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DERIVATIONAL AND INFLECTIONAL AFFIXES IN THE LANGUAGE OF JAKARTA GLOBE NEWS ARTICLES

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ABSTRACT

Understanding the morphological structure of English words remains a challenge for many learners, particularly students of English at Universitas Pamulang, who often experience difficulties in identifying bound morphemes attached to root or base words to create new lexical items or indicate grammatical functions. This study investigates the use of derivational and inflectional affixes in the language of *Jakarta Globe* news articles. Employing a qualitative descriptive approach, the research is grounded in Yule's (2006) theory of English morphology. The data were obtained from the online *Jakarta Globe* news article entitled *Indonesia Introduces AI and Coding to 59,000 Schools Nationwide*. Data collection involved identifying words containing affixes and classifying them into derivational and inflectional categories based on their morphological functions. The analysis revealed that inflectional suffixes were the most frequently occurring morphological forms, accounting for 27 instances (50%), including -s, -er, -ed, and -ing. Derivational suffixes appeared in 25 instances (46%), comprising -ence, -ive, -ion, -ity, -ly, -ation, -al, -ment, -ary, -ic, and -tion. No inflectional prefixes were identified in the data. In contrast, derivational prefixes occurred only twice (4%), represented by infra- and under-. These findings indicate that inflectional suffixes are the predominant morphological features in the language of the selected *Jakarta Globe* news article, highlighting their significant role in expressing grammatical relationships, whereas derivational affixes occur less frequently and primarily contribute to lexical expansion and word formation.

Keywords: Morphology, Derivational Affixes, Inflectional Affixes, News Article Language, Jakarta Globe.

1. INTRODUCTION

Language serves as a fundamental medium of human communication, enabling individuals to exchange ideas, express thoughts, and construct meaning in various social contexts (Zhang, 2022; Sherine et al., 2020; Lewis et al., 1997). The acquisition of language involves the development of four essential skills: listening, speaking, reading, and writing. Among these, writing is widely regarded as the most demanding skill because it requires not only the ability to organize ideas coherently but also a strong command of grammar, vocabulary, and appropriate word formation (Williyan et al., 2025; Wei, 2023; Pratama et al., 2020). Consequently, understanding the linguistic principles underlying written language is essential for achieving effective communication.

Linguistics provides the theoretical framework for examining how language is structured, functions, and develops (Aryadoust, 2023; Wasi et al., 2024; Jurafsky & Martin, 2023). One of its major branches is

morphology, which investigates the internal structure of words and the processes through which new words are formed. According to Aronoff and Fudeman (2022), morphology examines how words are constructed from smaller meaningful units known as morphemes and explains how these units contribute to both lexical meaning and grammatical function. This perspective demonstrates that word formation follows systematic linguistic patterns rather than occurring randomly. As a result, morphological knowledge plays a significant role in expanding vocabulary and improving grammatical accuracy, particularly in written discourse.

A central concept in morphology is the affix, a bound morpheme that cannot function independently but must be attached to a root or base word to produce a new lexical item or express grammatical information (Reuland, 2021; Lieber, 2021). Affixation represents one of the most productive mechanisms of word formation in English. Bauer (2023), argue that discussions of derivation and inflection should consider the productivity of affixes in generating different word forms and grammatical structures. Depending on their position, affixes may occur as prefixes, suffixes, infixes, or circumfixes (Rowe & Levine, 2012). However, English morphology relies predominantly on prefixes and suffixes, whereas infixes and circumfixes are relatively uncommon (Yulianti & Setyowati, 2024; Jaya et al., 2025) Lesiana et al., 2023).

Affixes are generally classified into two major categories: derivational and inflectional. Derivational affixes create new lexical items and frequently change the grammatical category or meaning of the base word. In contrast, inflectional affixes express grammatical information, such as tense, number, comparison, or possession, without altering the word's lexical meaning or word class (Lieber, 2021; Veto Mortini et al., 2023; Sherine et al., 2020). This distinction is particularly important because it illustrates how English expands its vocabulary while simultaneously maintaining grammatical relationships. Consequently, both derivational and inflectional affixes are extensively employed in academic and journalistic writing, where precision, clarity, and linguistic economy are essential.

