refers to the use of lexeme or lexemes from one language within the constituent structure of another language.

Code-mixing refers to the variety of language use within a bilingual community in which two or more languages are represented lexically and/or syntactically within the same speech act. This includes the use of lexical items from one language within another language's syntax, or two languages conjoined at a juncture point (be it clausal or phrasal).

Code-switching refers to the complete switch, both lexically and syntactically, from one language to the other, be it from one sentence to another, or from one main constituent to another. "Main constituent" here is defined as those constituents which play a major role in determining the language type, such as an adjunct, NP, or VP. It should be noted that this use of 'code-switching' is in accordance with Gumperz (1982), and not Myers-Scotton (1990).

Hybrid sentence refers to the coherent sentence which has at least one element, be it a constituent (at any level), or a non-syntactic bound morpheme from one language, combined with one or more elements from another. Hybrid sentences may contain switching or mixing, or both.

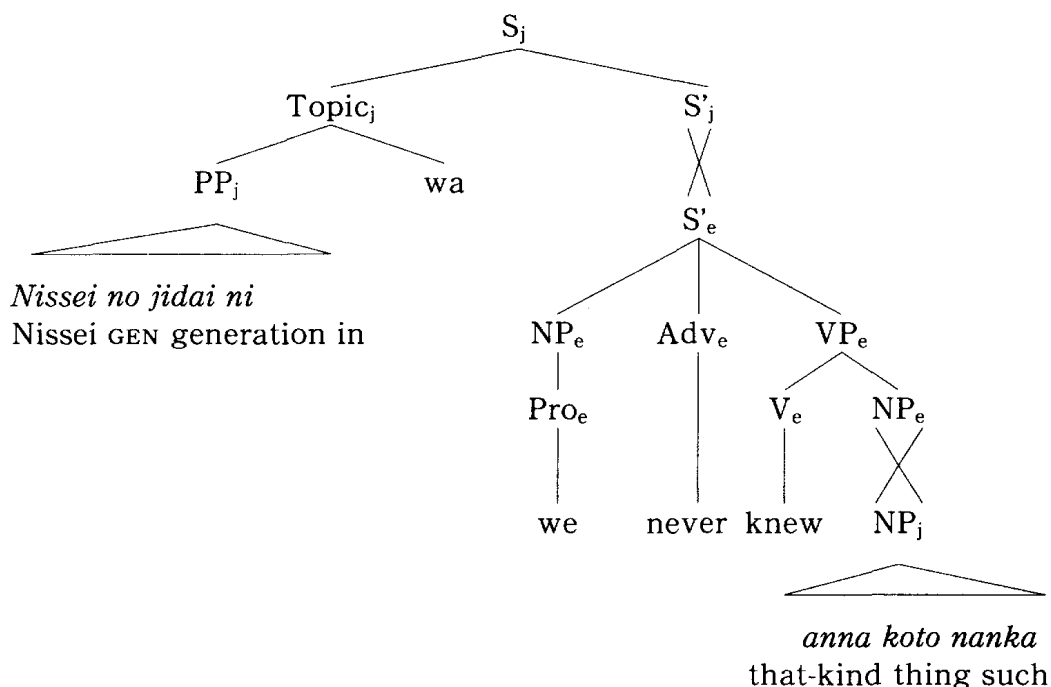
The terms **matrix** and **embedded** are applicable where the constituent ordering is clearly one language and not the other. If the highest S node is undoubtedly and only L1, based on the constituent ordering of the nodes immediately below it, that is the matrix language of the sentence. The highest constituent which has an internal structure foreign to the matrix is called the **embedded constituent**. Embedded constituents rule their own internal structure.

2. Literature Review

2.1 Linear vs. Hierarchical Approach

In this section I will discuss the two approaches to code-mixed data. The early works assumed a single language base and switched items were listed and analyzed statistically. An example of a model is presented below in figure 1. (The j = Japanese, e = English, and the elongated X's represent a switch.)

Figure 1.



'In the generation of Niseis (second generation Japanese Americans) we never knew such things as that.'

[Nishimura, 1985, p.77, gloss and translation mine]

Though most all of the researchers take a hierarchical approach to analyzing code-mixing data, Poplack (1978) and Poplack and Sankoff (1980) take a linear approach, illustrated by figure 2.

Figure 2.

A.	Eng:	I	seen	everything	'cause	I	didn't	take	anything
		↓	↓	↓	↓	↓	⊗	↓	↓
B.	Sp:	Yo	vi	todo	porque	yo	no	cogi	nada.
C.	CS:	I	see	everything	'cause		no	cogi	nada

[Sankoff and Poplack, 1980, p. 6]

This approach has sparked much discussion on the mechanics of code-mixing. What are Poplack and Sankoff's reason for rejecting the hierarchical approach?

... to postulate that one or the other of the monolingual grammars is basic to any particular sentence... does not seem pertinent to the East Harlem situation... Many cases this was arbitrary... What is more consistent with the data is simply to allow the possibility that in the uttering of a sentence, the rules used to construct its constituents may be drawn at times from one monolingual grammar and at times from another. Thus in what follows, neither the root S node of a phrase structure tree, nor the NP, VP, etc nodes must be identified as to language, though some of them necessarily will. (Sankoff and Poplack, 1981, pp. 11-12)

Poplack and Sankoff and Poplack reject the hierarchical approach based on the fact that it was not clear in their data which grammatical structure the constituents were in, since most of their early work was on Spanish/English which are structurally very similar. Data of two languages which are dissimilar, however, necessitate a language base of at least one language to license the word order. Clearly, the data show a systematic use of syntactic components of two languages used within the same utterance. However, assigning the language base is not always a simple matter, and regarding cases of arbitrary language base, Sankoff and Poplack have a valid point. The problem of language assignment will be taken up further in section 3.

2.2 Constraints and Generalizations

Table 1 lists prominent code-switching and code-mixing research in the early years. As can be seen, the first five years concentrated on Spanish and English; the next ten years saw pairs of languages with differing basic structures, and finally, more recent research has taken into consideration a variety of data. This is important for understanding the generalizations and constraints drawn from their research: first, from languages which were very similar in their underlying constituent order (SVO), then later, from the mixing of languages typologically different. Most recent studies claim to take into account all available data.

Table 1.

Authors	year	languages mixed
Timm	(1975)	Spanish/English
Lipski	(1978)	Spanish/English
Poplack	(1978)	Spanish/English
Pfaff	(1979)	Spanish/English
Sankoff & Poplack	(1980)	Spanish/English
Woolford	(1980)	Spanish/English
Joshi	(1981)	Marathi/English
Nishimura	(1985)	Japanese/English
Romaine	(1986)	Panjabi/English
Clyne	(1987)	Dutch/English, German/English
Bokamba & Kamwangamalu	(1987)	KiSwahili/English, Lingala/French
Bokamba	(1989)	Various
Myers-Scotton	(1990)	Various
Azuma	(1991)	Various

Over the years, various syntactic constraints have been proposed for the data. Timm (1975), proposed five “syntactic limits” on her Spanish/English code-mixing data. Switching was ruled impermissible—

1. between prenominal subjects or objects and the finite verbs to which they are immediately adjacent;
2. between finite verbs and adjacent infinitive complements.
3. within verbal constructions containing auxiliaries and main verbs.
4. within negated verb sequences.
5. within some N(oun) P(hrase)s containing one or more Adj(ective)s and a Det(erminer)

Lipski (1978) drew generalizations from Timm’s observations and proposed a hypothesis which he tested against his own data, also Spanish/English:

Given the underlying semantic representation of S, let x_1 and x_2 be the actual realization of S in L_1 and L_2 respectively. Furthermore, for any p_n in x_n (where $n = 1$ or 2), let a_n indicate that portion of x_n lying to the left of p_n and b_n that portion of x_n lying to the right of p_n . In order to produce a codeswitched utterance by combining x_1 and x_2 with a break at p_1 and p_2 , it is necessary that b_1 and b_2 be syntactically equivalent. (257–

258)

This may be better understood with an illustration of this hypothesis as shown in figure 3.

