



Analysis of Code-Mixing by The Bali Arknights Players Community on WhatsApp

Kadek Risma Septiani, Ganesha University of Education, Singaraja, Indonesia

Dewa Putu Ramendra, Ganesha University of Education, Singaraja, Indonesia

I Wayan Swandana, Ganesha University of Education, Singaraja, Indonesia

Abstract

This study investigates the phenomenon of code-mixing within the WhatsApp interactions of the Bali Arknights Players Community. The primary objective is to identify the types of code-mixing based on Hoffmann's (1991) classification. Employing a descriptive quantitative design, this research analyzed 168 instances of code-mixing extracted from group chat transcripts. The findings reveal three types of code-mixing: intra-sentential, intra-lexical, and involving a change of pronunciation. Intra-sentential code-mixing was the most dominant type, accounting for 74.40% of the data, followed by intra-lexical code-mixing at 21.43%, while code-mixing involving a change of pronunciation represented only 4.17%. The dominance of intra-sentential code-mixing indicates that community members more frequently insert English words or phrases into Indonesian sentence structures rather than hybridizing words or modifying phonological forms. This pattern reflects the influence of gaming terminology, which is predominantly expressed in English and widely adopted by bilingual speakers in online gaming communities. The study concludes that in specialized digital environments such as gaming communities, code-mixing functions as an effective communicative strategy to facilitate technical discussions, strengthen group identity, and maintain interactional efficiency among members.

Keywords: Code-mixing; Intra-sentential code-mixing; Bilingual Gamer Community

Corresponding: risma.septiani@undiksha.ac.id

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1. Introduction

In the modern era characterized by rapid technological progression and globalization, interpersonal communication has undergone a significant transformation, becoming increasingly multifaceted. According to Wardhaugh and Fuller (2015), the theory of speech communities suggests that a group of speakers is defined not only by shared linguistic rules but also by the normative expectations of language use within their specific social environment. Adhering to these norms allows for the systematic application of language variations in daily life. This is further supported by Spolsky (1998), who argues that language choice is a deliberate social act that reflects the speaker's relationship with the listener and the broader social context. One prominent linguistic phenomenon arising from this digital landscape is code-mixing, which involves the structural integration of two or more languages within a single communicative act. Putri et al. (2024) emphasize that in digital societies, language use in social media is a manifestation of how bilingual individuals navigate these social environments, often through specific patterns like phrase insertion in digital captions. This behavior is particularly visible



on instant messaging platforms like WhatsApp, reflecting how bilingual individuals adapt their linguistic repertoire to suit diverse social settings.

Language serves as a fundamental pillar of human interaction and acts as the primary bridge for social connectivity. As Sapir (1921) famously noted, language functions as a guide to social reality, implying that it transcends mere communication to shape how individuals perceive and engage with their world. Within social frameworks, language provides the mechanism for expressing complex ideas, emotions, and collective goals. Through these interactions, people establish relationships and foster mutual understanding, which in turn reinforces social cohesion. In multilingual societies such as Indonesia, this interaction frequently involves the use of more than one language in a single conversation. Consequently, code-mixing has become increasingly common, particularly among young people and digital communities who actively engage with global media and online platforms. Despite its prevalence, code-mixing is still often viewed merely as casual or informal language behavior, resulting in limited scholarly attention toward its communicative functions in highly specialized online communities.

From a linguistic perspective, code-mixing involves the systematic incorporation of elements from one language into another within the same sentence or discourse. Hoffmann (1991) categorizes code-mixing as the fusion of two languages within a single utterance, while Poplack (1980) argues that bilingual speakers follow grammatical constraints when mixing languages, indicating that code-mixing reflects linguistic competence rather than language deficiency. Previous studies in Indonesia have extensively examined code-mixing in educational contexts, social media captions, advertisements, and classroom interactions. For example, Lestari et al. (2025) identified dominant intra-sentential and intra-lexical code-mixing in educational YouTube content, whereas Saraswati et al. (2020) found that social media users frequently employ code-mixing to improve communication effectiveness and audience engagement. However, most existing studies focus on formal educational settings or general social media communication, leaving gaming communities relatively underexplored.

