African Educational Research Journal
Vol. 13(1), pp. 65-82, March 2025
DOI: 10.30918/AERJ.131.25.004
ISSN: 2354-2160
Full Length Research Paper

Applying (non)head-movement mechanism to study topic sentences in applied linguistics research articles

Abhinan Wongkittiporn

English for Business Communication, Faculty of Liberal Arts and Management Sciences, Prince of Songkla University, Surat Thani Campus, Thailand.

Accepted 4 March, 2025

ABSTRACT

Writing a topic sentence is difficult, as a variety of linguistic knowledge is required to represent the main idea of the whole paragraph. This study applies the mechanism of A-movement in generative syntax to observe syntactic structures, semantic denotations and pragmatic aspects of topic sentences in applied linguistics research articles. The data were collected from *System* and *LEARN*, which are SCOPUS database indexed in Q1 and Q2, respectively. A sample of 303 topic sentences calculated via Yamane sample size, was collected to be studied. The data analysis was adapted from Radford's (2009, 2020) A-movement mechanism. The results show that *System* applies the mechanism of A-movement more than *LEARN*. The discussion reveals that *pragmatic discourse of given and new information* is applied in *System*. Also, the semantic denotations of *subjectivity*, referring to evaluating certain entities, is commonly applied in *System*. Despite having differences, the similarities between the two publications are their syntactic structures. This study contributes to journals of applied linguistics to develop themselves in order to reach the SCOPUS Q1 database in the future. With over three years of study in this field, the author expects that this study will contribute some knowledge to other applied linguistics researchers, editors and EFL learners.

Keywords: A-movement, topic sentences, applied linguistics, SCOPUS databases.

E-mail: abhinan.w@psu.ac.th, abhinanwong@gmail.com.

INTRODUCTION

Writing in English is a skill that is quite difficult to develop (Vizzi, Angelelli, Risser and Marinelli, 2023). The difficulties in writing each paragraph include organization, ideas and language. The components of organization in a paragraph include a topic sentence, supporting details and a concluding sentence. The knowledge of these components takes only a small number of classes for learners to acquire. Similarly, living in the digital era allows us to access different ideas easily via Chat GPT, reliable websites and online libraries. So these two factors seem not to be the main issues in writing. However, McCutchen (2011) pointed out that the major problem that affects writing a paragraph is the ability to use language to express ideas.

Various linguistic competencies are required for writing (McCutchen, 2011), such as the knowledge of syntax, semantics and pragmatics. In generative grammar, *syntax* is the arrangement of sentence structures; how phrases are arranged into clauses and the clauses are combined into sentences (Radford, 2009; Radford, 2020). Different syntactic structures are used for different semantic denotations. For example, the subjective complement in English is used for the semantic denotations of providing factual information and/or what is what, as *linguistics is the study of language* or *the study of language is linguistics*. Swapping the positions between the subject and copular *be* complement would comply with *pragmatic aspects*, such as the *pragmatic discourse of given and*

new information. For example, *the study of language is linguistics. The theory of linguistics is divided into three camps, which are cognitive linguistics, generative linguistics and functional linguistics.* Accordingly, the phrase *the theory of linguistics* is moved via *A-movement* or *head-movement* to be landed at the subject position of the second sentence to be connected with the previous discourse (Radford, 2020). Writing in English requires pragmatic knowledge to combine syntactic structures and semantic denotations according to real-world events (Kroeger, 2023).

As explained above, various linguistic competencies and syntactic mechanisms are required to develop the topic sentence of each paragraph. The aim of having the topic sentence in each paragraph is to carry the main idea of the whole paragraph (Thonney, 2015). It is reported that most topic sentences in English are written as the first sentence of each paragraph at approximately 70 percent (Petelin, 2022; Smith, 2008). The most challenging part of creating a topic sentence is that writers are required to combine different syntactic structures with appropriate semantic denotations via pragmatic aspects of *iconicity of sequential events* or events happening according to the real world. Due to these conditions, the study of topic sentences in English is intriguing and would be beneficial to English writers, English language learners and academic researchers.

The problems associated with creating topic sentences have been reported by previous research papers. Yassin and Hames (2023) applied the principle of Bloom's cognitive competency to study how EFL learners develop their topic sentences. 30 argumentative essays written by male Saudi students who enrolled to study in the majors of engineering, law and computer science, were collected to study their formation of topic sentences. The results of the study interestingly showed that the participants have problems regarding the use of grammatical features in writing topic sentences. The problem of run-on sentences was frequently found with the inaccuracy of subject-verb agreement. Moreover, the problems associated with creating topic sentences occur for English language learners whose first language does not require the creation of topic sentences in every paragraph, such as Thai and Chinese. Consequently, creating a topic sentence in every paragraph is problematic among Thai EFL learners (Watcharapunyawong and Usaha, 2013).