Figure 3.

- (a) $[S_1 [x_1 \quad [a_1 \quad]]] p_1 [x_1 [b_1 \quad] \quad]]$
 (b) $[S_2 [x_2 \quad [a_2 \quad]]] p_2 [x_2 [b_2 \quad] \quad]]$
 (c) $[S_1 [x_1 \quad [a_1 \quad]]] p_{1/p_2} [x_2 [b_2 \quad] \quad]]$

In this figure, (a) represents a sentence in L_1 , and (b) in L_2 . The hybrid sentence is illustrated in (c). The b_2 of (b) must be syntactically identical to b_1 of (a) in order to produce (c).

Another attempt at reducing observed constraints into one general structural constraint was made by Pfaff (1979), who determined that switches favored surface structures common to both languages. Therefore, two constraints that arose out of her data on Spanish/English code-mixing focussed on the clitic pronouns and the noun phrase which contained a determiner, noun, and adjective, since these structures were not shared by English.

Similarly, Poplack (1979), proposed two constraints, one of which is the *Equivalence Constraint* reproduced below¹.

Codeswitches will tend to occur at points in the discourse where juxtaposition of L_1 and L_2 elements does not violate a syntactic rule of either language, i.e., at points around which the surface structures of the two languages map on to each other. (p. 1)

Woolford(1983)'s claim was that lexical insertion is free in nodes created by phrase structure rules common to both languages.

So far, all the constraints postulated imply that *shared constituent ordering* is key to allowing switching. And all the studies from which these constraints arose, are in fact, Spanish and English which share the basic S (subject) – V (verb) – O (object) order. Bokamba and Kamwangamalu (1987) and Bokamba (1989) show that these constraints do not hold up against code-mixed data of language pairs in

which the constituent ordering is not always shared, yet successfully mixed. Their review will not be repeated here, however, I hope to show how one example in Japanese/English code-mixing can invalidate these constraints (1):

- (1) Olympics *no hito-tachi mo* flu *o* catch-*shita* *sooda*, Austria *de*
 GEN people-PL also ACC do-PAST seems in
 'It seems that even the Olympians (people of the Olympics) have
 caught the flu, in Austria.'

In (1), the noun phrase "Olympics *no hito-tachi*" contains a constituent ordering of modifier-head, with the modifier followed by a postposition. The predicate phrase here is OV, following the Japanese constituent ordering. "Flu" is in object position, preceding "catch-*shita*" which is in the verb position. Within the verb, the English verb precedes the Japanese helping verb, which is the reverse of the English constituent ordering; the adverbial tag contains the noun first, and then a postposition. So here it becomes evident that English is in fact code-mixed with a language which doesn't share any of the constituent ordering spoken of in the proposed constraints.

I will now turn to the postulations which arose out of code-mixing languages with different constituent ordering.

Sridhar and Sridhar (1980, as reported by Bokamba, 1989) created the *Dual Structure Principle* which states:

The internal structure of the guest constituent [i.e. embedded] need not conform to the constituent structure rules of the host [i.e. matrix] language so long as its placement in the host sentence obeys the rules of the host language. (p. 412)

Joshi (1984), postulated an *Asymmetry Condition*, based on Marathi/English code-mixing, which claims that the matrix remains constant, and in his case, from Marathi to English. In addition, he determined that so-called "closed class items" (determiners, quantifiers, auxiliaries, prepositions, postpositions, possessives, tense, helping verbs, etc.) cannot be switched.

Nishimura (1985), who worked with Japanese/English code-

mixed data from Japanese Americans in which the L_1 matrix contained L_2 embedded constituents and vice versa, formulated a hypothesis which she claims to have worked successfully under: "When switching takes place between constituents whose order is possible only in one language, that language is the language of the sentence" (p. 48).

Bokamba (1989), based on KiSwahili/English and Lingala/French code-mixing data, argues that the constraints posited thus far tend to be specific to that code-mixing community with no universal value. While Bokamba concluded that constraints were impractical, he also made clear that Sridhar and Sridhar's Dual Structure Principle failed on the account that it allowed sentences rated unacceptable. If there are examples which are considered unacceptable, it stands to reason that there are in fact restrictions on the way the languages can be mixed. However, by subscribing to a hierarchical approach in which a matrix language is named, and in which that matrix language governs its constituents, Bokamba is able to avoid postulating any constraints.

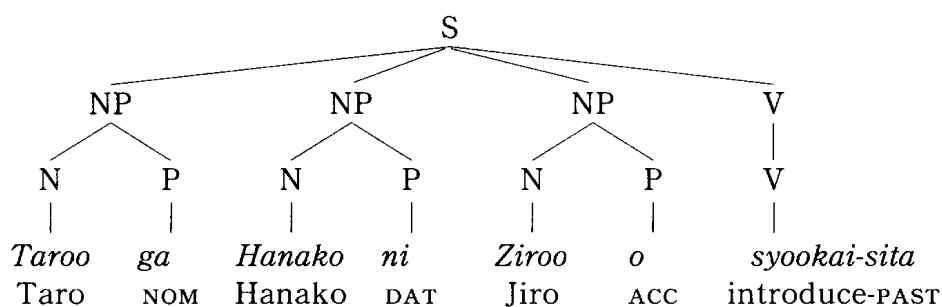
Myers-Scotton and Azuma (1990) also expand on the notion of the matrix language, developing theories based on Garret's frame-based speech production model and Joshi's postulation of nonswitchability of closed class items. Myers-Scotton (1990) and Azuma (1991) both refine this theory independently, but also depend heavily on the notion of a matrix language and an embedded language (taken up in Part II).

Claiming a hybrid sentence to have a language base is sometimes simple, as in (1), which is undeniably Japanese. However, language assignment is not always as clear-cut as this. Nishimura (1985) raises various issues concerning language assignment in Japanese/English code-mixing data from Japanese Americans in Canada and the United States. I address these issues in section 3, in the form of a critical review, using data from my own research for argument. However, before going into a review of Nishimura, a few words about the Japanese language are in order.

2.3 The Japanese Language Typology

According to Shibatani (1990), grammarians disagree on the structure of Japanese. Some posit a verb phrase, while others propose a “flat”, or non-configurational structure for a non-topic sentence. Shibatani believes there to be no clear evidence for the VP constituent, and claims the configuration found in figure 4 to be justifiable.

Figure 4



‘Taro introduced Jiro to Hanako.’
 [Shibatani, 1990, p 281, gloss and translation mine]

According to Shibatani, this flat structure should not be taken to mean that all the NPs are equal to each other. Rather, they do vary in syntactic status, with the subject being most prominent. (However, McCawley (*p.c.*) claims that these NP’s posited by Shibatani may be justified better as PP’s as it is the postposition which determines the status of the noun.)

As can be seen, Japanese is a SOV language. Its word order of “dependent-head” is prevalent throughout the language (Shibatani, p 257). Smith (1978) points out that the constituent ordering in Japanese often mirrors that of English. This is an important factor when considering language assignment. Further information regarding the structure of the Japanese language will be provided as the need arises.

3. Nishimura on Language Assignment

As mentioned earlier, Nishimura worked under the hypothesis which states “when switching takes place between constituents whose order is possible only in one language, that language is the language of the sentence” (p. 48). This then leaves open a question of

what happens when the constituent order is possible in both languages. We will examine such examples.

3.1 Subject - Predicate

Both Japanese and English are subject initial. Therefore, Nishimura claims for sentences in which switching occurs after the noun, language assignment must be made on the basis of the presence or absence of casemarking particles (in Japanese). Nishimura claims that a Japanese NP without a particle is equivalent to an English subject NP. Therefore, in her example (2), the matrix language of the NP would be ruled as English, and (3), Japanese.

