

From Sound to Script: Exploring the Oral-Orthographic Gap in Arabic Language Immersion

Dari Bunyi ke Tulisan: Mengeksplorasi Kesenjangan Oral-Ortografis dalam Imersi Bahasa Arab

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Abstract:

Intensive Arabic language immersion provides learners with extensive opportunities to use Arabic in daily communication, particularly through listening and speaking activities. However, intensive oral exposure does not necessarily result in equivalent development of written Arabic competence, particularly when learners rely heavily on phonological representations when producing written forms. This study aims to explore the oral-orthographic gap emerging within the Arabic language immersion environment (bi'ah 'arabiyyah) at Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan. Employing a qualitative case study design, data were collected through classroom and daily-language observations, semi-structured interviews with Arabic language teachers, language supervisors, and students, and document analysis of students' Arabic writing and relevant institutional documents. The data were analyzed using thematic analysis to identify recurring patterns in students' oral language practices and written Arabic production. The findings reveal that the intensive bi'ah 'arabiyyah provides strong auditory and communicative exposure that supports students' oral Arabic use, but this exposure is not always accompanied by equally intensive visual and orthographic input. As a result, students tend to rely on phonological representations when transferring familiar or newly acquired spoken Arabic into written forms, resulting in recurring difficulties in sound-to-script mapping and orthographic accuracy. The findings indicate that the oral-orthographic gap emerges as a modality imbalance rather than simply as a learner deficit. The study concludes that Arabic immersion should not be oriented exclusively toward oral communication but should integrate listening, speaking, reading, and writing to strengthen the connection between phonological and orthographic representations. The study contributes to Arabic language education by extending the concept of bi'ah 'arabiyyah from an oral proficiency-oriented environment toward an integrated oral-orthographic language ecology.

Keyword: *Bi'ah 'Arabiyyah; Arabic Language Immersion; Oral-Orthographic Gap; Arabic Orthography; Arabic Writing*

Abstrak:

Lingkungan imersi bahasa Arab (*bi'ah 'arabiyyah*) memberikan kesempatan yang luas bagi peserta didik untuk menggunakan bahasa Arab dalam komunikasi sehari-hari, terutama melalui aktivitas menyimak dan berbicara. Namun, intensitas paparan bahasa Arab secara lisan tidak selalu menghasilkan perkembangan kemampuan bahasa Arab tulis yang seimbang, terutama ketika peserta didik sangat bergantung pada representasi fonologis dalam menghasilkan bentuk tulisan. Penelitian ini bertujuan untuk mengeksplorasi kesenjangan oral-ortografis yang muncul dalam lingkungan *bi'ah 'arabiyyah* di Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan. Penelitian ini menggunakan pendekatan kualitatif dengan desain studi kasus. Data dikumpulkan melalui observasi terhadap praktik penggunaan bahasa Arab dalam pembelajaran dan komunikasi sehari-hari, wawancara semi-terstruktur dengan guru bahasa Arab, pembina bahasa, dan peserta didik, serta analisis dokumen berupa tulisan bahasa Arab peserta didik dan dokumen kelembagaan yang relevan. Data dianalisis menggunakan analisis tematik untuk mengidentifikasi pola-pola penggunaan bahasa Arab secara lisan dan produksi bahasa Arab secara tertulis. Hasil penelitian menunjukkan bahwa *bi'ah 'arabiyyah* memberikan paparan

auditori dan komunikatif yang kuat sehingga mendukung penggunaan bahasa Arab secara lisan, tetapi paparan tersebut belum selalu disertai dengan intensitas input visual dan ortografis yang seimbang. Kondisi tersebut menyebabkan peserta didik cenderung mengandalkan representasi fonologis ketika mentransformasikan bahasa Arab yang diperoleh secara lisan ke dalam bentuk tulisan, sehingga muncul kesulitan dalam pemetaan bunyi ke simbol tulisan dan ketepatan ortografis. Temuan ini menunjukkan bahwa kesenjangan oral-ortografis lebih tepat dipahami sebagai ketidakseimbangan antarmodalitas daripada semata-mata sebagai kelemahan peserta didik. Penelitian ini menyimpulkan bahwa *bi'ah 'arabiyyah* tidak seharusnya berorientasi hanya pada komunikasi lisan, tetapi perlu mengintegrasikan keterampilan menyimak, berbicara, membaca, dan menulis untuk memperkuat hubungan antara representasi fonologis dan ortografis. Penelitian ini memberikan kontribusi terhadap pendidikan bahasa Arab dengan memperluas pemahaman tentang *bi'ah 'arabiyyah* dari lingkungan yang berorientasi pada kompetensi lisan menuju ekologi bahasa oral-ortografis yang terintegrasi.

Kata Kunci: *Bi'ah 'Arabiyyah; Imersi Bahasa Arab; Kesenjangan Oral-Ortografis; Ortografi Bahasa Arab; Menulis Bahasa Arab.*

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INTRODUCTION

Arabic language immersion, commonly conceptualized in Islamic educational contexts as *bi'ah 'arabiyyah* or *bi'ah lughawiyyah*, is widely employed to create opportunities for learners to use Arabic beyond formal classroom instruction. By incorporating Arabic into everyday communication, such environments expose learners to repeated linguistic input and encourage them to use the target language in naturally occurring social interactions. Recent studies of *bi'ah lughawiyyah* in Indonesian Islamic schools and boarding schools have predominantly reported its contribution to students' speaking proficiency, vocabulary development, confidence, and willingness to communicate in Arabic (Setiyadi et al., 2023; Syamsiyah et al., 2025; Takdir et al., 2024). Preliminary observations at Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan, Indonesia, similarly indicate that the implementation of *bi'ah 'arabiyyah* has created an intensive Arabic-speaking environment in students' everyday lives. Students routinely use Arabic when interacting with peers and participating in various pesantren activities, allowing them to become familiar with frequently used expressions and conversational patterns. However, an unexpected phenomenon emerges alongside this oral success. Although students are able to communicate orally in Arabic, they frequently encounter difficulties when representing the Arabic they hear and use in written form. Their written production often reflects the sounds they perceive rather than the conventional orthographic forms of Arabic words. This phenomenon suggests that intensive oral exposure may support the development of communicative fluency without necessarily producing equivalent development in orthographic accuracy. Rather than indicating a simple failure of *maharah al-kitābah*, the phenomenon raises a broader question concerning how an oral-dominant language environment shapes the relationship between spoken and written representations of Arabic.

