CODES USED BY TWO PAIRS OF IDENTICAL TWINS

Gunawan, W. F.[1] and Tedjaatmadja, H. M.[2]
[1,2] English Department, Faculty of Letters, Petra Christian University, Siwalankerto 121-131, Surabaya 60236, East Java, INDONESIA
Emails: wida_gunawan@yahoo.com; windy382@.petra.ac.id

ABSTRACT
This study is about the codes used by two pairs of identical twins to their co-twin in their daily conversation. It is supported by Wardaugh's (2006) and Stromswold's theories (2004) of codes and language development. The data was gathered from the utterances produced in the given role plays. The findings reveal that seven types of codes were used by these pairs of twins. The similarities are all of them did not use secret language and both pairs mostly used Indonesian codes. The differences are the frequency of each code used and in general, Pair 2 is more formal than Pair 1. In conclusion, having Javanese parents does not always mean using Javanese codes when communicating with others and although they are twins, they do not always use similar codes. These differences might happen because of the differences in religion and travel experiences.
Keywords: Codes, Identical Twins, Language Development

In general, when people communicate with others, they will open their mouth and choose a particular language, dialect, style, register or variety – that is, a particular code (Wardhaugh, 2006, p. 88). According to Richard (cited in Holmes, 1985, p.42), code is a verbal system of signals which can be used for sending a message. It can take the form of language, language variety, speech variety or dialect. It is used when people want to stress the use of language or language variety in a particular community. Code can be used to refer to any kind of system that two or more people employ for communication. By having communication, people are nearly always faced with choosing an appropriate code when they speak. Sometimes the writer also finds differences of codes used by people, even by a pair of identical twins.

According to Stromswold (2004, pp.1-2), it is clear that identical twins who have identical genetic endowments and environment do not always have identical language systems. It is also known that identical (monozygotic) twins are linguistically more similar to one another than fraternal twins (dizygotic). It is because identical twins share 100% of their genetic material while fraternal twins share only 50%. He further said that there are also environmental factors that may give effect to phenotypic variance, such as shared environmental factor and non-shared environmental factors. Environmental factor includes the linguistic input children receive and non-shared environmental factor includes the illness or accidents that only one of them experiences.

Because of this kind of findings, the writer is curious about the language of twins, especially that of identical twins. There are also some studies which reveal that between languages there is also a secret language usually called autonomous languages, cryptophasia and idioglossia. It seems to belong to the mystique of twins communicating in paranormal ways and monozygotic twins were better 'interpreters' of each other's utterances (Piontelli, 2002, p. 133). By seeing this kind of twins language, the writer takes some pairs of twins that are teenagers, around 17-25 years old, live and study in Surabaya, and agree on being the subject of the study. Based on these criteria, finally, the writer found two pairs of identical twins; namely are Pair 1 and Pair 2. They are 19 years old and 20 years old respectively. They have many similarities. First, they take the same major in the same university. Second, they usually spend their time together with their co-twins, not only at their house, but also at college. Being twins, they have unique characteristics; for instance, when one of them is sick, the other can get sick too. As for Pair 2, they once were separated if they were crying. One would be at their house and the other would be at their aunt's house which is not far from theirs.

This research is conducted because the writer is curious about how twins use codes when they speak to their co-twins, particularly because the writer is also an identical twins and uses

different codes when speaking to her co-twin sister. The purpose of the study is to identify and understand the codes used by identical twins as well as the differences and similarities between their uses. Although they are twins, they may have the differences and similarities in communicating between themselves.

METHODS

In this research, the writer uses qualitative approach supported by quantitative data. The participants of this data are two pairs of identical twins who are willing to participate in the research. They are around 17-25 years old and take the same major at the same university in Surabaya. The source of data of this study is all dialogue lines spoken by these two pairs. The data of this research are the codes used by these pairs of identical twins to each other and the unit of analysis is word. In this research, the writer would also look for the similarities and differences.