(2) *Kodomotati* liked it.

children

'Children liked it.'

[Nishimura p. 56]

(3) *Camp-seikatu ga* made him rough.

life NOM

'(That) camp-life made him rough.'

[Nishimura p. 57]

In her analysis, a Japanese subject marked with a postposition cannot be embedded into an English NP node, whether it be in subject position or object position. If we adhere to McCawley's Japanese structure, as opposed to Shibatani's, we find some rationale to this claim.

However, Nishimura does not consider the fact that Japanese has postpositional particle deletion in informal speech, common especially with sentence final particles², as in the Japanese example (4).

(4) *Yattyān (ga) asobi ni kita yo.*

Yat-chan NOM play for came, you know.

"Yat-chan came to play, you know.

Subject marking postpositional particle deletion (or for that matter, topic marker deletion as well) would still be permissible for a sentence without a sentence final particle as well, and therefore, the justification for claiming (2) to be within an English matrix for informal

speech is lost. Particularly, example (5) should be a possible Japanese PP structure with a null postpositional.

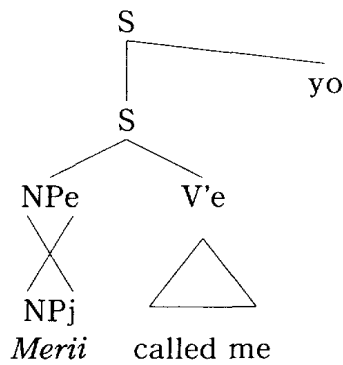
- (5) *Merii* called me *yo*.
 Mary you know
 'Mary called me you know.'

More importantly, if one takes the position that the Japanese typology involves a flat configuration, and that the verb phrase does not include the object NP, we have a problem. How does one embed a [PP(acc) + V'] into a VP, or a VP containing an object, into a V'?

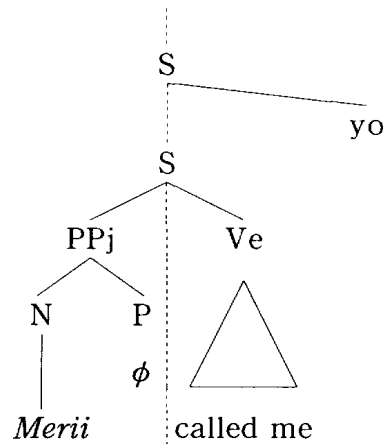
It would be possible to argue that this sentence is an example of code-switching, so that the subject was said in Japanese, and then the language was switched to English both lexically and structurally. So we see now that we have several options for analyzing this kind of hybrid sentence (see figure 5).

Figure 5

Code-mixing:



Code-switching:



In this case, the assignment of a matrix language is, in fact, arbitrary.

3.2 The Use of Discourse-related Elements

Nishimura divides the category of discourse-related elements into two parts: conjunctions and adverbs, e.g. (6) and particles (7), meaning sentence final particles².

- (6) *Dakedo* I don't like New York. [Nishimura, p. 65]
 but

- (7) He's in Japan *yo*. [Nishimura, p. 65]
 'I'm telling you'

Nishimura suggests that the Japanese elements in these sentences be treated as independent from the main clause. Rather than suggesting an adjunct position, she proposes to treat them as independent. If we were to include these elements as part of the matrix sentence, it becomes evident that the justification for the language assignment is lost, since sentence initial conjunctions and adverbs in Japanese and English share the sentence-initial adjunct position, and sentence final particles in Japanese share the sentence-final adjunct position of the English tags.

3.3 Topic-Comment Sentences

Nishimura uses (8) as an example to discuss code-mixing with topic-comment sentences.

- (8) Powell street *wa* we used to call it Little Tokyo.

TOP

'As for Powell street, we used to call it Little Tokyo.'

[Nishimura p. 71]

She proposes that all topic-comment sentences be treated as that of a Japanese matrix for the following reasons:

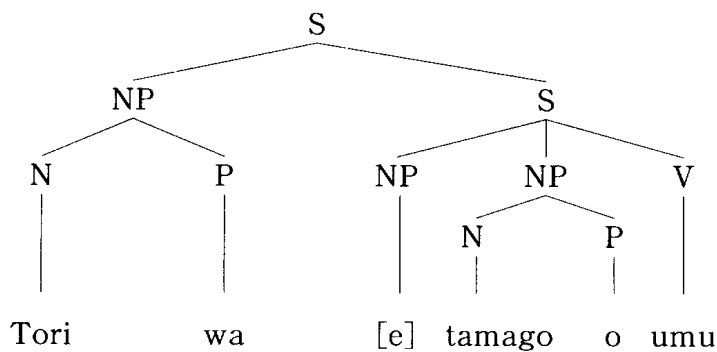
- i. Topic-comment structure is more common in Japanese than in English.
- ii. Some of the NP's marked by '*wa*' would be more natural as Japanese topics than as English topics in that they do not have the underlying NP in the sentence.
- iii. Japanese possesses topic markers; Japanese topics are PP structurally. English topics are NPs. In our approach, it is unacceptable to switch NP into PP..." (p. 80)

Do we have an argument to justify all topic-comment sentences as having a Japanese matrix? While point (i) is true, it does not constitute a syntactic argument, since left dislocation does occur in English. Her second point is also valid, yet the clause in (8) clearly does contain the

NP in the form of a pronoun, and therefore, could count as a complete and independent English sentence. Point (iii) justifies the topic adjunct to be syntactically Japanese, but does not necessarily imply that the matrix would have to be Japanese, unless the adjunct interacts with the comment.

To look at the case of the topic-comment sentences more carefully, it may be helpful to discuss various kinds of topic-comment construction in Japanese. Shibatani cites four kinds of *wa* -phrases. There are three subcategories of the topic construction, and then an adverbial+*wa* construction. The first kind is the prototypical topic construction in which the subject is missing in the comment clause, in (9), given the configuration in figure 6:

Figure 6.



[Shibatani p. 274]

- (9) *Tori wa tamago o umu*
 bird TOP egg ACC lay
 'A bird lays eggs.'

Examples of code-mixing within this kind of construction from my data include (10) and (11):

- (10) *Ore wa ima* trying to get up enough guts to call Mary *nano*.
 I TOP now COP
 'I'm now trying to get up enough guts to call Mary.'

- (11) John *wa kitto* kicked out of the country and put on an island
 TOP probably
 uninhabited or something.

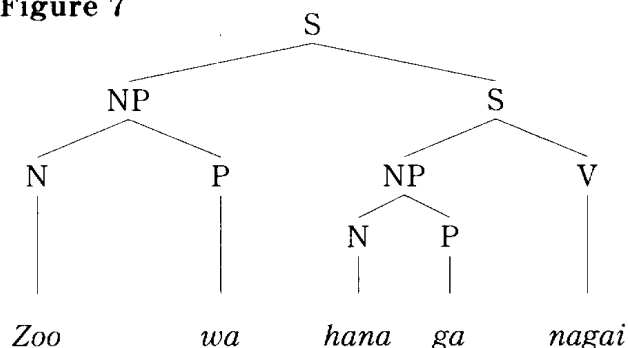
'John was probably kicked out of the country and put on an island uninhabited or something.'

According to Shibatani, this kind of topic construction is both semantically and structurally similar to the subject-predicate structure of English. He suggests that *wa* performs a kind of function similar to the indefinite article in English. So the resulting surface structure of this type of topic sentences poses the same kind of problem discussed with the subject-predicate code-mixing found above, regarding embedding of predicates. Another type is one which satisfies the *aboutness condition* which states that the topic must be something intimately related to the subject as in (12) diagrammed in figure 7.

(12) *Zoo wa hana ga nagai*
elephant TOP nose NOM long

'An elephant is such that its trunk is long.' [Shibatani p. 274]

Figure 7



[Shibatani p. 274]

Code-mixing of this kind is found in (13) below.

