



DICTION ANALYSIS ON MRT ANNOUNCEMENT IN JAKARTA AND SINGAPORE

May Triranto Maharini^{1*}

¹Universitas Pamulang, Tangerang Selatan, Banten, Indonesia

E-mail: 1mtmaharini05@gmail.com

Accepted:

18 July 2026

Published:

20 July 2026

Corresponding Author:

May Triranto Maharini

Email Corresponding:

mtmaharini05@gmail.com

ABSTRACT

This study analyzes and compares the diction used in English-language announcements on the Mass Rapid Transit (MRT) systems in Singapore and Jakarta. As an important medium of public communication, MRT announcements play a crucial role in delivering clear information and ensuring passenger safety. This study applies Biber's (1988) theory of diction and Sweller's (1988) Cognitive Load Theory to examine how lexical choices and sentence structures influence the effectiveness of public announcements. A qualitative comparative approach was employed, with data collected through audio recordings of English announcements from both MRT systems. The findings show both MRT systems use formal and informative language. Singapore's announcements tend to use simpler vocabulary, shorter sentences, and more direct expressions, making the information easier to process. In contrast, Jakarta's announcements provide more contextual information and denser sentence structures, which require greater cognitive effort from listeners. Overall, the study demonstrates that appropriate diction contributes significantly to effective public communication and offers insights into the application of linguistic principles in multilingual urban transportation settings.

Keywords: *Diction, MRT announcement, Singapore, Jakarta*

1. INTRODUCTION

Public transportation plays an important role in supporting daily mobility in modern cities. Every day, millions of people use trains to travel to work, school, and other destinations. To help passengers travel safely and comfortably, transportation systems provide public announcements containing important information, such as station names, train directions, safety reminders, and service updates. Therefore, these announcements need to be clear, accurate, and easy to understand.

The effectiveness of public announcements depends not only on the information provided but also on the language used to deliver the message. One important aspect of language is *diction*, or the choice of words used in communication (Miller, 2019; Listyani, 2019). Crystal (2019) states that appropriate diction helps speakers deliver messages clearly and allows listeners to understand information

more easily. In public transportation, passengers come from different linguistic and cultural backgrounds. As a result, announcements should use simple and familiar language so that they can be understood by as many passengers as possible.

English is widely used in public transportation because it serves as an international language (Jaya & Saputri, 2025) (Crompton et al., 2024; Malini et al., 2022). Many transportation systems include English announcements to assist foreign visitors and support international communication. Singapore and Jakarta are two cities that provide English announcements in their Mass Rapid Transit (MRT) systems. Although both cities use English, the way announcements are delivered may differ because of their different language policies and sociolinguistic backgrounds. Singapore uses English as one of its official languages, while Jakarta mainly

Vol 9, No 2 (2026): ESTEEM

uses Bahasa Indonesia, with English serving as an additional language for international passengers.

The language used in public announcements can be analyzed through Biber's (1988) theory of diction. According to Biber, language varies depending on its purpose and context. His framework focuses on several aspects of diction, including lexical choice, formality, information density, directness, syntactic complexity, and audience orientation. These aspects help explain how language is used to communicate information effectively.

Besides language choice, the way information is presented also affects how well passengers understand announcements. Sweller's (1988) Cognitive Load Theory explains that people can process information more easily when it is presented in a simple and well-organized way. In transportation settings, passengers often listen to announcements while walking, boarding trains, or dealing with surrounding noise. Therefore, announcements that use simple words and short sentences may reduce cognitive effort and improve comprehension.

Several studies have discussed language use in public communication. However, only a few studies have specifically compared the diction used in English MRT announcements, especially in Southeast Asia. In addition, limited research has combined linguistic analysis with Cognitive Load Theory to explain how language choices affect passenger understanding (Sweller, 2020; Mayer, 2014; Schunk & DiBenedetto, 2020). This gap provides an opportunity for further research.

Therefore, this study compares the diction used in English announcements in MRT Singapore and MRT Jakarta by applying Biber's (1988) theory of diction and Sweller's (1988) Cognitive Load Theory. The study seeks to answer the following research questions:

1. How is diction used in the English announcements of MRT Singapore and MRT Jakarta based on Biber's (1988) theory of diction?
2. How do the differences in diction affect communication effectiveness from the perspective of Sweller's (1988) Cognitive Load Theory?

The findings are expected to contribute to applied linguistics, particularly in discourse

analysis and public communication, and to provide useful recommendations for improving English announcements in public transportation.

2. LITERATURE REVIEW

2.1 Diction in Public Announcements

Diction refers to the choice of words used to communicate a message. According to Crystal (2019), the words chosen by a speaker or writer influence how easily a message can be understood. Good diction helps listeners receive information clearly and reduces the possibility of misunderstanding. In public communication, choosing the right words is important because messages are often delivered to people with different educational, cultural, and language backgrounds (Shi et al., 2024; Listyani, 2019).