Recent studies have highlighted the importance of morphology in written communication. Plag and Kunter (2022) argue that writers of news texts generally prefer familiar and transparent morphological forms to ensure readability and accessibility for a broad audience. For this reason, inflectional suffixes frequently occur in news discourse because they effectively convey grammatical information without introducing unfamiliar vocabulary. Furthermore, Nation and Webb (2022) emphasize that morphological awareness contributes substantially to vocabulary development and reading comprehension. Learners who recognize common prefixes and suffixes are better equipped to infer word meanings and comprehend complex written texts. Therefore, morphological analysis not only enriches vocabulary knowledge but also supports the development of reading and writing proficiency.

The significance of affixation in language learning has also been supported by previous research. Bauer (2023) explains that prefixes and suffixes constitute fundamental processes in English word formation, enabling speakers to generate a wide range of vocabulary from a limited number of base words. Similarly, Rohmadi (2018) argues that a comprehensive understanding of affixation promotes reading comprehension, writing ability, cognitive development, and overall language proficiency. Empirical evidence is provided by Oktavia's study entitled *The Use of Affixes as Word Structure Strategy on Students' Vocabulary Mastery*, which found that eleventh-grade students at SMAN 66 Jakarta experienced difficulties in identifying base words after affixation. Nevertheless, the implementation of affix-based instructional strategies

significantly improved students' vocabulary mastery and enabled them to achieve the expected learning outcomes.

Despite the importance of morphology, many English learners continue to experience difficulties in distinguishing derivational and inflectional affixes, particularly when identifying the root forms of words and interpreting their meanings in authentic texts. Such limitations frequently lead to misunderstandings of vocabulary and grammatical structures, especially in academic and journalistic contexts. Since news articles consistently employ a wide variety of morphological forms, they provide an appropriate source for investigating the practical application of English affixation.

Among English-language news media in Indonesia, *Jakarta Globe* is recognized for publishing current national and international news using standard English. The language employed in its news articles offers rich examples of morphological patterns, making it a valuable source for examining the use of derivational and inflectional affixes in authentic written discourse.

Based on these considerations, this study, entitled "Derivational and Inflectional Affixes in the Language of Jakarta Globe News Articles," aims to identify the derivational and inflectional affixes used in the language of selected *Jakarta Globe* news articles and classify them according to their morphological categories. Through this analysis, the study is expected to contribute to a deeper understanding of English word formation and provide practical insights for English language learners in developing their morphological awareness and vocabulary knowledge.

2. LITERATURE REVIEW

2.1 Morphology

Morphology is the study about the structure of words which formed from the smallest unit. According Rowe & Lavine (2016) as cited in Arifin (2024) Morphology, a branch of mental grammar that deals with word shapes and how words are constructed from smaller tangible components and other words, is a subject of linguistics. Morphology is focusing on the structures rather than recognizing individual words. Morphology teaches us about morphemes. A language's smallest meaningful repeating units are called morphemes. Morphemes are classified into two categories: bound morphemes and free morphemes. A free morpheme, also known as an unbound morpheme, is a morpheme that can stand alone, for instance *desk*, *play*, *beautiful, ring*, and *sing*. Meanwhile, a bound morpheme, the fundamental unit of morphosyntax, can only exist as a component of a larger expression. It cannot stand alone and must be attached to the free morpheme, such as *un-*, *-ness*, *-ly*, and *-ize*. In morphology, there is an object of study called morpheme. Morphemes are the smallest unit which has meaning and cannot be divided into smaller form of language. Aprianti & Parmawati explained that a morpheme is a linguistic element with diverse functions in constructing both words and sentences. A morpheme is divided into two, prefix and suffix. A prefix is positioned before a root, modifying the meaning of word and creating a new word. On the other hand, suffix is attached to the back of the base word.

2.2 Derivation

In the world of linguistic studies, affixes are a concept that is well known to language learners. Prefixes and suffixes are clearly defined as the most common types of affixes in the global language. According to their function, affixes contribute as elements in the process of modifying the meaning and structure of a base word. As expected,

especially suffixes, can change the part of speech of a word to another part of speech (derivational), such as from a noun to an adjective, or from an adjective to an adverb, or simply alter its grammatical function without changing its part of speech (inflectional), such as from a singular noun to a plural noun (Katamba, 2021). However, the prefix used for derivation, they only change the part of speech of the affix attached at the front Yule (2006) as citied in Siboro & Bram (2020).