In getting the data, the writer gave the questionnaire to know the background of the subjects and gave some role plays based on the differences that they had (as indicated in their background questionnaires), and they had to discuss what they would do in these situations. The writer also asked their permission to record it. A video recorder was used to record because it helped the writer to identify the subject who spoke in that time. Since the writer was the one who recorded it, she was not involved in the conversation.

After recording their discussion, the writer transcribed the dialogue of the conversation and underlined each of code found in each dialogue line. After completing the transcript, the writer gave two digits of numbering systems. The first digit was for the subjects and the second digit was for the codes they used. The first digit would be four subjects, there were Twin 1A, 1B, 2A, 2B. The second digit was the number of the sentences that they were talking about. The writer excluded some categories such as fillers (e.g. *sih, kan, lho, nah*, etc), the name of place (e.g. America, China, France, etc) and the name of person (e.g. Dicky, Ronald, Wida). The fillers, name of place and name of person that were not included in the analysis were written in bracket (....). After that, the writer gave numbers of them in the appropriate sub-column of the types of codes in the third column. Next, the writer counted the percentage of the codes used by these two pairs of twins. Based on the percentage of each code, the writer could find the differences and/or the similarities between the codes used by these pairs of twins.

FINDINGS AND DISCUSSION

Table 4.1.The Codes Used by Pair 1

No	Type	1 A	1 B
1	Indonesian Codes	83.193%	75.862%
2	Javanese Codes	3.151%	6.130%
3	Suroboyoan Codes	1.260%	1.149%
4	Secret Language	0.000%	0.000%
5	Indonesian Slang Codes	6.723%	7.280%
6	Foreign Codes	2.521%	0.766%
7	Mixed Codes	3.151 %	6.130%
8	Unknown Codes	0.000%	2.682%

Note: Mixed Codes can be Javanese-Indonesian, Javanese-Jakarta, Suroboyan-Indonesia, and Indonesian-Jakarta.

If we pay attention to this table, there are seven codes out of eight codes that appear in Pair 1, except Secret language (0.00%). Firstly, the most often used types of codes used by the Pair 1 to the co-twins is Indonesian codes because Indonesia is their home country and their parents come from different cities, namely Lombok and Surabaya respectively. Besides, Twin 1A used more Indonesian codes than Twin 1B because of his experience as a private teacher. In a work setting, people usually use more formal language; so as a private teacher, he probably had to explain the material using *bahasa Indonesia* to avoid any miscommunication. However, from the conversation it is also found that Pair 1 used "if" in a different way. Twin 1A used "*kalau*" (Indonesian codes) while Twin 1B used "*lek*" (unknown codes), as shown in the following sentences:

A: (Kan) enak kalau sudah punya mobil.   *(1A.41)*

(It will be better if we have already had a car)
B: Lek misale itu (kan) nggak ada modale to?　　　　*(1B.24)*
(If it was like that, you did not have any capital, right?)

　　　　Next, Twin 1A and Twin 1B also used Javanese codes possibly because they live in Java and it is a kind of informal language in conversation. In addition, Suroboyoan codes were also used probably because they have lived in Surabaya for 18 years. The example of Suroboyoan codes, are
A: Kayak orang susah aja, keluar semua uangnya.　　　　*(1A.90)*
(Don't act like poor people, just spend your money)
B: (Eeee), nunut ae.　　　　*(1B.11)*
(I follow you)

　　　　Then, the Indonesian slang codes used are colloquial words, usually Jakarta codes. It might happen because of influence of Jakarta codes in electronic and social media, e.g. TV or Twitter. The example of Indonesian slang codes used by these pairs of twins are *"gini", "gitu", "makasih", "gimana", "pingin",*and*"nggak"*. The examples of the utterances are:
*A: Kalau kamu **gimana**?*　　　　*(1A.68)*
(How about you)
*B: Harus pesta, terus **nggak** punya rumah buat tinggal.*　*(1B.49)*
(If you hold a party, you cannot afford to buy a house)

　　　　Note: The bold underlined words are defined as Indonesian slang words, namely Jakarta colloquial language. The word *"gimana"* is the colloquial form of *"bagaimana"* (How), and *"nggak"* is colloquial word for "*tidak*" (no).