(13) Me *wa* the idea was so *Merii-mitai* you know, as I told you.
TOP Mary-like

'As for me, (I thought) the idea was so Mary-like you know, as I told you.'

This topic structure is different from the first in that the topic is not the subject of the main clause. Rather, the comment contains its own subject. It is this kind of structuring that will pose a problem with

language assignment in code-mixing, since the comment is a complete clause without any strings attached to the adjunct. Which do we say is the ‘matrix’? If we say that the mother node of the topic is the matrix, shall we say the same for other adjuncts?

A third type is one in which the empty element is other than the subject of the comment structure, as in (14) created for illustration.

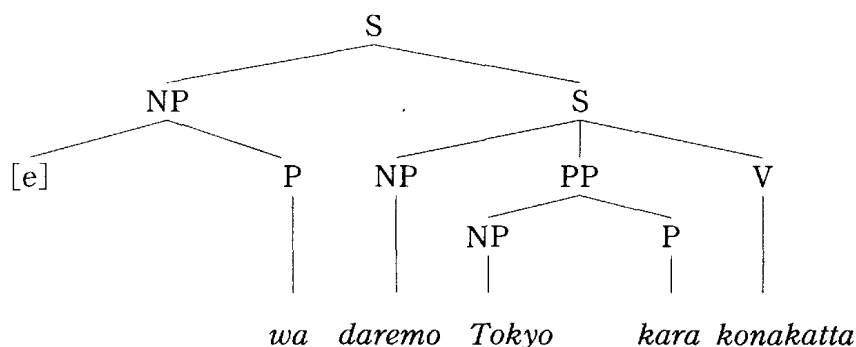
- (14) *Kono hon wa minna ga [e] yondeiru.*
 this book TOP everyone NOM read-PROG-PRES
 ‘This book is such that everyone is reading (it).’

This kind of structure is similar to the first in that an [NP + P_{nom}] is topicalized and the P is generally deleted when it receives the topic marker. Since there is an interaction between the topic and comment, this is a good candidate for claiming that it is of the Japanese matrix, were I to find an example of code-mixing within this structure. Nishimura’s sentence (8) approximates this pattern. However, it does not qualify, as the the topicalized object has ‘left behind’ a pronoun in the comment clause, rather than an empty category. I have no examples in my data which topicalize objects³.

A topic which includes a postpositional phrase, or an adverbial topic, is basically stylistic and is considered to be more of a case of scrambling rather than topicalization. An example of this is (15), diagrammed in figure 8.

- (15) *Tookyo kara wa daremo konakatta*
 Tokyo from TOP no-one COME-NEG-PAST
 ‘From Tokyo, no one came.’ [Shibatani, p 275]

Figure 8



[Shibatani, p. 276]

This is not considered a prototypical topic construction, but rather, an adverbial in adjunct position. An example of this kind of switching is found in (16).

- (16) *Omae no book de-wa* you had a list of stuff you sort of would like
 You GEN in TOP
 to have.

‘In your book you had a list of stuff you sort of would like to have.’

As English also has adverbs in adjunct position as well as within the VP, different kinds of code-mixed examples would constitute an interesting investigation. This kind of topic construction which parallels the English equivalent poses a problem similar to the kinds of topics which are independent of the comment, or main clause, discussed above.

3.4 Overlapping Clauses

Nishimura points out that there are quite an unusual amount of hybrid sentences that contain a constituent which serves a double function simultaneously in two different clauses. She calls such sentences portmanteau sentences. However, I will call them overlapping clauses. Overlapping hybrid clauses in my data contain a constituent in either L_1 or L_2 , shared by an English clause and a Japanese clause. Examples from my data are found in (17) through (19). The shared constituents are in bold.

- (17) *Yatto I* finally got the house to myself.
 finally
 ‘Finally I got the house to myself.’

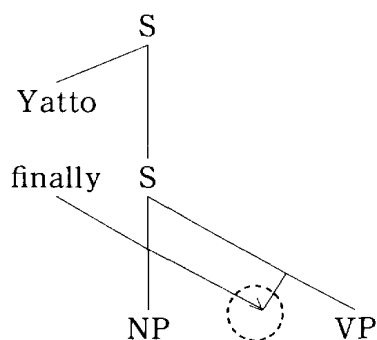
- (18) When **I was sick** *no toki*
 GEN time (when)
 ‘When I was sick.’

- (19) *Hontoo wa* I’m supposed to be ***hisshi-ni syukudai*** *o*
 really TOP frantically homework ACC
yatteru *tumori de* ita.
 do-PROG-PRES intention be-PST

‘Really I’m suppose to be frantically doing homework—I had the intention of frantically doing homework.’

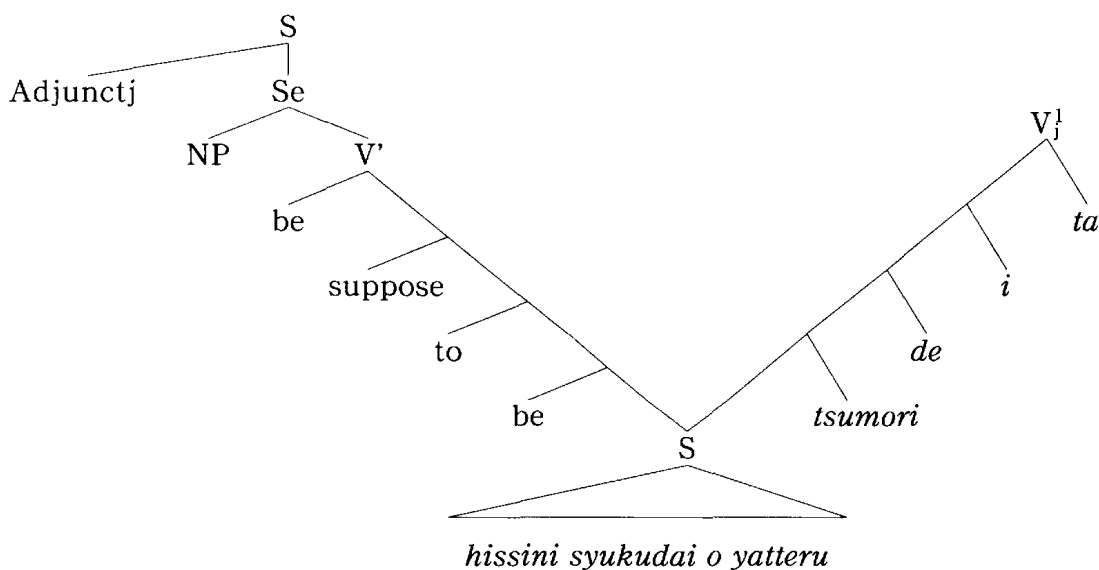
Nishimura attributes this to the fact that Japanese and English have mirror image constituent orderings. She claims that these kinds of sentences cannot be identified as having a single matrix. However, a closer look distinguishes (17) and (18) from (19). According to Nishimura’s analysis, adverbs are treated as independent from the clause, and therefore, she would assign (17) and (18) as having English matrixes. And if we consider certain adverbials to be lowered from an adjunct position, (17) could presumably take the form of figure 9, below:

Figure 9.



(19), on the other hand would require a tree diagram like in figure 10.

Figure 10.



3.5 Complex and Compound Sentences

The order between a subordinate clause and a main clause is shared by Japanese and English. We examine sentences in which clauses in different languages, syntactically, are conjoined. Nishimura presents the sentences (20), (21) below.

(20) *Nihon no kaisya ni hataraku to* they have bonuses at the end
Japan GEN company in work when
of the year.

‘When they work for a Japanese company, they have bonuses at the end of the year.’

(21) If you wanna plead guilty, *kaiteokuret-te*.

write -IMP QUOT

‘If you wanna plead guilty, they say write and send (it).’

