Code-Switching in Whatsapp Group: A Social Realty Amid Covid-19 Pandemic

Endang Yuliani Rahayu¹, Agnes Widyaningrum², Yulistiyanti³, Teguh Kasprabowo⁴

^{1,2,3} English Letters, Faculty of Language and Cultural Studies Universitas Stikubank (UNISBANK) Semarang, Indonesia

Artic	e In	0

ABSTRACT

Article history:	The current study examined the use of Code-Switching in WhatsApp Group (WAG) to find out what codes were used and
Submitted Jun 11, 2021 Revised July 30, 2021 Accepted Oct 6, 2021 Published Nov 9, 2021	switched among users of WA and in particular to identify rationales for such a discursive practice in their communica amid Covid-19 Pandemic. Data for this study were screenshot linguistic exchanges in WAG over a period of two days (weeke Theoretical framework for the use of Code- Switching highlighted as the basis of data analysis. Findings reveal that n
<i>Keywords:</i> Code-switching WhatsApp group Covid-19 Multilingual Multicultural	members of WAG employ intra-sentential code-switching. Regarding the rationales of code-switching, most members used code- switching to talk about particular topics and to show empathy. The study concludes that code switching is a social reality in a multilingual and multicultural society of diverse educational background. It is highly recommended that similar studies be conducted in some wider and more diverse strata of people in the use of CS to support a newly coined term 'Permanent Code Switching' (PCS).

Corresponding Author:

Endang Yuliani Rahayu,

English Letters, Faculty of Language and Cultural Sciences, Universitas Stikubank (UNISBANK) Semarang, Indonesia Jl. Tri Lomba Juang No 01, Semarang, Indonesia. Email: endangyuliani@edu.unisbank.ac.id

INTRODUCTION

As a social creature, anyone on earth, for sure, needs to linguistically interact with one another in fulfillment of his or her social encounters, such as greeting each other directly, asking for and giving information, expressing empathy, giving advice etc. This is a human tradition of socialization from time to time, changing in modes of communication in line with the development of human civilization (Smyth et al., 2020) to show the progress of media multiplexity and modality switching. This further support the dynamics of human nature.

In multilingual and multicultural society, Code Switching (CS) has been commonly used in different codes, types, purposes and functions (Osborne, 2020). A literary work (Novel) has also been investigated regarding the use of CS (Wiruna, 2018) to give evidence that social reality may be represented in a novel. Factors in the use of CS has also been examined in Malaysian students (Muthusamy et al., 2020) to show self identity, level of education and power relationship. The use of CS has been searched in social media (Halim & Maros, 2014), to investigate the function of CS in Facebook interaction.

Amid Covid-19 Pandemic has changed the mode of delivery in education—classes have to be conducted online with of course different levels of digital technology from highly sophisticated learning management system (LMS) to a simple use of smartphones



(WhatsApp, email, etc.). This applies to any level of education (Qazi et al., 2020). The use of social media has also increased tremendously in response to the need of communication in particular the use of WhatsApp Group (WAG) as a means to limit access by only its members (Maros et al., 2020).

It is a 'good' thing that Covid-19 occurs when Internet technology has been relatively ready. Had Covid-19 broke out—say 40 years ago, no one would have survived. Education would have stopped as no alternative modes of learning were available. In short cyber-technology has somewhat saved human civilization. It is hard to imagine how people go shopping for every need without the service of online purchases; and many other social events would be on hold without Internet during the pandemic.

To accomplish a research endeavor of CS, it is of high necessity to highlight Sociolinguistic theories related to CS phenomena, It is theorized that codes (languages) can be basically switched in three different ways—inter-sentential, intrasentential and tagging (Utami, 2019). To illustrate, an intersentntial switching occurs in one full sentence to another full sentence. Meanwhile, intrasentential occurs within one sentence by replacing one or more words with word(s) of a different language. Furthermore, tagging refers to a tag in one language is inserted at the end of an utterance in another language.

