Balinese transliteration in public space: Error analysis in linguistics landscapes

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ABSTRACT: Public space is one of the most accessible areas to the public eye. Placing any sign in a public space within a given territory creates a linguistic landscape environment. One of the essential functions of a linguistic landscape is representing a certain given territory's symbolic meaning. This symbolic meaning may represent local ideology or identity and local/national authority's power. This phenomenon occurs in Kuta village, Badung Regency, Bali Province, Indonesia. Due to a lack of local identity, all public sign in Bali is oblique to put Balinese scripts transliteration above all Latin scripts as mandated by Bali's Governor Regulation no. 80/2018. This authority's power of language use over public space is one of Bali's government's efforts to gain its local identity in public space through public signs. This study aims to further analyse the transliteration of Latin script to Balinese script in public signs in Kuta village, as previous research indicates some mistakes and irregularity. This analysis is needed to identify, refine and regulate the transliteration procedure since Balinese script is a syllabic system different from Latin script. The finding showed that some issues must be maintained and regulated to have a good transliteration of Balinese script in public space as a landmark of Balinese identity in Bali's public spaces.

KEYWORDS: quantitative aspect of foregrounding; stylistic convergence; extended metaphor; syntactical repetitions; pragmatic effect; strong position

1. Introduction

Kuta village is one of the international tourist destinations in Bali. It is located in Badung Regency, Bali Province, Indonesia. Kuta’s developments were marked by the establishment of a Dutch trading company, namely De Nederlandsche Handelmaatschappij (NHM), on 1 August 1839, with the approval of King Kesiman, Gusti Ngurah Gede Kesiman (Mahastuti, 2017). It was followed by the appointment of Mads Johansen Lange, a Danish trader, as harbour master and the village head in Kuta.

As a tourist destination, it was marked for the first time by the visit of a foreign tourist from Scotland named Miss Mank, who settled down and founded the first hotel in Kuta, named Kuta Beach Hotel, in 1959 (Mahastuti, 2017). Tourism development continued with the establishment of the Bali Beach Hotel in Sanur in 1963, followed by the revitalisation of Ngurah Rai Airport to become an international airport in 1967. Ever since, tourism in Kuta village has developed rapidly, causing natural environment changes. Kuta village, which was initially full of coconut trees, is now full of housing, hotels, restaurants, and...
shops (see Figure 1).

![Figure 1. Legian Street in 1975 (left) and present-day (right/before the Covid-19 pandemic).](image)


Nowadays, Kuta is struggling to maintain its identity, especially in public spaces, since the effect of tourism is unavoidable. Giulianotti and Robertson (2007, p. 2) stated that the development of the tourism industry would undoubtedly be followed by the impact of globalisation, which invariably endangers the locals. On the other hand, Blommaert (2012) stated that globalisation would affect the various aspects of the language used in society. For instance, Huebner (2006, p. 1) discovered that the diversity of language use in the urban area of Bangkok, as part of globalisation, shows many changes in Chinese usage to English. It offers evidence of a shift from Chinese to English as the major language in public signs. At the same time, Ben-Rafael et al. (2006) studied the symbolic language construction in public areas in Israel. They found that the language combination used in outdoor signs determines the community in the area: Hebrew-English language prevails in Jewish communities; Arabic-Hebrew in Israeli-Palestinian communities; and Arabic-English in East Jerusalem.

Likewise, Mulyawan (2017a) discovered that Kuta’s public space represents the tourism ideology of capitalism, in which none of the public tourism signs shows any local identity. He recalled that walking along the main streets of Kuta is not resembling walking in Bali since it is packed with ‘alien’ signs, which have no local attribute. All signs use either a foreign language or Indonesian. None of the commercial signs uses the Balinese language or Balinese scripts, which signal the lack of local-language power in public space. Balinese is only in local signs, temples, or cemeteries. This condition sparks the government’s awareness that Balinese are marginalised in Bali’s public space, especially in Kuta village (Mulyawan, 2017b).

