

Code-Mixing Used by SP and AY in WhatsApp Chats

Jusuf Sharon¹, Julia Eka Rini²

English Department, Faculty of Humanities and Creative Industries, Petra Christian University, Siwalankerto 121-131, Surabaya 60236, INDONESIA
Email: a11210031@john.petra.ac.id¹, jerini@petra.ac.id²

ABSTRACT

This study examines the use of code-mixing between SP and AY in WhatsApp chats. Muysken's (2000) theory of code-mixing is used as the main framework, and Holmes' (2013) theory of social factors serves as the supporting theory. A qualitative method is employed, with basic frequency counts. The study revealed that SP and AY used all three types of code-mixing, namely insertion, alternation, and congruent lexicalization. All four indicators namely, constituency, switch site, element switched, and properties were applied by both speakers with differences. This study also discusses how participant roles and communicative functions influence their code-mixing practices.

Keywords: code-mixing, social factors, WhatsApp chats

INTRODUCTION

This research came from the writer's internship experience at *PT IS Tbk*, a multinational company based in Gresik. During the internship, the writer observed SP, a marketing manager who often alternated between English and Indonesian in her communication. SP is a Filipino national who previously worked in Singapore for 13 years and now lives and works in Indonesia (personal communication, November 11, 2024). She supervises AY, her new subordinate from Indonesia. Despite being the newest member of the team, AY gets along well with SP. Interestingly, AY also often code-mixes when communicating with SP. Their relationship as manager and subordinate most likely leads to frequent interactions through WhatsApp conversations, which are expected to contain rich instances of language mixing and hence are valuable to analyze in this code-mixing study.

This study utilizes Muysken's (2000) theory of code-mixing as its main theory. Muysken (2000) identifies three types of code-mixing: insertion, alternation, and congruent lexicalization. Each type is characterized by four indicators: constituency, switch site, element switched, and properties (Muysken, 2000). In addition, this study also adopts Holmes' (2013) theory of social factors as a supporting theory. Holmes (2013) categorizes four primary social factors that underlie the use of code-mixing: participants, setting, topic, and function.

METHOD

This study employs Lincoln's (2005c) qualitative method. It also incorporates basic frequency counts from Miles et al. (2014), which can help enhance qualitative research analysis (Miles et al., 2014). The data source consists of the 50 most recent sentences from SP and AY's WhatsApp conversation that contain language mixing. However, the data has several limitations: the analysis is limited to written sentences by SP and AY, only sentences that received approval from both SP and AY were analyzed, and the languages used were not categorized as standard or non-standard variations.

Sharon; Rini: Code-Mixing Used by SP and AY in WhatsApp Chats

In the data collection process, the writer took several steps. First, the writer sent WhatsApp messages to SP and AY to obtain their written consent for the use of sentences in WhatsApp conversations as research data in this study. After both participants agreed, the writer asked AY to take screenshots of their most recent conversations. The writer then observed and collected the 50 most recent sentences containing language mixing, without using topic-based filtering. The sentences were then retyped into Microsoft Word. The writer modified the names of individuals and companies that appeared in the SP and AY sentences. After that, the writer applied a two-digit numbering system. The first digit in this system indicates the sender: number 1 indicates the sentence written by SP to AY, and number 2 indicates the sentence written by AY to SP. The second digit indicates the order of the sentences according to their occurrence in the conversation. For example, marker 1.2 refers to the second sentence written by SP to AY, while 2.3 refers to the third sentence written by AY to SP.

Once data collection was complete, the writer began analyzing the sentences using Muysken's (2000) theory of types of code-mixing (insertion, alternation, and congruent lexicalization). Four indicators (constituency, switch site, element switched, and properties) were used to support the categorization of each type.