Furthermore, Prefix is characterized as a morpheme which is positioned before the base word. Side & Wellman (1999) as cited in Cahya et al. (2022) prefix are utilized to denote the negative forms which is employed to construct negative form. For example, the antonym of 'satisfied' is 'dissatisfied', the antonym of 'pleasant' is 'unpleasant', and the antonym of 'polite is 'impolite'. Considering these prefixes, they come before the base word, indicating the lack or opposition of the concept. Meanwhile, suffix is recognized as a morphological component that attached of a root word. Suffixes modify the semantic content of the words which they are associated primarily by altering the grammatical category, such as the addition of the suffix -ment the base word 'manage' resulted in the noun 'management'. Suffix is able to changed not only the semantic interpretation but also the part of speech, spelling, and writing. Derivational Affixes are attaching between bound morpheme and base word in order to change the meaning and grammatical of the words. Regarding to Lieber (2019) derivation is a process of making new lexeme which is formed by combination between prefix or suffix on the base word, such as the prefix "im" is able to be added to adjective to form its antonym, for example "polite" becoming "impolite". The process of derivation is important to understand how the languages elaborate their vocabulary. Syarifaturahman, et.al., (2024) stated that the Mechanism of morphological process is about the formation and the modifying of the words. These include derivation, inflection, and compounding. First, derivation contained by adding affixes to a base morpheme to create a word with a different meaning, such as the suffix "men" added to the verb "manage" becoming the noun "management". In many languages, this process is predominant and beneficial to the enlargement of vocabulary and the function of grammar. Next, Inflection modifies a base word to show tense, case, number, or other grammatical features without changing the word's category. For instance, the base word of "car" added "-s" shows plurality. The last is about compounding which connects two or more base morphemes to make a new word, for example "hotdog" taken from the word "hot" and "dog". Among these processes, derivation and inflection are the most productive and create new words by adding affixes to the base word (Harahap, 2021; Huda, 2025; Khanetnok et al., 2023; Lestari et al., 2023).

3. METHODS

This research applies a qualitative descriptive approach. Mackey and Gass (2022) explained that qualitative approaches are effective for language studies that aim to describe patterns, meanings, and structures as they appear in texts. Therefore, a qualitative descriptive approach allows this research to present a clear explanation of affixation patterns based on contextual language use.

The source of data is taken from the news article "Indonesia Introduces AI and Coding to 59,000 Schools Nationwide" published by *Jakarta Globe*. The article is selected because it contains a wide range of vocabulary related to education and technology that is rich in affixation, particularly prefixes and suffixes. In addition, it is represented an authentic language use commonly found in media discourse, making it relevant for linguistic analysis. The article is also considered accessible and reliable as it is published by a well-known news outlet. Furthermore, the data collection process is conducted through several steps. First, the full text of the news article is retrieved from *Jakarta Globe* to confirm the completeness and accuracy

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of the data source. Next, the article is carefully read to identify and highlight words that potentially contain affixes, particularly prefixes and suffixes. Afterward, all identified words are extracted and listed in a data sheet to facilitate organized analysis. Finally, the collected data are verified by rechecking each word to avoid redundancy and to ensure that the affixes are correctly classified, thus maintaining the reliability of the data.

4.RESULTS AND DISCUSSION

Based on the outcomes of the word-sorting process conducted in the research procedure, it was found 54 affix words in the Jakarta Globe article. The 54 words were divided into word groups—derivational suffix, derivational prefix, inflectional suffix, and inflectional prefix. The number of words found in the Jakarta Globe newspaper is shown in the table below:

Table 1. Inflectional and Derivational Affixes in Jakarta Globe News

Affixes	Words Data	Percentage
Inflectional Suffix	27	50%
Derivational Suffix	25	46%
Derivational Prefix	2	4%
Inflectional Prefix	-	-
Total	54	100%

The data findings show that inflectional suffixes are the most frequently used forms in the news article, with 27 data . This dominance specifies that the text prioritizes grammatical clarity rather than the creation of new word meanings. Next in derivational suffixes, it appears slightly less frequently, with 25 data, and are mainly used to shape meaning and word classes related to education and technology topics. In contrast, derivational prefixes are rarely found, with only 2 data, suggesting that prefixation is not a dominant morphological feature in this type of news writing.

