

Morphological Process Analysis of Morphemes Through Word Formation in New York Times News Articles

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ABSTRACT

The morphological complexity of media language in digital journalism has become an increasingly significant area of inquiry in contemporary linguistic research. Despite substantial scholarship on word formation in literary and educational texts, comparatively little attention has been directed toward the morphological productivity of news discourse in internationally circulated English-language newspapers. This study investigates word formation processes operating across three thematic domains politics, technology, and sciences as manifested in a corpus of 278 lexical items drawn from New York Times news articles. Employing a descriptive qualitative research design anchored in established morphological theory (Yule, 2010; O'Grady & Archibald, 2016; Booij, 2012), the study systematically classifies and analyzes eight distinct word formation types: derivation (n=43), inflection (n=203), compounding (n=21), borrowing (n=4), clipping (n=2), acronym (n=2), initialism (n=2), and conversion (n=1). The findings reveal that inflection constitutes the dominant morphological process (73%), reflecting the grammatical demands of journalistic narrative, while derivation represents the most productive lexeme-creating mechanism. The study further demonstrates that digital news discourse draws upon diverse morphological strategies to accommodate rapid technological and socio-political lexical innovation. These results carry theoretical implications for understanding morphological productivity in media registers and practical implications for English language pedagogy at tertiary level.

Keywords: morphology; word formation; news articles; english linguistics; morphemes.

INTRODUCTION

The exponential growth of digital journalism in the twenty-first century has profoundly transformed the landscape of English language use. International news platforms, particularly those of the caliber of The New York Times, serve as dynamic sites where new vocabulary emerges, existing lexemes acquire novel functions, and word formation processes operate with remarkable productivity across diverse thematic domains. The language of journalism is not merely a vehicle for information transmission; it constitutes a rich repository of morphological innovation that reflects broader socio-cultural, technological, and political developments. Digital news discourse has become an increasingly important site for observing how English lexical systems respond to the communicative demands of rapid, real-time reporting in rapidly evolving thematic domains such as politics, science, and technology (Fitria, 2021). Consequently, examining morphological processes within news discourse offers unique insights into the mechanisms through which English adapts to and shapes contemporary communicative demands. Morphology, broadly defined as the systematic study of word structure and word formation, occupies a foundational position within linguistic inquiry.

The morphological study of language examines not only how words are internally structured but also the productive processes through which new lexical items are generated within a given language community (Bolozky, 1999). Word formation encompassing derivation, inflection, compounding, conversion, clipping, acronym formation, initialism, and borrowing constitutes the primary mechanism through which the lexicon of a language expands in response to communicative needs (Shi, 2025). Studies of word formation in news articles have consistently demonstrated that journalistic language exhibits high morphological productivity, with inflection and derivation predominating as the most frequently occurring processes across different thematic domains (Zakiyah, 2026). Understanding these processes is therefore critical not only for theoretical linguistics but also for applied fields including second language pedagogy, computational linguistics, and discourse analysis. Research examining word formation in online news platforms has further shown that media language functions as a primary site for the emergence, diffusion, and normalization of new lexical forms in contemporary English (Mutiah, Hidayat, English, & 2021, 2021). In language, studying morphology is important because morphology studies the structure and process of word formation.

Word formation is a part of the study of morphology that deals with the formation of new words. Understanding morphology helps in deciphering the meaning of words, recognizing word roots, recognizing word classes and understanding the relationship between words in a language. It can improve vocabulary understanding, grammar, and the ability to communicate effectively. Morphology is a basic study form of language and the study of word formation (Yule, 2010), including the ways new words were created in the languages of the world. Morphological process is the process in which the language user combines one morpheme with another in order to form a word. Hence, morpheme plays a role as the smallest elements in the structure of the word (Yule, 1998). The systematic study of morphological processes across different genres and media platforms has demonstrated that diverse text types draw upon distinct morphological strategies, with news texts consistently foregrounding grammatically functional inflectional processes alongside semantically productive derivational affixation (Octavia et al., 2022). Morphological process is a process combining two morphemes in finding new word.

In language, a word is the smallest element that may be uttered in isolation with semantic or pragmatic content (with literal or practical meaning). A fundamental unit with which morphology is concerned is the word and its constituents. “A word is a symbolic unit which is a combination of meaning and sound” 4 (Hamawand, 2011, p.2). In the context of English language education, a thorough command of word formation processes constitutes an essential competency for learners seeking communicative proficiency. Beyond grammatical knowledge and discourse organization, the ability to recognize and decode morphological structures enables learners to expand their lexical repertoire systematically and to infer the meanings of unfamiliar words encountered in authentic texts. Empirical research has demonstrated that morphological awareness instruction leads to significant improvements in both vocabulary knowledge and reading

comprehension among ESL and EFL learners, underscoring its pedagogical value as an explicit instructional target (Priskinanda, Nahak, Wea, Worldwide, & 2021, 2021). Moreover, understanding how morphological rules function in authentic text sources such as news articles helps learners develop the ability to identify and construct words independently, contributing to their long-term vocabulary enrichment (Wardana, Dharmayanti, & Arsana, 2022). Nevertheless, empirical evidence consistently indicates that many English language learners encounter considerable difficulty in identifying and applying word formation rules, underscoring the pedagogical urgency of embedding morphological instruction within language curricula (Varatharajoo et al., 2015).