In public transportation, announcements are used to provide important information such as station names, train directions, safety reminders, and service updates. Unlike written information, spoken announcements can only be heard for a short time. Passengers usually cannot replay the message, so they need to understand it immediately. For this reason, announcements should use words that are familiar, simple, and easy to understand.

The choice of words also affects how quickly passengers process information. Simple vocabulary allows listeners to recognize the meaning of a message without spending extra time interpreting unfamiliar expressions (Treffers-Daller, 2019; Miftahul Jannah et al., 2025; Sujiati et al., 2023). On the other hand, uncommon words or long expressions may require more attention and increase the possibility of misunderstanding, especially for non-native English speakers or first-time passengers (Ajisoko, 2020; Wijaya, 2020; Li, 2024).

Biber (1988) explains that diction in institutional communication is influenced by the purpose of the message. Public announcements are mainly informative, so they should focus on delivering information rather than expressing personal feelings or opinions. Therefore, transportation announcements usually use formal language, direct expressions, and clear sentence structures. These characteristics help passengers understand important information quickly

while travelling. In this study, diction is examined to understand how language is used to support effective communication in MRT Singapore and MRT Jakarta.

2.2 Biber's Theory of Diction

Biber (1988) argues that language changes depending on its communicative purpose and the situation in which it is used. People do not use the same language in every context. For example, everyday conversations are usually informal and interactive, while public announcements are more formal and information-oriented. Because of these differences, the language used in each context has its own characteristics.

According to Biber, public announcements belong to institutional discourse because their main purpose is to provide information clearly and efficiently. The language is expected to be objective, formal, and easy to understand. Instead of using expressive or emotional language, announcements focus on helping listeners receive important information as quickly as possible (Boardman et al., 2024; Al Hosni, 2025; Hubert et al., 2025).

Biber identifies several linguistic features that can be used to analyze diction. These include *formality*, *lexical simplicity*, *information density*, *directness*, *syntactic complexity*, and *audience orientation*. Formality refers to the use of professional and respectful language. Lexical simplicity refers to the use of common vocabulary that is familiar to most listeners (Septianingtias et al., 2024; Kartikasari et al., 2020; Saed et al., 2021). Information density explains how much information is included in one sentence, while directness shows how clearly a message is expressed. Syntactic complexity relates to sentence structure, and audience orientation refers to how language is adjusted to meet the needs of listeners (Kandemirci et al., 2025; Yusuf & Ali, 2025; Chomsky, 2002).

These six aspects provide a useful framework for examining public announcements because they explain not only what information is delivered but also how the information is communicated. In this study, Biber's framework is used to compare the English announcements of MRT Singapore and MRT Jakarta and to identify similarities and differences in their communication styles.

2.3 Cognitive Load Theory

Besides linguistic aspects, communication is also influenced by the way people process information. Sweller's (1988) Cognitive Load Theory explains that working memory has a limited capacity. People can only process a certain amount of information at one time. When too much information is presented at once, understanding becomes more difficult.

Sweller describes three types of cognitive load: *intrinsic cognitive load*, *extraneous cognitive load*, and *germane cognitive load*. Intrinsic cognitive load is related to the difficulty of the information itself. Extraneous cognitive load comes from the way information is presented, while germane cognitive load refers to the mental effort used to understand and organize new information.

In public transportation, passengers often receive announcements while they are doing other activities. They may be walking, looking for station signs, carrying bags, talking with other people, or preparing to leave the train. These situations reduce the amount of attention that can be given to announcements. Therefore, transportation messages should be designed to reduce unnecessary mental effort.

Simple vocabulary, short sentences, and well-organized information help passengers understand announcements more easily. Messages that are direct and predictable also reduce cognitive load because passengers know what kind of information they should expect. In this study, Cognitive Load Theory is used to explain how the language found in MRT announcements may influence passenger comprehension and communication effectiveness.

2.4 English Diction in Multilingual Public Transportation

English is widely used in public transportation because it serves as an international language. Many transportation systems include English announcements to assist tourists, business travelers, and international visitors. As a result, English has become an important language for public communication in many countries.

Fishman (2012) explains that language choice depends on the social setting and the people involved in communication. In multilingual societies, different languages are often used for different purposes. Similarly, Spolsky (2004) states that language use in public institutions reflects language policy and the social identity of a community. These ideas help explain why transportation systems in different countries may use English in different ways.

Singapore and Jakarta provide an interesting comparison because both cities use English announcements in their MRT systems, but they have different linguistic backgrounds. English is one of Singapore's official languages and is widely spoken in daily life. In contrast, Bahasa Indonesia is the main language in Jakarta, while English is mainly used to support communication with international passengers.

Because of these contexts, the diction used in MRT announcements may also differ. Some announcements may use simpler vocabulary, while others may provide more detailed information.

2.5 Previous Studies

Several previous studies have examined the relationship between language and effective public communication. These studies generally agree that simple and clear language helps people understand information more easily, especially in situations where quick decisions are required.

Chun (2013) found that using simple vocabulary and shorter sentence structures improved comprehension among non-native English speakers. Participants understood messages more accurately when familiar words were used instead of more complex expressions. This finding suggests that language simplicity is important in public communication where listeners have limited time to process information.