Table 2

Derivational Prefixes

No	Word	Prefix	Cate;	Explanation
			ory	
1	Infrastructure	Infra-	Locative	Basic foundation
2	Underway	Under-	Locative	In progress, already started

The result from Table 1 shows that 2 derivational prefixes categorized as locative prefixes were found, namely *infra-* and *under-*. These prefixes function to modify the meaning of the base words by providing information related to position or condition. The word *infrastructure* uses the prefix *infra-*, which means "below" or "beneath." When attached to the base word, the prefix forms a new word that refers to basic or foundational systems that support other activities. In this case, the prefix *infra-* helps deliver the idea of underlying structures that are essential for development. The word *underway* uses the prefix *under-*, which indicates a state or condition rather than a physical location. The prefix contributes to the meaning of an activity that has already started and is still in progress. Thus, *underway* is used to describe the ongoing status of a process or event. In general, these derivational prefixes play an important role in shaping word meaning by adding locative or contextual information, making the message clearer in the news text.

Table 3

Inflectional Suffixes

No	Word	Suffix	Category	Explanation
1	Subjects	-s	Plural	Noun à Plural form
2	Schools	-s	Plural	Noun à Plural form
3	Concepts	-s	Plural	Noun à Plural form
4	Modules	-s	Plural	Noun à Plural form
5	Facilities	-s	Plural	Noun à Plural form
6	Units	-s	Plural	Noun à Plural form
7	Instructors	-s	Plural	Noun à Plural form
8	Countries	-es	Plural	Noun à Plural form
9	Areas	-s	Plural	Noun à

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				Plural form
10	Objectives	-s	Plural	Noun à Plural form
11	Broader	-er	Comparative	Adjective à Compare two things
12	Begins	-s	3rd Person Singular Verb	Singular subject verb agreement
13	Joins	-s	3rd Person Singular Verb	Singular subject verb agreement
14	Expects	-s	3rd Person Singular Verb	Singular subject verb agreement
15	Assigned	-ed	Past Tense/Participle	Verb in past form
16	Located	-ed	Past Tense/Participle	Verb in past form
17	Implemented	-ed	Past Tense/Participle	Verb in past form
18	Added	-ed	Past Tense/Participle	Verb in past form
19	Completed	-ed	Past Tense/Participle	Verb in past form
20	Initiated	-ed	Past Tense/Participle	Verb in past form
21	Equipped	-ed	Past Tense/Participle	Verb in past form
22	Introducing	-ing	Present Participle	Verb in past form
23	Starting	-ing	Present Participle	Verb in present form
24	Using	-ing	Present Participle	Verb in present form
25	Rotating	-ing	Present Participle	Verb in present form
26	Integrating	-ing	Present Participle	Verb in present form
27	Training	-ing	Present Participle	Verb in present form

Based on the results from Table 2, these suffixes are used to mark important linguistic features such as plurality, tense, comparison, and subject-verb agreement, which are important components in English grammar. Through the use of inflectional suffixes, the text is able to deliver precise grammatical meanings that help readers interpret relationships between words within sentences.

First, the suffix **-s / -es** is dominantly used to indicate plural nouns, as found in words such as *subjects, schools, concepts, modules, facilities, units, instructors, countries, areas,* and *objectives*. The presence of this suffix marks that the nouns refer to more than one item or entity, which is essential in clarifying quantity and scope in the discussion. Although the suffix slightly changes the form of the word, it does not modify the core meaning or lexical category of the noun. Thus, the plural suffix functions as a grammatical sign that allows the writer to present information more precisely and allows readers to understand whether the discussion refers to singular or multiple nouns.

In addition, the suffix -er appears in the adjective *broader* to indicate the comparative degree. This suffix is used to compare two ideas, concepts, or conditions and to express a higher level or wider extent of a particular quality. By using the comparative form, the text is able to highlight differences or developments more effectively. Therefore, the inflectional suffix -er contributes to meaning by expressing comparison, while still maintaining the adjective's original word class and semantic base.