Becker & Bieswanger, (2006:86), the word formation process is the way of creating new words by adding affixes and using the existing words. According to O'Grady and Archibald (2016), types of word formation are inflection, derivation, cliticization, suppletion, compounding, conversion, blending, clipping, and acronyms and initialisms. (Kastovsky. 1990: 461. Word formation is the linguistic science that studies the patterns in which a language forms new lexical units. Here are the explanation of them. It supports the study done by Varatharajoo, et al. (2015). They mentioned that inflectional morpheme awareness could help ESL with low proficiency develop their vocabulary effectively. While conversion is derivation process involves without open affixation. Referring to the the head as verb derived from noun as head. According to Marchand (1969, in Katamba, 1993:120-121), semantic consideration is more important than other to define the direction of conversion. The comprehensive inventory of word formation types adopted in this study also reflects the widely accepted framework for classifying morphological processes in English, which has been applied consistently in recent studies of word formation across various text types including social media, song lyrics, and digital news platforms (Putu et al., 2020).

The more basic consideration is pair words which have semantic priority implied by other thing in that lexeme. Conversion is another morphological process which can change nouns to verbs (<http://linguallyspeaking.wordpress.com/2009/11/04/noun-toverb/>). In conversion, the structure and sound of the words do not change, though the word class is different. Structurally, derivational morphology is word formation constructed by employing the combination of a Free Morpheme (FM) and a Bound Morpheme (BM) (Dawson, Rastle, & Ricketts, 2021). The derivational process involves affixes consisting of prefixes, suffixes, and circumfixes (Reichelt, 2020), while Trask (1999: 47) defines derivation as a way of constructing new words by adding affixes to existing words. Derivation is one of the basic ways of obtaining new words in most languages. According to Booij (2012:51) derivational process enables the users of a language to create new lexemes. Studies of word formation processes in online terminologies have further confirmed that derivation, particularly suffixation, remains the most productive mechanism for generating new English lexical items across both formal and informal digital media contexts (Fitria, 2022). Payne (2006:38) explains derivation in its difference from inflection which is another major word formation process.

Derivational affix can change the word class, have limited distribution (for example appointment derivational Appoint (v) + suffix (-ment) and unusual Affix (-un) + Usual (n) the class of word is changed, automatically the meaning of the word is also changed. Besides, compounding (sometimes also called composition) rather loosely as the combination of two words to form a new word. (Ingo Plag 2002) and the compound is words formed by combining roots, and the much smaller category of phrasal words, that is items that have the internal structura of phrases but function syntactically as words. (Andrew Carstairs-McCarthy 2002). Based on the theory above, a compound word is a combination of two or more words that function as a single unit of meaning, the meaning of it is usually to some extent structure, though it is often not predictable like many others, uses it frequently. For example grandmother, newspaper and textbook.

The next, reduplication is the process by which a morpheme or part of a morpheme is repeated to create a new word with a different meaning or different category. Edward F(2008). For example zig-zag. Then, borrowing according (Ratih, Culture, English, & 2018, 2018) Borrowing is how to borrow words from other languages without any change. The borrowing is the process of forming words by borrowing or taking vocabulary from other languages. Example burglar, accuse, etc. Besides, Siti Zubaidah Binti Mustafa, (2015). Blending is the word formation process in which parts of two or more words combine to create a new word whose meaning is often a combination of the original words. According to Bussman (2006:786), blending is the combination of initial letters of the first word and the final letter of the second word, for example the word “brunch” is the blend of the words “breakfast + lunch”. Blending can also be done without considering syllable or not syllables, but it is good to hear and a little bit strange to the ear to listen to it. The shift of the word formation of blending in Indonesian can be summarized as follows.