From a psycholinguistic perspective, spoken and written language are closely interconnected but involve different forms of linguistic representation and processing. Oral language provides learners with phonological representations through exposure to speech sounds, while written language requires learners to establish stable mappings between linguistic representations and orthographic forms. The relationship between phonology and orthography is particularly important in second-language learning because learners may use information from one modality to construct or refine representations in another. Experimental research on learners of Arabic, for example, has demonstrated that exposure to novel orthographic information can influence learners' acquisition of second-language phonological contrasts, illustrating the interaction between written and spoken representations (Showalter & Hayes-Harb, 2015). The reverse direction is equally important for writing: when learners have strong access to phonological representations but insufficiently developed orthographic representations, they may rely on sound-based information when attempting to produce written forms. This issue is particularly relevant to Arabic because its writing system contains orthographic characteristics that cannot always be predicted directly from pronunciation. Arabic orthography involves positional variation in letter forms, the use of consonantal letters to represent lexical forms, and the partial representation of vowel information, making the relationship between sound and script more complex than a simple one-to-one correspondence. Research on Arabic spelling has further shown that phonological errors constitute a particularly prominent category of spelling difficulty, indicating the importance of phonological processing in the development of Arabic orthographic competence (Abu-Rabia & Taha, 2006). Thus, although oral exposure is essential for developing communicative competence, oral familiarity alone cannot be assumed to provide learners with sufficient knowledge of conventional written

forms.

Existing research on *bi'ah lughawiyyah* has consistently emphasized the positive role of language environments in developing Arabic speaking skills. Studies have documented how daily conversation, *muḥādathah*, vocabulary habituation, language days, speech activities, and other communicative programs encourage learners to use Arabic more actively and confidently (Setiyadi et al., 2023; Syamsiyah et al., 2025). Other research has similarly conceptualized the language environment as a mechanism for bridging formal Arabic instruction and authentic communication, with particular attention to students' fluency, vocabulary retention, motivation, and participation. This body of research provides strong evidence that an Arabic-rich environment can function as an important ecological resource for oral language development. At the same time, emerging research on Arabic writing has identified persistent difficulties involving spelling, letter formation, dots, *hamzah*, letter connections, and other orthographic features. Studies of Arabic as a second-language writing system have also identified phonological realization and orthographic difficulties among the factors underlying learners' writing errors (Alkadi, 2018). However, these two strands of research have largely developed separately: research on *bi'ah lughawiyyah* has focused on oral communicative development, whereas research on Arabic writing has tended to examine orthographic errors independently of the language environment in which learners acquire Arabic. Consequently, relatively little is known about what happens to orthographic development when learners acquire and use Arabic predominantly through an intensive oral environment.

This separation reveals an important research gap. The existing literature tends to assume that increasing opportunities for Arabic communication will contribute broadly to language proficiency, while comparatively limited attention has been given to the possibility of uneven development across language modalities. The phenomenon at Pondok Pesantren Miftahul Ulum Bringin Anom challenges a straightforward assumption that greater oral exposure necessarily produces balanced language competence. Students may become accustomed to speaking Arabic in daily interaction while simultaneously developing a tendency to reconstruct unfamiliar written forms from their auditory representations. In this sense, the problem is not simply that students make spelling mistakes; rather, their errors may reveal how an oral-dominant learning ecology mediates the transition from sound to script. This issue is particularly significant in Arabic because the orthographic system requires learners to attend to distinctions that may not be sufficiently recoverable from auditory information alone. Previous research has demonstrated the importance of phonological processes in Arabic spelling and has identified phonological errors as a major category of Arabic spelling difficulty (Abu-Rabia & Taha, 2006), while research on Arabic orthography has also emphasized the distinctive cognitive demands involved in processing written Arabic (Abu-Rabia, 1997; Wagner & Spratt, 1993). Nevertheless, these studies do not explain how such difficulties may emerge specifically within an immersive Arabic-speaking environment. The unresolved issue, therefore, is not whether *bi'ah 'arabiyyah* is beneficial, but how an environment that successfully develops oral communication may simultaneously create conditions in which oral and orthographic competencies develop unevenly.

Against this background, the present study investigates the oral-orthographic gap within the *bi'ah 'arabiyyah* implemented at Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan. The study seeks to understand how students experience the transition from spoken Arabic to written Arabic, what forms of orthographic difficulty emerge in their written production, and how their reliance on auditory or phonological representations is reflected in their writing practices. Rather than evaluating the effectiveness of *bi'ah 'arabiyyah* through

predetermined measures of speaking achievement, this qualitative case study examines the phenomenon from the perspective of students' everyday linguistic practices and the institutional environment in which those practices occur. Theoretically, the study aims to extend current discussions of Arabic language immersion by shifting attention from oral proficiency as an outcome of language environment to the relationship between oral exposure and orthographic development. It proposes an oral-orthographic perspective for understanding a potentially overlooked consequence of intensive language immersion: the possibility that strong oral development and weak orthographic accuracy may coexist within the same learner. Practically, the findings may inform the design of more balanced Arabic language environments by demonstrating the need to integrate systematic exposure to written forms with intensive oral communication, thereby allowing *bi'ah 'arabiyyah* to support not only communicative fluency but also accurate written Arabic.

