



Exploring University Toilet Signage as a Visual Communication Tool Through a Social Semiotics Lens in Brunei Darussalam

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ABSTRACT

Primarily, the linguistic landscape acts as a foundation for analysing how social, cultural and political structures are reflected in public signs. While previous studies have mainly focused on the linguistic elements and the semiotic principles of visual signs, this research explores how Brunei universities' toilet signages are analysed and interpreted through a social semiotics approach. By employing convenience, purposive and snowball sampling, the data collected were from seven local and seven international university students' semi-structured interviews and one focus group discussion, consisting of the local students only. This study employed a social semiotics approach by Halliday (1978) to analyse the visual findings and to guide the interview data analysis gathered. Three major themes emerged based on the findings, namely: 1) Interpretation and user experience, 2) Cultural encoding in signage, and 3) Cross-cultural interpretation gap. These findings revealed that university students' cultural background and their familiarity influence their interpretation of the signage. Findings also emphasised the dominant use of English in the signage, which raises questions about Malay visibility and institutional preferences. This study implies that although visuals can be similar, their meaning is not fixed but is shaped by individuals' cultural and social backgrounds. Although the findings correspond to existing literature, limitations include restricted access only to UTB and UBD signage, which influence the findings of the study. Besides, this study only explored university students from UTB and UBD, which excludes other potential public users and staff who might have a different interpretation of the signages. Hence, it is recommended for future research to explore how toilet signage is interpreted in other institutions and how different demographic groups interpret signage as a visual communication tool to expand the research area for more in-depth findings.

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1. Introduction

This study examines toilet signage as a communication tool in Brunei Darussalam through a social semiotics analysis, primarily using a qualitative approach. The research has three main objectives: (1) to explore how university students interpret and perceive toilet signages in Brunei Darussalam, (2) to analyze the social semiotic implications of these signages, and (3) to extend previous studies by offering new insights into the role of signage as a visual communication tool in public spaces. Linguistic landscape studies, rooted in the

sociology of language and language policy, focus on how languages are displayed in public spaces, often shaping perceptions and reflecting societal values. The field has evolved by integrating various theoretical perspectives and developing new methodologies to study different types of signage, highlighting the flexible and dynamic nature of linguistic landscape research as society and language change.

The linguistic landscape reveals the social, cultural, and political structures reflected in public signs (Blommaert, 2013). It serves as a foundation for constructing meaning in public spaces, which continue to evolve into other fields. Shifting our focus to the study of signage in Brunei Darussalam, several studies have been conducted to understand the linguistic landscape in Brunei Darussalam over the years (Coluzzi, 2016; Japri, 2016; Haji Othman, 2020). It was found that signage in Brunei Darussalam is mainly dominated by the Malay language in some areas of Brunei-Muara and Tutong districts, with the English language coming in second place in terms of dominance. However, these studies have only focused on studying shop signs and street signs, which limits their reliability and generalizability to other types of signage. Notably, according to Garg and Dewan (2022), there are different types of signage. Some of these include wayfinding signage, channel letter signs, monument signage, and blade signs, also known as projecting signage.

Additionally, as the study of signage evolves from only utilising a quantitative approach to a more qualitative approach, previous studies such as those from Svennevig (2021) from several countries outside Brunei and Haji Othman (2020) in Brunei Darussalam concurrently apply a semiotic approach along with a linguistic approach for a further comprehensive understanding of signage. While previous studies have mainly focused on linguistic elements and the basic principles of visual signs, this research aims to shift the focus toward social semiotics. Unlike semiotics, social semiotics concentrate further on a broader social and cultural context in which signages are created and interpreted. This makes social semiotics an approach to communication, as it seeks to understand how people communicate using various means in particular settings, including public spaces where signage is placed (Halliday, 1978, as cited in Mehawesh, 2014). This paper investigates signage as a visual communication tool in Brunei Darussalam using a social semiotic approach, with a primary focus on the signage found in Brunei Darussalam's university toilets.

Numerous studies have examined signage in the linguistic landscape, focusing on language use, word choice, and meaning regulation (Blommaert, 2013; Landry & Bourhis, 1997; Meis & Kashima, 2017; Svennevig, 2021). While once considered a quantitative field, there is a trend toward qualitative approaches that explore individual interpretations of signage (Zhang et al., 2021). However, few studies have examined the specific link between the linguistic landscape and social dynamics. Most have incorporated only semiotic, not social semiotic, approaches. Social semiotics examine how meaning is constructed through language, images, and gestures, all of which carry cultural values (Ghasemi, 2023).

Considering how established studies in Brunei Darussalam (Coluzzi, 2016; Haji Othman, 2020; Japri, 2016) have focused on the dominant language used for signage, with Malay being the dominant language and English following, these studies are limited to investigating language linguistically, rather than socially semiotically. Additionally, the studied signages are limited to shop signs and street signs, excluding toilet signage, particularly those found on university campuses. Notably, toilet signage is an underexplored area of study where communication extends beyond linguistic elements (Iio, 2023), as it may also rely heavily on symbols, images, and signs. Hence, there is a need to study the toilet signage of Brunei Darussalam's universities through the lens of social semiotics to explore how toilet signages potentially communicate Brunei's cultural, social, and institutional messages, as well as to understand how individuals make meaning of these signages.

Moreover, while signage studies in Brunei Darussalam have focused on shop and street signs, the role of cultural differences in public restrooms in educational institutions remains underexplored. Hence, there is a need to explore how individuals from different linguistic and cultural backgrounds, such as the non-locals, interpret and perceive the toilet signage at universities in Brunei Darussalam. For instance, a previous study conducted by Iio (2019) on toilet signage in Japan, Taiwan, Korea, and China found that the colours of the toilet signage are mainly blue and red, indicating the separation between males and females. However, whether the same patterns and preferences apply in Southeast Asia, particularly in Brunei Darussalam, remains unclear. Hence, this further justifies the need to understand how individuals interpret university toilet signage, considering that Brunei has its own unique cultural practices.