　　　　The other codes used by Twin 1A and 1B are foreign languages, namely Chinese, English, mixed codes which include Javanese-Indonesian, Javanese-Jakarta, Suroboyoan-Indonesia, and Indonesian-Jakarta. These are the examples of each type:
▪　　　　Indonesian-Javanese
*A: Kalau punya rumah bisa jadi tempat **tongkrongan**.*　　*(1A.43)*
(If we have a house, it can be a place to hang out)
*B: Iya **rasae**, naik pesawat ae.*　　　　*(1B.06)*
(I think so, let's go by plane)

　　　　Note: The suffix "*-e and -an*" are identified as Javanese codes. Therefore the words above are the mixed word between Indonesian and Javanese codes.
▪　　　　Javanese-Jakarta
*B: Kerja ikut orang, terus baru **ngumpulin** uang, baru buka*
usaha sendiri.　　　　*(1B.28)*
(Get a job, save up some money, then start your own business)

　　　　Note: The suffix "*-in*" in "*ngumpulin*" is Jakarta codes and the word "*ngumpul*" is Javanese codes. Thus, the word "*ngumpulin*" is the combination of Javanese and Jakarta codes.
▪　　　　Suroboyoan-Indonesia
*A: Uang **sangunya**.*　　　　*(1A.27)*
(The pocket money)

　　　　Note: The suffix "*-nya*" is identified as Indonesian codes and the word "*sangu*" is Suroboyoan codes; so "*sangunya*" is the mixed codes between Suroboyoan and Indonesia codes.
▪　　　　Indonesia-Jakarta
*A: Siapa coba yang **bayarin**?*　　　　*(1A.29)*
(Who will pay?)

　　　　The writer found that there are similarities and differences in the codes used by Twin 1A and Twin 1B. The similarities are Pair 1 did not use any secret language in their conversation and they mostly used Indonesian codes. The differences are the Twin 1A used Chinese and English for foreign codes while Twin 1B only used English codes and Twin 1A used more Indonesian codes than Twin 1B, probably because Twin 1A is a private teacher.

Table 4.2.The Types of Codes Used by Pair 2

No	Type	2 A	2 B
1	Indonesian Codes	89.286 %	88.734 %
2	Javanese Codes	1.905 %	0.772%
3	Suroboyoan Codes	1.429%	1.389%
4	Secret Language	0.00%	0.00%
5	Indonesian Slang Codes	3.810 %	3.086 %
6	Foreign Codes	1.190%	2.778%
7	Mixed Codes	2.143 %	2.315 %
8	Unknown Codes	0.238%	0.926%

Based on Table 4.2., there are seven out of eight codes that appear in Pair 2, except Secret language (0.00%). Firstly, the most often used types of codes used by the Pair 2 to the co-twins are Indonesian codes because Indonesia is the common language and they like to participate in a research paper competition that uses a formal language. The following illustrates how the Indonesian Codes were used by Pair 2:

A: Satu kedai saja terus dibuka jadi dimana-mana.   *(2A.28)*
(Open one stall in many places)
B: Untuk akomodasi sama, pastinya naik pesawat ya.   *(2B.04)*
(The accommodation will be the same, we will go by plane)

Next, Twin 1A and Twin 1B also used Javanese codes because they live in Java and it is a kind of informal language in conversation and Suroboyoan codes can appear in their conversation because they have lived in Surabaya for 2 years. The examples of the Suroboyoan codes used by Pair 2 such as "*gara-gara*", "*pesen*" can be seen in the examples below:

A: Terus, aku (sih) milih [Paris], gara-gara dia (kan) salah
satu negara paling romantis di dunia.   *(2A.06)*
(Then, I choose Paris, because it is one of the romantic countries in the world)
B: Dan yang paling penting diterima oleh kedua orangtuaku,
soalnya itu pesen mamaku kalau mau cari pasangan itu harus diterima oleh semua keluarga.
          (2B.64)
(And the most important thing is to be accepted by my parents, because my mom said that if we want to find a boyfriend, he must be accepted by the whole family)