RESEARCH METHODS

This study employed a qualitative approach using a case study design to obtain an in-depth understanding of the oral-orthographic gap emerging within the Arabic language immersion environment (*bi'ah 'arabiyyah*) at Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan, Indonesia. A qualitative approach was selected because the study sought to explore students' everyday Arabic language practices, experiences, and difficulties in transferring orally acquired Arabic into written forms. The case study design was considered appropriate because it enables researchers to investigate contemporary educational phenomena within their real-life context while taking into account the social, linguistic, pedagogical, and institutional characteristics that shape participants' language practices (Yin, 2018; Merriam & Tisdell, 2016). Accordingly, Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan was purposively selected as the research site because it has systematically implemented *bi'ah 'arabiyyah* as part of students' daily communication, providing an information-rich case for examining the relationship between intensive oral Arabic exposure and students' written Arabic production. The uniqueness of this linguistic environment lies in the coexistence of relatively active Arabic oral communication and recurring difficulties in representing orally acquired Arabic accurately in written form. This condition offers valuable insights into the emerging oral-orthographic gap within Arabic language immersion.

The study utilized both primary and secondary data sources. Primary data were obtained from participants who were purposively selected based on their direct involvement in and experience with the implementation of *bi'ah 'arabiyyah* at Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan. The participants consisted of [number] Arabic language teachers or language supervisors and [number] students who actively participated in the Arabic language immersion program and regularly used Arabic in their daily activities. These participants were selected because they possessed firsthand experience and substantial knowledge regarding the implementation of the Arabic language environment, students' oral communication practices, and the difficulties encountered when transforming spoken Arabic into written forms. Secondary data were collected from relevant institutional documents and students' written artifacts, including Arabic language program guidelines, language regulations, learning materials, students' notebooks, Arabic writing assignments, *insyā'* exercises, assessment records, and other relevant documents that reflected students' Arabic language practices. The combination of primary and secondary data enabled the researchers to obtain a comprehensive understanding of the relationship between oral Arabic exposure and written Arabic production while strengthening the credibility of the research findings through data source triangulation.

Data were collected through observation, semi-structured interviews, and document analysis to obtain a comprehensive understanding of the implementation of *bi'ah 'arabiyyah* and the emergence of the oral–orthographic gap. Observation was conducted to examine how Arabic was used in students' everyday activities, how students acquired Arabic expressions through oral interaction, and how the language environment emphasized spoken communication. Particular attention was given to students' listening and speaking practices, their use of Arabic vocabulary and expressions in daily interactions, and situations in which students encountered unfamiliar Arabic words or expressions and subsequently attempted to write them. Semi-structured interviews were undertaken with Arabic language teachers, language supervisors, and selected students to explore their experiences, perceptions, and reflections regarding the implementation of *bi'ah 'arabiyyah*, the acquisition of Arabic through oral interaction, and the difficulties experienced in producing written Arabic. In addition, document analysis was carried out by examining institutional language policies, Arabic language program documents, learning materials, students' written assignments, notebooks, and assessment records to identify patterns of orthographic difficulty and to corroborate the findings obtained through observation and interviews. The integration of these three data collection techniques enabled methodological triangulation, thereby enhancing the credibility, depth, and trustworthiness of the research findings.

Table 1: Data Collection Techniques

Data Collection Technique	Research Focus	Data Source
Observation	Implementation of <i>bi'ah 'arabiyyah</i> , students' everyday Arabic communication, oral language practices, and reliance on auditory input	Arabic language environment, students, teachers, and language supervisors
Semi-structured Interview	Students' experiences in acquiring and using spoken Arabic, difficulties in transferring spoken Arabic into written forms, and teachers'/supervisors' perceptions of students' writing difficulties	Arabic teachers, language supervisors, and students
Document Analysis	Students' written Arabic production, orthographic difficulties, and institutional practices related to oral and written Arabic	Arabic language guidelines, learning materials, students' notebooks, writing assignments, <i>insyā'</i> exercises, and assessment documents

The data were analyzed using thematic analysis following the six-phase framework proposed by Braun and Clarke (2006). This analytical approach was selected because it provides a systematic and flexible procedure for identifying, organizing, analyzing, and interpreting meaningful patterns across multiple qualitative data sources. In this study, the analysis began with repeated reading of interview transcripts, observation field notes, students' written Arabic, and institutional documents to develop a comprehensive understanding of the implementation of *bi'ah 'arabiyyah* and the oral–orthographic phenomenon. Subsequently, meaningful data segments were coded according to their relevance to the research objectives, particularly those related to students' oral exposure, auditory acquisition, phonological reliance, writing practices, and orthographic difficulties. Similar codes were then grouped into preliminary themes. These

themes were reviewed, refined, and clearly defined by continuously comparing findings across interviews, observations, and documentary evidence. Particular attention was given to identifying patterns indicating how students relied on what they heard when attempting to produce written Arabic. The final stage involved interpreting the relationships among the identified themes to construct a comprehensive explanation of how the Arabic language immersion environment shaped students' oral language development and their written Arabic production. This iterative analytical process enabled the researchers to generate empirically grounded themes while maintaining consistency and coherence throughout the interpretation of the findings.