Like Kuta village, Moriarty (2014) observed some areas most frequently traversed and visited by tourists in the Dingle region in Southwest Ireland. The data has been grouped according to the city, the language utilized, the type of sign, the makers (government/private) of signs, as well as the visuality of the sign. She found conflicts between two linguistic ideologies in the Dingle area: the state ideology that wanted for national unity. On the other hand, the residents tended to promote their territory with the ideology of postmodernism, which supports the multilingual concept. This action marginalised the use of the state or national language in the region.
In response to the marginalisation of the local language in Bali’s public spaces, therefore, in 2018, Bali’s Governor issued a controversial regulation to regulate the use of Balinese scripts in public spaces in Bali. This Bali’s Governor Regulation no. 80/2018, stipulated that all public signs should put Balinese scripts transliteration above their Latin script. It is considered one of the most controversial language policies, because it raises many debates about its legality and violation of higher laws in Indonesia (Mulyawan, 2021). However, despite being controversial, this regulation has successfully created a greater Balinese cultural ambiance in Bali, especially in Kuta. Since it could raise the use of Balinese scripts in public spaces on commercial signs (Mulyawan, 2021). Further research discovered that this regulation did not affect any outdoor signs of Covid-19 prevention, although it was made up in 2020 after the regulation was issued (Mulyawan and Artawa, 2021; Mulyawan et al., 2022). The finding showed that the regulation is not forceful enough to maintain and regulate the use of Balinese transliteration in public spaces in Kuta. Ever since, the Balinese language and scripts have begun to gain their position as hosts in Bali’s public spaces, in which many commercial outdoor signs started to put Balinese transliteration above their Latin.

However, some issues occurred concerning the transliteration process since it is not merely about a ruled-based sound transferring process and neglecting its complexity and multi-functions as stated by Huang (2023). He studied the transliteration of cultural words of Chinese classic Shan Hai Jing and treated it as a multidimensional semiosis, whose efficacy in cross-cultural communication could be revealed through the presence of icons, indexes, and symbols. Likewise, Khan et al. (2023) tried to use a similarity procedure to indicate English transliteration in Urdu script. Their approach of Similarity Measure based on Transliteration Words (SMTW) is proven in increasing the level of transliteration precision. Furthermore, Ekezie (2023) applied sound substitution, sound insertion, or approximation of Igbo/Yoruba phonetic symbols to English orthography in the process of translation/transliteration of the names of biblical books into Igbo and Yoruba.

Similarly, Balinese transliteration of Latin script also indicates the same issues, such as the inconsistency of the pronounce-based transliteration process for English words that showed different results for the same word. It was discovered that the problems arose from the different writing systems of Balinese script and the Latin script. One of the differences is that the Balinese script uses a syllabic system different from Latin’s.

The current study investigates any visible issue of the transliteration process of the Latin script to Balinese script, especially for Indonesian and English found in Kuta’s public spaces. At the same point, some recommendation for revision and/or standardisation rules have been formulated to resolve any found issues.

2. Theoretical basis

An outdoor sign is part of society’s mass communication system that signals the environmental condition in which the sign is posted. According to Blommaert (2012), physical space is also social, cultural, and political space: it offers, enables, triggers, invites, prescribes, proscribes, or enforces particular social behaviour patterns; it is never no man’s land but always someone’s space; it is historically rich in codes, expectations, norms, and traditions; and it is a space of power that is both controlled by and controlling people. Therefore, the study of outdoor signs may represent the language of the society, the ideology or the power of authority within any public policies.

The study of the outdoor sign is linguistically referred to as a Linguistic Landscape study (LLS).
LLS consists of two main words: landscape, which means a large expanse of land with a specific territorial scope, and linguistics, which means the scientific study of language. Thus, it can be said that LLS is a study of language in the public space within a specific territorial area. Landry and Bourhis (1997) first coined the LLS, which is part of a sociolinguistic study focusing on written language’s presence in various public and commercial signs in a certain given area.

Theoretically, this study can be analysed through its two main functions: informative and symbolic (Landry and Bourhis, 1997). The informative function approach studies the analysis of the function of sign visualization as a means of mass visual communication, distinguishing a region from other regions. In addition, the study of the informative function also provides indications regarding the types of language used in a particular area. In contrast, the symbolic function approach is an approach that is abstract, fundamental, and principle or salience related to the function of outdoor sign language as an identity of a region that is characterized by the language used, which is implicit. Furthermore, based on its function, Mulyawan (2023) proposed four types of public signs:

a. Nameplate signs with identity function.
b. Information signs with informative function.
c. Commerce signs with commercial and advertising functions.
d. Mixed signs with mixed or multiple functions.

Bali’s Governor Regulation no. 80/2018 is contentious legislation that governs the usage of Balinese script in public locations on the island. It was created to combat the marginalisation of the local language in public spaces. It requires all public and private sectors to include Balinese transliteration of any Latin script above public signage. Those signs involved seven categories, as stated in Chapter IV, article 6:

a. Hindu’s temple and cemetery;
b. Local institution;
c. Government institutions;
d. Private institution;
e. Traffic sign and street name;
f. Tourism facility; and

g. Public facility.