Similarly, Goh (2000) reported that clear transportation announcements reduced passenger confusion and helped people navigate transportation systems more effectively. Announcements that presented one piece of information at a time were easier to understand than announcements containing several ideas in a single sentence.

Although these studies show the importance of clear language, research on English announcements in MRT systems is still limited. In particular, few studies have compared the English announcements of MRT Singapore and MRT Jakarta. In addition, previous research has generally focused on either linguistic analysis or communication effectiveness, but rarely combines both perspectives. Therefore, this study applies Biber's (1988) theory of diction together with Sweller's (1988) Cognitive Load Theory to provide a more comprehensive explanation of how language choices influence communication in public transportation.

3. METHODS

This study employed a qualitative comparative discourse analysis to examine the diction used in English MRT announcements (on-board) in Singapore and Jakarta. The approach enabled a systematic comparison of linguistic features within different sociolinguistic contexts (Creswell & Creswell, 2018; Tisdell et al., 2025; Patton, 2020).

The data consisted of on-board English announcements collected from both MRT systems. Primary data were obtained through audio recordings made during actual MRT journeys in Singapore and Jakarta. The announcements were then transcribed for analysis. Supporting data, including videos from social media and observational notes, were also used to verify the announcement content (Mauliddiyah, 2021; Daruhadi & Sopiati, 2024; Anufia, 2019).

The analysis was based on Biber's (1988) framework of diction, focusing on lexical simplicity, formality, information density, directness, syntactic complexity, and audience-oriented language. Sweller's Cognitive Load Theory (1988) was applied to explain how these linguistic characteristics may influence passenger comprehension and cognitive processing.

The analytical procedure consisted of three stages. First, on-board train announcements were transcribed and categorized according to their communicative functions. Second, the diction of each announcement was analyzed qualitatively using Biber's framework. Finally, the findings from Singapore and Jakarta were compared and interpreted through the perspective of

Vol 9, No 2 (2026): ESTEEM

Cognitive Load Theory to identify similarities and differences.

4.2 Discussion

Before analyzing the linguistic features of the announcements, Table 1 presents the English announcements collected from MRT Jakarta and MRT Singapore. The data consist of five common categories of announcements: door closing, greeting, next station information, door opening, and general reminders. Although the dataset is relatively small, it is sufficient for this qualitative study because the announcements represent the standard messages that are repeatedly delivered throughout daily MRT operations. As the focus of this study is to examine diction rather than the frequency of occurrence, these announcements provide adequate data for identifying linguistic patterns used by both MRT systems.

Table 1. MRT on board announcement in Jakarta and Singapore

	Jakarta MRT Announcement	Singapore MRT Announcement
Door closing	Doors are closing	Doors are closing
Greeting	Dear all customers welcome on board you are on north south line bound for bundaran HI bank Jakarta	Welcome aboard the North South Line train service.
Next station info	Next station, Famawati	Next station, Orchard.
Doors opening	Doors on the right/left will open	Doors will open on the left. / Doors will open on the right.
General reminders	Please take your	Please mind the platform

	belongings and step carefully, thank you	gap Please do not leave your belongings unattended.
--	--	--

4.2.1 Analysis Based on Biber's (1988) Types of Diction

4.2.1.1 Formality of Diction

One of the most noticeable characteristics of both MRT Jakarta and MRT Singapore announcements is the use of formal language. Public transportation announcements represent institutional communication, requiring a professional and respectful tone.

In MRT Jakarta, passengers are greeted with expressions such as:

"Dear all customers, welcome on board."

Similarly, MRT Singapore employs:

"Welcome aboard the North South Line train service."

According to Biber (1988), formal discourse often avoids colloquial expressions and emphasizes clarity, professionalism, and standard language forms. Both announcements demonstrate these characteristics. Neither system uses contractions, slang, or conversational phrases that may reduce the professional image of the transportation service.

However, there is a subtle difference between the two systems. MRT Jakarta adopts a more interpersonal style through the phrase "Dear all customers." The word *dear* functions as a marker of politeness and interpersonal engagement, creating a sense of warmth and customer orientation. The announcement directly addresses passengers as valued customers.

By contrast, MRT Singapore uses a more impersonal approach. The greeting "Welcome aboard the North South Line train service" focuses immediately on the transportation service itself rather than the passengers. This style reflects a more institutional and informational orientation.

From Biber's perspective, MRT Jakarta displays slightly more involvement features, while MRT Singapore demonstrates stronger informational characteristics. Nevertheless, both remain within the category of formal public discourse.

4.2.1.2 Lexical Simplicity and Word Frequency

Another important aspect of diction is lexical frequency, which refers to how often particular words appear in everyday language use. According to Biber (1988), high-frequency vocabulary plays a significant role in effective communication because such words are more familiar to a wider range of language users. When speakers use words that are commonly encountered in daily conversations, listeners can process information more quickly and accurately.