2. Literature Review

2.1 Introduction

Social semiotics is a communication theory examining how people use signs and symbols to create meaning in social and cultural contexts (Gualberto & Kress, 2019). Communicators construct meaning with semiotic resources—language, images, gestures—adapting to each situation (Aririguzoh, 2022). Because meaning is made in diverse ways, semiotics is seen as plural (Cremaschi et al., 2021), aligning with Halliday's (1993) framework that views meaning making as a context-shaped social process.

Halliday (1978, as cited in Mehawesh, 2014) first explored social semiotics in language, identifying key elements—text, register, situation, context of culture, and sociosemiotics/translation—that shape language as a social process. His framework underpins analysis of meaning-making. Text refers to communicative instances where meaning is encoded through sentence choices. Malinowski (1935, as cited in Mehawesh, 2014) noted meaning emerges from both the context of situation (specific circumstances) and context of culture (broader language system), both of which shape meanings in texts. Register refers to vocabulary and grammar suited to activities or situations. Halliday (1993) distinguishes register (variety by context) from dialect (variety by speaker identity).

Situation is the context in which a text is produced or interpreted, including physical and abstract environments (Malinowski, 1923; Firth, 1957 as cited in Halliday, 1993). Halliday identifies three aspects: field (subject matter), tenor (social relationships), and mode (communication channel). The context of culture refers to the broader cultural background shaping meaning (Malinowski, 1923; Halliday, 1993). Cultural history influences how individuals interpret meaning. Halliday (1978) developed the socio-semiotic approach, viewing language as a system for expressing social meanings through signs, with meaning seen as context-dependent and communication as a social process closely tied to cultural and social phenomena.

While both social semiotics and sociosemiotics stem from Halliday's work, social semiotics examine how language operates within society, whereas sociosemiotics consider broader sign systems, including cultural and social structures. This study adopts the social semiotics approach, focusing on meaning-making in texts as interpreted through social and cultural contexts, consistent with Halliday (1993).

2.2 Signage as a Visual Communication Tool

Signage is a form of visual communication that conveys meaning through symbols, icons, text, layout, and color to guide human behavior in specific spatial contexts (Tang, 2020). It shapes how people navigate spaces, understand information, and make decisions. Typically, signage is concise, clear, universal, and intuitive (Wan, 2022). Particularly in public settings, signage plays a crucial role in directing users, enforcing norms, and reflecting cultural values (Gretzel & Collier de Mendonça, 2019). According to Campbell and Olteanu (2023), the growing use of multimodal signage highlights the increasing dependence on visual literacy in everyday environments. Additionally, public signage also serves as a visual communication tool, as it conveys behavioral norms and expectations. These, in turn, help to maintain order and manage conduct, as seen in transit etiquette posters.

Jun et al. (2020) identified three hazard signage types: prohibitory, warning, and mandatory. Each communicates hazards differently. Prohibitory signs mark forbidden actions, warning signs signal dangers, and mandatory signs indicate required actions. Color affects signage effectiveness; yellow hazard signs are more alerting than white or blue (Yuan et al., 2021). Signage transcends language barriers, using clear visual elements, familiar symbols, color, and concise words to aid public comprehension (Travere, 2023). Visual communication can be an effective way for persuasion especially within this era of modern media setting (Matussin, Padilla-Valdez, Mumin, 2025).

2.4 Functions of Signage

Signage is used to direct and influence behavior, acting as symbols and indicators, especially in commercial settings to prevent confusion (Newman, 1995; Vigolo et al., 2020). Vigolo et al. (2020) confirmed signage's role in directing public movement, notably in service organizations. Meis and Kashima (2017) note signage persuades the public to follow or avoid certain behaviors. Signage helps organize spaces by targeting audiences (Seargeant & Giaxoglou, 2020). Different types—warning, road, instructive—target various audiences. Road signs reach broad audiences, while “apartment for rent” signs are more specific (Blommaert, 2018).

Yusof and Azalie (2023) found that signs for places of worship often convey promotional messages by highlighting history or notable figures, persuading rather than just prohibiting or permitting. Kellaris and Machleit (2016) showed images and symbols enhance signage's communicative function; recycling and no parking signs use symbols to reinforce meaning, even without text. Visual elements alone can effectively convey intended messages (Iio, 2019).

Therefore, it is essential to examine how different types of signage target various audiences in order to understand the ways in which they are interpreted and perceived.

2.5 Cultural and Contextual Influences on Signage

2.5.1 Toilet Signage

Perceptions of toilet signage differ across countries due to cultural differences. Darras (2016) found that many countries use neutral, simple signage—stick figures for males and skirts or dresses for females—to avoid confusion. However, these "universal" designs often reflect Western norms and may overlook other cultures, such as India's use of Sarees. Trisnawati and Sriwarno (2018) found university students saw man-in-trousers and woman-in-skirt signs, in black and white, as easiest to understand, viewing them as universal toilet signs.

Iio (2019) collected toilet signage from Japan, Taiwan, Korea, and China, finding blue for males and red for females are common for gender separation. Pictograms also help users identify toilets, especially when signs are in local languages. Iio noted a research gap: it is unclear if Southeast Asian countries use the same color scheme for gender in toilet signage.

2.5.2 Educational Institution Signage

Pesch (2021) compared kindergarten signage in Norway and Germany, finding Norwegian signage focused on local culture and language, while German signage showed more multilingualism and inclusivity. This highlights cultural differences in signage identity. Iftikhar et al. (2021) found cultural differences in university signage color preferences: Hong Kong participants favored signage matching university themes and logos, while Pakistan participants preferred more colorful and varied signage. Hong Kong participants relied more on signage for navigation; Pakistan participants often sought verbal directions, like Indian norms.

Age also affects color preferences. Ulusoy and Onur (2023) found young adults preferred black and grey for signage at sociable places, while older respondents disliked these colors, associating them with death. Both groups favored red for its attractiveness.

2.6 Signage in Brunei Darussalam

Studies on public signage in Brunei Darussalam mainly focus on language use in the linguistic landscape. Only Haji Othman (2020) closely examined both linguistic and semiotic aspects, finding Malay language dominates signage in Tutong town, not reflecting its multilingual ecosystem. Coluzzi (2016) found 60% of signs in Bandar Seri Begawan used mixed languages, 21% in Standard Malay, and 16% in English, with minority languages absent. Malay's dominance stems from its official status, while English is used for its prestige and utility, influenced by British history as well as their sense of being a Non-Native speaker (Mumin, 2022). This highlights the importance of bilingualism in Brunei's political and social context (Sonmez, 2019) and a trending preference in academics and communicative language choices (Mumin, 2023; Mumin et al., 2025).