FINDINGS AND DISCUSSION

This section presents the findings of the study. To explain the analysis in more detail, the writer divides it into three main parts: (1) types of code-mixing used by SP, (2) types of code-mixing used by AY, and (3) similarities and differences between the types of code-mixing used by SP and AY. Before conducting the analysis, the writer provides Table 4.1 below to show a summary of the types of code-mixing along with the four indicators found in SP and AY's sentences in their WhatsApp chats.

Table 4.1
Summary of Code-Mixing Types Found in SP and AY Sentences in WhatsApp Chats

Subjects	Types of Code-Mixing											
	I				A				CL			
	C	SS	ES	P	C	SS	ES	P	C	SS	ES	P
SP	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	✓	✓
AY	✓	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	—

Abbreviations:

I : Insertion

A : Alternation

CL : Congruent Lexicalization

C : Constituency

SS : Switch Site

EL : Element Switched

P : Properties

Types of Code-Mixing Used by SP

The analysis of SP shows that she used all three types of code-mixing: insertion, alternation, and congruent lexicalization. The writer provides examples of each type of SP's code-mixing below.

A. Insertion

Example: Data 1.4

Bryan will go juga, right?

(Bryan will go too, right?)

Language-mixing “*juga*” in the sentence above showed a nested a-b-a pattern, where a is “Bryan will go” and ‘right’ which is English, so Indonesian “*juga*” which is b is inserted into the sentence. This means that “*juga*” is a single constituent.

Switch site is also identified from “*juga*” which is classified as dummy words. This means that “*juga*” does not have an important meaning and even if it is omitted, it does not affect the meaning of the sentence. Moreover, the word “*juga*” based on (*Badan Pengembangan dan Pembinaan Bahasa*, n.d.) is an adverb that meets the criteria of a switched element. However, Data 1.4 did not show any sign of the properties of insertion.

B. Alternation

Example: Data 1.11

Tolong tanya Pak Andy ya, like which step should we follow-up on.

(Please ask Mr. Andy yes, like which step should we follow-up on).

Data 1.11 showed the characteristic of constituency in alternation, where the sentence consists of multiple constituents and forms a non-nested a-b-a structure. According to Oxford University Press (n.d.), “like” is an interjection, “which” is a determiner, “step” is a noun, “should” is a modal verb, “we” is a pronoun, “follow-up” is a phrasal verb, and “on” is a preposition. Furthermore, the switch site of “like which step should we follow up on” is located at the edge of the sentence.

The sentence above also demonstrated the element switched characteristic of alternation, as the language switching “like which step should we follow up on” forms a long constituent, with “like” functioning as an interjection. The properties found in Data 1.11 reflected linear equivalence, since the Indonesian and English words share the same grammatical structure.

C. Congruent Lexicalization

Example: Data 1.23

Tadi, Pak Andy belum share if the anti-slip sheet sudah di-order ya?

(Earlier, Mr. Andy hasn’t share if the anti-slip sheet has been ordered, right?)

Data 1.23 reflected the constituency of congruent lexicalization. The sentence contained multiple constituents that form a non-nested a-b-a pattern. According to *Badan Pengembangan dan Pembinaan Bahasa* (n.d.), the words *tadi* (a noun), *Pak* (a noun), *Andy* (a proper noun), *belum* (an adverb), *sudah* (an adverb), *di* (a prefix), and *ya* (a particle) are Indonesian, while based on Oxford University Press (n.d.), the words *share* (a verb), *if* (a conjunction), *the* (a determiner), *anti-slip sheet* (a noun phrase), and *order* (a verb) are English. Data 1.23 also showed the switch site of congruent lexicalization, namely bidirectional switching, in which Indonesian and English switch back and forth within the sentence.

Moreover, Data 1.23 included function words as a feature of the element switched in congruent lexicalization, as seen in the *if* (a conjunction), *the* (a determiner), and *ya* (a particle). The properties identified in Data 1.23 was morphological integration. The word *di*, which is an Indonesian prefix (*Badan*

Pengembangan dan Pembinaan Bahasa, n.d.), is integrated with the English verb *order* (Oxford University Press, n.d.) to form a single unit: *di-order*.