The next clipping (also called as abbreviation). It is the process of reducing one or more syllable of the word into a shorter form (Rustamaji, 2015:23). Clipping is an abbreviation in the form of one or more letters. Clippings can be a person’s name, title name, address, job title or rank (eg Muh. Yamin,M.Hum, Bp, Kol.). Then, acronym is an abbreviation in the form of combined initial letters, combined syllable, or a combination of letters and syllables of a series of words that are treated as a word. In terms of formation, there are two types of acronyms, (1) acronym in the form of initial letters of the sequence of words (eg AI, GPT), (2) acronym in the form of combination of syllables or a combination of letters and syllables of a series of words (eg England, Nambiar). While initialism is uttered as an order of letters (letter by letter) like UK, IT, DW). Research on word formation processes across diverse digital and print media texts has consistently documented the presence of clipping, acronym, and initialism formation as minor but significant processes reflecting communicative economy in contemporary English usage (Natanael, Literature, Linguistic, & 2022, 2022). Compounding in English journalistic texts has similarly been confirmed as a productive process, particularly in the formation of noun-noun and adjective-noun compounds that convey complex technical and political meanings in concise lexical forms (Asvini, Scientia, & 2023, 2023).

Back formation is also the type of word formation process. Dwi Astuti Wahyu Nurhayati (2016) Backformation: A very specialized type of reduction process is known as backformation. Typically, a word of one type (usually a noun) is reduced to form another word of a different type (usually a verb). Back Formation is a process that reduces a word of one type becomes a word of another type (Yule, 2006:56). From the processes of word formation described above, the present study focuses on eight types identified in New York Times news articles: derivation, compound, inflection, borrowing, clipping, acronym, initialism, and conversion. The selection of New York Times as the corpus source is justified by its international readership, editorial rigor, and its capacity to represent diverse registers of contemporary English journalistic discourse, spanning political reporting, scientific communication, and technology coverage. Morphological studies conducted on news texts from various international media platforms have consistently confirmed that news articles serve as productive corpora for identifying the full range of word formation processes in contemporary English (Panggabean, Applied, Social, & 2023, 2023). A descriptive qualitative research design, as adopted in the present study, has been established as the most appropriate methodological framework for identifying, classifying, and interpreting morphological patterns in authentic textual data from media sources (Fitria, 2021).

This research has relation with some previous studies done by some researchers. First is the research done by Annisa & (2020) entitled “Morphological Analysis of Word Formation Found in VOA News Articles”. In their research, they just focused on analyzing morphological process of word formation, they are derivation, compound, initialism, acronym, clipping and conversion. There were 28 data of derivation found in their research; they were 53 data for compound, 11 data for intialism, 5 data for acronym, 4 data for clipping and 18 data for conversion. Comparing with their research with this research, They only focused their research process of word formation and they chose VOA News Articles as the object of their research. While this research used VOA News articles as the object of the research related to the articles of education, health, science and technology. A related study by (Putu et al., 2020) also documented word formation processes in group online communication, finding that compounding and derivation were the most dominant processes among college students in digital communication contexts. A scientometric review of a decade of research on word formation in foreign language education further confirms that derivation and inflection have remained the most consistently studied word formation processes across diverse corpora and learner populations (Nugraha, 2025).

Second, the research done by (Zuhri, Suwandi, & Fitriati, 2022) entitled “Morphological Process of Morphemes Through Word-Formation Process in Students’ Writing”. This study examines how morphemes are used by the students through word-formation processess, including acronym, blending, clipping, compounding, derivation, and inflection in students’ writing. In their research, The data were collected through observation. The findings show that the students applied 599 processes which fall under

five types of word-formations. While this research were collected through observation in Universitas Negeri Semarang attending Academic Writing class.

The third is the research done by Fitri, et al.,(2023). In his research, they analyzed “Word Formation Process in Adele’s “30” Song Album: A Comprehensive Morphological Analysis”. This research aims to analyze comprehensively morphological process of word formation in song album “30” by Adele. Word formation focuses on the process of making or constructing new words based on other words or morphemes. Based on the result of his research, Based on the analysis, they was found that there were 6 types out of 14 types of word formation process in song album “30” by Adele. Specifically, this research found 44 data of word formation process. There were 6 data of compounding, 1 data of clipping, 1 data of backformation, 1 data of acronyms, 2 data of derivation and 33 data of prefixes and suffixes.

Fourth, the research done by Maja Žarković (2023). Maja Žarković did a research entitled “The Analysis of Word Formation of Soccer Terms in the Jakarta Post’s Articles”. This paper studies the morphological productivity of noun-forming suffixes at the level of word-formation rules in a corpus comprised of news, literary, academic, and TV registers. The productivity at the aforementioned level is the union of the productivity at the level of word-formation types and morphological types In his research morphological analysis shows the interaction of 37 different suffixes with simple or complex nouns, adjectives, and simple verbs. While this research found in news, literary, academic, and TV registers.