Japri (2016) analyzed shopping mall signboards in Brunei-Muara, focusing on legal compliance. She found most signs did not follow Registry of Business laws and mainly used English or slang in shop names. Noor Azam Haji Othman (2020) analyzed both linguistic and semiotic aspects of Tutong town signage, finding the minority language of the Tutong people was not reflected; Malay remained dominant, with English second. The semiotics and linguistics of Tutong town do not accurately reflect its multilingual population. Although studies in Brunei analyze language use in signage, they have not addressed how signage may reflect cultural and social norms, nor how individuals perceive and interpret Brunei's signage. Most research focuses on linguistic aspects, rather than broader context.

In summary, social semiotics help explain how signage creates meaning through social and cultural contexts, acting as a tool to analyze signage beyond language. Signage guides, informs, and symbolizes cultural values shaped by environment. Toilet signage often reflects cultural norms and expectations; educational signage carries both functional and symbolic meanings. In Brunei Darussalam, signage reflects its cultural, religious, and political environment, evident in the use of Malay, Arabic script, and Islamic elements. However, research on signage in Brunei has focused mainly on linguistic elements, with little attention to how university toilet signage is interpreted by students or how social semiotics can broaden understanding of cultural and linguistic influences.

3. Methodology

3.2.1 Qualitative Approach

This study utilised a qualitative research method, particularly in a phenomenological approach to explore university students' experiences, interpretations and perceptions of university's toilet signages as a visual communication tool. Notably, a qualitative approach allows researchers to be flexible and inductive on what has been explored while collecting data (Dunwoodie et al., 2022). Additionally, the phenomenological approach is specifically employed because it helps to explore the lived experiences of local and international university students in interpreting toilet signage within institutional spaces. Hence, the approach is suitable as it investigates participants' subjective experiences, interpretation and their process of meaning making (Alhazmi & Kaufmann, 2022), which aligns with the study's aim to explore how toilet signages are interpreted and understood across different social backgrounds.

Furthermore, two primary data sources were collected. First, is photographic documentation of university toilet signages and second is, participant responses through semi-structured interviews and a focus group discussion. Photographic documentation is where the researcher takes photos of the toilet signages, for then to be analysed using Halliday's (1978, as cited in Mehawesh, 2014) five elements of social semiotics.

For semi-structured interviews, all international participants' interviews were conducted online, through both Microsoft Teams and Zoom Meetings, as they were unable to participate in physical interviews. Notably, data collection was carried out during the semester break, where many international students had returned to their hometowns. Moreover, for both focus group discussion and semi-structured interviews, the researcher adopted a conversational style to ensure participants are comfortable in discussing topics, particularly sensitive topics. As mentioned by Buys et al. (2022), participants tend to share more of their input once they feel comfortable with a researcher, and consequently, rich data can be collected.

3.2.2 Theoretical and Analytical Framework

For the collected visual data, this study employed a social semiotics framework to analyse the following visual data. Notably, Halliday (1978, as cited in Mehawesh, 2014) presented five elements of social semiotics theory of language, namely text, register, situation, text context of culture and socio semiotics, and translation. These five elements were used to understand how signage is constructed in Brunei Darussalam. This framework also allows for a detailed examination of how toilet signage in Brunei reflects social roles, institutional values and cultural norms. Meanwhile, thematic analyses were used to analyse both focus group discussion and semi-structured interviews. The thematic analysis is suitable for this study as it enables the identification and interpretation of recurring patterns within participants' responses.

3.3 Research Setting

This study took place at two universities in Brunei Darussalam, namely Universiti Brunei Darussalam and Universiti Teknologi Brunei. These two universities were selected as research sites because the researcher already had existing access and familiarity with the institutions. The researcher's existing access and familiarity are important to consider, specifically with how this research aimed to analyse existing toilet signages.

3.4 Participants and Sampling Method

3.4.1 Participants

The participants for this study were students from both Universiti Teknologi Brunei (UTB) and Universiti Brunei Darussalam (UBD), as they were the main toilet users and had regular exposure to both universities' toilet signages. Both local and international students were recruited to ensure a diverse cross-cultural perspective. The reason for limiting students from both Universiti Brunei Darussalam and Universiti Teknologi Brunei is that the toilet signages were only collected from both universities; hence, the participants should be from both universities as well to maximise the validity of the research. The participants were aged between 21 and 30 years old and came from various cultural and religious backgrounds. Their differences in cultural and religious backgrounds are crucial for this study as this study aims to explore any potential cultural differences that may influence their perception on toilet signages.

3.4.2 Sampling Method and Sample Size

In terms of sampling method for this study, a convenient, purposive, and snowballing sampling were used to recruit 19 participants: five (5) participants from one focus group discussion and 14 respondents for individual semi-structured interviews. Out of 14 participants, seven are locals and seven are international students. All participants were enrolled in the UTB and UBD programmes. Initially, this study utilised purposive sampling

only, by directly recruiting both local and international students from UTB and UBD, who were aged between 21 and 30 years old. Purposive sampling was initially chosen because it enables the researcher to identify best suited participants to answer the research questions (Bakkalbasioglu, 2020). Here, it enabled the researcher to identify and target a specific group of people to be included in the study. However, recruiting international students was challenging because many have returned to their hometowns during the semester break. Consequently, this study employed snowball sampling, relying on the researcher's initial interviews as referrals to contact additional potential interviewees (Leighton et al., 2021). On top of that, convenient sampling was chosen because since the researcher is a student at UTB, hence, the participants chosen are the ones who are convenient to the researcher (Golzar et al., 2022). However, the recruited participants must still meet the participants requirements.