Moreover, the suffix -s attached to verbs such as *begins, joins,* and *expects* functions as a third person singular present tense. This suffix is related to subject-verb agreement, indicating that the action is performed by a singular subject, such as *he, she,* or *it*. Thus, the correct use of this inflectional suffix improves grammatical accuracy and prevents ambiguity in sentence interpretation, especially in formal or academic texts.

Furthermore, the suffix -ed is found in verbs such as *assigned, located, implemented, added, completed, initiated,* and *equipped*, where it functions to use past tense or past participle forms. This suffix shows that the actions have already been carried out or completed. As a result, the -ed suffix helps to create the progressive context of events described in the text and allows

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readers to distinguish between ongoing processes and finished actions.

Lastly, the suffix **-ing** appears in verbs such as *introducing, starting, using, rotating, integrating,* and *training,* which function as present participles. These forms are generally used to show actions that are still happening or developing over time. Rather than focusing on results, the -ing form emphasizes the process itself, which helps readers understand that the activities described are ongoing. In this way, the -ing suffix supports the description of continuous actions and helps the information in the text flow more smoothly.

Table 4
Derivational Sufixes

No	Word	Suffix	Root position à New position	Explanation
1	Intelligence	-ence	Adj à Noun	Quality/state
2	Coding	-ing	Verb à Noun	Activity/process
3	Elective	-ive	Noun à Adj	Having quality of
4	Elementary	-ary	Noun à Adj	Relating to study
5	Academic	-ic	Noun à Adj	Relating to study
6	Formally	-ly	Adj à Adv	In a formal way
7	Primary	-ary	Noun à Adj	First level
8	Secondary	-ary	Noun à Adj	Second level
9	Education	-ion	Verb à Noun	Process/result
10	Teacher	-er	Verb à Noun	Person who teaches
11	Authority	-ity	Noun à Noun	State
12	Objectives	-ive	Noun à Adj	Having quality of
13	Government	-ment	Verb à Noun	Action/result
14	Digitally	-ly	Adj à Adv	By digital means
15	Logical	-al	Noun à Adj	Related to logic
16	Technology	-logy	Noun à Noun	Study/field
17	Reasoning	-ing	Verb à Noun	Act of reasoning
18	Creativity	-ity	Adj à Noun	Being creative
19	Implementation	-ation	Verb à Noun	Process/result
20	Several	-al	Noun à Adj	More than two
21	Especially	-ly	Adj à Adv	In particular
22	Growing	-ing	Verb à Noun	Growth process
23	Evolving	-ing	Verb à Noun	Development process
24	Certification	-tion	Verb à Noun	Act of certifying
25	Introducing	-ing	Verb à Verb	To introduce something

Based on the results from Table 3, the data show that derivational suffixes are actively used to form new words by changing the word class and, in some cases, by adding new layers of meaning to the base words. These suffixes do not only provide grammatical functions but also contribute to how ideas are developed and expanded in the text. Through derivational processes, the text is able to present concepts in a more structured way, which is especially important in academic and educational contexts where clarity of meaning is required.

A clear pattern can be seen in the formation of nouns from verbs and adjectives, such as in *intelligence, education, government, implementation, certification, creativity,* and *authority*. Suffixes like -ence, -ion, -ment, -ation, -tion, and -ity are used to express qualities, states, actions, or results. By using these suffixes, abstract id eas that might otherwise be difficult to explain can be presented as concrete concepts. This allows the text to discuss processes and outcomes in a more systematic and understandable manner.

Another frequent pattern involves the use of derivational suffixes to change nouns into adjectives, as shown in words such as *elective, elementary, academic, primary, secondary, logical,* and *several*. Suffixes including -ive, -ary, -ic, and -al help indicate characteristics, levels, or relationships related to the original nouns. These adjectival forms make descriptions more specific and help modify other elements in the sentence,

which improves the overall clarity and detail of the information presented. In addition, the suffix -ly is used to form adverbs in words such as *formally*, *digitally*, and *especially*. This suffix provides information about manner, emphasis, or the way an action is carried out. As a result, the use of -ly helps the text express ideas more clearly by showing how actions happen which supports smoother sentence flow and better interpretation.