There are some reasons (rationales) for the use of CS (Tajudin, 2013), which among others include talking about a particular topic, showing empathy, quoting someone else's utterances, interjecting, repeating for clarification, intending to clarify, expressing group identity, and softening or strengthening commands. It is important, though, to note that reasons may develop depending on the context in which they are applied. Meanwhile, functions and reasons of CS may overlap depending on what sides CS is viewed (Reyes, 2004), such as forgetting one word, which is finally supplied with another word in a different language with which both the speaker and the hearer are familiar—it refers to fluency function.

The current study explored the use of CS in WhatsApp Group (WAG)—referred to as a group of WA members of similar interests, personalities, institutions and or friendship types—especially amid Covid-19 Pandemic in which almost all social events, such as expressing eulogy, congratulating achievements, giving information, to mention only a few. were performed online in appreciation of the government's regulation of social distancing. In this respect, varieties of CS need to be evidently researched in order to know (1) the codes, (2) the types of CS, (3) the rationales and or functions and (4) the context in which it occurs. In particular, the study wanted to justify that social media have become a social reality during the pandemic, and will very likely continue to be the benchmark of communication in the future with a significant reference to the emerge of Society 5.0 as a manifestation of IRA4.0—identified as maximizing the use of Internet in all types of cybertechnology, minimizing human physical contacts, replacing human resources with robots, and service-oriented products supplying (Salgues, 2018). To be more specific, the novelty of the current study is to justify when CS should and should not be used—something that has never been discussed in the previous studies.

THEORY AND METHOD

In line with the theoretical nature of CS as linguistic phenomena, in which, particularly during natural linguistic exchanges, codes may change from one to another to comply with the social need of communication in linguistic community, the current study employed a descriptive, qualitative design which is explorative, and interpretative in nature (Maxwell, 2012) to examine the phenomena. Data of the study were collected by screenshots of dialogic utterances taken from a WAG. There were 35 screenshots of dialogic lines taken up as the data. Therefore, each line of the dialogue became the unit of analysis. Occurrences of CS in the WAG were highlighted and tabulated for further discussion. More specifically, the data were analyzed employing the following procedures:

- (1) Identifying—reading the messages, highlighting suspected linguistic features in which CS may occur;
- (2) Coding—highlighting and tabulating the CS features;
- (3) Classifying the CS features into suitable types of CS as theorized;
- (4) Interpreting the results in further discussion to find out the reasons, functions and contexts of CS.

RESULTS AND DISCUSSION

We have posted four research questions or problems. Upon the display of the results (findings), we interpret and discuss them one after another to justify the truth comprehensively as the basis of drawing conclusion and formulating recommendations for future researches.

Codes Switched

First of all, we would like to present the findings with reference to 'codes switched as the answer to Research Question 1 (RQ1). Described in Table 1 below are the codes switched intersentially, intrasententially or as tags:

No	Code	Wor	Word Counts		
		frequency	percentage		
1	Indonesian	143	39,7		
2	Arabic	92	25,5		
3	English	115	31,9		
4	Others	10	2,7		

Table 1. Codes Switched

Table 1 above clearly demonstrates that Bahasa Indonesia is used most of the time (39,7%). This is normal since the WAG members are all Indonesian people with different occupational and educational background. The problem lies in the fact they code-switched into Arabic (25,5%) at one time and into English (31,9%) at another time.

Code-switching (CS) from Indonesian to Arabic may mean that the user(s) is Moslem as it is commonly known that Arabic is the language of Islam in terms of the Holy Scripts (Koran). It is also evident that Moslems use Arabic in their prayers and they also have typical Arabic phrases to express occasional ideas, such as "*Innalilhi wa inna ilaihi raji'un*" as an expression to state condolence that someone has passed away. Thus, it can be said that this kind of code-switching is aimed at showing identity. However, in Indonesia, it is not guaranteed 'valid'. A number of non-Moslem people are able to pronounce the Arabic greeting such as "*Assalamu'alaikum wa rahmatullahi wa barakatuh*" just to respect that the majority of Indonesian people are Moslems. Therefore, he or she uses such as greeting when making a public speech as a leader. In this respect the greeting '*Assalamu'laikum*' has become public use without regard of the religion. This finding supports a research finding with respect to universalization of language communication values to reach harmony of the community (Suherman, 2011).