In terms of error analysis of bilingual and multilingual signs, Mohebbi and Firoozkohi (2019) proposed that error analysis involved spelling, translation, grammatical, transliteration and local language interference. This approach is suitable and in line with the discussion of this study which focuses on errors in the transliteration of Latin to Balinese script.

Balinese and Latin scripts are far different regarding the transliteration process due to the syllabic system of Balinese script. Sudiarta (2013) stated that the Balinese script is a syllabic system grouped into two based on its articulation and function. According to its articulation, Balinese script is divided into three: (1) aksara suara [vowel]; (2) aksara wianjana [consonant]; and (3) aksara lagana or anacaraka [syllable]. Furthermore, aksara suara is differentiated into two writing systems: independent vowel and dependent vowel, as shown in Figure 2 to Figure 5.

![Figure 2](image.png)

Figure 2. Balinese vowel of independent sound.

Source: Sudiarta (2013).
Based on its function, Sudiarta (2013) divided Balinese script into three: (1) *aksara wreasta*, also known as *anacaraka*, is a common or ordinary script used in various writings for everyday life (see again Figure 5); (2) *aksara swalalita*, is a special script for writing the holly song such as *kidung/kekawin* (see Figure 6); and (3) *aksara modre*, is a sacred script which is only intended for writing *mantra* [holly spells], *rerajahan* [holly calligraphy] and scripts for Gods and Goddesses (see Figure 7). Like in Balinese culture, *Modre* scripts in Chinese culture are also known as Worship Language, a process of language symbolization, and spells, in essence, are the symbol of language (Yuan and Li, 2021).

In terms of the Balinese script writing system, in general, it is divided into two: (1) *pasang jajar sambung* [joined word-based writing] as shown in Figure 8 and *pasang jajar palas* [split word-based writing] as shown in Figure 9; (2) traditional words writing system and modern/adaptation word writing system (Antara, 2020). It is further said that *pasang jajar sambung* is used for general writing, which applies to palm-leave or local constitution writing. In contrast, *pasang jajar palas* are used to write Balinese script on nameplates in public spaces (Antara, 2020).
3. Material and method

This study is conducted in Kuta village, Badung Regency Bali province (see Figure 10). It is constituted of 13 Banjar (local administrative area): Banjar Pelasa, Banjar Temacun, Banjar Pemamoran, Banjar Pengabetan, Banjar Pering, Banjar Pande Mas, Banjar Buni, Banjar Tegal, Banjar Jaba Jero, Banjar Teba Sari, Banjar Anyar, Banjar Segara and Banjar Mertha Jati.
Figure 8. The use of *Pasang Jajar Sambung*.

Figure 9. The use of *Pasang Jajar Palas*.

Figure 10. Kuta Village.

Source: Google Maps.
Kuta is one of the most iconic tourist destinations in Bali. It has been awarded the best tourist destination in Indonesia (Robino, 2019). Six main streets connect Kuta as the location of most tourist facilities, such as star hotels, luxury dining restaurants, pubs, discoteque art shops/galleries, and many other tourist facilities and attractions. Furthermore, as stated by Deore and Lathia (2019), the most public space in urban areas is the main streets, which are engines of economic activities, social hubs, and platforms for civic engagement. Those main streets are Kuta Main St., Legian Main St., Kuta Beach St., Bakung Sari St., Buni Sari St., and Kartika Plaza St., as shown in Figure 11.

![Figure 11. Main streets of Kuta.](Source: Google Maps.)

The data of this study is obtained from those six main streets as the research location. To limit and provide criteria for a vast number of outdoor signs, in this study, the data is limited to seven public signs as categories by Bali’s Governor Regulation no. 80/2018, Chapter IV, article 6, in which any signs of stickers or labels are not included as data of this research. The data is collected through photographic techniques (Kothari, 2004), in which all data are photographs of the outdoor sign.

The data collection process, conducted from April to July 2022, obtained 1445 data. Based on the type of data found, the data in this study were grouped into seven types (see Figure 12), namely:

1) Tourism facilities: include various tourism facilities, tourist accommodations, places to eat/drink, modern shops and art shops.
2) Health facilities: include various clinical facilities, health centres, pharmacies and doctors’ practices.
3) Traditional/local facilities: include places of worship, Banjar, and cemeteries.
4) Government facilities: include all government buildings.
5) Educational facilities: include various formal and informal educational facilities.
6) Financial facilities: include banking service offices, ATM facilities and money exchange places.
7) Traffic signs: include various traffic signs and directions.