The suffix -ing appears with varied functions in the data. In words such as *coding*, *reasoning*, *growing*, and *evolving*, it changes verbs into nouns that refer to activities or ongoing processes. These forms emphasize development and continuity rather than fixed outcomes. However, in the word *introducing*, the suffix -ing does not change the word class and remains part of the verb form. This variation shows that derivational suffixes can function differently depending on their context and usage in the sentence.

Thus, the derivational suffixes identified in the table prove their significant function in word formation and meaning development in the text. By allowing shifts in word class and adding new semantic meanings, these suffixes provide clearer explanation of ideas and improve the academic quality of the writing. Lastly, derivational suffixes contribute not only to vocabulary expansion but also to the effectiveness and precision of the text as a whole.

5. CONCLUSION

This research concludes that affixation, particularly the use of prefixes and suffixes, were the most productive morphological forms found in the *Jakarta Globe* news article "Indonesia Introduces AI and Coding to 59,000 Schools Nationwide." The findings show that inflectional suffixes appear more dominant, followed by derivational suffixes, while derivational prefixes are used only minimally. This reported that the article relies more on suffixation to express grammatical information and maintain clarity in delivering news content, rather than introducing new or complex word formations. In addition, the dominance of inflectional suffixes shows that news writing tends to prioritize grammatical accuracy and readability to provide information that can be easily understood by a wide range of readers. The limited use of prefixes also shows the distribution of media texts to use familiar vocabulary rather than heavily modified vocabulary.

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4. REFERENCES

Aprianti, I. N., & Parmawati, A. (2020). Derivational and inflectional morpheme analysis on the song lyrics of Lady Gaga's *A Star Is Born* album. *Professional Journal of English Education, 3*(3), 323–330.

Arifin, I. (2024). A morphological analysis of the prefix and suffix in Jokowi's speech at Ecosperity Week in Singapore. *Maliki Interdisciplinary Journal (MIJ), 11*(2), 1301–1308.

Aronoff, M., & Fudeman, K. (2022). *What is morphology?* (2nd ed.). Wiley-Blackwell.

Aryadoust, V. (2023). Bibliometrics and scientometrics in applied linguistics: Epilogue to the special issue. *Studies in Second Language Learning and Teaching, 13*(4), 925–933. https://doi.org/10.14746/ssllt.40221

Bauer, L. (2023). The birth and death of affixes and other morphological processes in English derivation. *Languages, 8*(4), Article 244. https://doi.org/10.3390/languages8040244

Booij, G. (2021). *The grammar of words: An introduction to morphology* (3rd ed.). Oxford University Press.

Harahap, T. A. R. (2021). Derivational affixes in YouTube video *Vsauce*. *Teaching English and Language Learning English Journal (TELLE), 1*(3), 207–217. https://doi.org/10.36085/telle.v1i3.2970

Hohenhaus, P., & Klages, M. (2022). *Morphology in contemporary English*. Edinburgh University Press.

Huda, M. (2025). How are English verb-forming suffixes translated into Indonesian? A morphological and contrastive linguistic perspective. *ELITE: English and Literature Journal*, *12*(1), 59–67.

Hyland, K. (2022). *Disciplinary discourses: Social interactions in academic writing* (3rd ed.). Routledge.

Jaya, A., Hartono, R., Wahyuni, S., & Yulianto, H. J. (2025). Los efectos de la estrategia de aprendizaje basado en proyectos con actividad física en función del género sobre el rendimiento escolar y la confianza en sí mismos de los estudiantes. *Retos: Nuevas Tendencias en Educación Física, Deporte y Recreación*, *66*, 349–360. https://doi.org/10.47197/retos.v66.110067

Jurafsky, D., & Martin, J. H. (2023). *Speech and language processing: An introduction to natural language processing, computational linguistics, and speech recognition* (3rd ed.). Stanford University.

Katamba, F. (2021). *Morphology*. Macmillan.