Meanwhile, CS from Indonesia to English occurring in this special WAG is of a special concern as to why they had to code-switch their native language (Indonesian) into English. Such a tendency is not without reason. It is simply that the WAG members are of the English Department students. Such a Phenomenon is also supported by a research in

language learning strategies (Peacock & Ho, 2003). In an informal setting, foreign or second language learners may code-switch from their native tongue into the target language.

Types of Code-Switching

Further described below are types of CS identified from the collected data. For ease of analysis and discussion, they are tabulated in Table 2.

No	Type of Code Switching	Fi	requency	Precentage
1	Inter-sentential Code Switching		2	5,71%
2	Intra-sentential Code Switching		29	82,85%
3	Tag code Switching		3	8,57%
		Total	35	100%

Table 2. Types of Code-Switching

As evidenced in Table 2, it turns out that intra-sentential type of CS occupies the high level of occurrence (82.85%). This coincides with the finding of research project (conversation analysis) in which intra-sentential code switching outstands the other two types (Retnawati & Mujiyanto, 2015). It can therefore be implied that CS does not mean to change one language into another language. There is always one mainstream language. Changes are limited to one or two words (phrases) then return to the mainstream language. If ever inter-sentential code switching occurs, the frequency is very low as evidenced in this study of only 5.71%. It seems to be an unnatural use of the mainstream language when a speaker suddenly jumps into another language with sentences. Code switching shall be made as naturally as possible—that is not to go far beyond the mainstream language, resulting in an assumption that such a speaker may be considered to show 'improper social conducts'.

The use of tagging (tag code switching) is also of low percentage (8.57%). It supports Poplack's research findings of CS in which the use of tag code switching is labeled as being 'less intimate type' (Poplack, 2000). This further strengthens the claim that tagging is not a good practice in code- switching. Thus, from this point. It shall be theorized (initially, though) that the most appropriate type of code-switching is intrasentential—that is to limit CS to substituting one or more words within one meanstream sentences. In other words, inter-sentential and tagging types of CS should be minimized as low as possible.

Of course, it is impossible, especially in multilingual and multicultural contexts, to avoid speaking in the mainstream language without performing code-switching. This is due to the fact that CS implies 'self identity' which helps promote the user(s) into a much higher social status— particularly code-switching into a more prestigious language, demonstrating more knowledgeable individuals. To elaborate, a native speaker of Indonesian may be thought of as being smarter when at one point or another he or she can code-switch intrasententially in one or more English words. The reason is that English is considered to be a more prestigious language. However, a native speaker of Indonesian who speaks English with occasional switching into Indonesian (even if only one word or two), he or she will be likely labeled as 'less proficient' in English.

The use of Arabic in the current study does not really reflect Arabic proficiency as

the Arabic words (phrases) in use are typically employed by most Moslems—though it is not always true as evidenced in Indonesian contexts. In practice, some non-Moslem individuals, as previously mentioned, can make pretty appropriate uses of the Arabic phrases when speaking in public. Thus, code- switching into Arabic is not considered 'special' at least in Indonesian context of language use. However, the use of English codeswitching will promote self-intellectual capacity. In this study, most of the WAG members are lecturers and students of the English Department. This will, probably, present a different assumption, such as being influenced by the target language they are at present learning, boasting themselves as starting to lose their native language (Indonesian), and to acquire the target language.

The current study further justifies that the use of code-switching in intrasentential types indicates a higher self dignity—thus, it is recommended. However, the use of inter-sentential code- switching has to be discouraged as it does not represent any integrity with respect to which language is actually mastered and being professionally used. Furthermore, overuse of tagging code-switching should also be discouraged as it will be assumed to be less intimate. In this respect, there is one point to note—a native speaker of one language is encouraged to intra-sententially code-switched into a more prestigious language, especially dealing with technical terms. With this, he or she will be labeled as being 'smart' and 'knowledgeable' in the subject matter with which he or she is dealing. Another point to note when performing CS is that he or she has to pronounce the foreign words he or she is trying to use. In the case of using social media, such as Facebook, Twitter, WhatsApp, etc., he or she has to spell the foreign words correctly. Failure to do so shall, for sue, ruin one's self- intelligence. In other words, correct pronunciation is a must for spoken language and correct spellings for written language.