3.5 Data Sources and Data Collection Procedures

3.5.1 Visual Data (Toilet Signages)

For visual data, accessed locations for toilet signages are the only ones that are being photographed. Before photos of the signages were taken, a consent letter was obtained from UTB Research Ethics (refer to Appendix A). The type of toilet signage that was photographed is any signages that is within or around the toilet area. This includes any signage whether attached to the toilet's door, near the sink, or even near the bidet is categorised as toilet signage. Out of nine UTB's toilet signages, four of them are from the main buildings, another two are from the UTB library building, and the remaining are from UTB engineering buildings. Only one type of signage was photographed as the toilet signages within the buildings were standardised. For UBD's toilet signages, there are 10 of them. Three of them are from UBD's library, two from Student Centre, two from Central Language Theatre (CLT) and the rest are from The Core. These signages were taken in December 2024 and were immediately documented in Google Docs for subsequent analysis.

3.5.2 Interview Data

For interview data, the source is from semi-structured interviews and focus group discussions. The data collection began after ethical approval was obtained from the university's Research Ethics. Participants were contacted personally via email, Teams and WhatsApp. On average, the duration for both interviews are within 15 to 40 minutes only. Before starting the interviews, consent was obtained from all participants. All local and focus group discussions were conducted physically, while all international participants' interviews were conducted online through Teams and Zoom meetings due to the semester break. Participants were given freedom to speak in both English and Malay, to ensure they can express their perspectives more freely and accurately. Additionally, giving participants freedom also helps establish rapport and trust between the researcher and participants (Villiers et al., 2022) as they tend to feel more comfortable. During the sessions, an iPad was used to voice record the interviews. All interviews were transcribed manually. For this research, pseudonyms are used to address and protect participants' anonymity.

4. Results

4.1 Visual Social Semiotic Findings

One of the prevalent findings from the visual data analysis is the use of English language. It was found that most toilet signages from both UTB and UBD use English for the toilet text. Although Jawi characters are present in some toilet signages at UTB, it was noticed that English has been consistently used for the toilet text. In terms of register, all UTB signages were analysed to have a religious register, mainly due to the use of songkok and tudung, the use of Jawi characters and a prayer text. Meanwhile for UBD, all signages were analysed to be formal and direct due to the stick man figures. Nonetheless, all signages demonstrated a consistent use of either a combination of black and white or black and gray. For the situation, most of the signages were placed on the door, while some were either placed on a wall or next to a bidet. Regarding context of culture, UTB signages highlighted Islamic and Malay identity due to the use of Jawi characters, a prayer text and visuals wearing songkok and tudung. In contrast, no culture was identified for UBD signages. Lastly, for socio semiotics and translation, UTB's signages were found to have Malay Muslim identity. Whereby for UBD, universal symbols were identified, which translated into neutralisation of culture.

4.2 Interview Data Findings

The result revealed three distinct themes derived from both focus group discussions and semi-structured interviews. The three themes are as follows: Interpretation and User Experience, Cultural Encoding in Signage and Cross-Cultural Interpretation Gap.

4.2.1 Interpretation and User Experience: The differences between UTB and UBD Signage

All participants expressed that they interpreted and have different experience concerning toilet signages for UTB and UBD. For UTB, all participants regard the toilet signages to be new, realistic, unfamiliar, weird, have more Bruneian features, and traditional. They mentioned that UTB toilet signage is realistic because it has face features, with additional features such as wearing tudung and songkok, as mentioned by Hani and July when asked about UTB toilet signages,

“Weird, because usually stickman. Different from others so unique.” - Hani.

“My impression was UTB toilet signages are out of the ordinary.” - July.

Additionally, most Muslim international participants also interpreted UTB toilet signages to be a prayer room, besides regarding it as realistic and traditional. They mentioned that these kinds of features such as wearing tudung and songkok are often used in their country to signify a prayer room. However, for non-Muslim international participants, they only interpreted it as unfamiliar and weird, because they have never encountered such signages in their country. One participant, Terry, specifically interpreted UTB's toilet signages as “ugly” and “very traditional” for a modern world, as shown in the excerpt below:

“I find the icons of toilet signage as ugly and not for city people. Like the signage is very traditional? For me.” - Terry.

Meanwhile, for UBD toilet signages, all participants agreed that they interpreted it as a ‘normal’, ‘straightforward’ and ‘universal’ toilet signage because they are familiar with it. Most participants agreed that UBD's toilet signages are everywhere, especially during their school years. They also added that they interpreted the symbol for the ones wearing skirts or dresses to be for women, and icon with trousers or legs only to be for men. Furthermore, most participants mentioned that even with just the icon itself, it is already informative and serves the purpose of going to the toilet.

4.3.2 Interpretation and User Experience: Mode of Communication

Concerning the representation of the toilet signages, all participants asserted that toilet signages should be designed in a combination of both pictorial and text to avoid confusion. Although they agreed that even with the presence of toilet icons are acceptable, it is still better with the inclusion of text. The reason for this is to avoid being mistakenly entering the wrong toilet. For example, some participants mentioned,

“The perfect sign would be combination of both pictorial and texts.” - Terry

“Combination because if picture only it might be difficult to understand because some designs are quite similar.” - Khadijah

“...even before I enter, I need to atleast make sure like several times that I am entering the right one. I don't want to be accused of being pervert [laughs].” - July

Furthermore, most participants also mentioned they prefer a combination of both pictorial and text in the design of toilet signages to ease the international students who might not be fluent in the language used for the text. Hence, with the presence of both pictorial and text, they can be confident that it is the right toilet room to enter.

4.2.3 Interpretation and User Experience: Sign Clarity

Half of the participants regarded UBD's toilet signages at the library to be unprofessional and even suspicious because the signages are made up of paper that is stuck to the door. They added that because the signage is pasted with caution tape, it makes it more suspicious, and fear of being pranked. For example, Azrul asserted that,

"As someone majoring in cybersecurity, personally I would not enter this kind of toilet because its suspicious for me. Who knows if someone wanted to prank me? Or its not a toilet actually?"

However, they also added that without the caution tape, UBD's library toilet signages were regarded as the most attractive due to its yellow colour. They asserted that the yellow colour helps them to distinguish and see the toilet signages even from afar. Kamin expressed that,

"..the yellow ones are attractive to me because the rest is just in black colour, but this one in yellow."