[Nishimura, p. 86]

Nishimura has assigned Japanese to (20), and English to (21). At first glance it appears that Nishimura has assigned the language of the sentence according to the constituent ordering of the conditional clause. However, her rationale for selecting the matrix language is quite different: “When the first constituent has this length and structure, it might be more plausible to say that the sentence was initiated in the language of that constituent.” (p. 87) I like better what I assumed to be her rationale, where the second clause is considered embedded with regard to code-mixing.

As for the compound construction, Nishimura takes the stance that the two clauses are formed independently, and that a matrix language cannot be assigned. Her examples are (22) and (23).

(22) *Tabekata mo, camp-seikatu de,* like, my dad used to have
way-of-eating also life COP
poor manners.

‘Also talking about the way of eating, since it was a camp-life, my dad used to have poor manners. [Nishimura, p. 89]

- (23) ... *ikaren yo-tte yuu kara*, 'cause knitting class *ga*
 can't-go you-know-QUOT say-PRES SO NOM
aru desho.
 be-PRES right

'... since (He) says he can't go, because there is knitting class.'

[Nishimura, p. 91]

She distinguishes *de* and *kara* from other subordinate conjunctions in that they do not serve a "syntactic function". However, examples (22) and (23) look to me like separate clauses which are not conjoined. (22) has a copula in the first clause which in colloquial speech can indicate the end of the sentence. In (23), the first clause is completed with *kara*, and a new clause is begun with an English equivalent, 'because', which prefaces an entirely different reason than the first clause.

One way to conjoin a sentence in Japanese is to end with the gerundive form of the (clause final) verb. One question which arises is whether this bound morpheme which serves as a conjunction functionally, should be treated as conjunction syntactically. An example of this gerund form is found in (24), in bold.

- (24) *Yattyan wa gakkoo ni it-te, isshookemmee-ni benkyoo-sita.*

Yat-chan TOP school to go-and with-all-his-might study-do-PAST
 'Yat-chan went to school and studied with all his might.'

Smith's list of mirror image constituent ordering in Japanese and English included the conjunction. In English, he claims, the conjunction is clause initial, while in Japanese it is clause final. Technically, then, the code-mixed sentence may take the form of either a or b in (25):

- (25) a. [[-]-te], []
 b. [], [and []

In fact, while I have many examples of (25a), e.g. (26) and (27), (25b) is rare, e.g. (28) and (29). In example (26), the first clause is clearly Japanese, and the second, English.

(26) Plane *kara ori-te* we went on monorails, and trains, and
 from alight-and
 trains.

‘(We) got off the plane and we went on monorails, and trains, and
 trains.’

On the other hand (27)’s first clause contains a determiner, which makes it harder to determine a matrix language for this clause. However, the presence of *-te* makes it likely that the clause is of the Japanese matrix, assuming that *-te* heads the clause, in spite of its attachment to the Japanese verb. This is not entirely clear.

(27) The *baatyan not-te* started singing too.
 grandma got-into-it-and

‘The old woman got into it and started singing too.’

Sentence (28) begins with a clause which has a constituent ordering permissible in either Japanese or English, but the conjunctive particle *-te* is not used. It may be possible to use the absence of *-te* as an argument for an English matrix; again, it is not clear.

(28) Finally he *hontoo-ni taoreta* and a *kyukyusha* came.
 for-real fainted ambulance

‘Finally he really fainted and an ambulance came.’

Sentence (29) is an example of a Japanese clause following the English conjunction.

(29) Everyone is just so nice and God *no love ni afureteru*.
 GEN by overflowing

‘Everyone is just so nice and overflowing with God’s love.’

Here, it is not clear whether the presence of the English conjunction could be used as an argument for an English matrix at that level, since there is no morpho-phonological influence on the clause to which it attaches.

Nishimura concluded that there is no reason to use conjunctions as a determination of the matrix language since a Japanese phrase can

follow the English conjunction, and the conjunctions do not interact with the clauses which they conjoin. I don't think that the case is so clear, as the use of the Japanese conjunction *-te* necessarily calls for a Japanese gerund to precede it. It may be that these conjunctions should not be compared on an equal basis.

4. Mismatched Constituents

The preceding discussion concentrated on examples where Japanese nouns are embedded in positions where there would be an English noun, or a English verb in contexts where there might have otherwise been a Japanese verb. The following addresses another kind of code-mixing in which the embedded constituent doesn't necessarily occupy a node to which it is equivalent to, though it may well parallel it functionally. These involve embedded Japanese expressions of the body and mind, onomatopoeic expressions, and the noun phrase containing the Japanese genitive *no*.

4.1 Expressions of Body and Mind

There are in Japanese expressions of the body and mind which usually follow an NP-*wa* adjunct, as in (30)

(30) *Taro wa hara ga het-ta.*

Taro TOP stomach NOM decrease-PAST

'Taro got hungry.'

However, as you will see, these same expressions are used as verbs, after English copulas, in code-mixed sentences of an English language base, as in (31)

(31) I always *hara ga heru* at my *baachan's* like mad.

stomach NOM decrease-PRES granny's

'I always get hungry at my granny's like mad.'

What sets these particular expressions apart from other embedded Japanese verbs is that they contain a subject marking postposition *ga*, giving these phrases the status of a complete clause.

The question, then, is raised whether the English copula is acting as a topic marker, or whether these expressions aren't predicates in the first place. Given that the English copula does mark the focus by consistently following it, and given that it doesn't distinguish between topics and subjects, the former notion may not be so far-fetched. To answer this question, we must examine closely the nature of these expressions in the Japanese language⁴. Expressions of the body and mind may indicate experiences, as in (32).

- (32) *me ga samer-u,*
 eye(s) NOM wake-PRES
 (Lit.) 'Eyes awake.'

physical or character traits, as in (33):

- (33) *se ga taka-i.*
 height NOM tall-PRES
 '(Lit.) Height is tall.'

or temporary states, as in (34):

- (34) *atama ga ita-i.*
 head NOM hurt-PRES
 (Lit.) 'Head hurts.'

There are probably more expressions using *ki*, or feelings, than any others. It plays a role in relating to the emotional life, as well as workings of the judgment, consciousness, or will⁵. Expressions with *ki* fall under character traits or temporary states.

These expressions of body and mind usually occur with the possessor of the body part or mind identified in the adjunct position with the topic marker *wa*. Traditionally, these sentences are analyzed in such a way that the possessor of the body part or mind is the topic, and the body part or mind marked with *ga* is the subject, as in figure 11.

However, I would like to propose that the subject of sentences such as in figure 11, is the possessor/experiencer rather than the topic which is marked by *ga*, and that the expressions are sentential predicates rather than main clauses. If these expressions are in fact

(37), a mother is speaking for her baby who is unable to speak yet.

(37) *Yattyān ga kibun ga warui.*

Yat-chan NOM mood NOM bad-PRES

‘Yat-chan’s in a bad mood.’

Now we have an acceptable sentence in which the experiencer is the neutral subject (as opposed to the exhaustive use of *ga*) and again a neutral subject marker immediately following.

Actually multiple occurrences of *ga* are not uncommon. Kuno describes what he calls multiple-subject constructions in terms of an optional transformation. This transformation, “subjectivization”, changes a “NP-*no* (genitive) NP-*ga*” noun phrase into “NP-*ga* NP-*ga*”. While Kuno discusses each nominative marked with *ga* as a subject, implying the permissibility of a sentence to contain more than one subject, Shibatani and Cotton (1977) claim that sentences contain one subject by definition, proposing that the initial nominative which undergoes the *no* to *ga* transformation results in an adjunct to the main clause. Therefore, rather than undergoing subjectivization, it undergoes a movement to an adjunct position. However, the examples below show that in most cases, the expressions cannot take the genitive as seen in (38) below:

(38) **Taroo no hara ga hetta*

Taro GEN stomach NOM decrease-PRES

‘Taro’s stomach is hungry.’