Another point with respect to the use of CS is that an individual should not employ any form of CS when speaking a foreign language. It has been somewhat previously mentioned that he or she will be assumed as not being proficient in the foreign language. In other words, CS can only be used when speaking or writing in one's native language to promote self-dignity. This is also discussed below under CS as a social reality.

Rationales for the Use of Code-Switching

Any strategy employed in linguistic interaction must have a rationale for which choices are made. This is in line with what functionalists have proposed—language is used to make meanings through a series of grammatical and lexical choices (Eggins, 2004). To create one type of meaning in a language, for example, an individual is confronted with a series of choices in grammar and lexical items. He or she has to appropriately select grammatical features and lexical items only to produce one meaning which is ideationally, interpersonally and textually acceptable. Presented below are the findings of the use of CS in WAG in terms of choice rationales. See Table 3 underneath.

No	Rationales for Code Switching	Frequency	Percentage
1	Talking about a particular topic	7	20%
2	Showing emphaty	7	20%
3	Quoting someone else	0	

4	Interjection		3	8.57%
5	Repetition		5	14,.28%
6	Intention of clarifying speech content		4	11.42%
7	Expressing group identity		4	11.42%
8	Softening /strengthening commands /reques	ts	1	2.85%
9	Due to real lexical need		4	11.42%
10	Excluding other people when a comment in		0	
	intended for only limited audience.			
		Total	35	100%

To discuss the above results, we describe the process of data analysis to justify the rationales to arrive at those special choices. However, for efficiency, only distinctive processes are described— involving limited purposefully selected data. This will not have any impact since the non-selected data are similar in nature.

As evidenced in Table 3, two choices are of equal level—talking about a particular topic and showing emphaty with 20% respectively. This happens situationally in nature and thus does not justify in different contexts.

Yaumil milad mbak Endang, Semoga selalu sehat & bahagia, Semoga selamat dunia akhirat, Barakallahu fii umrik Aamiin (Data 1)

The use of typical Arabic expression of Birthday is to show identity that he or she is a Moslem, taking the opportunity to emphatically wish a happy birthday. She or he ends with a prayer in Arabic, which is also a typical expression of Arabic prayer, and therefore does not neccesarily mean that he or she knows Arabic, let alone speak Arabic like students of the Arabic Department, or the Middleeast Letters Department. The Arabic in use is typically by Moslems in such a context.

HBD mbak Endang Yuliani Rahayu Semoga sukses selalu (Data 2)

HBD has been commonly known as short for Happy Birthday. This is an expression of emphaty; and in social media, the short form of HBD is commonly used due to typing efficiency. In normal conversation (spoken), people use a complete for "Happy Birthday" or "Many Happy Returns of the Day.

Similar short forms of this type found in the data, include GWS (Get Well Soon) to express sympathy for 'sick friend', HP (Handphone) to mean 'Mobile Phone' or Cellular Phone'—a wrongly acceptable word. A native speaker of English may not understand HP as he or she may say Cellphone; RIP (Rest In Peace) to express condolence, normally used for Christianity.

Met *miladan* te EndYul. Smoga Allah sll maringi. Ksehatan yg sempurna. Usia panj yg berkah. Rezki yg luas. Dimudahkan dlm sgl urusan. Dikabulkan smua doa2nya. Sll istiqomah dlm iman Islam. Bhg dunia akherat.. Aamiiin. Aamiiin yaa Robbal' Alaamiiiin. (Data 3)

Two languages are involved—Indonesian and Arabic, all typical forms. A lot of abbreviated forms are used but they are all familiar in social media writing. However, the word 'miladan' is unique in nature since the Arabic word *milad* undergoes Indonesian morphological process (-an), meaning 'Enjoy— " as '*libur*' (holiday} and 'libur-an' (enjoy

the holiday), and thus "Met liburan", which is morphologically equivalent to "Met miladan".