Besides concerning its colours and designs, Terry stated that the use of 'gentlemen' and 'ladies' is inappropriate because he regarded 'gentlemen' and 'ladies' as only suitable for elderly. This, to him, excludes other groups such as children or simply those who do not regard themselves as either. Consequently, he argued that it might affect the clarity of the signage.

4.2.4 Cultural Encoding in Signage: MIB Philosophy in Practice

During the interviews, one of the questions I posed was about whether any cultural or religious values are being communicated at both UTB and UBD's toilet signages. All participants agreed that UTB signages communicated Melayu Islam Beraja (MIB) philosophy, especially with the figure wearing tudung and songkok. Particularly for the female toilet signage, they regarded wearing a tudung as covering the figure's aurat or intimate parts. Although it is just a figure, many expressed that UTB put heavy emphasis on the toilet signages to have Malay and Islamic elements. As mentioned by Hidayah,

"Nya orang, sipun tah toilet, masih jua UTB atu mau tekankan MIB (People say even though it is just a toilet, UTB still wants to emphasise MIB). That's how Brunei regard MIB as very important lah for me."

Similarly, Hussein also regarded UTB's male toilet figure wearing a hat "...its like a cap in Brunei", which shows how participants deduce the hat the figure is wearing as a Bruneian identity. Besides, Terry also asserted that the inclusion of the prayer text placed on the wall strengthens UTB's heavy emphasis on reinforcing Islamic values. He added that he had never encountered a prayer text placed outside a toilet room. Similarly, Jeremy expressed that the prayer text signifies Brunei as a unique country because he regarded the prayer text to protect those who enter the toilet.

"Oh so unique. I thought it was some kind of information thingy.... I think it's a good thing to put..... people can be protected by it."

Additionally, most local participants and Shila, an international participant also regarded UTB's signages as 'traditional', 'classic' and 'old school' because the use of cultural markers such as tudung and songkok. They regarded that by using Bruneian's cultural markers for toilet signages to be less modern. Specifically, Shila expressed that she often sees similar toilet signages that use tudung and songkok in old government buildings. Hence, she also regarded those toilet signages as old and classic.

Contrastingly, for UBD toilet signages, all participants stated that no cultural or religious values are being communicated. They added that UBD signages to be "religious-friendly" and "cultural-friendly" due to its universal features, compared to UTB's toilet signages.

4.3.5 Cultural Encoding in Signage: Gender Representation

Regarding gender representation on toilet signages, all participants agreed that for UTB's signages, the visuals differentiated male and female toilets, particularly through the dress. All local and international participants asserted that a figure wearing a songkok was for the male, while a figure wearing a headscarf was for a female. The representation aligns with Islamic modesty as covering hair or aurat is associated with femininity. As mentioned by Jasmine,

"I know it's for females because of the tudung. And songkok means for male, because they're wearing a Bruneian hat."

Here, it was found that most participants interpreted gender identity through clothing instead of through body shape or text because the signage only includes face features with additional songkok and tudung. Meanwhile, for UBD's toilet signages, all participants regarded that male toilets are communicated through the icons wearing trousers or just by having the legs itself. For female toilets on the other hand, are communicated using dress or skirt by the icons. Here, they added that these two features are commonly the ones that differentiated between male and female.

4.2.6 Cultural Encoding in Signage: Clothing as a Social Semiotic Resource

In the lens of social semiotic approach, all participants agreed that the use of tudung and songkok are more than just a dress code, as rather, they represent cultural signs that communicate gender, religion and social belonging. It is revealed that for UTB's signages, the features of wearing a hat and wearing a tudung acts as a semiotic shortcut because it tells the viewers what the institution considers as appropriate and normative. All participants relate the institution's values with the signage used in the toilet, by asserting that it is normal for UTB to choose the signage because they have specific and strict attire rules. As expressed by Kamin,

"...UTB is more strict in attire rules, hence why I think they choose to design the toilet icons in such way. For UBD I don't think they have a strict attire rules, so hence why their toilet signages are universal?"

All participants also asserted that the clothing itself serves as a social semiotic resource because UTB's toilet signages especially in the main buildings only have pictorial, without a text to further clarify whether this toilet is for male and female. Hence, they only relied on the icons to distinguish between different genders' toilets. On the other hand, all Muslim international participants expressed that they sometimes misunderstood the toilet signages as a prayer or an ablution room, especially when the door is closed. This is because, in their country, they have encountered similar signages but are used to communicating in a prayer or an ablution room. Here, it can be seen how clothing style represents identity, instead of fashion because it visually encodes cultural values in a subtle but powerful way. For instance,

"So let's say lah ah, the door is closed right. Since I am a Muslim, I would regard it as tempat berwudhu atau surau sebab di negeri aku kan kalau icons nya kayak gitu I will automatically think it's a prayer room or tempat berwudhu. [Since I am a Muslim, I would regard it as an ablution or prayer room because we use similar pictures in my country to present a prayer or ablution room]." - Sara

4.2.7 Cross-Cultural Interpretation Gap: Differences between Locals and Non-Locals

During the interview, one of the questions asked was whether their background affects how they interpret the toilet signages. For UTB's toilet signages at the main buildings, all Muslims participants from both locals and non-locals immediately recognised the meaning of songkok and tudung. They immediately regarded tudung and songkok as presenting gender separation. They also added the reason they immediately recognised gender separation was because they have grown up with the symbols. Hidayah mentioned,

"..yes as a Muslim so I know wearing tudung is for girls so like songkok is for boys." - Hidayah

“...yes my background affect because in my country we do use similar icons too.” - Hussien

“...yes, because I grew up being a Malay. Like I grew up in a Malay community, so I associate like songkok, female and male because I am always exposed to this kind of information.” - Khadijah

For non-locals who are non-Muslim on the other hand, they find it hard to recognise tudung is for females and songkok is for male. They asserted that they were sometimes unsure what the images meant, especially because there was no text accompanying the pictorial signage. Instead of regarding it as a toilet room, they interpreted it as a prayer room or an ablution room because they were aware Muslims have to take ablution before praying. As mentioned by Terry,

“For UTB signages, its kinda difficult for me because I have different religion.”