Table 2. Stages of Data Analysis

Phase	Analytical Process	Application in This Study	Expected Output
Phase 1	Familiarization with the data	Reading interview transcripts, observation notes, students' Arabic writing, and institutional documents repeatedly	Initial understanding of <i>bi'ah 'arabiyyah</i> and the oral-orthographic phenomenon
Phase 2	Generating initial codes	Coding meaningful statements related to oral exposure, auditory acquisition, speaking practices, phonological reliance, and orthographic difficulties	Initial codes
Phase 3	Searching for themes	Grouping similar codes into broader categories related to oral language practices and written Arabic production	Preliminary themes
Phase 4	Reviewing themes	Comparing themes across interviews, observations, students' written artifacts, and document analysis	Refined and triangulated themes
Phase 5	Defining and naming themes	Refining and naming each theme to explain the relationship between oral immersion and orthographic production	Final themes
Phase 6	Producing the report	Interpreting the relationships among themes and developing an explanation of the transition from spoken Arabic to written Arabic	Research findings and conceptual interpretation

To ensure the trustworthiness of the findings, this study adopted the qualitative rigor criteria proposed by Lincoln and Guba (1985), namely credibility, transferability, dependability, and confirmability. Credibility was enhanced through methodological triangulation by integrating observations, semi-structured interviews, and document analysis, particularly students' written Arabic artifacts, as well as through member checking, in which selected participants were invited to verify the accuracy of the interview interpretations and emerging findings. Transferability was supported by providing rich descriptions of the research context, participants, implementation of *bi'ah 'arabiyyah*, students' Arabic language practices, and the characteristics of their written production, enabling readers to determine the applicability of the

findings to similar Arabic immersion environments. Dependability was maintained by documenting the research procedures systematically, including participant selection, data collection, coding, thematic development, and interpretation processes. Confirmability was strengthened through maintaining an audit trail and continuously comparing interpretations across multiple data sources to minimize researcher bias and ensure that the findings remained grounded in the empirical evidence. These strategies collectively enhanced the rigor, consistency, credibility, and trustworthiness of the research findings.

RESULTS

The Oral–Orthographic Gap in Arabic Language Immersion

The findings revealed that the implementation of *bi'ah 'arabiyyah* at Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan created an intensive Arabic-speaking environment in which students were consistently exposed to and encouraged to use Arabic in their daily interactions. The findings, however, also revealed an uneven development between students' oral Arabic performance and their written Arabic production. While students were able to communicate using frequently encountered Arabic expressions in everyday activities, they continued to experience difficulties when representing orally acquired words and expressions in written form. This phenomenon emerged across classroom observations, semi-structured interviews, and analysis of students' written Arabic. The findings were organized into five interconnected themes: (1) the dominance of oral Arabic exposure, (2) reliance on phonological representations in writing, (3) recurring oral–orthographic discrepancies, (4) difficulties in transferring spoken Arabic into written form, and (5) teachers' responses to the oral–orthographic gap. Taken together, these findings indicate that intensive oral immersion supported students' communicative use of Arabic while simultaneously creating conditions in which sound-based representations could become more dominant than accurate orthographic representations.

Finding 1. The Dominance of Oral Arabic Exposure

Classroom and environmental observations indicated that Arabic was predominantly acquired and practiced through oral interaction. Students were required to use Arabic when communicating with teachers, language supervisors, and peers in various formal and informal activities. Arabic expressions were frequently introduced through spoken commands, daily conversations, classroom instructions, greetings, requests, and routine interactions. Students often encountered new vocabulary first through listening and subsequently attempted to reproduce the expressions orally. Written forms were introduced less consistently in spontaneous communication outside formal learning activities.

The observation further showed that students tended to remember Arabic expressions according to their sound patterns. When encountering unfamiliar expressions, several students repeated the expressions orally and attempted to use them in subsequent interactions without immediately checking their written forms. This pattern was particularly visible in daily communication, where the immediate communicative function of Arabic appeared to receive greater attention than orthographic accuracy.

The Arabic language teacher explained:

"Students hear and use Arabic almost every day. They quickly remember expressions that they often hear from teachers and friends. However, when they are asked to write some of those expressions, they sometimes hesitate because they remember the sound more strongly than the written form." (P02)

A student similarly stated:

"Usually, I first learn the word from what I hear. When I want to write it, I sometimes write according to how I remember the pronunciation." (P05)

Another student explained:

"There are words that I can say correctly because I hear them every day, but when the teacher asks me to write them, I sometimes forget which letters should be used." (P07)

Document analysis provided additional evidence of the dominance of oral exposure. Arabic language program guidelines and daily language regulations emphasized the use of Arabic in students' interactions, particularly through speaking activities and routine communication. Meanwhile, students' notebooks and written assignments indicated that some vocabulary items appeared repeatedly in oral activities but were represented inconsistently in students' written production.

These findings suggest that the *bi'ah 'arabiyyah* provided substantial opportunities for oral Arabic development, but students' exposure to the corresponding orthographic forms was not always equally intensive. The resulting imbalance between auditory exposure and written exposure constituted an important condition underlying the oral-orthographic gap identified in this study.

Finding 2. Reliance on Phonological Representations in Arabic Writing

The second finding concerned students' tendency to rely on phonological representations when producing written Arabic. Observation of writing activities showed that students frequently attempted to reconstruct Arabic words from the sounds they had previously heard. This tendency was particularly apparent when students encountered vocabulary that was familiar orally but less familiar in written form. Instead of retrieving the complete orthographic representation of a word, students appeared to reproduce the sequence of Arabic letters based on their perception and memory of its pronunciation.

For example, when students were asked to write Arabic expressions that had previously been introduced orally, several students produced spellings that reflected the perceived pronunciation rather than the conventional orthographic form. Some students omitted letters that were not clearly represented in pronunciation, while others selected letters that appeared phonetically similar to the sounds they remembered. These patterns indicated that students did not always possess stable mappings between the phonological and orthographic representations of Arabic words. The teacher described this difficulty as follows:

"Sometimes students know the meaning of a word and can pronounce it correctly, but when I ask them to write it, they make mistakes. They usually write based on what they hear rather than remembering the exact letters." (P02)

A student also acknowledged this pattern:

"If I have heard the word many times, I can say it. But when I write it without seeing the example, I sometimes choose the letters based on the sound." (P06)

Another student stated:

"Sometimes I know how to pronounce the word, but I am not sure whether the word uses alif, hamzah, or another letter. I usually try to remember how it sounds." (P08)

Analysis of students' written artifacts reinforced these observations. Several writing samples demonstrated that students were able to convey intended meanings but produced orthographic forms that differed from the conventional Arabic spelling. The errors were not always associated with a lack of vocabulary knowledge. In several cases, students recognized the meaning of the word and could pronounce it appropriately but were unable to reproduce its written form accurately.