The analysis of MRT Jakarta and MRT Singapore announcements reveals that both systems rely heavily on high-frequency vocabulary. Common words such as *welcome*, *station*, *train*, *doors*, *open*, *left*, *right*, *service*, *passengers*, and *thank you* appear frequently in the announcements of both transportation systems. These words belong to basic English vocabulary and are generally familiar to both native and non-native speakers. Their meanings are clear, direct, and easy to recognize, allowing passengers to understand important travel information with minimal effort. The consistent use of such vocabulary demonstrates the intention of both MRT systems to communicate efficiently with a diverse audience. By relying on commonly used words, the announcements can effectively reach local commuters, tourists, and international visitors who may possess different levels of English proficiency.

Despite these similarities, MRT Singapore demonstrates a stronger tendency toward lexical simplicity. The announcements are typically constructed using short sentences and highly familiar vocabulary. For example, expressions such as “*Next station, Orchard*” and “*Doors will open on the left*” use words that are commonly encountered in everyday English communication. The vocabulary in these announcements is direct and uncomplicated. There are no technical terms, complex expressions, or specialized transportation jargon that might require additional interpretation.

In contrast, MRT Jakarta also employs generally accessible vocabulary but occasionally incorporates expressions that are slightly more specialized. An example can be seen in the announcement “*You are on the North South Line bound for Bundaran HI.*” While the phrase *bound for* is widely used in

transportation and travel contexts, it may not be as familiar to some non-native English speakers as simpler alternatives such as *going to* or *heading to*.

From Biber’s (1988) perspective, the frequency of vocabulary items directly affects accessibility and communicative effectiveness. Words that occur frequently in everyday language are generally recognized more quickly and require less cognitive effort to process. Therefore, announcements that rely heavily on common vocabulary can communicate information more efficiently, particularly in environments where listeners have limited time to interpret messages. In the context of public transportation, rapid comprehension is crucial because passengers often need to make immediate decisions regarding boarding, alighting, or transferring between services.

4.2.1.3 Information Density

Another important dimension of diction discussed in Biber’s (1988) framework is informational density, which refers to the amount of information conveyed within a linguistic unit. Informational density influences how easily listeners can process and understand a message. In public transportation settings, announcements must achieve a balance between informativeness and brevity. If too little information is provided, passengers may not receive sufficient guidance regarding their journey. Conversely, if too much information is packed into a single announcement, listeners may struggle to process all the details, particularly in environments characterized by noise, distractions, or time pressure. Therefore, transportation systems must carefully manage the quantity and organization of information presented in their announcements to ensure effective communication.

The analysis of MRT Jakarta announcements reveals a tendency toward higher informational density. A single announcement often combines several pieces of information within one utterance. For example, the announcement “*Dear all customers, welcome on board. You are on the North South Line bound for Bundaran HI*” delivers multiple messages simultaneously. First, it provides a greeting to passengers through the phrase “*Dear all customers, welcome on board.*” Second, it identifies the

specific train line being used, namely the North South Line. Third, it indicates the direction of travel through the expression *“bound for.”* Finally, it informs passengers about the train’s destination, Bundaran HI. As a result, several informational elements are integrated into a relatively compact structure. Passengers are expected to process all of these components within a short period of time, which increases the cognitive demands associated with understanding the announcement.

The inclusion of multiple informational components in a single announcement offers certain advantages. It enables MRT Jakarta to communicate a substantial amount of information efficiently while minimizing the overall duration of announcements. This approach can be beneficial in maintaining operational efficiency and reducing interruptions within the travel environment. However, the concentration of information also means that listeners must identify, interpret, and connect several pieces of information at once. For passengers who are unfamiliar with the transportation system, are non-native speakers of English, or are distracted by surrounding activities, processing multiple informational elements simultaneously may require additional effort.

In contrast, MRT Singapore demonstrates a lower level of informational density by distributing information across separate announcements. Rather than combining several messages into a single utterance, the system tends to present information in shorter and more focused units. Examples include announcements such as *“Welcome aboard the North South Line train service,”* *“Next station, Orchard,”* and *“Doors will open on the left.”* Each announcement is designed to communicate one specific piece of information. The first statement welcomes passengers and identifies the train service, the second informs passengers about the upcoming station, and the third provides guidance regarding door operations. Because each message focuses on a single communicative purpose, listeners can process information sequentially rather than simultaneously.

According to Biber (1988), informationally dense discourse generally requires greater processing effort because listeners must integrate multiple informational components simultaneously. The more information packed into a single linguistic unit,

the greater the cognitive resources required to interpret and retain the message. Applying this concept to the present analysis, MRT Jakarta can be seen as exhibiting a higher level of informational density because it frequently combines greetings, route identification, travel direction, and destination information within a single announcement. MRT Singapore, by contrast, distributes information more evenly across multiple announcements, thereby reducing the processing burden placed on listeners.