"actually students are eager to have real internship experience, *tetapi karena keadaan yang tidak memungkinkan dan itu dapat membahayakan kesehatan diri sendiri dan orang lain*, we improvise because we have no better option" (Data 26)

Two languages are involved in the above utterance—English and Indonesian. It talks about a particular topic (internship). Internship is important for the students' real experience but the institution cannot provide one. From the utterance, it is clear that the writer is proficient in both Indonesian and English. It can be seen from the form of CW— inter-sentential or at least inter-clausal.

"so my picture book is a story about a young girl who has a crisis of confidence. dia merasa bahwa *"she has no talent"* dan ia juga merasa tidak pintar" (Data 28)

Similarly, Data 28 is an utterance code-switched from English to Indonesian to English and finally to Indonesia. The speaker is writing a picture book in English but at the same time he or she is trying to explain it in Indonesian. From this point, it is clear that both the writer and the reader have reached a considerably good English proficiency and have fully acquired Bahasa Indonesia as their native language.

Table 3 indicates that another rationale for choice of CS is repetition—to repeat particular words or phrases for berter comprehension (14.28%) or emotional touches

I have compressed my video mom, please wait.. tolong tungguya mom. (Data7)

Actually, the utterance '...please wait' and 'tolong tunggu ya..' have the same meaning. The first part (in English) is to show that he or she is an English Department student, talking to his or her lecturer. However, she is emotionally touched that she is still Indonesian, and therefore trying to express it in Indonesian 'tolong tunggu ya..' which is actually wrong. It can be better written as 'mohon tunggu', as he or she is talking to a lecturer. He or she should have used the formal form.

Rationales, such as 'intention of clarifying speech content', 'expressing group identity', and 'due to real lexical need' occupay the same degree of frequency (11.42%), of which the justification can be seen below:

"Her parents always compare her to her brother who is a doctor, *dan karena itu ia selalu merasa dirinya kurang*" (Data 29)

It is also possible that an individual who is emotionally touched, expresses something in a foreign language he or she is learning. However, he or she realizes that he or she is still Indonesian, therefore driven back to where he or she belongs—writing in Indonesian, ' *dan karena itu ia selalu merasa kurang*'. Thus, emotional touches or factors may cause any bilingual individual to code-switch from and to a language in which he or she is considerably proficient.

Another rationale (8.57%) involves 'Interjection' to express a kind of surprise about a certain event. Upon hearing the death of a Moslem, we spontaneously write (in social media) or say "*Innalilahi wa inna ilaihi raji'un*' a typical expression of interjection of sorrow. Another interjection expresson is '*Astaghfirlloh*,' to feel sorry about something. A special research should be conducted to examine sociolinguistically whether the Indonesian language has borrowed or acquired such Arabic expressions to show sympathy on particular event which are sorrowful in nature. We are in a difficult stance since the expressions maintain their special Latin spelling excluded from the Indonesian formal spelling rules.

To soften and or strengthen command or request is another rationale of CS choice despite of very low frequency (2.85%) in this study. A screenshot "I'm sorry mam, **belum bisa gabung** ...in have bad signal there.," the English initial utterance 'I'm sorry mam' is used to soften the excuse of not being able to attend (join), and giving a reason for not being able to join to end the utterance in English—'have bad signal there.' Such a student employs a touching strategy to his or her English lecturer. With this, the lecturer may not get mad, thereby granting permission of not joining the online session.

Code-Switching as a Social Reality

CS, what we really mean here, is as used in social media by netizens. A new world has just started—say upon the outbreak of Covid-19 pandemic. We have to live in a new civilization with tight health protocols, such as frequent hands washing, wearing maskers whereever you go, social distancing and avoid crowds of people. Online education has been implemented for over one year and we do not know whether it will go on this way or return to its original offline mode upon the end of Covid-19 pandemic. In this situation, social media, such as Facebook, Twitter, WhatsApp Messenger become fixed alternatives to keep people cyber-socially connected as we have to minimize physical contacts.