The evidence therefore indicates that the central difficulty was not simply vocabulary deficiency. Rather, some students appeared to possess relatively strong phonological representations while having less stable orthographic representations. This finding is important because it demonstrates that successful oral recognition and production do not necessarily guarantee accurate written representation.

Finding 3. Recurring Oral-Orthographic Discrepancies

The third finding involved recurring discrepancies between students' spoken and written forms of Arabic. Comparative analysis of classroom observations, interviews, and written artifacts revealed several patterns in which students demonstrated adequate oral familiarity with particular words or expressions but produced inaccurate written forms. These discrepancies were particularly evident in words that students had primarily encountered through listening and everyday conversation.

The observed discrepancies included omission of letters, substitution of visually or phonetically similar letters, inaccurate representation of long-vowel markers, confusion involving *hamzah*, and inconsistent spelling of frequently used vocabulary. In some cases, students were able to immediately correct their pronunciation when the teacher provided an oral model, yet they required additional assistance when asked to write the same expression.

One teacher explained:

"There is a difference between students being able to say a word and being able to write it. Some expressions are already familiar to them orally, but their spelling is still inconsistent." (P03)

This observation was also reflected in students' experiences. One student stated:

"I sometimes know that my pronunciation is correct because I hear the word every day, but I do not always know whether the spelling is correct." (P05)

Another student explained:

"When the teacher says a word, I can understand it quickly. But when I see the word in writing, sometimes I need more time because the letters are not exactly what I expected from the sound." (P08)

Document analysis demonstrated that these discrepancies were not isolated occurrences. Similar patterns appeared across several writing assignments and

classroom exercises. In some cases, the same student wrote a particular word differently in different assignments, suggesting that the orthographic representation had not yet become stable. Conversely, words that students frequently encountered both orally and visually tended to be written more consistently.

The comparison between oral performance and written artifacts therefore revealed a notable asymmetry: students could demonstrate functional communicative competence in familiar oral situations while still experiencing difficulties in accurate Arabic spelling. This asymmetry constitutes the central empirical manifestation of the oral–orthographic gap in the present study.

Finding 4. Difficulties in Transferring Spoken Arabic into Written Form

The fourth finding concerned the transition from spoken Arabic to written Arabic. The data indicated that students did not automatically transfer their oral knowledge into accurate written production. Although students frequently used Arabic expressions in daily interactions, the transition from hearing or saying an expression to writing it required an additional process of orthographic retrieval and reconstruction.

Classroom observations showed that students generally experienced fewer difficulties when copying or reproducing words that were already visible in written form. Greater difficulties emerged when they were required to write expressions from dictation or from memory after hearing them orally. Students often paused, asked for repetition, or sought confirmation regarding the appropriate letters before completing the written task.

The teacher explained:

"When students see the word, many of them can copy it correctly. The difficulty becomes more visible when they only hear the word and then have to write it. At that point, they need to connect the sound with the correct written form." (P02)

A student described a similar experience:

"If I see the word first, I can usually write it. But if I only hear the word, sometimes I am confused about the letters." (P04)

Another student stated:

"I can remember the pronunciation more easily than the spelling. Sometimes I need to hear the word several times before I can decide how to write it." (P07)

The students' written artifacts provided further evidence of this transition difficulty. Writing produced after visual exposure tended to contain fewer orthographic inconsistencies than writing produced from oral input alone. This pattern suggests that visual exposure to written Arabic played an important role in stabilizing students' orthographic representations.

The findings also indicated that repeated oral exposure, although valuable for developing communicative familiarity, did not by itself ensure accurate sound-to-script mapping. Students required opportunities to encounter Arabic words simultaneously through listening, speaking, reading, and writing. The absence or limited availability of one modality, particularly written exposure, appeared to make the transition from spoken language to written representation more demanding.

Finding 5. Teachers' Responses to the Oral-Orthographic Gap

The fifth finding concerned teachers' responses to the discrepancy between students' oral proficiency and written accuracy. The teachers recognized that students' ability to communicate orally did not necessarily correspond to their ability to spell Arabic words accurately. Consequently, teachers employed several strategies to strengthen the connection between pronunciation and orthographic representation.

Classroom observations showed that teachers frequently corrected students' written errors by asking them to pronounce the word, compare the pronunciation with its written form, and identify the letters that represented particular sounds. Teachers also encouraged students to read written vocabulary aloud, copy correctly spelled words, and repeatedly encounter vocabulary in both oral and written contexts.

One teacher explained:

"I try to connect the pronunciation with the written form. When students make a spelling mistake, I do not only correct the letters. I ask them to pronounce the word again and compare what they say with what they write." (P03)

Another teacher stated:

"Students need to see the word repeatedly. If they only hear it, they may remember the sound but not the spelling. Therefore, we try to provide written examples after introducing new expressions orally." (P02)

Students also reported that visual reinforcement helped them remember Arabic spelling. One student stated:

"When the teacher writes the word after we hear it, I can remember the spelling better. Later, when I hear the word again, I can remember how it looks." (P06)

Document analysis supported these findings by showing that teachers incorporated vocabulary writing exercises, copying activities, dictation, and written corrections into Arabic learning activities. Some student notebooks also showed repeated corrections of the same vocabulary items, indicating an ongoing process of strengthening the connection between oral and written forms.

These findings demonstrate that teachers were not merely correcting spelling errors as isolated mistakes. Rather, their responses reflected an attempt to establish stronger connections between students' auditory experiences and orthographic representations. Nevertheless, the persistence of writing difficulties suggests that the oral-orthographic gap requires systematic integration of oral and written exposure rather than occasional corrective activities.