This gap is significant because gaming communities represent a unique form of digital interaction characterized by spontaneity, technical terminology, fast-paced communication, and strong group identity. In communities centered around online games such as *Arknights*, English gaming terms are frequently integrated into Indonesian conversations because many technical expressions do not have natural or widely accepted Indonesian equivalents. As a result, bilingual speakers continuously switch and mix languages to maintain efficiency, accuracy, and social connectedness during communication. Without proper investigation, the linguistic patterns emerging in these communities may remain undocumented, despite reflecting broader sociolinguistic changes influenced by globalization and digital culture. Therefore, examining code-mixing in gaming communities is important not only for understanding language behavior in online interactions but also for revealing how bilingual speakers negotiate identity, solidarity, and communicative needs in specialized digital environments.

A significant manifestation of this phenomenon can be observed within the Bali Arknights Players Community on WhatsApp. In this environment, players frequently combine Indonesian, English, and occasionally local Balinese expressions during interaction. The integration of English terms often functions as a practical strategy for discussing game mechanics, character roles, updates, and technical gameplay features more efficiently. Previous studies by Adinata et al. (2020) and Hilda et al. (2020) indicate that the “need-filling motive” is one of the strongest reasons bilingual speakers employ code-mixing in digital communication. Nevertheless, studies specifically examining code-mixing patterns in Indonesian gaming communities remain limited, particularly within WhatsApp-



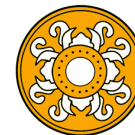
based interactions where communication occurs naturally and spontaneously. Therefore, this study is urgently needed to provide a clearer understanding of how code-mixing operates within gaming-oriented digital communities. By focusing on the Bali Arknights Players Community, this research contributes to sociolinguistic studies by extending the analysis of code-mixing beyond traditional educational and social media contexts into the domain of online gaming communication. In addition, the study contributes empirical evidence regarding the dominance and distribution of code-mixing types based on Hoffmann's (1991) classification. The findings are expected to enrich discussions on bilingual communication, digital discourse, and language adaptation in globalized online environments, while also serving as a reference for future research on language practices within gaming communities and other specialized digital groups.

2. Method

This study employed a descriptive quantitative research design to systematically identify and quantify the types of code-mixing used within the Bali Arknights Players Community on WhatsApp. The researcher collected 168 instances of code-mixing from group chat transcripts, which were then categorized based on Hoffmann's (1991) theoretical framework. Data analysis involved calculating the frequency and percentage of each code-mixing type to determine the most dominant patterns in this digital gaming environment. This quantitative approach was chosen to provide a clear and objective statistical breakdown of linguistic variations, ensuring a precise representation of the community's communicative habits (Creswell, 2014). The study was conducted within the Semeton Arknights (Bali) WhatsApp group, a digital community for *Arknights* mobile game players established in March 2020. This online setting was selected because members frequently used bilingual and multilingual expressions during interaction, making it a relevant environment for investigating code-mixing phenomena. The community consisted of 119 members from various backgrounds, including students and professionals, and was managed by seven administrators. From the total population, 27 active members contributed interactional data that became the primary source of analysis in this study.

The primary research instrument used in this study was an observation sheet designed to systematically record and classify instances of code-mixing found in the WhatsApp conversations. The instrument functioned as a structured observation table containing categories based on Hoffmann's (1991) classification of code-mixing, namely intra-sentential code-mixing, intra-lexical code-mixing, and involving a change of pronunciation. In addition, the researcher utilized WhatsApp chat transcripts as documentary evidence to ensure the authenticity and accuracy of the linguistic data. The observation sheet included several components, such as the date of interaction, participant utterances, identified code-mixing expressions, and the corresponding classification category. The use of this instrument enabled the researcher to organize the data systematically and minimize subjective interpretation during the categorization process.

