



# A Phonological Analysis of the Pronunciation of the Rhotic Sound in Word-Final Positions in Joko Widodo's English Speech at Ecosperity Week 2023

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Article Info	Abstract
<p><b>Received:</b> 2026-04-29 <b>Revised:</b> 2026-06-10 <b>Accepted:</b> 2026-06-10</p> <p><b>Keywords:</b> <i>Interlanguage phonology; rhoticity; intelligibility</i></p> <p><b>DOI:</b> 10.24256/ideas.v14i1.10311</p> <p><b>Corresponding Author:</b> Gea Amelia <a href="mailto:geamelia86@gmail.com">geamelia86@gmail.com</a> English Literature, Sunan Gunung Djati Islamic States University, West Java</p>	<p><i>Despite extensive studies on Indonesian-accented English pronunciation, limited research has specifically examined the realization of word-final /r/ in authentic international speeches delivered by Indonesian political leaders. This study analyzes the realization of the /r/ sound in word-final position in President Joko Widodo's English speech at Ecosperity Week 2023 to identify the phonological patterns of Indonesian speakers' interlanguage in the context of international communication. Using a descriptive qualitative approach, data were collected through non-participant observation of a 10 minutes audio-visual speech and analyzed through phonetic transcription based on the International Phonetic Alphabet (IPA), classification of rhotic and non-rhotic patterns, and interpretation using interlanguage theory. A total of 15 word-final /r/ tokens were identified and examined. The findings reveal that 12 of the 15 tokens exhibit rhotic realization, indicating a dominant tendency to retain the /r/ sound, while the remaining tokens show non-rhotic variations, including glottal substitution and deletion. These patterns reflect strong phonological transfer from Indonesian as the first language, particularly in words with high lexical load, whereas non-rhotic realizations emerge in specific contexts due to articulatory reduction and prosodic factors. The novelty of this study lies in its focus on word-final rhoticity in an authentic international speech by a seventh president.</i></p>

*The findings demonstrate that Joko Widodo's English pronunciation represents a dynamic interlanguage phonological system rather than strict adherence to native-speaker norms. Furthermore, the study confirms that intelligibility plays a more significant role than native-like pronunciation in ensuring effective communication in international speech contexts.*

## 1. Introduction

In global communication, particularly in international diplomatic speeches, intelligibility plays a crucial role in ensuring that messages are effectively conveyed across linguistic and cultural boundaries. As emphasized by Lin, et al. (2023), second language pronunciation must be understood within communicative contexts where listener perception plays a key role. Pronunciation is therefore not merely a linguistic feature but an important factor influencing communication success (Levis, 2018). For many second-language (L2) speakers, pronunciation is shaped by the influence of their first language (L1), resulting in phonological variations that may affect comprehensibility. According to Niu, et al. (2023), the difficulty in mastering specific phonetic sounds is a universal challenge in L2 acquisition.

Within the framework of interlanguage theory, these variations emerge as learners construct a linguistic system that incorporates features from both the native and target languages (Selinker, 1972; Corder, 1974). Among the various phonological features of English, the rhotic consonant /r/ has attracted considerable attention because its realization varies across accents and speech communities. In English, word-final /r/ may be realized or omitted depending on the speaker's linguistic background and the phonological system being used (Roach, 1991).

As noted by Dickson and Hall-Lew (2017), rhoticity is not understood as a binary category between rhotic and non-rhotic, but rather as a phonetic continuum encompassing various degrees of auditory realization, ranging from weak forms such as non-rhotic and derhoticized to strong forms such as taps and trills. This perspective suggests that variations in the sound /r/ in word-final position can manifest in diverse articulatory forms depending on the phonological context and the speaker's production characteristics.

For Indonesian speakers, whose native phonological system generally favors a tapped or trilled realization of /r/, the production of English rhotic sounds often reflects L1 transfer. Research by Kurniati, et al. (2024) highlights specific Indonesian phonological challenges, noting how the syllable structure and segmental rules of Bahasa Indonesia influence the way learners tackle English

sounds. Consequently, the analysis of rhoticity provides valuable insights into interlanguage phonology and pronunciation patterns among Indonesian users of English.