Types of Code-Mixing Used by AY

Analysis of AY's conversations on WhatsApp also shows that she uses code-mixing. Specifically, all 3 types of code mixing (insertion, alternation, and congruent lexicalization) were found in her sentences. Examples of each type are discussed below.

A. Insertion

Example: Data 2.2

Belum, itu juga baru di-suggest sama Pak Andy.
(Not yet, it was just suggested by Mr. Andy.)

The sentence above showed the insertion of a single constituent, the word “suggest.” This insertion also forms a nested a-b-a structure, as the English word “suggest,” which represents ‘a’, is placed between “*Belum, itu juga baru di*” and “*sama Pak Andy*,” which are in Indonesian. The word “suggest” is also classified as a verb (Cambridge University Press, n.d.), thus fulfilling the element switched criterion of insertion.

In Data 2.2, a characteristic of the properties indicator, namely, morphological integration is present. This is because “*di*” is categorized as an Indonesian prefix (*Badan Pengembangan dan Pembinaan Bahasa*, n.d.) and, when combined with the English verb “suggest,” forms a unified word and appears as an element of code-mixing. Still, the sentence above did not show any indication of the switch site characteristic of insertion.

B. Alternation

Example: Data 2.18

Tapi, I'm not sure the car is available.
(But, I'm not sure the car is available.)

Data 2.18 revealed the presence of constituencies in alternation. According to Cambridge University Press (n.d.), the words are categorized as follows: “I” is a pronoun, “m (am)” is a verb, “not” is an adverb, “sure” is an adjective, “the” is a determiner, “car” is a noun, “is” is a verb, and “available” is an adjective. This showed that AY's sentence contains multiple constituents. Regarding the switch site, the sentence indicates that the language-switching segment is located at the periphery of the sentence, as seen in “I'm not sure the car is available.”

Furthermore, Data 2.18 represented the element switched characteristic of alternation, as the phrase “I'm not sure the car is available” forms a long constituent, with “not” functioning as an adverb. The properties in Data 2.18 were demonstrated through linear equivalence, since the first language (Indonesian) and the second language (English) share the same grammatical structures.

C. Congruent Lexicalization

Example: Data 2.22

Hello SP, may I confirm untuk meeting tomorrow boleh pakai ruangan Pak Rudi?
(Hello SP, may I confirm for meeting tomorrow can use Mr. Rudi's room?)

The sentence above (Data 2.22) demonstrated the constituency of congruent lexicalization. It contains multiple constituents that switch with each other and form a non-nested a-b-a structure. According to Oxford University Press (n.d.), the terms *Hello*, *SP*, *may*, *I*, *confirm*, *meeting*, and *tomorrow* are classified as English. Meanwhile, according to *Badan Pengembangan dan Pembinaan Bahasa* (n.d.), the words *untuk*, *boleh*, *pakai*, *ruangan*, and *Pak Rudi* are classified as Indonesian. Data 2.22 also showed the characteristic switch site of congruent lexicalization. The sentence used bidirectional switching, with English and Indonesian words alternating back and forth.

Moreover, Data 2.22 presented the element switched of congruent lexicalization. The sentence contained several function words: *Hello* (an interjection), *may* (a modal verb), *I* (a pronoun), *for* (a preposition), and *boleh* (a modal verb). Data.2.22 did not show any properties related to congruent lexicalization.

Similarities and Differences Between the Types of Code-Mixing Used by SP and AY

This section explains the similarities and differences between SP and AY's use of code-mixing. The writer identifies some similarities and differences in how they use code-mixing in WhatsApp conversations.

Similarities

In the analysis, the writer found five similarities between SP and AY. These include all three types of code-mixing used, the most common type, constituency indicator usage, element switched indicator usage, and both speakers using all four indicators from alternation.