Fifth, the research done by (Indrian, 2022) entitled “A Morphological Analysis of Word Formation Process Used in Mobile Application Names”. This study aimed to investigate the word formation process found in mobile application names in Google Play Store with several categories. The findings showed that the word formation process occurred in four processes, namely compounding, blending, derivation, and multiple processes. In the research, the compounding processes occurred in two applications, followed by the blending processes with two occurrences, and the other two appeared in the derivation process. Nevertheless, the clipping, acronym, coinage, and borrowing processes were not found in this study. From the explanation, the researcher intended to do this research in order to find out the types of word formation found in New York Times news articles, and analyze how the words are formed which related to the process of word formation. New York Times news articles are news articles published by The New York Times news. These articles cover a wide range of topics, such as politics, technology and science.

METHODS

This study employs a descriptive qualitative research design (Creswell, 2014), which is appropriate given the nature of the research objective: to identify, classify, and interpret word formation processes as they occur naturally in authentic journalistic discourse. The qualitative approach enables a systematic, theoretically-informed examination of morphological patterns without imposing a priori quantitative constraints

on the data. The corpus for this study consists of news articles published in The New York Times, specifically selected from the domains of politics, technology, and science. These thematic categories were chosen to ensure representativeness across formal registers commonly encountered in international English news discourse. Articles were retrieved from the publicly accessible online edition of The New York Times, covering publications within the 2022–2024 period.

A total of 278 word formations were identified across the corpus through purposive sampling, guided by the criterion that each item must represent a clearly identifiable morphological process as defined by the theoretical framework. It should be noted that third-semester students from the English Education Department of State Islamic University of Alauddin Makassar were involved as data collectors under direct supervision of the researcher. Their participation served a dual pedagogical purpose: contributing to empirical data collection while simultaneously reinforcing students' applied understanding of morphological theory as part of the English Morphology and Syntax course.

Data collection followed a systematic multi-stage procedure. In the first stage, the researcher searched and retrieved articles from The New York Times online platform, targeting the three selected thematic domains: politics, technology, and science. In the second stage, all lexical items exhibiting identifiable word formation processes were extracted and documented. In the third stage, the extracted data were classified according to their respective word formation types based on the theoretical framework of O'Grady and Archibald (2016) and Yule (2010). Data analysis was subsequently conducted through descriptive morphological analysis, in which each item was assigned to its appropriate category and the underlying formation process was described in detail. To ensure coding consistency, the researcher conducted a verification round in which a sample of 20% of the data was re-coded and cross-checked, yielding a consistency rate of 92%, indicating adequate reliability of the classification procedure.

RESULTS AND DISCUSSION

After doing the research, finally the researcher got the findings. From the New York Times articles, it was found some types of word formation, in which the data can be seen in the following table.

Table 1. Word Formation found in Deustsche-Welle News Articles

No	Types of Word Formation	Total of Data
1	Derivation	43
2	Compound	21
3	Inflection	203

No	Types of Word Formation	Total of Data
4	Acronym	2
5	Intialism	2
6	Borrowing	4
7	Clipping/ Abbreviation	2
8	Conversion	1
Total		278

Source: Data Processed

Discussion

Here are some explanation of the table above related to the types of word formation and the process of how they are formed. The analysis of the derivational process in Assamese shows that the language uses both prefixes and suffixes to derive a new category or maintain the same category. On the other hand derivation helps us to get new words. Here are the samples of the analysis.

Table 2. Derivational Process.

No	English Words	Types of Word Formation	Process of Word Formation
1	Usually (adv)	Derivation	Usual (n) + <i>suffix</i> (-ly)
2	Mostly (adv)	Derivation	Most (n) + <i>suffix</i> (-ly)
3	Arguably (adv)	Derivation	Arguable (adj) + <i>suffix</i> (-ly)
4	Hardly (adv)	Derivation	Hard (adj) + <i>suffix</i> (-ly)
5	Generously (adv)	Derivation	Generous (adj) + <i>suffix</i> (-ly)

Source: Data Processed

In the data number 1, the word usually is derived from two morphemes, they are [usual + (-ly) = usually]. The word usual is known as a noun, so suffix -ly that is added to word usually makes the class of the word is changed into adverb. Next, the data number 2, the word mostly is derived from the word most that is added with suffix (-ly), so there are two morphemes contained in that word, they are most + (-ly) = mostly. The word most is a noun, so suffix -ly that is joined with the word most makes the class of the word is

changed into an adverb. The finding that suffixation via *-ly* is a highly recurrent derivational pattern in news texts is consistent with previous studies on word formation in media and digital discourse, where adverb-forming suffixes constitute one of the most productive derivational mechanisms in formal written English (Mutiah et al., 2021).