Previous studies have consistently demonstrated the influence of Indonesian L1 on English pronunciation. Ambalegin and Arianto (2018) identified various consonant and vowel pronunciation deviations in Joko Widodo's English speeches, while Suhardianto et al. (2023) reported strong evidence of L1 transfer in his pronunciation patterns. Similarly, Syam et al. (2024) examined characteristics of the Indonesian accent in English and highlighted variations in consonant production, including /r/. Beyond the Indonesian context, Moniva et al. (2024) found comparable evidence of L1 influence on English pronunciation in public speeches delivered by political leaders (e.g., Rodrigo Duterte).

Collectively, these studies confirm the importance of interlanguage phonology in explaining pronunciation variation among non-native English speakers. Additionally, Saito & Plonsky (2019) and Saito (2021), through meta-analyses, demonstrate the effectiveness of pronunciation instruction in improving intelligibility, while Costa & Serra (2022) discuss the evolution of rhoticity in the British accent. However, previous research has primarily focused on general pronunciation errors, accent characteristics, or broad phonological patterns. Limited attention has been given to the realization of word-final /r/ in authentic speech data, particularly in the speech of Indonesian political leaders addressing international audiences.

Furthermore, Saito (2021) argues that "comprehensible" and "native-like" pronunciation are distinct constructs, warning against overgeneralizing phonological features without looking at specific contexts. This gap highlights the need for a focused investigation of word-final /r/ realization in authentic speech contexts.

This study adopts Selinker's (1972) interlanguage theory as its primary framework, complemented by phonetic analysis proposed by Roach (1991). Within this framework, Indonesian L1 phonology is assumed to influence the speaker's interlanguage system, which subsequently shapes the realization of word-final /r/. The resulting rhotic and non-rhotic patterns are then interpreted in relation to intelligibility in international communication.

Based on the gap identified above, this study addresses the following research question: How is the /r/ sound realized in word-final positions in Joko Widodo's English speech at Ecosperity Week 2023? Accordingly, the study aims to identify and analyze the phonological patterns of word-final /r/ realization in the speech. The findings are expected to contribute to interlanguage phonology research, enrich understanding of Indonesian English pronunciation, and provide insights into intelligibility in international public speaking contexts.

## 2. Method

This study employed a descriptive qualitative approach. According to Creswell and Creswell (2018), qualitative research is used to explore and understand the meaning of specific social or linguistic phenomena through data in the form of texts, utterances, or images, with an emphasis on in-depth and interpretive analysis. This approach was selected because the study focuses on understanding the realization of the rhotic /r/ sound within a specific communicative context, namely an international public speech. A single-case study design was adopted to allow an intensive examination of a single speaker in a particular communicative event.

The subject of this study is Indonesia's seventh president, Joko Widodo, a non-native English speaker who delivered a speech at Ecosperity Week 2023 in Singapore. The selection of the subject was based on the relevance of examining English pronunciation in a formal international setting where intelligibility is essential for effective communication.

The data were collected through non-participant observation of audio-visual documents. The primary source of data was the official video recording of Joko Widodo's speech at Ecosperity Week 2023 published on the Presidential Secretariat YouTube channel. The researcher served as the primary instrument in collecting and interpreting the data (Creswell & Creswell, 2018). The speech recording was listened to repeatedly and examined using slow-motion playback to facilitate accurate phonetic identification.

The analyzed data consisted of all words containing the /r/ sound in word-final position. Although this study focuses on a limited sample of fifteen tokens, this is typical for qualitative phonetic analysis examining specific phonological features in authentic speech (Roach, 1991; Ladefoged, 2003). The tokens identified represent all occurrences of word-final /r/ meeting the selection criteria in the speech, constituting the complete population rather than a sample for generalization.

Tokens were selected based on three criteria: (1) the occurrence of /r/ in word-final position, (2) clear audibility in the recording, and (3) adequate sound quality without substantial interference from background noise. Words containing /r/ in initial or medial positions were excluded because the study specifically focuses on word-final rhotic realization. A total of fifteen word-final /r/ tokens were identified and analyzed.

Data analysis followed the inductive procedures proposed by Creswell and Creswell (2018), including data organization, coding, categorization, and interpretation. First, words containing word-final /r/ were transcribed using the International Phonetic Alphabet (IPA). For example, the word *director* was transcribed as /də'rektər/ when the final /r/ was clearly articulated, whereas *center* was transcribed as /'sentə/ when the final rhotic segment was absent.