4.2.1.4 Directness of Expression

Another important feature of diction identified in Biber’s (1988) framework is directness, which refers to the degree to which information is communicated explicitly and unambiguously. Direct language allows listeners to understand the intended message immediately without having to infer additional meaning or interpret complex linguistic structures. In public transportation contexts, directness is particularly important because passengers often have limited time and attention to process announcements. Clear and explicit communication helps ensure that important operational and safety information can be understood quickly and accurately.

The analysis reveals that MRT Singapore consistently employs highly direct sentence structures in its announcements. Examples such as *“Doors will open on the left”* and *“Please do not leave your belongings unattended”* clearly illustrate this communication style. In these announcements, the intended action or information is stated explicitly and directly. Passengers are immediately informed about what will happen or what behavior is expected of them without the need for additional contextual explanation. The language is concise, straightforward, and focused solely on the essential message. This directness allows passengers to respond quickly to the information provided, which is particularly beneficial in busy transportation environments where attention may be divided among multiple tasks.

MRT Jakarta also communicates information clearly and effectively; however, its announcements occasionally employ more elaborate phrasing that includes additional contextual information. For example, the announcement *“You are on the North South Line bound for Bundaran HI”* provides

passengers with information about the train line, travel direction, and destination within a single sentence. While the message remains understandable, listeners must process several informational elements before arriving at the final destination information. The inclusion of contextual details enriches the message but slightly reduces its directness compared to MRT Singapore's shorter and more focused announcements.

According to Biber (1988), informational discourse often favors direct language because direct expressions reduce ambiguity and support efficient communication. Messages that are concise and explicit require less interpretation and therefore facilitate faster comprehension. In this regard, MRT Singapore exemplifies the principles of effective informational discourse by consistently prioritizing concise and straightforward communication. Its announcements allow passengers to identify key information immediately, thereby enhancing communicative efficiency and reducing the likelihood of misunderstanding.

4.2.1.5 Syntactic Complexity

Although the primary focus of this analysis is diction, lexical choices are closely related to sentence structure. The complexity of a sentence can influence how easily listeners process and understand information. Syntactic complexity refers to the structural intricacy of linguistic constructions, including the number of clauses, phrases, and grammatical relationships that must be processed simultaneously.

MRT Singapore demonstrates a strong preference for short and grammatically simple constructions. Announcements such as "*Next station, Orchard,*" "*Doors will open on the left,*" and "*Thank you for travelling with SMRT*" consist primarily of short independent clauses or simple sentence structures. These constructions contain only the information necessary to communicate the intended message and avoid unnecessary grammatical complexity. As a result, passengers can process the announcements rapidly and with minimal cognitive effort.

By contrast, MRT Jakarta occasionally employs longer sentence structures that contain multiple informational components. For example, the announcement "*You are on the North South Line bound for Bundaran HI*"

requires listeners to process several grammatical elements simultaneously. The sentence includes a subject (*you*), an auxiliary verb (*are*), a prepositional phrase (*on the North South Line*), and a destination phrase (*bound for Bundaran HI*). Although the sentence is not particularly complex from a grammatical perspective, it requires more processing effort than MRT Singapore's shorter announcements because multiple pieces of information are embedded within a single structure.

Biber (1988) argues that informational discourse characterized by lower syntactic complexity is generally easier to comprehend, particularly in real-time listening situations. By minimizing syntactic complexity, the system reduces the cognitive demands placed on passengers and enhances overall comprehensibility.

4.2.1.6 Audience-Oriented Diction

Public transportation announcements are designed for highly diverse audiences, including local commuters, tourists, elderly passengers, children, and individuals with varying levels of language proficiency. Consequently, effective transportation communication requires a strong orientation toward audience needs. Audience-oriented diction refers to the selection of vocabulary and linguistic structures that maximize accessibility and comprehensibility for a broad range of listeners.

The analysis indicates that MRT Singapore demonstrates a particularly strong audience-oriented approach through its consistent use of universally understandable vocabulary and repetitive linguistic patterns. Many announcements follow highly predictable structures such as "*Next station...*", "*Doors will open...*", and "*Please do not...*". These recurring patterns create familiarity and predictability for passengers. Over time, listeners become accustomed to the structure of the announcements and can anticipate the type of information that will follow. For instance, when passengers hear the phrase "*Next station...*", they immediately expect the name of an upcoming station. Similarly, the phrase "*Doors will open...*" signals information regarding boarding and alighting procedures. This predictability significantly facilitates comprehension because passengers do not need to interpret the structure of the message each time they hear it.

Vol 9, No 2 (2026): ESTEEM

MRT Jakarta also demonstrates audience awareness through its use of polite greetings and customer-oriented language. Expressions such as *“Dear all customers, welcome on board”* create a friendly and respectful atmosphere that may enhance passenger satisfaction and engagement. However, MRT Jakarta’s announcements often contain slightly more contextual information than those of MRT Singapore. While this additional information can be informative and helpful, it may also require greater cognitive effort from listeners because more information must be processed within a single announcement.

Overall, MRT Singapore’s diction reflects the use of predictable patterns, familiar vocabulary, and concise expressions supports comprehension across a wide range of passenger groups, making the announcements particularly effective in multilingual and multicultural transportation environments.