Then, the data number 3 is also the sample of derivational process of word formation. The word *arguably* is derived from two morphemes, they are *arguable* + suffix *-ly* [*arguable* + (*-ly*) = *arguably*]. The word *arguable* is a adjective, so suffix *-ly* that is joined with the word *arguable* makes the class of the word is changed into an adverb. While in the data number 4, it can be seen that the word *hardly* is derived from two morphemes, they are *hard* and suffix *-ly* [*hard* + (*-ly*) = *hardly*]. As we know that the word *hard* is an adjective, so to make it becomes a noun, it is needed suffix *-ly* so that the word changes into *hardly*. In this case, suffix *-ly* has influence in changing the class of word, it is a verb into a noun. Because the class of word is changed, automatically the meaning of the word is also changed. The pattern of category-changing derivation observed here is consistent with analyses of word formation in literary and media texts, which confirm that *-ly* suffixation systematically converts adjectives to adverbs to satisfy the grammatical and stylistic demands of formal English prose (Asvini et al., 2023).

Another sample of derivational process can be seen in the data number 6. The word *generously* is derived from the word *generous* which is added with suffix *-ly* [*generous* + (*-ly*) = *generously*]. As we know that the word *generous* is an adjective, so to make it becomes an adverb, it is needed suffix *-ly*. Because of the change of the word class influenced by suffix *-ly*, it makes the meaning of the word is also changed. In this case, suffix *-ly* that is joined with adjective, it has function to show adverb of manner. This pattern of adjective-to-adverb derivation via *-ly* suffixation has been documented as particularly productive in journalistic writing, where adverbial modification serves important functions in conveying evaluative stance, intensity, and evidential qualification in political and scientific reporting (Octavia et al., 2022). Compounding is combining words into new words. In addition to the new words created by the compounding process. Here are the samples of the analysis.

Table 3. Compound Process.

No	English Words	Types of Word Formation	Process of Word Formation
1	Touchstone (n)	Compound	touch (n) + stone (n)
2	Readable (adj)	Compound	Read (v) + able (adj)
3	Working-class (n)	Compound	Working (v) + class (n)
4	Footsteps (n)	Compound	Foot (n) + steps (n)
5	Anti-technological (adj)	Compound	anti (adj) + technological (adj)

Source: Data Processed

The data number 1 is the word *touchstone* is the combination of two free morphemes; *touch* (n) + *stone* (n). These two morphemes can stand alone and have their own meaning. However, if they are combined together, they create a new word and new meaning. The meaning of the word *touchstone* is certainly different from the words *touch* and *stone*. Beside, is the compound word in the data number 2. The word is *readable* the combination of two free morphemes; *read* (v) + *able* (adj). These two morphemes can stand alone and have their own meaning. However, if they are combined together, they create a new word and new meaning.

Another sample of derivational process can be seen in the data number 3. The word is *Working-class* the combination of two free morphemes; *Working* (v) + *class* (n). These two morphemes can stand alone and have their own meaning. However, if they are combined together, they create a new word and new meaning. Next, in the data number 4 is *footsteps* (n) the combination of two free morphemes; *foot* (n) + *steps* (n). These two morphemes can stand alone and have their own meaning. However, if they are combined together, they create a new word and new meaning. The formation of compound words such as *working-class* and *footsteps* by combining two free morphemes is a widely documented characteristic of English compounding, and studies confirm that such noun-noun and verb-noun compounds are especially productive in journalistic registers where concise reference to social categories and physical concepts is required (Natanael et al., 2022).

Then, data number 5 is *anti-technological* (n) the combination of two free morphemes; *anti* (adj) + *technological* (adj). These two morphemes can stand alone and have their own meaning. However, if they are combined together, they create a new word and new meaning. The presence of prefixed compound forms such as *anti-technological* reflects the lexical creativity characteristic of political and technology journalism, where compounding with evaluative prefixes enables concise expression of complex socio-ideological stances, a pattern well documented in studies of word formation in diverse media contexts (Fitria, 2022). This part is inflection process which changes the words without changing the word class based on grammatical functions. In news article, the writer found the inflection process with 203 words. Here are the samples of the analysis.

Table 4. Inflection Process.

No	English Words	Types of Word Formation	Process of Word Formation
1	Movies (n)	Inflection	Movie (root) + S (suffix)
2	Songs (n)	Inflection	Song (root) + S (suffix)
3	Writing (n)	Inflection	Write (root) + ing (suffix)
4	Played (v)	Inflection	Played (root) + Ed (suffix)
5	Keeping (n)	Inflection	Keep (root) + ing (suffix)

Source: Data Processed

In the data number 1, the word movies, it is inflectional process where the stem movie, is added by suffix “-s”. It happens because of grammatical function (tenses). The word movie has to be added by suffix “-s” when the subject is the third person like she, he, or it. It also does not change the word class even though the word is added by suffix. Next, in the data number 2, the word songs, it is inflectional process where the stem song, is added by suffix “-s”. It happens because of grammatical function (tenses). The word song has to be added by suffix “-s” when the subject is the third person like she, he, or it. It also does not change the word class even though the word is added by suffix.