The transcribed tokens were subsequently classified into rhotic and non-rhotic realization patterns. Finally, the identified patterns were interpreted using Selinker's (1972) interlanguage theory to explain the influence of Indonesian phonology on English pronunciation.

To enhance the reliability of the analysis, the recordings were reviewed multiple times using different playback speeds. The IPA transcriptions were checked repeatedly and compared with standard phonetic descriptions to ensure consistency. Ambiguous pronunciations were re-examined within their phonological context before final classification. These procedures were undertaken to minimize subjective interpretation and improve the trustworthiness of the findings. Future studies could incorporate acoustic analysis software such as Praat to provide objective measurements of duration, formant frequencies, and spectral characteristics for more robust phonetic validation.

### 3. Results

This section presents the findings regarding the realization of the /r/ sound in word-final position in President Joko Widodo's speech at Ecosperity Week 2023. The analysis was conducted on fifteen tokens containing word-final /r/, selected based on their occurrence in the speech, phonetic clarity, and suitability for auditory analysis. The findings reveal that the realization of /r/ is variable, consisting of rhotic, glottalized, and deleted forms. These variations reflect the interaction between Indonesian phonological transfer and the phonetic demands of English pronunciation.

Table 1 presents the distribution of realization patterns identified in the dataset.

Table 1. Distribution of Word-Final /r/ Realizations

Realization Category	Frequency	Percentage
Rhotic	12	80%
Non-Rhotic (Glottal Substitution)	2	13.3%
Non-Rhotic (Deletion)	1	6.7%
<b>Total</b>	<b>15</b>	<b>100%</b>

As shown in Table 1, rhotic realization is the dominant pattern, accounting for 80% of the analyzed tokens. Non-rhotic realizations occur less frequently, with glottal substitution representing 13.3% and deletion representing 6.7% of the data. These findings indicate that Joko Widodo generally retains the /r/ sound in word-final position despite English allowing non-rhotic realizations in certain varieties.

The rhotic pattern is observed in twelve tokens, namely *quarter* [kwɔ:rtər], *together* [tə'geðər], *director* [də'rektər], *our* [aʊər], *whoever* [hu:'evər], *solar* ['səʊlə], *dollar* [dɒlə], *barometer* [ba.ro.me.tər], *center* ['sɛntər], *another* [ə'nʌðər], *super* [su:pər], and *river* ['rɪvər]. These words occur in various segments of the

speech and consistently retain the word-final /r/ sound. Several of them appear in informationally important contexts related to governance, economic development, and energy transition.

For example, in the utterance "Executive Director," the final /r/ is clearly articulated, suggesting that lexical importance may encourage more careful pronunciation. Similarly, solar appears in a list of renewable energy resources (solar panel), while dollar and quarter are key economic terms frequently used throughout the speech. The words our, whoever, and together also maintain rhotic realization, indicating that retention of word-final /r/ occurs across different lexical and communicative contexts throughout the speech.

Non-rhotic realizations occur in different communicative contexts. In the utterance "will be finished next year," the word *year* is realized as [jɪəh], showing glottal weakening of the final rhotic segment. Likewise, *for* in the phrase "surplus for 36 straight months" is realized as [fəh]. These realizations suggest that function words and highly frequent lexical items may be more susceptible to articulatory reduction. In contrast, the token *four* is produced as [fɔ:], demonstrating complete deletion of the final /r/. This finding indicates that word-final /r/ may be weakened when occurring in rapid speech sequences or when communicative attention is directed toward surrounding semantic content rather than phonetic precision.

The findings also reveal the influence of contextual factors on pronunciation. First, the audience at Ecosperity Week 2023 consisted of international business leaders and dignitaries, creating a formal setting that likely encouraged more careful articulation. Second, as a prepared political speech, the speaker had opportunity to rehearse key terms, potentially explaining the stronger retention in content words such as director, barometer, and solar. Third, tokens retaining rhotic realization are generally associated with content words carrying substantial informational value, whereas weakened realizations tend to occur in shorter or more frequently used function words.

In addition, speech rate may contribute to reduction patterns. During segments delivered at a faster pace, the articulatory effort required to maintain a clear rhotic sound appears to decrease, resulting in glottal substitution or deletion. This observation is consistent with previous studies suggesting that rhotic realization is influenced not only by phonological position but also by prosodic prominence and communicative emphasis.