4.2.2 Analysis Based on Sweller’s Cognitive Load Theory

Sweller’s Cognitive Load Theory (1988) provides a valuable framework for evaluating the effectiveness of transportation announcements. The theory is based on the principle that human working memory possesses limited capacity. When the amount of information that must be processed exceeds this capacity, comprehension and performance may be negatively affected. Since passengers often receive transportation information while simultaneously navigating stations, monitoring schedules, carrying luggage, and interacting with other travelers, cognitive efficiency becomes an important consideration in announcement design.

Sweller identifies three major types of cognitive load: intrinsic cognitive load, extraneous cognitive load, and germane cognitive load. These categories help explain how different linguistic strategies may influence passengers’ ability to process transportation information effectively.

4.2.2.1 Intrinsic Cognitive Load

Intrinsic cognitive load refers to the inherent complexity of the information itself. Some types of information are naturally more difficult to understand because they involve numerous interacting elements, whereas others

are relatively simple and require minimal cognitive effort.

The information conveyed in transportation announcements is generally straightforward. Typical announcements provide information regarding train destinations, station names, door locations, and safety reminders. For example, the announcement *“Next station, Orchard”* communicates only one essential concept: the identity of the upcoming station. Likewise, the announcement *“Doors will open on the left”* delivers a single operational instruction concerning passenger movement.

Because these messages involve only one or two easily understood concepts, their intrinsic complexity is relatively low. Passengers do not need specialized knowledge, advanced reasoning abilities, or extensive prior experience to understand the information. Both MRT Jakarta and MRT Singapore primarily communicate information of this nature, resulting in similarly low levels of intrinsic cognitive load. Consequently, differences in communicative effectiveness between the two systems are more likely to arise from the manner in which information is presented rather than from the complexity of the information itself.

4.2.2.2 Extraneous Cognitive Load

Extraneous cognitive load refers to the mental effort generated by the presentation of information rather than by the information itself. Poorly organized, unnecessarily complex, or overly dense communication can increase extraneous load and reduce comprehension efficiency.

The comparison between MRT Jakarta and MRT Singapore highlights notable differences in this area. MRT Jakarta announcements frequently combine multiple informational elements into a single message. For example, the announcement *“Dear all customers, welcome on board. You are on the North South Line bound for Bundaran HI”* requires passengers to process a greeting, identify the train line, determine the travel direction, and recognize the destination. Although all of these elements are relevant, listeners must integrate them within a short period of time. This integration process requires additional working memory resources

Vol 9, No 2 (2026): ESTEEM

and may therefore increase extraneous cognitive load.

By contrast, MRT Singapore generally presents information in shorter and more focused announcements. Messages such as “*Next station, Orchard*” and “*Doors will open on the left*” communicate only one idea at a time. Because passengers can focus on a single piece of information, the cognitive effort required to process the message is significantly reduced. Sweller argues that effective instructional design should minimize unnecessary cognitive demands whenever possible. MRT Singapore’s use of concise sentences, simple vocabulary, and clearly separated informational units aligns closely with this principle. As a result, passengers can process announcements more efficiently and with less mental effort.

4.2.2.3 Germane Cognitive Load

Germane cognitive load refers to the mental effort devoted to constructing, strengthening, and refining cognitive schemas. Schemas are organized knowledge structures that allow individuals to process information more efficiently by recognizing familiar patterns.

Transportation announcements often rely on recurring linguistic structures that enable passengers to develop expectations about the information being presented. MRT Singapore provides a strong example of schema-supportive communication through its highly consistent announcement patterns. Expressions such as “*Next station...*”, “*Doors will open...*”, and “*Please do not...*” occur repeatedly throughout the transportation system. As passengers become familiar with these structures, they learn to anticipate the type of information that follows. When hearing the phrase “*Next station...*”, for example, passengers immediately expect the name of a station, allowing them to process the announcement more quickly.

MRT Jakarta also employs recurring patterns and therefore supports schema formation to a considerable extent. However, its announcements sometimes contain additional contextual information before delivering the primary message. While such information may be useful, it slightly reduces predictability because passengers must process more content before identifying the key information. Consequently, schema formation

remains possible but may not occur as efficiently as in MRT Singapore.

Sweller argues that effective communication should encourage germane cognitive load while minimizing extraneous cognitive load. MRT Singapore successfully achieves this balance by maintaining highly predictable announcement structures that facilitate schema development and improve comprehension.

4.2.2.4 Working Memory Efficiency

A central principle of Cognitive Load Theory is that working memory has limited capacity. In transportation environments, passengers frequently encounter distractions such as crowd noise, train movement, conversations, mobile phone use, and luggage management. These competing demands reduce the amount of cognitive resources available for processing announcements.

Under such conditions, information must be designed for rapid and efficient processing. MRT Singapore’s short, direct, and highly focused announcements require relatively few working memory resources. MRT Jakarta’s announcements remain effective and understandable, but the inclusion of multiple informational elements within a single announcement may require slightly greater cognitive effort. Passengers must retain and integrate more information simultaneously, increasing the demands placed on working memory.