Then, the Indonesian slang codes are colloquial words commonly used in daily conversation, namely Jakarta codes. The examples are "*gini*", "*gitu*", "*ngapain*", "*pingin*",and"*nggak*". The following example describes the situation:

*A: Aku (sih) pilih klinis, pada dasarnya **pingin gini**,karena*
pada dasarnya ada isu-isu bahwa 2014 nanti (kan) ada,...   *(2A.63)*
(I choose clinic, because that's what I want, because I hear that in 2014 there will be ...)
*B: Ya **nggak** tahu (sih), Kak.*   *(2B.23)*
(I don't know)

Note: The word "*pingin*" is one of Indonesian slang words (Jakarta codes). If it is translated into English, it will share the same meaning as "want". The word "*gini*" is a colloquial word from "*begini*" (like this).

The other codes used by Twin 1A and 1B are foreign codes, namely Chinese, English and Arabic. They use these kinds of foreign language because they have learnt Chinese and English. In addition, they are Moslem, which is probably why the Arabic codes were used in their conversation. The last is mixed codes which include Jakarta-Indonesia, Suroboyoan-Indonesia, Indonesian-English, Indonesian-Javanese, English-Indonesian, Indonesian-Jakarta, Javanese-Indonesian, Jakarta-Javanese. These are the samples:

▪ Jakarta-Indonesian
*A: **Pinginnya** ke [Paris] ya?*   *(2A.02)*

(I want to go to Paris, yeah?)

Note: The suffix "*-nya*" is identified as a part of Indonesian codes, therefore the word "*pinginnya*" is mixed codes between Jakarta "*pingin*" and Indonesian "*-nya*".

▪ Suroboyoan-Indonesia

*A: 1M cukup **kayaknya**.* (2A.29)

(I think one billion is enough)

▪ Indonesian-Javanese

*A: (Lah), nanti kalau **misale** apoteker dituntut untuk ngerti*

farmakologinya (kan) nggak dipelajari. (2A.79)

(If one day a pharmacist is required to understand pharmacology, we won't understand because it was not taught)

*B: Nggak tahu (sih) **pokoke intine** aku masih 70% masuk*

industri. (2B.48)

(I don't know, the important point is I will probably work in industry)

Note: The suffix "*-e*" is identified as a Javanese codes and all words above ended with "*-e*" could be concluded as mixed word between Indonesian and Javanese codes.

▪ English-Indonesian

B: Soalnya kalau naik bis dankawan-kawan terlalu

*melelahkan dan **budgetnya** lebih banyak kayaknya.* (2B.05)

(I think if we travel by a bus, it will be tiring and it will cost a lot of money)

▪ Indonesia-Jakarta

*B: Aku (sih) pertama, pingin **buatin** rumah mama di daerah*

perkampungan mama. (2B.08)

(First, I want build a house for mom in her hometown)

Note: The suffix word "*-in*" is a Jakarta codes and the word "*buatin*" is a mixed word between "*buat*" (Indonesian) and "*-in*" (Jakarta).

▪ Javanese-Indonesia

*B: (Kok) nggak **mendhingan** bikin kayak, toko baju*

***mendhingan** lebih baik daripada franchise.* (2B.17)

(Is it better to set up a boutique than a franchise)

Note: The suffix "*-an*" is Indonesian codes and the word "*mendhing*" is Javanese codes so the words above are the examples of Javanese-Indonesian codes.

▪ Jakarta-Javanese

*B: Untuk pesta pernikahan (sih), **pingine** ya sama kayak pesta*

pernikahan yang lain, di gedung, didatangi temen-temen *semua,*

temen-temen *baik SMP, SMA.* (2B. 66)

(I want to have a wedding party like others, in buildings, visited by all of my friends, from Junior and Senior High Schools)

The writer found that there are similarities and difference in the codes used by Twin 2A and Twin 2B. The similarities are these Pair 2 did not use any Secret language in their conversation and they mostly used Indonesian codes. There is no specific differences of codes used by Pair 2.