From the perspective of interlanguage phonology, the dominance of rhotic realizations (80%) reflects the strong influence of Indonesian phonology. Indonesian /r/ is typically produced as an alveolar trill or tap, which differs from the approximant /ɹ/ commonly found in many English varieties. Consequently, the retention of /r/ in words such as *director*, *solar*, *dollar*, *barometer*, and *quarter* may be interpreted as evidence of L1 transfer. However, the presence of glottalized and deleted forms demonstrates that this transfer is not absolute. Specifically, *year* is realized as [jɪəh] (glottal substitution), *for* as [fəh] (glottal substitution), and *four* as [fɔ:] (deletion). Instead, the speaker exhibits a dynamic interlanguage

system in which Indonesian phonological habits interact with English phonetic and prosodic constraints

Overall, the results suggest that word-final /r/ realization in Joko Widodo's speech cannot be categorized as consistently rhotic or non-rhotic. Rather, it represents a continuum of pronunciation patterns shaped by multiple factors: lexical importance (content vs. function words), speech rate, prosodic emphasis, audience composition, speech preparation, and first-language influence. With 80% rhotic realization, these findings support the view that pronunciation in international communication is governed not by strict adherence to native-speaker norms but by the maintenance of intelligibility and communicative effectiveness.

#### **4. Discussion**

##### *Dominance of Rhotic Realization and Indonesian L1 Transfer*

The findings indicate that rhotic realization is the dominant pattern in the production of word-final /r/ in Joko Widodo's speech, accounting for 80% of the analyzed tokens. Twelve tokens, namely *quarter*, *together*, *director*, *our*, *whoever*, *solar*, *dollar*, *barometer*, *center*, *another*, *super*, and *river*, retain the rhotic segment, often through an alveolar tap or trill that resembles Indonesian phonology more closely than the English approximant /ɹ/. This pattern supports previous findings that Indonesian speakers tend to transfer L1 articulatory habits into English pronunciation (Endarto, 2024; Ambalegin & Arianto, 2018). From an interlanguage perspective (Selinker, 1972), the retention of /r/ demonstrates the persistence of established L1 phonological features within the learner's developing linguistic system.

However, the dominance of rhoticity should not be interpreted solely as evidence of L1 transfer. An alternative explanation is that the speech was delivered in a highly formal international setting where careful pronunciation may have been prioritized. Speakers often monitor their speech more closely during public presentations, which can encourage the retention of salient consonants regardless of native-language influence. Therefore, the observed rhoticity may result from the interaction between Indonesian phonological habits and increased speech monitoring in formal communication.

##### *Non-Rhotic Realization and Contextual Variation*

Although rhotic realizations predominate, the occurrence of glottal substitution and deletion demonstrates that the speaker's pronunciation is not uniformly rhotic. The realizations of *year* as [jɪəh], *for* as [fɔh], and *four* as [fɔ:] indicate that word-final /r/ remains susceptible to reduction in certain phonological environments. These findings are consistent with research showing that rhoticity exists on a continuum ranging from strong realization to weakening and deletion (Costa & Serra, 2022).

Rather than representing simple pronunciation errors, these forms may reflect multiple interacting factors. Reduced articulatory effort, speech rate, prosodic positioning, and lexical frequency may all contribute to weakening. Function words such as *for*, which occur frequently and often receive less stress, may naturally undergo reduction regardless of the speaker's language background. Consequently, the observed variation should be viewed as the outcome of several phonological and communicative influences rather than exclusively as evidence of L1 transfer.

#### *Word Type, Prosodic Salience, and Communicative Priorities*

A notable pattern in the data is the tendency for content words to maintain rhotic realization more consistently than function words. Lexically important items such as *director*, *solar*, *dollar*, *barometer*, *quarter*, *center* occur in content words carrying substantial informational value, whereas reduced forms are found in shorter and less informationally prominent words such as *for* and *four*. This finding suggests that pronunciation patterns may be influenced by communicative priorities as much as by phonological constraints.

The relationship between lexical importance and pronunciation is particularly relevant in public speaking contexts. Speakers may allocate greater articulatory attention to words carrying key information because these words contribute directly to message transmission. As a result, the retention of /r/ in content words may function as a strategy for maintaining intelligibility, even when other portions of speech undergo phonetic reduction. This interpretation aligns with research emphasizing that intelligibility, rather than native-speaker accuracy, is the primary objective in effective international communication (Levis, 2018).