A. The use of All Three Types of Code-Mixing

SP and AY's use of all three types of code-mixing can be linked to the participant and function factors from Holmes (2013). Their difference in status influences their use of code-mixing. As participants, SP is the manager and AY is the subordinate. SP uses code-mixing to appear more approachable, softening her identity as a "boss." Meanwhile, AY seems to mimic SP's language style to maintain politeness and align herself with SP's way of speaking. In terms of function, aside from discussing work-related matters, they also engage in personal communication. Code-mixing helps SP appear approachable and AY appear respectful, without sounding too distant or too casual.

B. Most Common Type of Code-Mixing Used

Among the three types of code-mixing, SP and AY both most often use insertion type. Of the 25 sentences analyzed from each speaker, SP used 14 insertions, and AY used 15. This is influenced by their participants' role and communicative function (Holmes, 2013). As participants, they both use insertion but with different base languages. SP, the manager who is native English, inserts English words, while AY, the subordinate who is native Indonesian, inserts Indonesian words into the sentence. This shows mutual adjustment between SP and AY. In function, insertion is very suitable for work conversations. Since it only inserts a single word, it is easy, quick, and efficient.

C. The Use of Constituency Indicator

The use of constituency indicators in all three types of code-mixing (insertion, alternation, and congruent lexicalization) by SP and AY is closely related to participant roles and communicative function (Holmes, 2013). As participants, SP, a manager and native English speaker, has been exposed to

Indonesian, while AY, a subordinate and native Indonesian speaker, has been exposed to English. This exposure enables them to use code-mixing in sentences while maintaining grammatical structure. Functionally, the use of constituency indicates that their code-mixing practices are not perfunctory; rather, they ensure that their messages are clear and precise.

D. The Use of Element Switched Indicator

SP and AY's use of element switched in all three types of code-mixing (insertion, alternation, and congruent lexicalization) demonstrates the relevance of Holmes' (2013) concept of participants and function in communication. As participants, SP, a manager who native English speaker, and AY, a subordinate who native Indonesian speaker, both show a strong understanding of both Indonesian and English vocabulary. Functionally, the element switched allows them to choose and insert specific words from one language into another within a sentence, enabling them to communicate efficiently according to the context.

E. The Use of Four Indicators of Alternation

The presence of four indicators in SP and AY's use of alternation reflects their participant roles and communicative functions (Holmes, 2013). In their role as participants, SP and AY demonstrate the ability to use a complex type of code-mixing. This is because alternation involves switching between languages in the form of phrases or clauses. Functionally, these four indicators help them communicate clearly and effectively about work-related matters.

Differences

The analysis also revealed differences in the use of code-mixing between SP and AY. Four main differences were identified: the least common type, the use of switch site in insertion, and the use of properties in insertion and congruent lexicalization.

A. Least Common Type of Code-Mixing Used

SP used alternation type the least, which only 4 times out of 25 sentences. AY used congruent lexicalization type the least, which only 4 times out of 25 sentences. These differences in code-mixing types are related to participants and communicative functions (Holmes, 2013). As participant roles, SP and AY (a manager and a subordinate) tended to choose simpler types of code-mixing to communicate about work-related matters more quickly and accurately. For function, alternation and congruent lexicalization were not efficient for their communication. This is because alternation involves switching languages at the phrase or clause level, which can slow down the flow of communication. Also, congruent lexicalization, where two languages appear back and forth within a sentence, is highly complex and potentially confusing, which may lead to the message being misunderstood. Therefore, these types were rarely used.

B. The Use of Switch Site Indicator in Insertion

SP used switch sites in her insertion through the use of dummy words, while AY did not use them at all in her insertion. This can be explained through the professional roles and communicative function described by Holmes (2013). Typically, insertion often involves the use of dummy words, words that help fill the sentence structure but do not carry significant meaning (Muysken, 2000). SP's role as a manager often required her to give instructions to AY. This encouraged the use of dummy words. SP's frequent use of dummy words such as "ya" and "juga" reflects her attempt to make her communication culturally

appropriate. For example, ending a sentence with “*ya*” can make her instructions or statements feel less direct, which aligns with Indonesian communication culture (Wouk, 2001), even though the word itself is not grammatically essential to the sentence structure. In contrast, AY, as a subordinate, often responded to SP’s questions. This may reduce the need to involve dummy words. Without dummy words, AY can make her communication more direct by selecting only the words that are grammatically necessary.