However, for UTB's toilet signages at both library and engineering buildings, they are quite familiar with it because the icons used are what they considered to be 'familiar' and 'universal'. Nevertheless, for both Jasmine and Shila, they immediately recognise these symbols as a gender separation despite being a non-Muslim. They revealed that they have been living in Brunei for about 20 years, hence why they are exposed to these kinds of symbols. They also added that they learned about Brunei's culture more than they learn about their own cultures. This shows that the meanings they made are learned over time and shaped by socialisation. They said, *“For UTB, because I've been in Brunei for 20 years, so i am already exposed to Bruneian culture, that's how I instantly know.” – Jasmine.*

“...yes because I've been here for 20 years, so I know the Bruneian and Islamic culture that's why I can understand them easily. Also, back then at my school, they taught me about like this generic signages.” - Shila

Regarding UBD signages, all participants agreed that they are familiar with the icons ever since they were a child. They asserted that they were particularly exposed to the icons during primary school as their schools used similar icons. Besides, they also added that even when travelling to other countries, similar icons are also being used. Hence, they do not have differences in interpreting UBD's toilet signages.

4.2.8 Cross-Cultural Interpretation Gap: Representation vs Exclusion

When asked about whether the participants felt represented or excluded by the toilet signages, most Muslim participants expressed that they feel represented. Since UTB's toilet signages at the main building used symbols with tudung and songkok features, they feel represented because it shows their identity as a Malay, Muslim and Bruneian. For instance,

“I feel represented because like it represents my Malay culture and religion.” - Hidayah

“I feel represented because Malay aspects of the signage like how they include the one attire like the Malay attire.” - Kamin

“Represented because I am a Muslim myself so no problem with both university's signages.” - Sara

However, some non-Muslim participants expressed that they feel excluded from the toilet signages because they are not a Muslim and not a Bruneian at the same time. They felt like the signages were biased towards the Bruneian Muslim only. For UBD's toilet signages, all participants revealed that they felt represented mainly due to their gender. They felt like UBD's toilet signages, with UTB's toilet signages at the Engineering buildings to be religious friendly and culturally friendly. As mentioned by Jeremy,

“I would say UBD make me feel represented because the signage is friendly.”

Despite these findings, some participants also indicated that neither of the toilet signages made them feel represented or excluded. They mentioned the reason for this is because they only regarded it as a toilet, a place where they can do their business. They do not put heavy emphasis on the signage because as long as they can distinguish gender separation, then they are good with it. For instance,

*“I didn’t think about all that. It’s just a toilet? So I don’t mind.. Neither feel represented or excluded.” –
Hani*

To summarise, some of the major findings are the dominant use of English on toilet signages, while Jawi characters are only used at UTB toilet signages. Additionally, while UTB signages reflect Islamic and Malay identity through the use of songkok, tudung, and prayer text, UBD signages on the other hand are analysed as neutral and universal due to the use of stick man figures. Besides, the findings also revealed the preferences for multimodal signages, mainly for signage clarity. For all non-Muslim international students, they interpreted UTB signages at the main buildings to be a prayer or an ablution room instead of a toilet, due to the absence of text to clarify and their limited exposure to these signages as toilet signages. In terms of colours, all signages consistently use a combination of black and white or black and gray. Yet, the colour yellow as background helps viewers to notice toilet signages from afar.

5. Discussion

5.2 Interpretation of Signage

5.2.1 Visual Recognition and Familiarity

Drawing on the findings, it was found that university students interpreted UTB and UBD toilet signages differently, mainly based on their familiarity with the visuals. Here, their interpretation of toilet signages was shaped by visual recognition, as they were able to classify the kind of visuals that looked normal and abnormal to them. For UTB toilet signages, many students regarded them as traditional, unique and religious due to the presence of songkok and tudung. This implies that the detailed cultural dress code makes the signs look formal and culturally embedded, which causes both tudung and songkok to be regarded as traditional, unique and religious. The finding aligns with Zheng (2022) where traditional design elements are often communicated through visuals, which are purposely used to make a place feel more traditional and cultural. While all local and Muslim international students may find both tudung and songkok familiar, non-Muslim international students find tudung and songkok strange as gender-segregated toilet signs, because they do not follow a universal toilet signage norm, particularly the stick man figure. This finding corresponds with Felder (2021), who argues that familiarity plays an important role in an individual’s everyday life because it determines the meaning that a person makes to a certain context. In essence, this shows that not all viewers share the same visual literacy because what can be regarded as cultural and traditional signs can be perceived differently, especially by those from different cultural backgrounds.

Contrastingly, UBD’s toilet signages were interpreted as normal, straightforward and universal, where the students across different religions and cultures find it easier to decode. All local and international students immediately recognised the stick man figure as a toilet symbol, mainly because similar symbols are commonly seen in many public spaces. Besides, their familiarity with the symbols also causes them to regard UBD’s toilet signage to be universal. These findings support Darras’ (2016) study, where he found that stick man figures are commonly perceived as universal signifiers for toilet signages. Furthermore, he also added that these stick man figures are the most favourable because of their neutral design of a stick man with a typical human figure. Here, it may explain the reason as to why stick man figures are more favourable and familiar among university students.

In addition, the current study also found that university students easily interpreted the stick man figure as toilet signage by identifying the ones with a skirt or dress shape design as female toilets, while the ones with trousers or just two legs shape to be for male toilets. Similar findings were also found by Trisnawati and Sriwarno (2018) where university students tend to interpret a figure with trousers as an indicator for a male toilet and a figure with either a skirt or a dress as an indicator for a female toilet. Here, it shows how designs can be interpreted as a universal design through repeated exposure in public spaces. On top of that, familiarity also

leads to faster and easier recognition (Manahova et al., 2020). In essence, visual familiarity is crucial in enhancing communication, as the more students are exposed to a symbol in public, the easier they decode it.