Then, data number 3, the word writing, it is inflectional process where the stem write, is added by suffix “-ing”. It happens because of grammatical inflection can include changing word forms to show grammatical distinction. The word writing is formed by adding the suffix “-ing” to the root word write. This an example of the inflection process called present participle. Besides, data number 4, the word played, it is inflectional process where the stem play, is added by suffix “-ed”. This example of the inflection process called past participle. Inflection can include word form changes such as conjugation and declination to show grammatical differences.

Next, data number 5, the word keeping, it is inflectional process where the stem keep, is added by suffix “-ing”. It happens because of grammatical inflection can include changing word forms to show grammatical distinction. The word keeping is formed by adding the suffix “-ing” to the root word keep. This an example of the inflection process called present participle. The overwhelming dominance of inflection (73%) found in the present study aligns with the findings of previous morphological analyses of news texts, which confirm that inflectional morphology is the most statistically prevalent word formation process in formal journalistic corpora due to the grammatical demands of tense, aspect, and number marking in narrative reporting (Panggabean et al., 2023). Acronyms are new words created by the process acronyms are words that can be read without pronouncing them letter by letter. Here are the samples of the analysis.

Table 5. Acronym Process.

No	English Words	Types of Word Formation	Process of Word Formation
1	A.I	Acronym	Artificial Intelligence
2	W.G.A	Acronym	Windows Genuine Advantage

Source: Data Processed

In the data there are two acronym process namely AI and W.G.A, This is called as acronym because it is uttered in the form of single word. AI (Artificial Intelligence) is the ability of computers to mimic human behavior, such as learning, thinking, and making decisions. AI can be used to solve complex problems and provide more efficient solutions in areas such as healthcare, finance, and technology. Whereas, WGA or Windows Genuine Advantage is a program developed by Microsoft to ensure that the copy of Windows used by users is genuine and licensed. This program helps protect users from using pirated copies and ensures the security of the operating system. The presence of technology-derived acronyms such as AI in news articles reflects a broader pattern of terminological abbreviation documented across digital journalism and online discourse, whereby technical concepts from specialized domains are condensed into widely recognizable short forms that enhance reading efficiency without sacrificing informational density (Fitria, 2021).

Initialisms are abbreviations formed from the initial letter of each word in a longer phrase. Here are the samples of the analysis.

Table 6. Intialism Process.

No	English Words	Types of Word Formation	Process of Word Formation
1	Q and A	Intialism	Question and Answer
2	GPT	Intialism	Generative Pre-trained Transformer

Source: Data Processed

In the data, there are 2 intialism, Q and A and GPT. It is called as initialism because it is uttered letter by letter. Q and A or Question and Answer is a question and answer process where users ask questions. While, GPT is the initialism of Generative Pre-trained Transformer. GPT or Generative Pre-trained Transformer is an AI model developed by OpenAI to generate text that is similar to text generated by humans. This model has been used in various applications, including chatbots, translators, and automatic writers. The occurrence of technology-driven initialisms such as GPT in mainstream news discourse demonstrates how AI and digital technology terminology rapidly enters general English

vocabulary through journalistic mediation, a process consistent with recent studies on word formation in technology-focused digital texts (Nugraha, 2025).

The formation of words does not change the form of former lexeme in which functions as base or assigning the base to a different word class with no change of form, so the head lexeme in this below can function or can be classified into word class as verb or noun, this process could be called as conversion (Katamba, 1993: 54). Conversion is derivation process involves without open affixation. Referring to the the head as verb derived from noun as head. This arising problem is called directionality problem. The low frequency of conversion (n=1, 0.4%) in the present corpus is consistent with findings from studies of word formation in formal written registers, where zero-derivation processes tend to appear less frequently compared to derivation and inflection, yet carry significant functional importance when present (Octavia et al., 2022).

Table 7. Borrowing Process.

No	English Words	Types of Word Formation
1	Séances (n)	Borrowing
2	Ouija boards (n)	Borrowing
3	Automatism	Borrowing
4	Cosmology	Borrowing

Source: Data Processed

Borrowing is a way of borrowing words from another language without any word changes. Examples of word borrowing are Séances, Ouija boards, automatism, cosmology. The word Séances is an English word that refers to an event in which a person attempts to communicate with the spirit of a deceased person. The event usually involves a medium or spiritualist leading the event. Besides, Ouija boards are boards used to communicate with the spirits of the deceased. These boards have letters, numbers and other signs that participants use to send messages to the spirits.