The data for this study were collected through systematic online observation conducted over a two-week period. The researcher carefully examined text-based interactions within the Semeton Arknights (Bali) WhatsApp group to identify authentic occurrences of code-mixing. Every utterance containing mixed linguistic elements was documented using the observation sheet and subsequently transferred into a data classification table for analysis. The use of observation as the primary data collection method was considered appropriate because it allowed the researcher to capture naturally occurring language use in a real digital communication setting without interfering with the participants' interactions. The collected data were analyzed using a descriptive quantitative technique to determine



the frequency and distribution of code-mixing types. According to Creswell and Clark (2018), descriptive quantitative analysis is used to provide a numerical description of trends or patterns within a specific context. The analysis process began with data identification, where the researcher extracted all utterances containing code-mixing from the observation transcripts. The data were then classified into three categories based on Hoffmann's (1991) framework: intra-sentential, intra-lexical, and involving a change of pronunciation. To ensure precise statistical representation, the frequency of each category was converted into percentages using the formula proposed by Sudijono (2018):

$$P = \frac{F}{N} \times 100\%$$

Where P represents the percentage, f the frequency of each specific type, and N the total number of code-mixing instances. Finally, the results were tabulated and interpreted to provide a clear visualization and a descriptive summary of the linguistic patterns within the Bali Arknights Players Community.

3. Findings

Data collected over a two-week period from the Semeton Arknights (Bali) WhatsApp group revealed 168 instances of code-mixing. Following Hoffmann's (1991) framework, the analysis identified three distinct types: intra-sentential, intra-lexical, and involving a change of pronunciation. The distribution of these types is summarized in the table and description below.

Table 1. Numbers of code mixing among the Bali Arknights players community on WhatsApp

N	Types of Code-mixing	Numbers	Percentage
1	Intra-sentential	125	74.40%
2	Intra-lexical	36	21.43%
3	Involving change of pronunciation	7	4.17%

The statistical distribution of code-mixing types used within the Bali Arknights Players Community is illustrated in the pie chart and table provided above. Based on the analysis of 168 identified instances of code-mixing, the findings demonstrate that community members employ several forms of bilingual language interaction in their daily WhatsApp communication. However, the frequency of each type differs considerably, indicating distinct linguistic preferences among the participants. The results show that intra-sentential code-mixing is the dominant type, accounting for 125 occurrences or 74.40% of the total data. This result highlights that most participants frequently inserted English words, phrases, or clauses directly into Indonesian sentence structures without changing the grammatical form of the inserted expressions. The dominance of this type reflects the community's tendency to maintain original English gaming terminology during interaction, particularly when discussing gameplay strategies, character skills, in-game updates, and technical game mechanics.

Several raw findings from the chat transcripts further strengthen this result. Expressions such as "Aku belum clear stage ini," "Besok ada event rerun," and "Coba pakai support operator itu" were repeatedly identified throughout the conversations. These utterances demonstrate how English lexical items such as *clear*, *event rerun*, *support*, and *operator* are naturally embedded into Indonesian sentence



patterns. The repeated occurrence of these forms indicates that English gaming terminology has become normalized within the community's communicative practices. In many cases, participants appeared to prefer English expressions because equivalent Indonesian terms were either unavailable, less familiar, or considered less practical in gaming discussions.

Intra-lexical code-mixing emerged as the second most common category, appearing in 36 utterances or 21.43% of the total findings. This type involved the combination of English lexical roots with Indonesian affixes, producing hybrid linguistic forms adapted to local communication styles. Examples identified in the data include words such as “nge-pull,” “di-lock,” and “nge-farm,” where Indonesian prefixes or suffixes were attached to English gaming verbs. These forms illustrate the speakers' linguistic creativity and their ability to adapt foreign terminology into Indonesian morphological structures while maintaining the original semantic meaning. The findings suggest that the community members not only borrow English vocabulary but also actively integrate it into Indonesian linguistic patterns to support smoother and more efficient communication. Meanwhile, the least frequent type was code-mixing involving a change of pronunciation or phonological adaptation, which appeared in only 7 instances or 4.17% of the total data. In the context of text-based WhatsApp communication, this category was reflected through modified spellings intended to imitate Indonesian pronunciation patterns. Examples such as “gacha” being written with localized pronunciation tendencies or adapted spellings of English gaming terms illustrate this phenomenon. Although relatively rare, these findings indicate that some participants attempted to localize foreign expressions to align with Indonesian phonetic habits and informal online communication styles.