All collected data are analysed through mixed methods. The quantitative method is used to quantify the occurrence of certain signs and the language/script used. The qualitative method is used to assess its Balinese script transliteration and identify any errors or miss transliteration. Besides, the analysis is also supported by expert judgement and random local passers-by opinions (respondents) regarding the clarity and good presentation of the scripts. The result is presented in a descriptive narrative method, including all errors and their proposed resolution.
4. Results and discussion

The amount of data collected in this study was 1455 data. The highest data findings are in tourism facilities, with 1153 data (79.24%), and the lowest is in Education facilities, with only 11 data (0.75%), which can be seen in detail in the following Table 1.

<table>
<thead>
<tr>
<th>Types of data</th>
<th>Total</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism facilities</td>
<td>1153</td>
<td>79.24</td>
</tr>
<tr>
<td>Health facilities</td>
<td>49</td>
<td>3.37</td>
</tr>
<tr>
<td>Traditional/local facilities</td>
<td>42</td>
<td>2.89</td>
</tr>
<tr>
<td>Government facilities</td>
<td>30</td>
<td>2.06</td>
</tr>
<tr>
<td>Educational facilities</td>
<td>11</td>
<td>0.75</td>
</tr>
<tr>
<td>Financial facilities</td>
<td>69</td>
<td>4.74</td>
</tr>
<tr>
<td>Traffic signs</td>
<td>101</td>
<td>6.34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1455</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Based on the language use, the analysis found three main languages: English, Indonesian and Balinese. These were highlighted because all sectors (private and public) employ just these three languages in monolingual form. In contrast, other foreign languages such as Japanese, Indian, Arabic and Russian were only used on multilingual signs, except for the Chinese language, which is found in bilingual and multilingual forms. English is the most used language, totalling 1017 (69.90%). This number is mostly found in English monolingual signs, with 715 data (49.14%). Further details can be seen in the following Table 2.

<table>
<thead>
<tr>
<th>Language</th>
<th>Total</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolingual signs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balinese</td>
<td>28</td>
<td>1.92</td>
</tr>
<tr>
<td>Indonesian</td>
<td>223</td>
<td>15.33</td>
</tr>
<tr>
<td>English</td>
<td>715</td>
<td>49.14</td>
</tr>
<tr>
<td>Bilingual signs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balinese-Indonesian</td>
<td>82</td>
<td>5.64</td>
</tr>
<tr>
<td>Balinese-English</td>
<td>60</td>
<td>4.12</td>
</tr>
<tr>
<td>Indonesian-English</td>
<td>218</td>
<td>14.98</td>
</tr>
<tr>
<td>English-Chinese</td>
<td>24</td>
<td>1.65</td>
</tr>
<tr>
<td>Multilingual signs</td>
<td>31</td>
<td>2.13</td>
</tr>
<tr>
<td>Visual signs</td>
<td>74</td>
<td>5.09</td>
</tr>
<tr>
<td>Total</td>
<td>1.455</td>
<td>100</td>
</tr>
</tbody>
</table>

As for the use of the script, the data in this study were grouped into two groups of scripts: Balinese script and non-Balinese script. The grouping is based on the type of signs. It is focused on two criteria: (1) signs with Balinese script; and (2) signs without Balinese script. The analysis results show that the use of Balinese script in space has experienced a significant increase since the implementation of Bali’s Governor Regulation no. 80/2018, especially for signs of tourism facilities, which previously had no use (Mulyawan, 2017a). From all available data, 144 signs (10%) use Balinese script or transliteration of Balinese script, with the highest number in tourism facilities with 82 signs (5.64%). More details can be seen in the following Table 3.

<table>
<thead>
<tr>
<th>Types of data</th>
<th>Total</th>
<th>With Balinese script</th>
<th>Without Balinese script</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>With Balinese script</td>
<td>Without Balinese script</td>
<td></td>
</tr>
<tr>
<td>Tourism facilities</td>
<td>52</td>
<td>5.64</td>
<td>73.61</td>
<td></td>
</tr>
<tr>
<td>Health facilities</td>
<td>5</td>
<td>0.34</td>
<td>3.02</td>
<td></td>
</tr>
<tr>
<td>Traditional/local facilities</td>
<td>21</td>
<td>1.44</td>
<td>1.44</td>
<td></td>
</tr>
<tr>
<td>Government facilities</td>
<td>4</td>
<td>0.27</td>
<td>1.72</td>
<td></td>
</tr>
<tr>
<td>Educational facilities</td>
<td>1</td>
<td>0.07</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>Financial facilities</td>
<td>18</td>
<td>1.24</td>
<td>3.51</td>
<td></td>
</tr>
<tr>
<td>Traffic signs</td>
<td>13</td>
<td>0.89</td>
<td>6.05</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>10</td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>
Based on the Balinese writing principles, data analysis revealed that the writing of Balinese script on various outdoor signs in Kuta village uses both swalalita script and modre script, which violates the established Balinese script rules for common writing purposes. It is worsened by using them on commercial/business outdoor signs. One example is the use of pemada [specific opening/closing script], as shown in Figure 13. It is a starting and closing marker used as a clamp or prefix in writing a holly song/spell. Experts said the script is mangajapa, a prayer for salvation before singing the holly song or chanting the holy spell. This use is inappropriate because those nameplates are not religious text/writing that needs to be read with a blessing.