**Taroo no ki ga omoi.*

Taro GEN feelings NOM heavy-PRES

‘Taro’s feelings are heavy.’

**Taroo no se ga takai.*

Taro GEN height NOM tall-PRES

‘Taro’s height is tall.’

**Taroo no me ga samet-a.*

Taro GEN eyes NOM awake-PRES

‘Taro’s eyes awoke.’

**Hanako no ki ga kiku.*

Hanako GEN feelings NOM work-PRES

‘Hanako’s feelings are [such that she was sensitive enough to do the appropriate thing at the right time.]’

Furthermore, the interrogatives which are sometimes used for clarification in discourse are indicative of non-possession (39) - (40):

(39) A: *Waa. Anohito, hige ga nagai nee!*

Wow, that-person beard NOM long huh

‘Wow, that person, his beard is so long, huh.’

B: *Dare no? /Dare ga?*

Who GEN/Who NOM

‘Whose/ Who?’

A: (Looking into a crowd) *Ano seetaa kiree ne.*

That sweater pretty huh

‘That sweater is pretty, huh.’

B: *Dore /Dare no?*

Which/Who GEN

‘Which/Whose?’

(40) A: *Kibun ga waru-i-n-dat-te.*

Feelings NOM bad-PRES-NOMI-COP-QUOT

‘() isn’t feeling well I hear.’

[lit.: feeling is bad]

B: *Dare ga? / *Dare no?*

Who NOM/ *Who GEN

‘Who/ *Whose?’

A: *Atama ga ii-n-da-kara.*

Head NOM good-NOMI-COP-because

‘() is really smart!’

[lit.: head is good]

B: *Dare ga? /*Dare no?*

Who NOM/*Who GEN

Who?/*Whose?’

Finally, when testing their (the second nominative) 'subjectness' to see how they behave in coordination we see that problems arise. Control of gap in sentence coordination is much the same in Japanese and English. Both the controller and the gap occurs in subject position (41):

- (41) [*Hahaoya ga kodomo o sikat*]-te [ϕ *naita*]
 Mother NOM child ACC scold-and cry-PAST
 'The mother scolded the child and ϕ cried.'

Kodomo ga hahaoya ni sikarare]-te [ϕ *naita*].
 Child NOM mother AGNT scold-PASS-and cry-PAST
 'The child was scolded by the mother and ϕ cried.'

(Shibatani, 1990, p. 282–3)

This is also true for adjectival predicates (42):

- (42) *Tanaka-jiisan wa hige ga siroku-te nagai*.
 Tanaka-grandpa TOP beard NOM white-and long
 'Old-man Tanaka's beard is white and long.'

Assuming that Shibatani is correct in claiming the nominal of the expressions to always be the subject, it stands to reason that conjoining ought to be no problem. However, examples in (43) show that it is resistant.

- (43) **Taroo wa onaka ga sui-te ita-n-de-ita*.
 Taro TOP stomach NOM decrease-and hurt-NOMI-COP-PROG-PAST
 'As for Taro, (his) stomach was hungry and hurting.'

*?*Taroo wa me ga same-te akaku-nat-te-i-ta*.
 Taro TOP eyes NOM awake-and red-become-PROG-PAST
 'As for Taro, (his) eyes awoke and were red.'

**Taroo wa ki ga meit-e omokunatte-ita*.
 Taro TOP feelings NOM decreased-and heavy-become-PROG-PAST
 'As for Taro, (his) feelings fell and felt heavy.'

What would explain the unacceptability of these sentences? If the expressions were in fact sentential predicates under the V', with the nominative marked with the subject marker carrying the powers of a subject, it seems that there could be conjoining within the embedded clause. On the other hand, if only the subject of the matrix sentence can control gapping, then the results are not surprising.

Now observe (44) and (45):

(44) *Atama ga itaku-te nerare-na-i.*

Head NOM hurt-CONJ sleep-able-NEG-PRES

'Since my head aches [I] can't sleep.'

(45) *Hara ga het-tewa ikusa wa deki-nai.*

Stomach NOM decrease-since warring TOP able-NEG

'One cannot fight if hungry.'

When asked whether the two predicates (unspecified) shared a common subject in each of the sentences above, (44) and (45), three out of four thought that (44) did, while two out of four thought (45) did. No one could say that they had *different* subjects, however.

What about the notion that "is" is embedded as the topic marker? This may sound far-fetched to the trained linguist, but to the bilingual child, *wa* is "is" in Japanese. This childish interpretation is not so outrageous when one considers the position of the English copula as following the focus of the sentence. So functionally, it does mark what could be called the topic of the sentence. While it's true that the topic and the subject categories are merged in English (Shibatani, 1990, p. 281–282), no double nominative constructions with underlying genitive constructions occur in English matrices, in my data. In other words, an acceptable sentence such as (46) would not be mixed in the manner of (47), created for the purpose of illustration, and judged by the subjects.

(46) *Sikago Daigaku wa seeto ga rippa da.*

Chicago University TOP students NOM impressive COP

'As for University of Chicago, its students are impressive.'

('University of Chicago's students are impressive.')

- (47) *University of Chicago is *seeto ga rippa*.
 students NOM impressive
 *University of Chicago is students are impressive.

Nor do thematic *wa* constructions such as (48) occur in subject position in code-mixed sentences with an English base, as in (49), also judged by the subjects.

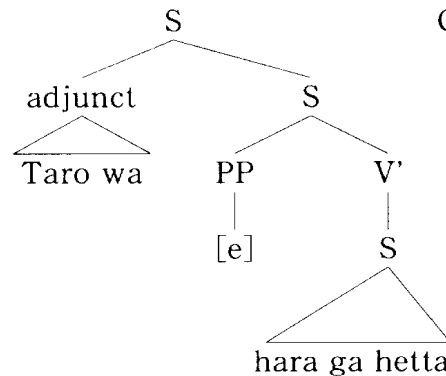
- (48) *Sakana wa tai ga ii*.
 fish TOP seabream NOM good
 'As for fish, seabream is good.'

- (49) *Fish is *tai ga ii*.
 seabream NOM good
 *'Fish is seabream is good.'

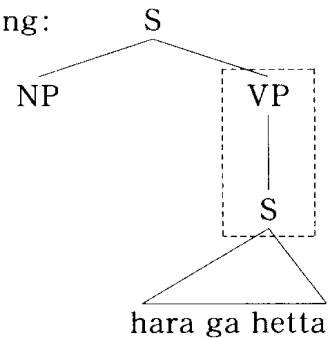
Therefore, it seems that for the bilingual American these expressions are predicates. A representation of these expressions, then would take the form of figure 12:

Figure 12.

Japanese:



Code-mixing:



In section 3.1 I said that the sentences involving the subject in Japanese and the rest of the sentence in English could be analyzed as code-switching or one having an English matrix. The verb phrase was considered strictly an English construction. There are, however, fixed expressions involving the accusative marker, which, like the expressions discussed above, behave like a verb. One such sentence is (50):

(50) I've *yaruki o nakushita* my plans.

motivation ACC lose-PAST

'I've lost motivation (to do) my plans

Our lunch on the plane, we have to be extremely careful or else

we *onaka o kowasu*.

stomach ACC break

'our lunch on the plane, we have to be extremely careful or else we get stomach upset.'

For these expressions as well, there appears to be a mismatch that is justified by the fixedness of the expression.