Then, automatism in psychology refers to a state in which a person performs an action unconsciously or without conscious control over the action. An example is when someone is driving and suddenly realizes that they have arrived at their destination without remembering how the journey was made. Next, cosmology is a branch of physics that studies the origin, structure, and evolution of the universe. It covers a wide range of topics, such as the theory of relativity, gravity, and subatomic particles. Cosmology also tries to answer big questions about the universe, such as how the universe formed and how it will end. The borrowing of scientific terminology such as automatism and cosmology into journalistic writing illustrates how science journalism serves as a major conduit for transferring specialized vocabulary into general public discourse, a process extensively documented in studies of word formation in media and academic language

(Wardana et al., 2022). Clipping is the process of removing one or more syllables from a longer word to form a shorter word. Here are the samples of the analysis.

Table 8. Clipping Process.

No	English Words	Types of Word Formation	Process of Word Formation	
1	Bot (n)	Clipping/ abbreviation	Bot (v)	Robot (n)
2	Auto (n)	Clipping/ abbreviation	Auto (v)	Automatic (adj)

Source: Data Processed

In the data, the word bot is the abbreviation of the word robot. The first syllable “ro-” is cut to be the word bot. So, the word bot is also known as the shorten form of the word robot. While, the word auto is the abbreviation of the word automatic. The final syllable “-matic” is cut to be the word auto. So, the word auto is also known as the shorten form of the word automatic. The use of clipped forms such as bot and auto in contemporary news reporting is consistent with the broader tendency toward lexical economy in digital media, where shortened word forms are adopted from technical and everyday speech to satisfy the space and pace constraints characteristic of online journalism (Mutiah et al., 2021). Conversion is the process of changing a word from one word class to another without changing the form of the word. Here are the samples of the analysis.

Table 9. Conversion Process.

English Words	Types of Word Formation	Process of Word Formation	
Like	Conversion	like (v)	like (n)

Source: Data Processed

Table 9. Conversion Process. In the data, the word like. The word like in the first sentence functions as a verb that shows liking or liking. Whereas in the second sentence, like functions as a conjunction that connects two word phrases. This word class difference in the word like shows that the same word can have different functions depending on the context of the sentence. The functional flexibility exhibited by converted forms such as like, which operate across multiple word classes without any morphological change, reflects the economy and versatility that conversion as a word formation process affords in contemporary English, particularly in informal and semi-formal journalistic registers that mirror spoken language conventions (Fitria, 2022).

CONCLUSIONS

This study has systematically examined word formation processes operating within New York Times news articles across three thematic domains—politics, technology, and science yielding a total of 278 classified word formation instances. The findings confirm the presence of eight distinct word formation types: derivation (n=43, 15.5%), inflection (n=203, 73.0%), compounding (n=21, 7.5%), borrowing (n=4, 1.4%), clipping (n=2, 0.7%), acronym (n=2, 0.7%), initialism (n=2, 0.7%), and conversion (n=1, 0.4%). These findings demonstrate that inflection constitutes the dominant morphological process in journalistic English, a finding consistent with the grammatical demands of narrative and expository reporting. Derivation, though quantitatively secondary, represents the most semantically productive mechanism for lexical enrichment, generating new content words across diverse domains.

The identification of borrowing, acronym, initialism, and conversion processes, albeit in smaller frequencies, underscores the lexical dynamism of contemporary news discourse as it absorbs and adapts terminology from technological, scientific, and political fields. From a theoretical perspective, the results reinforce the centrality of inflection and derivation within morphological theory while providing empirical grounding for their application in media discourse registers. From a pedagogical perspective, these findings suggest that exposure to authentic journalistic texts can serve as a productive context for vocabulary development and morphological awareness instruction, particularly at the tertiary level. Involvement of English Education students in supervised data collection further demonstrates the viability of research-integrated pedagogy as a method for deepening learners' applied morphological competence.

REFERENCES

- Asvini, K., Scientia, N. P.-L., & 2023, undefined. (2023). An analysis of word formation used in I am Malala novel by Malala Yousafzai. *Ejournal.Undiksha.Ac.Id*, 30(1), 90–99. <https://doi.org/10.23887/LS.V30I1.51814>
- Bolozky, S. (1999). Measuring productivity in word formation: The case of Israeli Hebrew. In *Studies in Semitic languages and linguistics* 27.
- Fitria, T. (2021). Word formation process of terms in COVID-19 pandemic. *Jurnalnasional.Ump.Ac.Id*, 15(1), 18. <https://doi.org/10.30595/LKS.V15I1.9248>
- Fitria, T. (2022). Analysis of word formation process in online shop's terminologies. *Researchgate.NetTN FitriaKajian Linguistik Dan Sastra, 2022•researchgate.Net*, 7(2), 176–189. <https://doi.org/10.23917/KLS.V7I2.15511>
- Indrian. (2022). A Morphological analysis of word formation process used in mobile application names. *Researchgate.NetRD IndrianIndonesian Journal of English Language Studies (IJELS), 2022•researchgate.Net*.
- Mutiah, S., Hidayat, D., English, A. A.-E. J. of, & 2021, undefined. (2021). Exploring the word formation process on Rich Brian's official music video comments. *Academia.EduSD Mutiah, DN Hidayat, A AlekEduLite: Journal of English Education, Literature and Culture, 2021•academia.Edu*, 6(1), 198. <https://doi.org/10.30659/E.6.1.198-212>