Table 3. Themes Emerging from the Oral-Orthographic Gap in Arabic Language Immersion

Finding	Research Focus	Evidence from Observation	Evidence from Interviews	Evidence from Documents
1. Dominance of Oral Arabic Exposure	The extent to which students acquire and practice	Arabic was predominantly used through daily conversations,	Teachers and students emphasized frequent oral exposure as the	Language regulations and program guidelines emphasized

	Arabic through oral interaction	instructions, and routine interactions	main source of vocabulary and expressions	daily Arabic communication
2. Phonological Reliance in Writing	Students' tendency to reconstruct written Arabic from remembered sounds	Students sometimes wrote unfamiliar words according to how they heard them	Teachers and students reported difficulties writing words that were familiar orally	Written assignments showed sound-based spelling and unstable orthographic representations
3. Oral-Orthographic Discrepancies	Differences between students' oral familiarity and written accuracy	Students could pronounce familiar words but produced inaccurate written forms	Participants described cases in which pronunciation was correct but spelling remained uncertain	Writing artifacts showed omission, substitution, and inconsistent representation of letters
4. Spoken-to-Written Transfer Difficulties	Students' ability to transfer orally acquired Arabic into written production	Greater difficulty appeared when students wrote words from oral input without visual models	Students reported greater uncertainty when writing words they had only heard	Dictation and memory-based writing contained more inconsistencies than visually supported writing
5. Teachers' Responses to the Gap	Pedagogical efforts to strengthen sound-to-script mapping	Teachers connected pronunciation, reading, and spelling during correction activities	Teachers emphasized repeated visual exposure and integration of oral and written practice	Notebooks and assignments documented vocabulary writing, corrections, dictation, and written reinforcement

Table 3 demonstrates that the oral-orthographic gap was not represented by a single type of spelling error but emerged through a series of interconnected processes. The *bi'ah 'arabiyyah* provided students with intensive opportunities to hear and use Arabic in authentic daily interactions, contributing to familiarity and functional oral communication. However, the predominance of oral exposure also meant that some students developed stronger phonological representations than stable orthographic representations. This imbalance became visible when students were required to

transform orally acquired Arabic into written form.

The triangulation of observations, interviews, and written documents further indicates that students' writing difficulties cannot simply be interpreted as evidence of limited Arabic proficiency. In several cases, students demonstrated knowledge of the meaning and pronunciation of particular words but remained uncertain about their conventional written forms. The findings therefore point to a more specific problem concerning the mapping between sound and script. The oral–orthographic gap emerged when students' ability to recognize and produce Arabic orally developed more rapidly than their ability to encode the same linguistic knowledge orthographically.

Overall, the findings suggest that *bi'ah 'arabiyyah* should not be evaluated solely according to its success in increasing students' Arabic speaking practices. Its linguistic ecology also shapes how students encounter, store, and reproduce Arabic across modalities. The present case therefore reveals a paradoxical condition in which strong oral immersion coexists with persistent orthographic difficulties. Rather than indicating a failure of *bi'ah 'arabiyyah*, this finding highlights the need to conceptualize Arabic immersion as a multimodal language-learning environment in which oral fluency and orthographic development must be deliberately connected.

DISCUSSION

The findings of this study indicate that the *bi'ah 'arabiyyah* at Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan should not be understood solely as a mechanism for increasing students' Arabic speaking opportunities, but rather as a linguistic ecology that shapes how learners encounter, process, and reproduce Arabic across different modalities. The findings demonstrate a notable asymmetry between students' oral and written Arabic development. Students were frequently able to understand and use familiar Arabic expressions in daily communication, yet they continued to experience difficulties when converting orally acquired language into accurate written forms. This condition reveals what this study conceptualizes as an oral–orthographic gap, namely a discrepancy in which phonological representations of Arabic appear to develop more readily than stable orthographic representations. The finding is consistent with previous studies of *bi'ah lughawiyyah*, which have predominantly reported positive contributions to students' Arabic speaking ability, communicative confidence, vocabulary use, and daily language practice (Setiyadi et al., 2023; Syamsiyah et al., 2025; Takdir et al., 2024). However, the present findings extend this literature by showing that intensive oral exposure should not automatically be equated with balanced development across language modalities. In other words, an environment that is highly successful in promoting oral communication may simultaneously leave specific orthographic competencies less sufficiently developed when written exposure and explicit sound-to-script mapping are comparatively limited.

Furthermore, the findings demonstrate that students' writing difficulties were closely associated with their reliance on phonological representations when producing Arabic orthography. Students frequently encountered vocabulary through listening and oral interaction before encountering its written representation. Consequently, when they

were asked to write unfamiliar or less visually familiar words, some students appeared to reconstruct the written form on the basis of how the word sounded. This pattern is theoretically important because writing requires more than knowledge of pronunciation or meaning; it requires the learner to establish a stable mapping between linguistic knowledge and the conventional orthographic system. Research on Arabic spelling has similarly demonstrated the prominence of phonological difficulties in Arabic writing, indicating that learners may experience difficulties in translating phonological representations into accurate orthographic forms (Abu-Rabia & Taha, 2006). The present study adds a contextual dimension to this issue by demonstrating how an oral-dominant language environment may become an important context in which such difficulties become visible. The problem, therefore, should not be reduced to students' inability to memorize spelling. Rather, it reflects a modality-specific learning condition in which auditory and phonological experience may become more salient than visual-orthographic experience. This interpretation is also compatible with research showing that Arabic orthography presents particular challenges for learners because the relationship between pronunciation, orthographic representation, and written conventions is not always straightforward (Abu-Rabia, 1997; Wagner & Spratt, 1993).