4.2 Mimetics

Another seemingly mismatched code-mixing in Japanese/English data involves a construction in Japanese which has no direct parallel in English, which I will call *mimetics*. The use of onomatopoeia in Japanese is found in ordinary conversation on a daily basis. Makino and Tsutsui (1986) discuss sound symbolism in Japanese in three categories:

- a. phonomimes, Japanese giseigo, meaning [phonetic representations of sounds];
- b. phenomimes, Japanese gitaigo, meaning phonetic representations of phenomena perceptible by non-auditory senses;
- c. psychomimes, also gitaigo, meaning phonetic representations of human psychological states. (p. 50)

All are based on a systematic sound symbolism that I will not go into here. An example of each would be:

a' *shito shito (furu)*:

'(it rains) quietly'

b' *gira gira (to hikaru)*

'(shine) dazzlingly'

c' *ira ira (suru)*

'(to be) restless'

These mimetics are optionally followed by the Japanese quotative

to, preceding the verb. The 'quote' makes the sound which symbolizes the manner of the verb. Then, not surprisingly, Japanese mimetic quotes are embedded in the adverbial node in English sentences, as found in (51) to (55).

(51) I was just *poi poi to* running next to this girl that gave up so fast...
(effortlessly)

'I was just running effortlessly next to this girl that gave up so fast...'

(52) *Gaaan to* my mouth fell open.

(heavy fall)

'My mouth fell open with a thud.'

(53) I slipped in the *benjyo* and one leg went *dossuun* down the hole.
toilet (fall through something)

'I slipped in the bathroom and one leg went down the hole with a whoosh.'

(54) John or Bob is *pettya pettya* talking and its so *urusai* and danger-
(sound of chatting) noisy

ous if the *senkoo* hears.

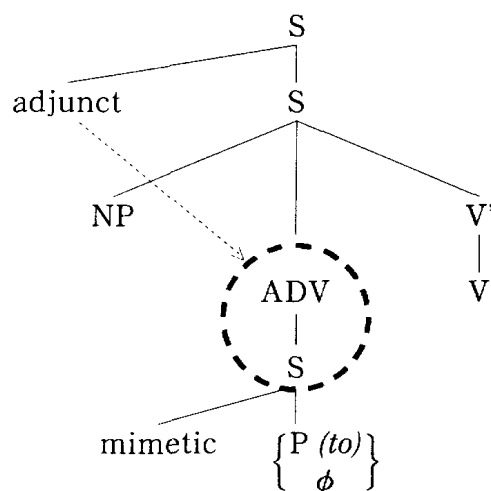
teacher

(55) They kept *gyoro gyoro* looking at me!

('sound' of staring eyes)

In this case of (51), (54), and (55), the mimetic precedes the verb, whereas, in (52) it precedes the clause, and in (53), it forms part of the verb together with 'went' (similar to the structure of the English expression 'it went splat'). The quotation particle deletion seems to occur only when preceding the verb, and never when it is modifying the S. The hybrid sentence might be expressed as in figure 13. Considering the choice of placement, the mimetic might be best represented as an adjunct and in the most common case, moved down to the verb phrase for pre-verb placement, as in figure 13.

Figure 13



4.3 The Genitive No

The Japanese genitive particle *no*, and the English genitive clitic share a post-nominal position. Do we have any reason to suppose that the Japanese postpositional genitive might be embedded in English noun phrases, and the English possessive in the Japanese P?

Examine the hybrid sentences below:

- (56) When I die I want my ashes to be scattered over the Japan Sea, but if I can't, then I'll be buried in the... Takikawa & Fukagawa Lutheran Church *no* grave area.

GEN

'When I die I want my ashes to be scattered over the Japan Sea, but if I can't, then I'll be buried in the... Takikawa & Fukagawa Lutheran Church's grave area.'

- (57) *Sate, kyoo no* news is that it's clash day.

Now, today GEN

'Now, today's news is that it's clash day.'

(56) was a lengthy English sentence with only the genitive in Japanese. The use of *no* is quite pervasive throughout the data. In many cases, it parallels the English possessive clitic. One is tempted to analyze it as such. However, a closer look shows us that there are cases of the Japanese genitive that don't fit the possessive node in

English, as in (58) and (59).

- (58) The *Yuyuki no fake titi and Taiyoo ni Hoero no Denka*
 (name) GEN father (name of TV program) GEN (name)
 are brothers *da-to*.

COP-QUOT

'The fake father of Yuyuki and Denka of Taiyoo ni Hoero are brothers I hear.'

? 'Yuyuki's fake father and Taiyoo ni Hoero's Denka are brothers I hear.'

- (59) On Saturday, I went with *Tootyán* and Mary to the *Tikagai*
 Dad underground
 dessert *no* restaurant and had a *furuutu-sandee*.

GEN

fruit-sundae

'On Saturday, I went with Dad and Mary to the underground dessert restaurant for a fruit sundae'

- (60) *Dakara* for your sake I got a picture taken by those 3 minute *de*
 so in

OK *no* machines.

GEN

'So for your sake I got a picture taken by those "Ready in 3 minutes" machines.'

The question is whether we can assume that it is the noun that is embedded as opposed to the particle/possessive. Considering the fact the Japanese genitive *no* and the English possessive clitic potentially behave differently, these two categories should be kept separate, and the base language of these code-mixed hybrid clauses should be determined by the language of these particles.

5. Nonswitchables and Nonswitched

In this section, I will review the list provided by Nishimura on what is not switched in her data, and what she identifies as non-

(62) Then we went down to land in **osoroshiki** Tokyo.

terrifying

'Then we went down to land in terrifying Tokyo.'

(63) John straightened out and faced the camera with his **dekkee** smile.

huge

'John straightened out and faced the camera with his huge smile.'

Few English adjectives are found occurring with Japanese nouns, as in (64) and (65).

(64) *Ore no kimotiwari [[buta- prissy-onna-mitai] na] koe ni*
 I GEN irksome pig- -woman-like-ADJ voice against
kurabe-tara nantomo ie-nai.

compare-if nothing say-PRES-NEG

'If (you) compare (it) with my gross, piggish, prissy-woman-like voice, what can one say.'

(65) *Sasuga no clumsy otchokochoi no Mary da.*

klutzy GEN COP

'It's the usual clumsy klutz of a Mary.'

Furthermore, in my data, relative clauses, an in (66) and (67) and embedded clauses in L2 are in fact found in L1 matrices as in (68) through (69).

(66) *Merii wa [[itumo yanto-siteru] one] (or: itumo [[tyanto-siteru] one]*
 Mary TOP always properly-do-PRO-PRES
siteru] one]

'You are the one who is always behaving properly.'

(67) *Omae [Mr. Smith sent you [Yamada-sensei no haitta [9th grade you*

Miss Yamada GEN in_v-PAST

syasin]]] o okutta -ka yutte-nai

photograph ACC sent-PAST whether say-GER-not

jya-nai no.

isn't-it-the-case

'You haven't told me whether you've sent the photograph with Miss Yamada in it that Mr. Smith sent you.'

- (68) *Kawari ni* [*John ga* [*sono* knapsack *kakae-te* [**he came**]]]
 instead NOM that shouldering-and
da-ttara I'd be so surprised.
 COP-if (suppose)

'If instead John came shouldering that knapsack I'd be so surprised.' or 'If John came shouldering the knapsack in (his) place, I'd be so surprised.'

- (69) *John no* stay-*siteru* *toko wa* *sutetimatta* *yo* ,
 GEN -DO-PROG-PRES place TOP throw-out-PAST you-know,
ano kami that had the address on.
 that paper

'I've thrown out the the place where John is staying—you know—that paper that had the address on.'

Nishimura means to list items that are not switched in her data, in order to identify those determinants of a language base. However, what she doesn't make clear is that it is the constituent place that determines the language base (in non-arbitrary cases) and not the language of the lexeme which fills the node. In other words, while in (66) *tyanto shiteru* modifies the English word 'one,' the fact that the noun comes after the modifying clause tells us that it is a Japanese language base. Likewise, in other examples, it is not the language of the relativized clause or the embedded clause that determines the language base, but rather, the order. As for P, subordinate conjunctions, Aux, and relative pronouns, the placement of the items are crucial as well, but as she indicates, they tend to appear only in the language of their constituent ordering. In other words, these items are not embedded in L2 matrices in my data at any level of the sentence. As for Det, since demonstratives occur preminally in both English and Japanese, we cannot justify the claim that in a mixed noun phrase, the embedded is always N or always Det. Our best argument

perhaps is for the sake of consistency, since Det fits neatly into a category together with the other items, as “closed class” items, as suggested by Joshi (1984), and we know NPs to be embedded commonly. On the other hand, other items in this category are found embedded, such as quantifiers⁶, as in (70).