Are we ready to head for Society 5.0? Japan claims its readiness to be in a human centric society (Fukuyama, 2018) where human activities are digitally-based within a few clicks from the mobile- phones. This, for sure, implies tremendous growth of online business, demanding implementation of cyber-writing through social media—all paperless as all written on screen from keyboards.

Meanwhile, in a diverse, multilingual, and multicultural society, it is arguably true that CS is unavoidable and will become a social reality. The problem then lies in the rules of conducts in the use of CS apart from the general knowledge of the types, rationale and functions of CS. The proposed basic principle of CS is that, as already touched upon in the above discussion, an individual should not code-switch in a foreign language. Instead, he or she is recommended to only code-switch in his or her own language. Code-switching in a foreign language may create an impression that an individual has not mastered the foreign language. Conversely, code-switching in one's mother tongue will create an impression that he or she knows more.

Every social medium has rules of conducts, telling what can be done and what cannot be done. Violating the rules may result in suspending the account up to its total banning where access to the account is always denied. This also applies in the use of WhatsApp Messenger as an individual account or within the WAG. Once a rule of the group is violated, Anyone can be kicked out from the group. Likewise, anyone can exit the group when he or she feels that his other privacy has been attacked.

Thinking ahead, we can imagine living in a society where physical contacts are minimized, where online shopping is the only choice, where education can be completed without teachers as everything can be performed off-campus (online). Codes have to be switched according to the contexts (of situation and of culture). They may be switched as we have discussed above but at one time or another it is possible that there will be permanent switching. What is this supposed to mean? For example, a Indonesian individual starts a cyber-conversation via WhatsApp, using one language with his or her Malaysian friend. In this respect, Indonesian and Malay are equally used, resulting in possible linguistic and cultural misunderstandings. These two individuals then agree to code-switch permanently in all types of communication in English—a language of which both of them have reached a considerably good mastery. From this moment on, they use English for good.

CONCLUSION

It has been evident that social media play an important role in human communication in an era approaching Society 5.0 as a manifestation of IR4.0 in which Internet (cyber-technology) is within reach of everyone. There is a blessing in disguise that Covid-19 pandemic broke out when we have been technologically prepared. By so doing, things can go on with the help of cyber technology. One form of social media, familiar with us is called WhatsApp Messenger (WA for short) in which there is a facility that enables WA members to be united in a group called WAG, normally consisting of people of the same interests—professionally, academically or whatever interests they might be linked. This special WAG taken as the data source belongs to the research team leader is of specialty—that is the occurrence of code-switching (Indonesian-Arabic-English) as one important phenomenon in sociolinguistics with intra-sentential code-switching as the most significant occurrence, followed by tagging, and inter-sentential. Regarding the rationale for CS, Two items are of equal significance, namely talking about particular topics and showing empathy. The other three of equal significance are clarifying, expressing group identity, and being in need of real lexical expressions. Meanwhile, repetition is surprising. Finally, interjections and negotiating commands occupy are of low choices. It is therefore recommended that future researchers conduct similar studies to see if CS occurs in different WAG to position social media as a new paradigm in communication. Secondly, CS should be used only when speaking the native language. Thirdly, speaking a foreign language employing CS is strongly discouraged. Finally, a term permanent code-switching (PSC) is also proposed, challenging future researchers to continue this attempt to further develop sociolinguistics.

ACKNOWLEDGEMENT

Our thanks and gratitude shall go to Office of Research and Community Service, UNISBANK for the research grant without which the current study would not have been executed. We also thank WAG members whose chatting lines had been screenshot for the data of this study. Finally, we thanks our proofreader, for finalizing this paper.

REFERENCES

Eggins, S. (2004). Introduction to systemic functional linguistics: 2nd. Continuum

International Publishing Group.