In this context, although UTB and UBD toilet signages serve the same function, which is to display a toilet room, their differences in signage caused university students to interpret them differently. They based their interpretations on their personal and cultural background to make meaning of the signage. This idea parallels with Jun et al. (2020) and Tishler et al. (2020) studies, where they found that people from different cultures and backgrounds may perceive and make meaning of the same signages differently. At this point, it shows how visual communication is far from being neutral, as the meaning created for the visuals is based on an individual's different background (Wan, 2022). In essence, university students interpret and make meaning of toilet signage based on familiarity and cultural knowledge. Toilet signages that use universal visuals like UBD were easier to decode among the university students. Meanwhile, toilet signages that use cultural codes like UTB were difficult to decode and consequently caused miscommunication to the students, especially the ones who are non-Muslim. In general, visual communication is rather versatile in nature, instead of having a fixed meaning.

5.2.2 Semiotic Features: Symbols, Text and Colours

Concerning toilet signages' semiotic features, findings revealed that students stressed the importance of multimodal signs to clarify their interpretation. The preferred toilet signages are the ones that have multimodal signs, particularly a combination of both symbols and text to strengthen their interpretation. The findings challenged Iio's (2023) case study of toilet signages in Southeast Asia, where he highlights that symbols alone are informative enough to indicate a toilet room. In fact, in Bruneian institutional settings, a combination of symbols and linguistic elements is required, especially for some toilet signages that the students are less familiar with. For instance, all non-Muslim international students regarded UTB's toilet signages at the main buildings as either a prayer or ablution room due to the absence of text. In this context, it shows how the presence of text can act as a support for interpretation, as it helps to avoid misreadings and confusion, especially for individuals of different socio-cultural backgrounds (Garg & Dewan, 2022). Furthermore, by referring to Halliday's (1978, as cited in Mehawesh, 2014) register theory, the current study highlights that semiotic features play a role in influencing the students' meaning making process and consequently how students interpret signages, especially in a multicultural and formal setting like a university. Essentially, this implies the importance of multimodal signs, particularly a combination of symbols and text, for clear interpretation.

Despite students' preferences for multimodal signs, findings also revealed that stick man figures are informative enough on their own to signify a toilet room. This finding aligns with Matwick and Matwick (2022), who note that stick man icons are typically used in toilet signage, causing most people in Singapore to regard them as the 'official' toilet signage. In essence, it shows how a certain visual can communicate the intended message, such as signs to communicate that it is a toilet room, but only among those who are familiar with the viewers.

In terms of colours, university students regarded yellow as the most attractive colour to be used for displaying toilet signage. They mentioned that the colour yellow enables them to notice and recognise a toilet even from afar. Here, it makes yellow act as a visual cue as it helps people notice the toilet from a distance. The findings are supported by Yuan et al. (2021), who argued that the colour yellow was more likely to alert viewers than other colours. Although their study focuses on hazard signages only, and since the findings are aligned, it shows how the colour yellow can be regarded as effective in visual communication due to its contrasting feature. Furthermore, Dewar and Pronin (2023) also asserted that yellow is an ideal colour when designing signage due to its bright and alerting feature. However, this perspective is inconsistent with Ulusoy and Onur (2023) because they argued that young adults preferred black and gray tones more for signage at sociable place entrances, compared to bright colours. Here, it is recommended for future research to explore whether yellow colour can be applied to different demographics, as the current study only explored university students, while other groups might have a different interpretation. Besides, it is also recommended for future research to analyse whether signage in yellow colour may be favourable in different situations, such as when the background is in yellow colour as well.

5.3 Cultural, Religious and Institutional Values

5.3.1 MIB Ideology in UTB Signage

This study finds that UTB and UBD have distinct ways to express or communicate their culture, social and institutional values through toilet signages from a social semiotics perspective. For UTB toilet signages at the

main buildings, it was found that the visuals of a male wearing a songkok and a female wearing a tudung encode Islamic and Bruneian cultural norms. Particularly, the students regarded the songkok as a traditional Bruneian cap. Notably, Shahrin (2023) notes that songkok and tudung are part of Bruneian identity, as they reflect the Bruneian cultural attire. Here, by utilising songkok and tudung, it shows how these visuals act as an indicator of gender separation toilets. Moreover, findings also highlighted that students strongly correlated tudung with Islamic teachings because the figure is perceived to cover their aurat or intimate parts. This view corresponds with Liu (2020), who demonstrates that Brunei is recognised as an Islamic country that strongly emphasises the Islamic teachings such as covering aurat. Besides tudung, the placement of a prayer text on the wall outside of UTB's toilet room further strengthens Liu's (2020) argument as it encourages viewers to recite it before and after going to the toilet. According to Halliday (1978, as cited in Mehawesh, 2014), in his theory of context of culture, this phenomenon shows how certain symbols are not just part of the design, but are part of cultural semiotics that influence how messages are interpreted. Together, the incorporation of Bruneian cultural attire and Islamic values might indicate the value that UTB holds, as notably, UTB's mission is "To produce towering talents for a sustainable, global, and enterprising society deeply rooted in our national philosophy (MIB) towards realising Wawasan Brunei 2035" (Universiti Teknologi Brunei, 2025).

Therefore, the use of tudung, songkok and prayer text might be one of the ways that UTB use to reinforce and communicate MIB values to their students. Even though UTB's toilet signages at the main buildings effectively communicate cultural, social and institutional values, university students still perceived it as traditional, classic and outdated. In contrast, toilet signages at UTB's library and Engineering buildings that use stick man figures were considered modern because no culture was attached to the signage. In essence, it shows how students perceive any toilet signage that has local cultural elements to be traditional and outdated, while the ones with universally familiar toilet symbols are considered modern and advanced. This argument parallels with Rahman and Mehta (2020) who highlighted that signages that have cultural semiotic features tend to be viewed as traditional and antique because they give a cultural sensory experience. Besides, it is known that UTB's buildings are built in phases. The main buildings were built in Phase One, which was in 1997, when UTB was first known as Institut Teknologi Brunei (ITB) (Universiti Teknologi Brunei, n.d.). Meanwhile, both the Library and the Engineering buildings were built in Phase Three, which was in 2013. Here, the construction timeline may explain the students' contrasting perceptions of how toilet signages are designed. Essentially, it shows how visual communication that is communicated through toilet signages reflects the evolution of institutional identity and cultural shifts over time.