Table 4.3. The Differences and Similarities the Codes Used by Pair 1 and Pair 2

No	Types of Codes	Pair 1		Pair 2	
		1A	1B	2A	2B
1	Indonesian Codes	83.193%	75.862%	89.386%	88.734%
2	Javanese Codes	3.151%	6.130%	1.905%	0.772%
3	Suroboyoan Codes	1.260%	1.149%	1.429%	1.389%
4	Secret Language	0.00%	0.00%	0.00%	0.00%
5	Indonesian Slang Codes	6.723%	7.280%	3.810%	3.086%
6	Foreign Codes	2.521%	0.766%	1.190%	2.778%

7	Mixed Codes	3.151%	6.130%	2.143%	2.315%
8	Unknown Codes	0.00%	2.682%	0.238%	0.926%

The similarities that appear in these two Pairs of twins are they did not use any secret language in their daily conversation although the theory said that twins may have a secret language to communicate with their co-twins (Piontelli, 2002). Besides, there is a similarity in the sequence of the codes that the first is Indonesian codes and the second is Indonesian slang codes, Jakarta codes. Colloquial Jakartan Indonesia has become a standard informal style (Sneddon, 2006, p. 1) and thus it may be the second mostly used codes.

The differences of these two Pairs of twins are Pair 2 used Indonesian codes and the gap between the frequency of each code was not as much as that of Pair 1. This implies that Pair 2 is more formal than Pair 1, especially in twin 1B. It may happen because Pair 2 often joins research competitions that force them to use formal Indonesian language, while only one of Pair 1 has some private students that make him use Indonesian in teaching. On the other hand, Pair 1 used Javanese codes more often than Pair 2 did. It is assumed that Pair 2 is more formal than Pair 1.

Besides the differences in the use of Indonesian language and Indonesian colloquial language, there are also differences in the foreign codes used aside from English and Chinese. Table 4.3 shows that Pair 2 used more foreign language than Pair 1. It is probably because Pair 2 has been to Malaysia for holiday while Pair 1 did not have any experience in foreign country. Besides, there are some of Arabic codes in Pair 2's conversation, such as *insya'allah, soleh, ustad* because they are Moslem.

The study also reveal that Pair 2 has fewer differences in the codes used between themselves if compared to Pair 1 does. For example, in Indonesian codes used by Pair 1, Twin 1A is 83.193% while Twin 1B is only 75.862%, in Javanese and mixed codes Twins 1A is 3.151% while Twin B is 6.130%. On the other hand, in Indonesian codes used by Pair 2, Twin 2A is 89.386% while Twin 2B is 88.734%, in Javanese codes Twin 2A is 1.905% and Twin 2B is 0.772%, and in mixed codes Twin 2A is 2.143% and Twin 2B is 2.315%.

The results from the present study show that having Javanese parents does not always mean using Javanese codes when communicating with others and although they are twins, they do not always use similar codes. The different codes can happen because of religion or their travel experience.

CONCLUSION

Therefore, it can be concluded that identical twins are quite similar to each other linguistically and do not always use secret language in their daily conversation. Furthermore, it is also found that the codes from the place where identical twins live are not always the dominant codes while speaking to each other. From this study, it is expected that more studies related to codes would be carried out in the future to widen the knowledge about codes which has not been discovered.The writer also hopes that future studies could discover the reasons in which similarities and differences occur in identical twins.

REFERENCES

Holmes, J. (1985). *An introduction to Sociolinguistics*. London:Longman.

Piontelli, A. (2002). *Twins: From Fetus to Child*. USA: Routledge.

Sneddon, J. N. (2006). *Colloquial Jakartan Indonesian*. Australia: Pacific Linguistics.

Stromswold, K. (2004). *Why aren't identical twins linguistically identical*. New Brunswick: Rutgers University. Retrieved December 1, 2012 from http://www.summer10.isc.uqam.ca/page/docs/readings/stromswold_karin/image01.pdf.

Wardhaugh, R. (2006). *An Introduction to Sociolinguistic*. Massachusetts: Blackwell Published.