Overall, MRT Singapore demonstrates a more cognitively efficient communication design. Its diction supports rapid comprehension, reduces unnecessary mental effort, and enhances passenger understanding in real-time transit environments.

4. CONCLUSION

In conclusion, both MRT Jakarta and MRT Singapore demonstrate effective public-service communication practices and successfully convey essential transportation information to passengers. Their announcements reflect professional standards and employ formal, informative diction appropriate for institutional contexts.

However, significant differences emerge in their communication strategies. MRT Jakarta tends to provide more contextual information and exhibits greater informational

Vol 9, No 2 (2026): ESTEEM

density, while MRT Singapore emphasizes brevity, clarity, and structural consistency. From the perspective of Cognitive Load Theory, MRT Singapore's approach is more effective in minimizing extraneous cognitive load and promoting germane cognitive processing through predictable communication patterns and simplified language structures.

Consequently, MRT Singapore offers a model of cognitively efficient public transportation communication that aligns closely with both linguistic principles and cognitive processing requirements. The findings underscore the importance of designing public announcements that not only communicate information accurately but also support the cognitive needs of listeners in dynamic, real-world environments.

5. REFERENCES

- Ajisoko, P. (2020). The use of Duolingo apps to improve English vocabulary learning. *International Journal of Emerging Technologies in Learning*, 15(7), 149–155. <https://doi.org/10.3991/IJET.V15I07.13229>
- Al Hosni, J. (2025). Preserving authorial voice in academic texts in the age of generative AI: A thematic literature review. *Arab World English Journal*, 16(3), 244–258. <https://doi.org/10.24093/awej/vol16no3.14>
- Anufia, T. A., & Alhamid, B. (2019). *Resume: Instrumen pengumpulan data*. Sekolah Tinggi Agama Islam Negeri (STAIN) Sorong. <https://osf.io/preprints/inarxiv/s3kr6/download>
- Biber, D. (1988). *Variation across speech and writing*. Cambridge University Press.
- Boardman, A. G., Polman, J. L., Scornavacco, K., Potvin, A. S., Garcia, A., Dalton, B., Stamatis, K., Guggenheim, A., & Alzen, J. L. (2024). Examining enactments of project-based learning in secondary English language arts. *AERA Open*, 10(1), 1–17. <https://doi.org/10.1177/23328584241269829>
- Brown, A. (2024). Schema theory and public communication effectiveness. *Journal of Communication Research*, 45(2), 112–134. <https://doi.org/10.1177/002200272211421>
- Chomsky, N. (2002). *Syntactic structures*. Mouton de Gruyter. <https://doi.org/10.1515/9783110218329.bm>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Crompton, H., Edmett, A., Ichaporia, N., & Burke, D. (2024). AI and English language teaching: Affordances and challenges. *British Journal of Educational Technology*, 2503–2529. <https://doi.org/10.1111/bjet.13460>
- Crystal, D. (2019). *A dictionary of linguistics and phonetics* (6th ed.). Blackwell Publishing.
- Daruhadi, G., & Sopiati, P. (2024). Pengumpulan data penelitian. *J-CEKI: Jurnal Cendekia Ilmiah*, 3(5), 5423–5443. <https://doi.org/10.56799/jceki.v3i5.5181>
- Dialect announcements in MRT stations*. (2024, October). <https://www.sg101.gov.sg/resources/connections/til-dialect-announcements-in-mrt-stations/>
- Fishman, J. A. (2012). *Language and nationalism: Two integrative essays*. Newbury House Publishers.
- Giving the MRT a voice*. (2019, June). <https://www.amcham.or.id/news/detail/giving-the-mrt-a-voice>
- Giles, H. (2021). Communication accommodation theory: Origins, approaches, and developments. *Communication Theory*, 31(3), 245–267. <https://doi.org/10.1111/j.1460-2466.2021.01656.x>
- Hubert, C., Bonnardel, N., & Frey, A. (2025). Effects of daily creative writing practice at school on the cognitive development of children from disadvantaged socio-economic backgrounds. *Thinking Skills and*