These findings reveal a clear hierarchical pattern in the linguistic behavior of the Bali Arknights Players Community. The overwhelming dominance of intra-sentential code-mixing indicates that participants strongly prefer direct insertion of English gaming terminology into Indonesian discourse rather than modifying or localizing the terms. This tendency appears closely related to the communicative demands of online gaming environments, where speed, clarity, and technical precision are highly important. The findings also demonstrate that English functions not only as a supplementary language but as an integral component of communication within the gaming community. Consequently, the study highlights how code-mixing in digital gaming spaces serves practical, social, and identity-related functions simultaneously, reinforcing both communicative efficiency and group solidarity among bilingual speakers.

4. Discussions

The analysis of the interactions within the Bali Arknights Players Community reveals a complex linguistic landscape where Indonesian and English are not merely used side-by-side but are intricately woven together. The following sections provide a more nuanced understanding of how these types function in real-time dialogue through a descriptive analysis and contextual exploration. Intra-sentential code-mixing emerged as the most dominant type, accounting for 74.40% of the total data. According to Hoffmann (1991), this type involves the insertion of foreign elements ranging from lexical items to entire clauses within the boundary of a single sentence. In the context of this study, the high frequency of intra-sentential mixing is illustrated in several examples:

- “Coba **crosscheck** bisa aja keliru.”
- “**Actually**, dia memberikan ide bagus.”
- “Oiya stage baru udah buka.”



The overwhelming prevalence of this type suggests that the participants prioritize communicative speed and conceptual accuracy. The use of the word "crosscheck" or "stage" represents a phenomenon where English terms serve as "functional anchors" within an Indonesian sentence. From a sociolinguistic perspective, these terms carry a specific semantic weight that would be diminished if translated into formal Indonesian. For instance, the word "tahap" (stage) or "periksa kembali" (crosscheck) feels too formal and lacks the "gaming-sense" that the players are accustomed to. This dominance aligns with the findings of Hilda et al. (2020) and Adinata et al. (2020), who argue that intra-sentential mixing is the most flexible form of language contact in digital spaces. However, this study goes further by suggesting that in the Arknights community, this type of mixing serves as a marker of modernity and digital literacy. By inserting English adverbs like "actually" or "basically," speakers are not just sharing information; they are projecting a certain identity as globally-connected individuals. The integration happens seamlessly, which indicates that the speakers have developed a high level of "code-mixing fluency," where the transition between languages does not cause a breakdown in the sentence's grammatical rhythm.

The second most frequent type is intra-lexical code-mixing (21.43%), which involves the hybridization of two languages at the word level. This type is particularly fascinating because it shows how the Indonesian linguistic system "colonizes" English vocabulary by applying local morphological rules. The participants frequently utilized the Indonesian prefix "nge-" to transform English base words:

- "...kadang **ngelag** pas baru buka aplikasinya." (Prefix nge- + lag).
- "...bangunnya otak langsung **ngeblank**." (Prefix nge- + blank).
- "Iya, itu **ngefixing** bagian yang aneh." (Prefix nge- + fixing).

The use of the prefix "nge-" is a hallmark of informal Indonesian slang (Bahasa Gaul), which typically functions to turn a noun or an adjective into an active, informal verb. When players say "ngelag," they are not just using an English word; they are creating a new, hybrid lexical item that fits perfectly into the phonological and morphological flow of their daily speech. This linguistic creativity supports the theory by Saraswati et al. (2020), which suggests that code-mixing is a tool for making communication more engaging and adaptable. Furthermore, this study observes that intra-lexical mixing often occurs with "psychological state" terms (like ngeblank) or "technical action" terms (like ngefixing). This suggests that players feel a need to bridge the gap between their native emotional expression and the technical English environment of the game. By "Indonesianizing" these terms, the speakers reduce the social distance between the foreign technology and their local community. This hybridization reflects a dynamic process of language evolution within digital subcultures, where the boundaries between "Language A" and "Language B" become increasingly blurred.

The least frequent type (4.17%) involves changing the pronunciation or orthography of English terms to fit Indonesian rules. In the text-based world of WhatsApp, this is seen through phonetic spelling:

- "**Betewe** ada kemungkinan utopia gk bisa loh..." (from By the way).
- "**Balik lgi krn** katanya ada **koleb**." (from Collaboration).
- "**Makin hari makin ribet kombo**." (from Combo).