#### *Implications for English as a Lingua Franca*

The findings therefore support the view that phonological diversity is compatible with effective global communication, provided that essential intelligibility is maintained. These findings align with English as a Lingua Franca (ELF) scholarship (LaScotte & Tarone, 2022), which emphasizes intelligibility over native-speaker conformity in international communication.

From an ELF perspective, the presence of Indonesian-influenced rhotic realizations should not necessarily be viewed as a deficiency. Instead, these realizations may represent legitimate phonological variations that reflect the speaker's linguistic identity while remaining comprehensible to an international audience. The findings therefore support the view that phonological diversity is compatible with effective global communication, provided that essential intelligibility is maintained.

### *Contributions to Interlanguage Phonology*

Theoretically, this study extends interlanguage phonology in three key ways. First, it provides empirical data on word-final rhoticity in authentic political speech by an Indonesian leader, addressing the gap identified in previous research. Second, it demonstrates the dynamic nature of L1 transfer in real communicative contexts rather than being a stable phenomenon, phonological transfer interacts with situational factors such as audience, speech formality, and lexical importance. Third, it illustrates how multiple factors (word type, speech rate, prosodic prominence) interact within a speaker's developing phonological system.

Rather than representing a fixed transfer pattern, the realization of /r/ appears to fluctuate according to communicative context and phonetic environment. Such variation highlights the adaptive nature of interlanguage in authentic speech situations.

### *Limitations and Interpretation of Findings*

The findings should be interpreted with caution due to the limited dataset. The analysis is based on fifteen word-final /r/ tokens extracted from a single speech event, which restricts the extent to which broader conclusions can be drawn about Joko Widodo's English pronunciation or Indonesian English more generally. Consequently, the patterns identified in this study should be understood as tendencies within the analyzed dataset rather than definitive characteristics of all Indonesian speakers.

Future studies could expand the dataset by examining multiple speeches and incorporating acoustic analysis software such as Praat to obtain more objective measurements of rhotic realization. Such approaches would provide a more comprehensive understanding of the interaction between phonological transfer, contextual factors, and intelligibility in English pronunciation.

## **5. Conclusion**

This study examined the realization of the /r/ sound in word-final position in Joko Widodo's English speech at Ecosperity Week 2023 within the framework of interlanguage phonology. The findings reveal that rhotic realization is the dominant pattern, occurring in 80% of the analyzed tokens, while non-rhotic realizations in the form of glottal substitution and deletion account for the remaining 20%. These patterns indicate that Indonesian phonological influence remains evident in the speaker's English pronunciation, particularly through the tendency to retain the rhotic consonant in word-final position.

However, the findings also demonstrate that word-final /r/ realization is not exclusively determined by first-language transfer. Variations in pronunciation appear to be influenced by contextual factors such as lexical importance, prosodic prominence, and communicative demands. Content words carrying substantial informational value tend to preserve rhotic realization more consistently than

function words, suggesting that pronunciation choices are shaped by the speaker's effort to maintain intelligibility in international communication.

From the perspective of interlanguage phonology, the results support the view that second-language pronunciation is dynamic rather than fixed. The coexistence of rhotic and non-rhotic forms reflects the interaction between Indonesian phonological patterns and the phonetic requirements of English. Thus, the study contributes to the understanding of how interlanguage operates in authentic public-speaking contexts, particularly among non-native English-speaking political leaders.

The findings also have implications for English as a Lingua Franca (ELF). Although the observed pronunciations do not consistently conform to native-speaker norms, they remain intelligible and communicatively effective. This supports the argument that successful international communication depends more on intelligibility than on achieving native-like pronunciation. Consequently, phonological variation should not necessarily be viewed as a deficiency, but rather as a natural feature of English use in multilingual contexts.

Nevertheless, the study is limited by its small dataset, consisting of only fifteen word-final /r/ tokens from Ecosperity Week 2023 speech. Therefore, the findings should be interpreted as tendencies within the analyzed speech rather than as generalizable characteristics of Indonesian English. Future research is encouraged to examine larger datasets from multiple speeches and to incorporate acoustic phonetic analysis to provide more objective evidence regarding rhotic realization and pronunciation variation in English as spoken by Indonesian users.

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