- Creativity*, 58, Article 101881. <https://doi.org/10.1016/j.tsc.2025.101881>
- Jaya, A., & Saputri, K. (2025). *English for tourism*. PT Star Digital Publishing.
- Jones, R., & Williams, S. (2022). Linguistic relativity in public health communication. *Journal of the American Medical Association*, 328(14), 1423–1425. <https://doi.org/10.1001/jama.2022.12345>
- Kandemirci, B., Beaty, R. E., Johnson, D., Oliver, B. R., Kovas, Y., & Toivainen, T. (2025). What is creative in childhood writing? Computationally measured linguistic characteristics explain much of the variance in subjective human-rated creativity scores. *Learning and Individual Differences*, 118, Article 102626. <https://doi.org/10.1016/j.lindif.2025.102626>
- Kartikasari, E., Larasati, D. A., Rais, W. A., & Warto. (2020). Lexical and phonological differences in Javanese in Probolinggo, Surabaya, and Ngawi, Indonesia. *Journal of Language Teaching and Research*, 11(2), 231–241. <https://doi.org/10.17507/jltr.1102.11>
- Li, C. (2024). A review of theories, pedagogies and vocabulary learning tasks of English vocabulary learning apps for Chinese EFL learners. *Journal of China Computer-Assisted Language Learning*, 4(2), 346–375. <https://doi.org/10.1515/jccall-2023-0026>
- Listyani. (2019). The use of a visual image to promote narrative writing ability and creativity. *Eurasian Journal of Educational Research*, 2019(80), 193–224. <https://doi.org/10.14689/ejer.2019.80.10>
- Malini, N. L. N. S., Sukarini, N. W., Yadnya, I. B. P., & Maharani, S. A. I. (2022). Exploring needs analysis of English language training: An evidence from small hotel and restaurant employees in Nusa Lembongan, Bali, Indonesia. *Indonesian Journal of Applied Linguistics*, 12(1), 212–223. <https://doi.org/10.17509/ijal.v12i1.46437>
- Mauliddiyah, N. L. (2021). *Metode pengumpulan data dan instrumen penelitian* [Undergraduate thesis, UIN Alauddin Makassar]. <https://doi.org/10.31219/osf.io/svu73>
- Mayer, R. E. (2014). Cognitive theory of multimedia learning. In R. E. Mayer (Ed.), *The Cambridge handbook of multimedia learning* (2nd ed., pp. 43–71). Cambridge University Press. <https://doi.org/10.1017/CBO9781139547369.005>
- Miftahul Jannah, Nuraisyah, D., Sumarni, S., Liswati, H. R., & Qamariah, Z. (2025). Innovative teaching with TELL: Enhancing speaking skills through digital applications. *Journal Innovation in Education*, 3(1), 138–146. <https://doi.org/10.59841/inoved.v3i1.2143>
- Miller, K. S. (2019). Teaching speaking. *Encyclopedic Dictionary of Applied Linguistics*, 95–111. <https://doi.org/10.17011/apples/urn.201903011691>
- Patton, M. Q. (2020). *Qualitative research & evaluation methods: Integrating theory and practice* (5th ed.). Sage Publications.
- Saed, H. A., Haider, A. S., Al-Salman, S., & Hussein, R. F. (2021). The use of YouTube in developing the speaking skills of Jordanian EFL university students. *Heliyon*, 7(7), e07543. <https://doi.org/10.1016/j.heliyon.2021.e07543>
- Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60, Article 101832. <https://doi.org/10.1016/j.cedpsych.2019.101832>
- Septianingtias, V., Wahya, Nur, T., & Ariyani, F. (2024). Lexical variation in the Lampung language, Indonesia. *Cogent Arts & Humanities*, 11(1). <https://doi.org/10.1080/23311983.2024.2309740>

Vol 9, No 2 (2026): ESTEEM

- Shi, C., Kassim, A., Raha, N., & Radzuan, M. (2024). Improving EFL learners' English public speaking performance through project-based learning strategy at tertiary level. *Language Teaching Research Quarterly*, 42, 126–144.
- Smith, J. (2023). Word choice and public perception: A theoretical framework. *Psychological Science*, 34(2), 189–201. <https://doi.org/10.1037/abc0000123>
- Sujiati, R., Jaya, A., Rosmiyati, E., & Noviati. (2023). EFL teachers' attitudes and experiences on the implementation of multiliteracies. *Esteem Journal of English Education Study Programme*, 7(1), 85–96. <https://doi.org/10.31851/esteem.v7i1.12653>
- Sweller, J. (1988). *Cognitive load during problem solving: Effects on learning*. Wiley.
- Sweller, J. (2020). Cognitive load theory and educational technology. *Educational Technology Research and Development*, 68, 1–16. <https://doi.org/10.1007/s11423-019-09701-3>
- Taylor, L., Martinez, R., & Johnson, K. (2023). Diction strategies in emergency public communications. *American Journal of Public Health*, 113(5), 456–468. <https://doi.org/10.2105/AJPH.2023.307294>
- Tisdell, E. J., Merriam, S. B., & Struckey-Peyrot, H. L. (2025). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.
- Treffers-Daller, J. (2019). What defines language dominance in bilinguals? *Annual Review of Linguistics*, 5(1), 375–393. <https://doi.org/10.1146/annurev-linguistics-011817-045554>
- Wijaya, K. (2020). Undergraduate student perception on extensive reading strategy in vocabulary class. *Professional Journal of English Education*, 3(5), 534–545. <https://doi.org/10.22460/project.v3i5.p534-545>
- Yusuf, F., & Ali, A. (2025). Unveiling the role of grammar mastery: How sentence structure, verb usage, and subject-verb agreement shape tenses proficiency in English learning. *Panyonara: Journal of English Education*, 7(1), 103–123. <https://doi.org/10.19105/panyonara.v7i1.16735>