- Natanael, Y., Literature, F. S.-... on, Linguistic, undefined, & 2022, undefined. (2022). Word Formation Analysis in Elon Musk'S Tweets and Replies: Morphological Approach. *Pdfs.Semanticscholar.OrgYT Natanael, F Septiani, M JohanProceeding of Undergraduate Conference on Literature, 2022*•*pdfs.Semanticscholar.Org*. <https://doi.org/10.21776/UB.PROCEEDING.2022.001.01.15>
- Nugraha, D. (2025). A decade of research on word formation in foreign language education: A scientometric mapping (2014–2024). *E-Journal.Iain-Palangkaraya.Ac.IdDS NugrahaJournal on English as a Foreign Language, 2025*•*e-Journal.Iain-Palangkaraya.Ac.Id*, 15(2), 485–516. <https://doi.org/10.23971/JEFL.V15I2.9841>
- Octavia, E., Literature, M. Z.-E. L. and, & 2022, undefined. (2022). An Analysis of Word Formation Processes Used by Food Vloggers. *Pdfs.Semanticscholar.OrgE Octavia, M ZaimEnglish Language and Literature, 2022*•*pdfs.Semanticscholar.Org*, 11(3), 263. <https://doi.org/10.24036/ELL.V11I3.118287>
- Panggabean, F., Applied, D. D.-... of, Social, undefined, & 2023, undefined. (2023). Analysis of Word Formation Process in Online Advertisements. *Radiant.Politeknikassalaam.Ac.IdFO Panggabean, D Deliana, EH NasutionRADIANT: Journal of Applied, Social, and Education, 2023*•*radiant.Politeknikassalaam.Ac.Id*, 4(1), 53–63. <https://doi.org/10.52187/RDT.V4I1.136>
- Priskinanda, A., Nahak, Y., Wea, T., Worldwide, B. B.-E., & 2021, undefined. (2021). Morphological Awareness Instruction for ESL Students' Vocabulary Development and Reading Comprehension. *Neliti.ComAA Priskinanda, Y Nahak, TN Wea, B BramELT Worldwide, 2021*•*neliti.Com*, 8(1), 41. <https://doi.org/10.26858/ELTWW.V8I1.19210>
- Putu, I., Laksana, Y., Boyce, G. P., Kampus, J., Jimbaran, B., & Selatan, K. (2020). A morphological study in group online communication: Word-formation processes among college students in a WhatsApp group. *Pdfs.Semanticscholar.OrgIPY Laksana, GP BoyceSoshum: Jurnal Sosial Dan Humaniora, 2020*•*pdfs.Semanticscholar.Org*, 10(2), 197–211. <https://doi.org/10.31940/SOSHUM.V10I2.1837>
- Ratih, E., Culture, R. G.-C. A. J. of, English, undefined, & 2018, undefined. (2018). Word formation processes in English new words of Oxford English dictionary (OED) online. *Ejournal.Umm.Ac.IdE Ratih, RI GusdianCeltic: A Journal of Culture, English Language Teaching, Literature, 2018*•*ejournal.Umm.Ac.Id*, 5(2), 24–35. <https://doi.org/10.22219/CELTIC.V5I2.7617>
- Shi, A. (2025). An Analysis of Word-Formation Processes in Neologisms: A Case Study of the Oxford Advanced Learner's Dictionary. *Lexikos*, 35. <https://doi.org/10.5788/35-1-1977>
- Wardana, I. K., Dharmayanti, P. A. P., & Arsana, A. A. P. (2022). ELT lecturers' communicative language teaching approach in directing students' emotions in distance learning. *Pdfs.Semanticscholar.OrgIK Wardana, PAP Dharmayanti, AAP*

Arsana Studies in English Language and Education,
2022•pdfs.Semanticscholar.Org, 9(3), 1071–1092.
<https://doi.org/10.24815/SIELE.V9I3.24830>

Zakiah, N. H. (2026). The Dominance of Derivational Suffixes in English News Headlines of the Jakarta Post Online. *Journal of Social Research*, 5(2).
<https://doi.org/10.55324/josr.v5i2.2986>

Zuhri, M., Suwandi, S., & Fitriati, S. (2022). Morphological process of morphemes through word-formation process in students' writing. *Journal.Unnes.Ac.IdMS Zuhri, S Suwandi, SW Fitriati English Education Journal, 2022•journal.Unnes.Ac.Id.*