5.3.2 Neutralisation in UBD Signage

In terms of neutralisation of design, the results indicated that all toilet signages, except for the ones at UTB's main buildings, were perceived as culturally and religiously friendly due to their universal features of stick man figures. Here, this study suggests that the absence of specific cultural elements caused the signage to be seen as more neutral and inclusive. However, it is worth noting that stick man figures are considered Western designs (Iio, 2019). Some scholars argue that stick man figures carry Western culture, where a figure showing two legs or wearing trousers is male and the ones wearing a skirt or dress are considered to be female (Colker, 2017; Song; 2024; Yiheng, 2023). In this context, the students' preferences for stick man figures as toilet signages might indicate how Western signage dominates and becomes the default international and modern design for toilet signage. Here, it calls into question whether a perceived 'neutral' signage is neutral or whether it demonstrates Western cultural norms that have become globally accepted by individuals, even from diverse backgrounds. In this regard, it also shows how investigating interpretation informs us on the cultural hierarchies, even in basic objects like toilet signages, where Western culture is more preferred than Malay culture. This supports Rosendal and Ngabonziza (2023) study, where signage design conveys cultural hierarchies, regardless of how neutral they appear to be. In essence, it shows how even the most basic signs carry cultural values.

5.3.3 Language Use in Toilet Signage

For language use in university toilet signages, results from the visual data observation demonstrated that English was primarily used on both UTB and UBD signages. Similar results have also been consistent with regional trends in other Southeast Asian countries like Indonesia, where English is predominantly used for institutional signage (Riani et al., 2021). Even so, the findings are unexpected, considering how the Malay language holds official status under the MIB philosophy in Brunei. Notably, according to Japri (2016), in terms of commercial signage, she observed that these signages are required to be displayed in Malay, as part of the official requirements from the Building Control (Advertisement, Billboard and Signboard) Regulations, 2016. Additionally, the findings are also in contrast with prior local studies, which found that Malay is still prevalent in public signage. For instance, Coluzzi (2016) found in his Bandar Seri Begawan study that 21% of signage

is in Standard Malay only, compared to 16% of signage used in English only. On top of that, Haji Othman (2020) also observed that Tutong town signages are mainly in Malay, despite Tutong town being known for its multilingual environment. This suggests that, unlike other Southeast Asian countries like Indonesia, Brunei puts heavy emphasis on using Malay over other languages, especially in visual domains. Yet, the contrast in findings calls into question language use preferences, especially in institutional settings. Thus, it is recommended for future research to explore the language use of toilet signage in other institutions. With this recommendation, it will help to justify whether English is particularly preferred in institutional signage or if it is becoming a trend across formal settings in Brunei.

5.4 Cross-Cultural Interpretations

5.4.1 Local vs Non-locals Meaning Making

The locals and the non-local university students have contrasting interpretations of the toilet signages, mainly due to their linguistic and cultural differences. According to the findings, all Muslim and long-term resident students from both local and non-local groups decode UTB signages at the main buildings easily due to cultural familiarity. Meanwhile, non-Muslim international students misinterpreted the signage to be a prayer or an ablution room, instead of a toilet room. The findings align with Halliday's (1978, as cited in Mehawesh, 2014) socio-semiotics and translation theory, where signage reflects social context and viewers translate the signs' meaning based on their cultural and religious background. This demonstrates a semiotic gap between the Muslim and long-resident students with non-Muslim international students, as similar visuals are interpreted differently. Previous studies also highlighted that individuals tend to perceive similar visuals differently, mainly due to their cultural and social backgrounds (Ellestrom, 2022; Kellaris & Machleit, 2016). Here, there is a disconnect between the intended meaning reinforced by the institution and the perceived meaning by the viewer (Sehyr & Emmorey, 2019). Moreover, this also suggests how internal cultural schemas play an important role when interpreting signage, as meaning is filtered through lived experience and background knowledge especially for international students in their mission to quickly adapt onto their new cultural settings (Mumin, 2020). This would mean that personal experience influences how individuals interpret (Elmore et al., 2017). Nonetheless, no different interpretation was reported concerning UTB's new buildings and UBD's toilet signages despite their linguistic and cultural differences. It was found that both groups had similar interpretations, where they immediately regarded the signage as toilet signage only. Here, it further justifies how long-term exposure to similar signage norms may contribute to common interpretation, even among international students.

5.5 Overall Analysis

Based on the above discussion, it is evident that Halliday's (1978) five elements of social semiotics play an important role in decoding the social messages embedded in Brunei's university toilet signages. Each element, namely the Text, Register, Situation, The Context of Culture and Sociosemiotic and Translation, helps to uncover the structure and layout of the signage, the style of the signage, the physical setting where signage is situated, the embedded cultural, religious and institutional codes, and the way meanings are interpreted by the students. However, analysing the visual signs themselves is not enough to understand how these signs are perceived and interpreted by the students. Here, the current study justifies that the phenomenological method, through exploring the lived experiences of the students, helped reveal how toilet signages are perceived ideologically, and not just visually. Although toilets may be mundane, these discussions reflect how even the basic signs carry significant social meanings. Ultimately, toilet signages as a visual communication are not passive, rather, they actively communicate through cultural, institutional and religious perspectives.

6. Conclusion

To conclude, this study revealed that university toilet signages in Brunei Darussalam communicates beyond its functionality, as it also encodes cultural, religious and institutional values. It also revealed how the interpretation of signage is influenced by familiarity, visual literacy and cultural background, where local and long-term residents understood culturally embedded signage easier than non-local international students. Additionally, this study also highlighted that, universal signage such as stick man figures are more preferred and more easily understood by all groups to be a toilet signage, although they still reflect Western visual norms. Besides, this study also demonstrated that English is more prominently used in toilet signage and potentially reflects a shift in institutional communication practices. On top of that, this study supports social semiotic view that meaning is not fixed but shaped based on the viewer's social and cultural background. In essence, this

study highlights the importance of multimodal signage, particularly a combination of both text and symbols, to enhance clarity and avoid confusion when interpreting toilet signage. Ultimately, phenomenological approach and social semiotic approach helps to uncover that signage does not only serve a purpose, which is to guide, but it also reflects the embedded cultural and institutional values within the signage itself.

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