Khanetnok, P., Srihamongkhon, K., Daengsaewram, S., & Thabkhoontod, R. (2023). Morphology: Word formation in linguistics. *International Journal of Sociologies and Anthropologies Science Reviews*, *3*(1), 83–92. https://doi.org/10.14456/jsasr.2023.9

Lesiana, N., Mulyadi, M., Jaya, A., & Pratiwi, E. (2023). Classroom interaction in communicative language teaching of secondary school. *ESTEEM Journal of English Education Study Programme*, *7*(1), 61–71. https://doi.org/10.31851/esteem.v7i1.12661

Lestari, I. A. K., Arka, I. W., & Udayana, I. N. (2023). Derivational suffixes in the *La La Land* movie. *ULIL ALBAB: Jurnal Ilmiah Multidisiplin*, *2*(12), 5808–5812. https://doi.org/10.56799/jim.v2i12.2624

Lewis, M., Gough, C., Martínez, R., Powell, M., Marks, J., Woolard, G. C., & Ribisch, K. H. (1997). *Implementing the lexical approach: Putting theory into practice*. Language Teaching Publications.

Lieber, R. (2021). *Introducing morphology* (2nd ed.). Cambridge University Press. https://doi.org/10.1017/9781108582969

Nation, I. S. P., & Webb, S. (2022). *Vocabulary learning in another language* (3rd ed.). Cambridge University Press. https://doi.org/10.1017/9781108569052

Plag, I., & Kunter, G. (2022). *Morphological complexity and language use*. Cambridge University Press. https://doi.org/10.1017/9781108981892

Pratama, G. Y., Haruna, J., & M. Siddik. (2020). Pengembangan bahan ajar menulis puisi dengan perpaduan model demonstrasi dan teknik beriur kata kelas VIII SMP. *Diglosia: Jurnal Kajian Bahasa, Sastra, dan Pengajarannya*, *3*(2), 149–162. https://doi.org/10.30872/diglosia.v3i2.58

Reuland, E. (2021). *Morphology and syntax*. Walter de Gruyter.

Rowe, B. M., & Levine, D. P. (2012). *A concise introduction to linguistics* (2nd ed.). Routledge.

Sari, A. A. N., & Nufus, Z. (2022). An analysis of inflectional affixes in the short story *Rumpelstiltskin*. *Proceeding STAI Rakha Amuntai*, *1*(1), 169–180.

Sherine, A., Seshagiri, A. V. S., & Sastry, M. M. (2020). Impact of WhatsApp interaction on improving L2 speaking skills. *International Journal of Emerging Technologies in Learning*, *15*(3), 250–259.

https://doi.org/10.3991/ijet.v15i03.11534

Syarifaturahman, S., et al. (2024). Derivational prefixes in Sasak: A morphological analysis of verb formation. *Jurnal Istrendi: Jurnal Linguistik, Sastra, dan Pendidikan, 2*(9), 390–401.

Veto Mortini, A., Jaya, A., & Akbar Zam, M. A. (2023). The effect of MAP Libs technique on students' English learning achievement in learning personal pronouns. *ESTEEM Journal of English Education Study Programme, 6*(2), 216–225. https://doi.org/10.31851/esteem.v6i2.12316

Wasi, M., Zaki, S., & Anwar, R. H. (2024). A bibliometric analysis of research in forensic linguistics. *SAGE Open, 14*(4). https://doi.org/10.1177/21582440241299280

Wei, L. (2023). Artificial intelligence in language instruction: Impact on English learning achievement, L2 motivation, and self-regulated learning. *Frontiers in Psychology, 14*. https://doi.org/10.3389/fpsyg.2023.1261955

Williyan, A., Ilyas, M., Shahat, S., Guntur, M., & Rosalina, U. (2025). AI-powered pedagogy for argumentative essays in tertiary ELT: Insights from focus groups. *Journal of General Education and Humanities, 4*(3), 671–686. https://doi.org/10.58421/gehu.v4i3.423

Yule, G. (2006). *The study of language* (3rd ed.). Cambridge University Press.

Yulianti, A., & Setyowati, R. (2024). A descriptive analysis of affixation processes and morphophonemic patterns. *Eurasian Journal of Applied Linguistics, 10*(2), 226–240. https://doi.org/10.32601/ejal.10219

Zhang, W. (2022). The role of technology-based education and teacher professional development in English as a foreign language classes. *Frontiers in Psychology, 13*. https://doi.org/10.3389/fpsyg.2022.910315