- (70) You *no tegami wa itsumo kochi no hoo wa doo da toka*
 GEN letter TOP always here GEN way TOP how COP and-such
 all *kotchi no hoo no* questions *bakkasi*.
 here GEN way GEN exclusively
 ‘As for your letters, (you) always ask how are things over here and
 all questions about here.’

It seems that a listing of switchables and nonswitchables is not the issue here at all. Rather, the ordering within the embedded constituent, regardless of the language of the lexemes, is the key here to the construction of acceptable hybrid sentences. Bound morphemes, also included in this category, require more discussion, and will be taken up in Part II.

6. Conclusion

6.1 Determining the Matrix

The above examples should have made it clear by now how problematic a large portion of sentences can be in terms of assigning a language base according to its constituent ordering. For many, language assignment would be completely arbitrary if a single language matrix is imposed, as Sankoff and Poplack noted in their rationale for choosing the linear approach.

However, it seems that at least one language governs constituent ordering, at various levels within the sentence, since the ordering is not random, and yet not restricted to shared constituent ordering. We also examined what appeared to be possible mismatches where constituents occupied an incongruent node and found that to justify its presence, an intermediary node was required. Then, by examining Nishimura’s list of nonswitchables against my data, we noted that the

constituent order, irrelevant of the language of the lexemes, should determine the matrix language. However, certain items, such as the P, Aux, relative pronouns, tended not to embed.

6.2 Readdressing the terminology

In this paper, the term 'switching' was reserved for the shift, phonologically, from one language to the other in the linear sense, regardless of syntactic issues. I did not use it to mean that a constituent of one language was replaced by a constituent of another. There are many Japanese words, and some constituents (mimetics, for example) which have no English counterparts. In addition, the concept of 'switching' constituents hierarchically is counterintuitive to their bilingual experience. Rather, using the lexemes and constituents accessible to them, they build a hybrid sentence, adhering to the phrase structure rules of one language at various levels of the sentence. The concept of mixing lexical items of different languages in a constituent, which in turn plays a larger role in a higher constituent, is supported by the data.

Notes:

1. The other, the Free Morpheme Constraint will not be discussed here. but taken up in Part II.
2. Sentence final particles in Japanese conversation denote the speakers emotion or attitude toward the hearer.
3. This may not be purely accidental, but rather a result of the influence of English. Examine the sentences below.
 - As for me, I gave her a dirty look.
 - As for me, I got a dirty look from her.
 - *As for me, she gave me a dirty look.
 While these sentences do not constitute a strong argument for why I do not have sentences in this category, it certainly is something that should be investigated further.
4. The Japanese sentences in this section received acceptability judgments from 7 to 8 Japanese native speakers.
5. See Doi (1973) Anatomy of Independence
6. Nishimura includes quantifiers as a subitem of the P & DET category and

claims that they are never embedded.

References

- Azuma, Shoji. 1991. Two level processing in speech production: evidence from intrasentential code-switching. *CLS Proceedings 27* (forthcoming)
- Bokamba, Eyamba. 1989. Are there syntactic constraints on code-mixing? *World Englishes*, Vol. 8 No. 3 pp. 277–292
- Bokamba, Eyamba and Nkonko M. Kamwangamalu. 1987. The significance of code-mixing to linguistic theory: evidence from Bantu languages. *Studies in Linguistic Sciences* 17, 21–43.
- Clyne, Micheal G. 1987. Constraints on code-switching: how universal are they? *Linguistics* 25, 739–764.
- Doi, Takeo. 1973. *The Anatomy of Dependence*. Kodansha International, Ltd., Tokyo.
- Gumperz, John J. 1982. *Discourse Strategies*. London: Cambridge University Press.
- Joshi, A.K. 1984. Processing of sentences with intrasentential code-switching. *Natural language processing: psychological, computational, and theoretical perspectives*, ed. by Dawty, Karttument, and Zwicky, pp. 190–204. Cambridge: Cambridge University Press
- Kuno, Susumu. 1972. Evidence for subject raising in Japanese. *Papers in Japanese Linguistics* Vol 1 No. 1, 24–51.
- . 1973. *The Structure of the Japanese Language*. MIT, Cambridge, MA.
- Lipski, John. 1978. Code-switching and the problem of bilingual competence. *Aspects of bilingualism*, ed. by M. Paradis, pp. 250–264. Columbia, SC: Hornbeam Press.
- Makino, Seiichi and Michio Tsutsui. 1986. *A dictionary of basic Japanese grammar*. Tokyo: The Japan Times, Inc.
- McCawley, James D. 1988. *The syntactic phenomena of English, Vol. 2*, Chicago, University of Chicago.
- Myers-Scotton, Carol. 1990. Building the frame in codeswitching: evidence from Africa. Paper presented at the 21st Annual Conference on African Linguistics, University of Georgia.
- and Shoji Azuma. 1990. A frame-based process model of code-switching. In M. Ziolkowski, K. Deaton, M. Noske eds., *Proceedings from the 26th Regional Conference*. Chicago Linguistic Society, 307–21.

- Nishimura, Miwa. 1985. Intrasentential Code-switching in Japanese and English. Unpublished dissertation, University of Pennsylvania.
- Pfaff, Carol. 1979. Constraints on language mixing: intrasentential code-switching and borrowing in Spanish-English. *Language* 55, 291–318.
- Poplack, Shana. 1978. Syntactic structure and the social function of code-switching. *Latino discourse and communicative behavior*, ed. by Richard Duran, pp. 169–184. Princeton, N.J.: Ablex.
- Romaine, Suzanne. 1986. The syntax and semantics of the code-mixed compound verb in Punjabi/English bilingual discourse. *Language and linguistics: the interdependence of theory, data, and application*, ed. by D. Tannen and James E. Altais, pp. 35–49. Washington, D.C.: Georgetown University Press.
- Sankoff, David and Shana Poplack. 1980. A formal grammar for code-switching. *Working papers in the center for Puerto Rican Studies* 8, New York: City University of New York.
- Shibatani, Masayoshi. 1990. *The Languages of Japan*. Cambridge University Press, Great Britain.
- and Chiseko Cotton. 1976–77. Remarks on double-nominative sentences. *Papers in Japanese Linguistics* Vol. 5, pp. 261–278.
- Smith, Donald. 1978. Mirror Images in Japanese and English. *Language* Vol. 54, No. 1, pp. 78–122.
- Sridhar, S.N. and Kamal K. Sridhar. 1980. The syntax and psycholinguistics of bilingual code-mixing. *Canadian Journal of Psychology*, 34, 407–416.
- Takemura, Kenichi. 1975–76. Subject raising and meaning in Japanese. *Papers in Japanese Linguistics*. Vol. 4, pp. 181–190.
- Timm, Lenora A. 1975. Spanish-English code-switching el porque y how-not-to. *Romance Philology*, 28, pp. 473–482.
- Woolford, Ellen. 1983 Bilingual code-switching and syntactic theory, *Linguistics Inquiry*, 14, pp. 520–536.

Appendix:

List of Abbreviations Used in Glosses

ACC accusative

AGNT agent

CAU causative

COMP complementizer

COP copula

DES desiderative

GEN genitive

GER gerund

NEG negative

NOM subject case marker

NOMI nominalizer

PASS passive affix

PAST past tense affix

PRES present tense affix

PROG progressive aspect (also analyzable as GER + be-TENSE)

QUES question particle

QUOT quotative particle

TOP topic marker

subscript n noun

subscript v verb

subscript a adjective