Figure 13. The misused of Pemada script.

In contrast, if pemada script is used on local domain names, particularly on temple names, it will surely have a different effect (see Figure 14). Additionally, it is only used to denote the temple’s name, not its address or location. However, this kind of use is still not entirely appropriate when referring to the function of the script. Compared to a business sign, it is barely acceptable.

Figure 14. The acceptable use of Pemada script.

Additionally, the script’s orderliness should follow a pasang jajar palas pattern. Nevertheless, many signs are written in pasang jajar sambung patterning (see Figure 8). As a result, it becomes challenging for the reader to read the text, and there is a mismatch in the transliteration of the words. Moreover, some
locals say that it subtly diminishes the visual and aesthetic value of the current outdoor signs. In contrast, the respondent thinks that signs are more readable and look lovely and proportionate if transliterated using *pasang jajar palas* (see Figure 9). It is written, word by word, above the words being transliterated.

The Balinese alphabet is a syllable system in which consonants are always used with vowels in one script, known as the *anacaraka* script (see again Figure 5). Therefore, when transliterating other languages, particularly English, a pronunciation-based approach will be used in the transliteration process. One of the most obvious examples is the article “the” being written in Balinese as “de” and “di” according to the English pronunciation, as in “the Anvaya” written as “di Anpaya” and “the Vira” written as “de Pira” (see Figure 15). In the same examples, the letter “V” is written as “P” since there is no “V” sound in the Balinese script.

![Figure 15. Pronunciation-based transliteration.](image)

In addition, the Balinese script has no double consonant system; hence, all double consonants are transcribed as single consonants. For example, “Lippo” and “Mall” are spelt as “Lipo” and “Mol” respectively (see Figure 16).

![Figure 16. The transliteration of double consonants.](image)
This pronunciation-based transliteration system caused extra complications for someone not experienced with pronouncing foreign words, thereby causing an error in transliteration. For example, the term “Resort” should be spelt as “Risot” (see Figure 17). However, others wrote it as “Resot” since it was mispronounced (see Figure 18). Lastly, total adjustments are made in transliterating single consonants of abbreviations. It is written accordingly to its pronunciation, not as ‘dead’ consonants, such as “BRI” written as “Be Er, I” or “KCP” written as “Ka Ce Pe” (see Figure 19).

Figure 17. The transliteration of “Resort” as “Risot”.

Figure 18. The transliteration of “Resort” as “Resot”.

Figure 19. Transliteration of abbreviation.

5. Conclusions

Based on the preceding analysis, it can be concluded that Balinese transliteration has positively
impacted the revitalisation of Balinese in public spaces, as noted in Table 3, compared to before the regulation was issued, as reported by (Mulyawan, 2017a). In terms of the transliteration process, some errors and adjustments occurred. Errors happen due to the misused of the script’s type (see Figures 13 and 14); the misused of script pattern that should be pasang jajar palas instead of pasang jajar sambung (see Figures 8 and 9); the mispronunciation of foreign words affects the writing itself (see Figures 17 and 18); last but not least, significant adjustments are made in transliterating articles, double consonants, and abbreviations of foreign words by pronunciation-based transliteration (see Figures 15, 16 and 19).

As a recommendation of standardisation, as also proposed by experts, the transliteration of Latin to Balinese script should only use wreasta/anacaraka, pasang jajar palas in word arrangements and should have an accurate pronunciation of foreign words before transliterating it to Balinese script.

Author contributions

This work is an output of joint project of all authors. IWM is the project leader. NKRE and IKNS are team members. IWM leads the field works whereas NKRE and IKNS are responsible for sorting out the data and identifying the errors. All authors have read and agreed to the published version of the manuscript.

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Conflict of interest

The authors declare no conflict of interest. On behalf of all authors, the corresponding author states that there is no conflict of interest.

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