The findings further reveal that the oral-orthographic gap is particularly evident when students are required to move from spoken input to independent written production. Students generally demonstrated fewer difficulties when they encountered words visually and reproduced them from an existing written model, whereas greater uncertainty emerged when they had to write words based primarily on oral input or memory. This pattern suggests that exposure to spoken Arabic and exposure to written Arabic do not necessarily produce identical forms of linguistic knowledge. Oral familiarity may allow students to recognize and reproduce a word communicatively, while orthographic familiarity requires repeated visual encounters and opportunities to retrieve and encode the conventional written form. This distinction is particularly relevant to Arabic because its writing system involves orthographic features that may not be fully predictable from pronunciation alone. Previous research has demonstrated that Arabic reading and orthographic processing are influenced by the characteristics of the Arabic writing system, including the representation of vowels and the interaction between orthographic and phonological information (Abu-Rabia, 1997; Abu-Rabia, 2021). The present findings therefore suggest that successful oral acquisition should be accompanied by systematic written exposure if learners are expected to develop balanced competence across modalities.

Another important finding concerns the relationship between oral immersion and orthographic learning. The present study does not suggest that *bi'ah 'arabiyyah* directly causes students' writing errors. Rather, the findings indicate that the particular configuration of the language environment may create conditions in which oral input becomes considerably more dominant than written input. Within such an environment, students may develop strong familiarity with the sound, meaning, and communicative function of frequently used expressions while possessing less stable representations of their written forms. This interpretation is consistent with the broader understanding of

language learning as a multidimensional process in which listening, speaking, reading, and writing develop through partially interconnected but distinguishable processes. Previous research on Arabic language environments has generally emphasized the importance of authentic communication and repeated interaction in developing speaking skills (Setiyadi et al., 2023; Takdir et al., 2024). The present study does not challenge this conclusion. Instead, it complicates it by demonstrating that the success of an oral immersion environment should also be evaluated in terms of whether learners are provided with sufficient opportunities to connect oral linguistic knowledge with written representations. Thus, the central issue is not whether *bi'ah 'arabiyyah* is effective, but whether its implementation provides balanced multimodal exposure.

The findings also have important implications for understanding Arabic orthographic development from a psycholinguistic perspective. The students' ability to pronounce and understand particular words while experiencing difficulty writing them accurately indicates that lexical knowledge may not always be represented in a fully integrated manner across phonological and orthographic dimensions. When a word is primarily encountered auditorily, its phonological representation may become highly accessible, while its orthographic representation remains comparatively weak. During writing, learners must retrieve the lexical item and establish the appropriate graphemic sequence. If the orthographic representation is insufficiently established, learners may rely on phonological cues to reconstruct the written form. This interpretation is consistent with findings from Arabic spelling research showing that phonological processes play an important role in spelling development and spelling errors (Abu-Rabia & Taha, 2006). It is also relevant to second-language Arabic research demonstrating that learners encounter difficulties associated with the Arabic writing system and the relationship between novel orthographic information and phonological acquisition (Showalter & Hayes-Harb, 2015). The present study extends these perspectives by situating phonological reliance within an immersive educational ecology rather than treating it solely as an individual learner deficit.

At the same time, the findings reveal that students' orthographic difficulties were not uniform. Students who frequently encountered vocabulary in both oral and written forms appeared to demonstrate more stable written representations than students whose exposure was predominantly auditory. This variation suggests that the quantity and distribution of modality-specific exposure may influence the development of linguistic representations. Repeatedly hearing a word may strengthen its auditory and phonological familiarity, whereas repeatedly seeing, reading, copying, and writing the same word may strengthen its orthographic representation. The implication is that multimodal repetition may be more pedagogically productive than repetition through a single modality. In the context of Arabic immersion, therefore, the introduction of new vocabulary through spoken interaction could be immediately followed by visual presentation, reading aloud, controlled writing, and contextual written production. Such integration would enable learners to establish stronger connections between what they hear, what they say, what they see, and what they write.

The teachers' responses identified in this study further demonstrate that the oral–

orthographic gap can be addressed through deliberate pedagogical mediation. Teachers attempted to connect pronunciation with written representation by asking students to repeat words, observe their written forms, compare pronunciation with spelling, and practice writing familiar vocabulary. These practices indicate that teachers recognized the distinction between knowing a word orally and being able to represent it accurately in writing. From a pedagogical perspective, this finding supports the importance of explicit integration between oral and written language activities. Rather than treating spelling correction as an isolated remedial activity, teachers can use oral interaction as the starting point for developing orthographic awareness. For example, a frequently used expression in daily communication can subsequently become the object of reading, dictation, spelling analysis, copying, sentence construction, and independent writing. In this way, oral immersion becomes not an alternative to literacy development but a foundation upon which written competence can be deliberately constructed.

Theoretically, this study contributes to Arabic language education by introducing the concept of the oral–orthographic gap as a useful lens for examining language development within immersive Arabic environments. Previous studies of *bi'ah lughawiyyah* have primarily positioned the language environment as a mechanism for strengthening speaking ability and communicative practice (Setiyadi et al., 2023; Syamsiyah et al., 2025; Takdir et al., 2024). Meanwhile, studies of Arabic spelling and orthography have largely examined learner errors, phonological processing, or characteristics of the Arabic writing system independently of immersive language ecology (Abu-Rabia & Taha, 2006; Showalter & Hayes-Harb, 2015). The present study brings these two strands together by demonstrating that the development of oral and orthographic competence should be considered relationally. The oral–orthographic gap therefore provides a conceptual bridge between research on language environment and research on Arabic writing development. This perspective shifts the discussion from the conventional question of whether immersion improves Arabic proficiency toward a more nuanced question of how the distribution of linguistic exposure across modalities shapes different dimensions of language competence.

Practically, the findings suggest that Arabic language programs in pesantren should design *bi'ah 'arabiyyah* not only around speaking targets but also around systematic oral–written integration. Teachers and language supervisors can introduce written representations immediately after oral vocabulary exposure, display frequently used expressions in visible locations, encourage students to maintain vocabulary records, incorporate dictation and transcription activities, and require students to transform frequently spoken expressions into written sentences. Language regulations may also be complemented by literacy-oriented practices so that Arabic is not only spoken in the environment but also read and written as part of everyday communication. Such practices would allow the immersion environment to maintain its communicative strength while simultaneously reducing the possibility of a persistent gap between oral fluency and orthographic accuracy.