C. The Use of Properties Indicator in Insertion

The study shows that SP did not use properties in her insertion, whereas AY did. This difference can be explained through the communicative function theory by Holmes (2013). The most notable difference lies in the presence of morphological integration. For example, AY attaches the Indonesian prefix “*di-*” to the English verb “suggest”, forming “*di-suggest*” instead of using the Indonesian word “*sarankan*”. SP, a native English speaker, does not use morphological integration, indicating that she naturally inserts simpler forms of code-mixing in her insertion and does not prefer morphological integration. AY’s use of morphological integration is influenced by her native Indonesian background, combined with her comfort with English vocabulary.

D. The Use of Properties Indicator in Congruent Lexicalization

The writer analyzed that SP used properties in her congruent lexicalization, while AY did not. Two types of properties were identified. First, homophonous diamorphs, which are elements from two languages that have similar pronunciations in both codes (Muysken, 2000). Second, morphological integration, which occurs when an affix from one language is combined with an element from another language (Muysken, 2000). This is closely related to their participant roles (Holmes, 2013). SP’s role as a manager likely gives her greater confidence in applying more complex forms of code-mixing in congruent lexicalization, especially since she knows that AY can understand her. On the other hand, AY’s role as a subordinate may lead her to put in more effort to avoid ambiguity in communication. Since congruent lexicalization is already complex, adding properties may increase the risk of misunderstanding.

CONCLUSION

The study led to the result that SP and AY used all three types of code-mixing: insertion, alternation, and congruent lexicalization, with insertion being the most frequently used type by both speakers. SP used alternation the least, while AY used congruent lexicalization the least. Both speakers also employed all four indicators: constituency, switch site, element switched, and properties. However, there were key differences in how these indicators were applied to each type of code-mixing. SP did not apply the properties indicator in her use of insertion. Meanwhile, AY did not use the switch site indicator in insertion and did not apply the properties indicator in her use of congruent lexicalization. Furthermore, it was found that participant roles and communicative functions influenced their code-mixing practices in the WhatsApp conversation. For further research, since this study on code-mixing is based on the writer’s direct experience, future researchers are encouraged to analyze code-mixing from their own firsthand experiences as well, as this can deepen the contextual understanding of the study. Future research is also expected to explore other types of social relationships beyond the professional context, in order to broaden insights into the topic of code-mixing.

REFERENCES

- Badan Pengembangan dan Pembinaan Bahasa. (n.d.). *Kamus Besar Bahasa Indonesia (KBBI)*. <https://kbbi.kemdikbud.go.id/>

Sharon; Rini: Code-Mixing Used by SP and AY in WhatsApp Chats

- Cambridge University Press. (n.d.). *Cambridge Dictionary*. <https://dictionary.cambridge.org/>
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005c). *The SAGE handbook of qualitative research*. SAGE.
- Holmes, J. (2013). *An introduction to sociolinguistics*. Routledge.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook*. SAGE Publications.
- Muysken, P. (2000). *Bilingual speech: A typology of code-Mixing*. Cambridge University Press.
- Oxford University Press. (n.d.). Anti. In *Oxford Advanced Learner's Dictionary*.
<https://www.oxfordlearnersdictionaries.com/>
- Wouk, F. (2001). Solidarity in Indonesian conversation: The discourse marker ya. *Journal of Pragmatics*, 33(2), 171–191. [https://doi.org/10.1016/s0378-2166\(99\)00139-3](https://doi.org/10.1016/s0378-2166(99)00139-3)