- Fukuyama, M. (2018). Society 5.0: Aiming for a new human-centered society. *Japan Spotlight*, *27*, 47–50. https://doi.org/https://dx.doi.org/10.1002/9781119507314
- Halim, N. S., & Maros, M. (2014). The functions of code-switching in Facebook interactions.
- Procedia-Social and Behavioral Sciences, 118, 126–133. https://doi.org/https://dx.doi.org/10.1016/j.sbspro.2014.02.017
- Maros, A., Almeida, J., Benevenuto, F., & Vasconcelos, M. (2020). Analyzing the use of audio messages in Whatsapp groups. *Proceedings of The Web Conference 2020*, 3005– 3011. https://doi.org/https://dx.doi.org/10.1145/3366423.3380070
- Maxwell, J. A. (2012). *Qualitative research design: An interactive approach* (Vol. 41). Sage publications.
- Muthusamy, P., Muniandy, R., Kandasam, S. S., Hussin, O. H., Subramaniam, M., & Farashaiyan, A. (2020). Factors of Code-Switching among Bilingual International Students in Malaysia. *International Journal of Higher Education*, 9(4), 332–338. https://doi.org/https://dx.doi.org/10.5430/ijhe.v9n4p332
- Osborne, D. (2020). Codeswitching practices from "other tongues" to the "mother tongue" in the provincial Philippine classroom. *Linguistics and Education*, *55*, 100780. https://doi.org/https://dx.doi.org/10.1016/j.linged.2019.100780
- Peacock, M., & Ho, B. (2003). Student language learning strategies across eight disciplines. International Journal of Applied Linguistics, 13(2), 179–200.
- Poplack, S. (2000). Sometimes I'll start a sentence in Spanish y termino en español: Toward a typology of code-switching. *The Bilingualism Reader*, *18*(2), 221–256. https://doi.org/https://dx.doi.org/10.1515/ling.1980.18.7-8.581
- Qazi, A., Naseer, K., Qazi, J., Al Salman, H., Naseem, U., Yang, S., Hardaker, G., & Gumaei, A. (2020).
- Conventional to online education during COVID-19 pandemic: Do develop and underdeveloped nations cope alike. *Children and Youth Services Review*, 119, 105582. https://doi.org/https://dx.doi.org/10.1016/j.childyouth.2020.105582
- Retnawati, S., & Mujiyanto, Y. (2015). Code switching used in conversations by an american student of the darmasiswa program. *Language Circle: Journal of Language and Literature*, *10*(1). https://doi.org/https://dx.doi.org/10.15294/lc.v10i1.4156
- Reyes, I. (2004). Functions of code switching in schoolchildren's conversations. *Bilingual Research Journal*, *28*(1), 77–98. https://doi.org/https://dx.doi.org/10.1080/15235882.2004.10162613
- Salgues, B. (2018). Society 5.0: industry of the future, technologies, methods and tools. John Wiley & Sons. https://doi.org/https://dx.doi.org/10.1002/9781119507314

- Smyth, B. M., Ainscough, G., & Payne, J. L. (2020). Modes of communication between highconflict separated parents: Exploring the role of media multiplexity and modality switching. *Journal of Family Communication*, 20(3), 189–205. https://doi.org/https://dx.doi.org/10.1080/15267431.2020.1754826
- Suherman, A. (2011). The Universalization of language communication values in religious community harmony: The Case Study of Sundanese Islamic Society. *TAWARIKH*, *3*(1).
- Tajudin, T. (2013). The occurrence of code switching on personal message of Blackberry messenger. *Journal of English and Education*, 1(2), 103–114.
- Utami, N. M. V. (2019). Code switching analysis in the notes made by the sales assisstants in ripcurl. *Lingual: Journal of Language and Culture*, 6(2), 20. https://doi.org/https://dx.doi.org/10.24843/ljlc.2018.v06.i02.p04
- Wiruna, T. A. (2018). The use of code switching in critical eleven novel. *Metathesis: Journal* of English Language, Literature, and Teaching, 2(1). https://doi.org/https://dx.doi.org/10.31002/metathesis.v2i1.514