Finally, the findings indicate that the oral–orthographic gap should not necessarily be interpreted as a weakness or failure of the *bi'ah 'arabiyyah* model. Instead, it reveals an

important pedagogical paradox: the same environment that successfully strengthens students' oral familiarity with Arabic may not automatically produce equivalent orthographic competence. This paradox is valuable because it exposes an often-overlooked dimension of language immersion. An effective language environment must provide not only abundant input but also appropriately distributed input across modalities. Accordingly, the present study proposes that the pedagogical strength of Arabic immersion lies not simply in increasing the amount of Arabic that students hear and speak, but in strategically connecting oral experience with written representation. Such a perspective provides a basis for developing a more balanced model of *bi'ah 'arabiyyah* in which communicative fluency and orthographic accuracy are treated as mutually reinforcing dimensions of Arabic language development.

Table 4. Research Findings and Contributions to Arabic Language Immersion

Research Findings	Meaning / Interpretation	Contribution to Arabic Language Education
The <i>bi'ah 'arabiyyah</i> provides intensive oral Arabic exposure.	Students develop strong familiarity with frequently heard and used Arabic expressions through daily communication.	Confirms the communicative value of Arabic immersion while highlighting the need to consider other language modalities.
Students tend to rely on phonological representations when writing unfamiliar orally acquired words.	Students may reconstruct written forms from remembered sounds when orthographic representations are insufficiently established.	Highlights the importance of explicitly connecting auditory input with visual and orthographic input.
A discrepancy exists between oral familiarity and written accuracy.	Students may pronounce and understand words correctly while remaining uncertain about their conventional written forms.	Introduces the oral–orthographic gap as an analytical perspective in Arabic language education.
Spoken-to-written transfer is more difficult when students lack visual exposure to the written form.	Oral knowledge does not automatically guarantee accurate orthographic production.	Demonstrates the importance of multimodal exposure in Arabic immersion programs.
Teachers mediate the transition from oral language to written representation.	Teachers connect pronunciation, reading, spelling, and writing through correction and reinforcement activities.	Positions teachers as mediators who can transform oral immersion into integrated language learning.
Balanced oral and written exposure may	Repeated encounters with Arabic through listening,	Provides a practical foundation for developing a

strengthen sound-to-script mapping.	speaking, reading, and writing can support more stable linguistic representations.	multimodal <i>bi'ah 'arabiyyah</i> .
The oral–orthographic gap represents a modality imbalance rather than simply a learner deficit.	Writing difficulties emerge within the interaction between learners and the distribution of linguistic input in their environment.	Expands the conceptualization of Arabic language immersion from an oral-communication model toward a multimodal language ecology.

Table 4 demonstrates that the principal contribution of this study lies in repositioning *bi'ah 'arabiyyah* from a predominantly oral communication environment toward a multimodal language-learning ecology. The findings do not undermine the established value of immersion for Arabic speaking development. Rather, they reveal that oral success and orthographic success represent related but not identical dimensions of language development. The identification of the oral–orthographic gap consequently provides a more nuanced framework for understanding why students may communicate effectively in Arabic while still demonstrating persistent difficulties in writing.

Overall, the study contributes theoretically by connecting research on *bi'ah lughawiyyah*, Arabic orthography, and phonological processing, and practically by emphasizing the importance of integrating listening, speaking, reading, and writing within Arabic immersion programs. The central implication is that Arabic immersion should move from an oral-dominant environment toward an integrated oral–orthographic ecology, in which every important spoken expression can become an opportunity for reading, writing, and orthographic consolidation.

CONCLUSION

This study concludes that the *bi'ah 'arabiyyah* at Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan provides an intensive linguistic environment that supports students' Arabic oral communication while simultaneously revealing an asymmetry between oral familiarity and written Arabic production. Although students were able to understand and use frequently encountered Arabic expressions in daily communication, they continued to experience difficulties when transferring orally acquired language into accurate written forms, particularly when relying on phonological representations to reconstruct unfamiliar or less visually familiar Arabic words. This phenomenon is conceptualized in this study as an oral–orthographic gap, referring to the discrepancy between relatively developed oral Arabic competence and less stable orthographic representation. The findings suggest that this gap should not be interpreted simply as a learner deficit or as a direct consequence of *bi'ah 'arabiyyah*, but rather as a phenomenon emerging within an oral-dominant language ecology in which auditory and communicative exposure may be more intensive than written exposure. Theoretically, this study extends research on *bi'ah 'arabiyyah* by connecting language immersion with Arabic orthographic development and phonological processing, while practically emphasizing the need to integrate listening, speaking, reading, and writing so that oral expressions are systematically reinforced through visual and orthographic exposure.

Despite these contributions, this study has several limitations. As a single qualitative

case study conducted at Pondok Pesantren Miftahul Ulum Bringin Anom Pamekasan, its findings are contextually bounded and should not be statistically generalized to other Arabic immersion institutions. The study also did not quantitatively measure the relative development of students' oral and orthographic competence or experimentally examine the relationship between oral exposure and writing accuracy. Future research could therefore employ mixed-methods, longitudinal, or experimental designs to examine the development of oral and orthographic competence across different stages of Arabic acquisition. Further studies could also investigate whether the systematic integration of dictation, visual vocabulary exposure, reading-writing activities, and multimodal learning technologies within *bi'ah 'arabiyyah* can reduce the oral-orthographic gap. Such research may contribute to the development of a more balanced oral-orthographic ecology in which oral fluency and orthographic accuracy are developed as mutually reinforcing dimensions of Arabic language competence.

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