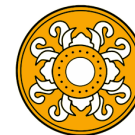


These examples represent a process of phonological naturalization. The word "koleb" is a shortened, phonetic version of "collaboration," while "betewe" is a literal transcription of the English acronym "BTW" as it is pronounced in an Indonesian accent. The low frequency of this type indicates that players generally respect the original English spelling for core gaming terminology. Players seem to distinguish between "general conversation terms" (which can be modified) and "technical game terms" (which must remain intact for clarity). This finding is consistent with Lestari et al. (2025), who noted that while phonetic spelling is common in general social media, it is less frequent in specialized communities where technical accuracy is valued. The fact that "kombo" or "betewe" still appears suggests a desire to maintain a casual, non-serious atmosphere in the group. It softens the tone of the conversation, making it feel more like a "tongkrongan" (casual hangout) rather than a formal discussion.

The distribution of code-mixing types within the Bali Arknights Players Community provides a window into the broader intersection of linguistic competence and digital identity. The data reveals that the choice to mix languages is not merely a pragmatic decision to fill lexical gaps, but a sophisticated performance of identity. When players opt for intra-sentential mixing at such a high frequency (74.40%), they are actively constructing a persona that is both locally grounded in Indonesian culture and globally connected to the international gaming community. This "dual identity" is facilitated by the English language, which acts as a bridge to global trends, while the Indonesian syntax keeps the interaction personal and community-oriented. Furthermore, the creative nature of intra-lexical mixing where English roots are modified by Indonesian affixes reflects a phenomenon known as "translingual practice." This goes beyond traditional views of code-mixing as shifting between two fixed systems; instead, it shows players creating a new, third space of communication. In this space, the rigid rules of both languages are relaxed to allow for maximum expressive potential. For instance, the word "ngelag" or "ngeblank" signifies a level of intimacy with the language that purely formal speakers might not possess. It shows that the speakers are comfortable enough with both languages to "play" with their structures, treating language as a malleable tool rather than a set of restrictive laws. This linguistic playfulness is a key characteristic of digital subcultures, where innovation and speed are often valued more than traditional grammatical correctness. Moreover, the minimal use of phonological adaptation (4.17%) suggests a form of "linguistic prestige" within the community. In many other digital contexts, such as general Facebook comments or celebrity fan pages, phonetic spellings and "slang" adaptations are far more common. However, the Arknights community's preference for maintaining original English orthography indicates a respect for the "originality" of the game's source material. This creates a specific "community standard" where using the correct English term is a sign of being an "elite" or experienced player. Consequently, the patterns of code-mixing found in this study do more than just facilitate talk; they establish a social hierarchy and a shared set of values among the players. This analysis proves that code-mixing in WhatsApp groups is a complex social behavior that requires a high degree of cognitive flexibility and social awareness.

5. Conclusion and Suggestion

This study demonstrates that code-mixing is an integral and dominant feature of daily communication within the Bali Arknights Players Community on WhatsApp. Quantitative analysis of 168 instances reveals that intra-sentential code-mixing is the most prevalent type (74.40%), followed by intra-lexical (21.43%) and changes in pronunciation (4.17%). These findings indicate a strong tendency among community members to integrate English phrases or clauses into Indonesian sentence



structures to facilitate technical gaming discourse. Furthermore, the deliberate nature of these linguistic choices suggests that code-mixing functions as a conscious communicative strategy rather than an unconscious habit, allowing bilingual players to navigate specialized digital environments effectively. This research contributes empirical data to the field of sociolinguistics, highlighting how informal digital communities adapt their linguistic repertoire to maintain social cohesion and communicative efficiency. Based on the findings of this study, several suggestions are proposed for different stakeholders. For teachers, code-mixing should be considered a strategic pedagogical tool, particularly when explaining technical terms or foreign vocabulary that may lose meaning in translation; however, its use must be balanced with clear contextual explanations to ensure inclusivity for all students. Students are encouraged to actively observe and reflect on natural code-mixing phenomena in digital communities to understand its functional use while simultaneously improving their bilingual proficiency to avoid lexical misuse. Lastly, future researchers are advised to expand the research scope to include more diverse participants and adopt mixed-method or longitudinal approaches. It is also imperative for future studies to maintain high ethical standards regarding data privacy and anonymity when analyzing digital interactions to preserve the trust of the participants.

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