People from different regions of the world are likely to share the problem of creating topic sentences. The researcher in this study would like to apply his own accumulated knowledge in the field, over three years after his doctoral degree, to help support them. Examples of topic sentences from internationally acceptable empirical evidence were collected for this study. On top of that, this research would like to support scholars in the field of English applied linguistics regarding how to use appropriate language to write their research papers. Therefore, this study selected the materials of applied linguistics research articles for several reasons. Although Thailand has publications indexed in the SCOPUS Q1 database, such as the *Journal of Urban Culture Research* (focusing on archeology) and *Journal of Mekong Societies* (focusing on religious and cultural studies); journals of English applied linguistics as indexed in the SCOPUS Q1 database is lacking in Thailand. This is regarded as the gap of the study where comparing what we have with the best-applied linguistics journals as indexed in the SCOPUS database would help us improve our researchers and research quality where indexing in SCOPUS Q1 databases is reachable in the future. In addition, the reviewers mostly pay attention to the content of the study and often leave the syntactic structures behind as they believe that checking syntactic structures and grammatic features are native English speakers' and proofreaders' responsibilities. The results of this study will be a guideline for reviewers, advisors and graduate learners to form topic sentences in applied linguistics research articles accurately and appropriately. Accordingly, this study could encourage doctoral and master's degree students and novice researchers in the field of English applied linguistics to try submitting their academic research papers to be published in the SCOPUS database, too. This information leads to the objective of the study.

Objectives of the study

1. To examine the frequencies of the A-movement mechanism and non-movement mechanism applied in writing topic sentences in *LEARN* and *System* journals
2. To examine the similarities and differences between how the A-movement mechanism and non-movement mechanism are applied in writing topic sentences in *LEARN* and *System* journals

METHODOLOGY

The design of this study is qualitative research. The probability of purposive sampling method is employed to examine the syntactic structures, semantic denotations and pragmatic aspects of the topic sentences used in *LEARN* and *System*.

Data collection

As mentioned, this study aims to contribute its findings to applied linguistics journals in Thailand that wish to be indexed in the SCOPUS database. At present, several applied linguistics journals in Thailand are indexed in SCOPUS Q2, such as *PASSA*, *rEFLections* and *LEARN*. There are possibilities for these three journals to reach Q1 SCOPUS. However, *LEARN* was selected because the complete 2023 publications have already been published with 82 academic research papers at

the time of collecting data. *LEARN* is a well-known applied linguistics journal of Thammasat University, Thailand. To help Thai scholars assess the quality of their written papers when compared with others, all academic research papers collected from *LEARN* were written by Thai authors, especially university lecturers and professors. In addition, every collected academic paper was written by a single researcher.

In comparison with *LEARN*, *System* is a publication of the United Kingdom that has been indexed in the SCOPUS Q1 database for over ten years. A journal can reach SCOPUS Q1, but maintaining the same standard over ten years, as *System* has, is outstanding, so *System* is selected to be compared with *LEARN.*

In order to avoid researchers' bias in selecting applied linguistics journals to be studied, various topics in applied linguistics were collected, such as teaching methods, assessment and evaluation, ESP, language use in English language learning and translation. A total of 20 research articles which were equally divided into 10 from each journal, were collected to study topic sentences, syntactically, semantically and pragmatically.

The total amount of data collected in the study is 303 topic sentences. They are divided into 164 topic sentences from *LEARN* and 139 topic sentences from *System.* The current study is a qualitative study to analyze the linguistic feature of topic sentences in both journals and the result is not generalizable. To ensure the acceptable number of data collection concerning frequencies, the researcher applied Yamane sample calculation to ensure acceptable and representative data collection.

In 2023, there were 82 academic papers published in *LEARN*. Each published paper contains between 50 and 60 paragraphs. So, the mean score is 55 (m=55). The population, which refers to the total number of paragraphs is 4,510 paragraphs, where this data comes from 82 x 55 = 4,510 paragraphs, which represents the whole population. According to Yamane sample calculation, the sample size that is recommended to be studied is 98 tokens as presented in Table 1.

Table 1. Yamane's sample size (Yamane, 1973).

Sample of population	Sample size (n) for precision (e) of ±10%
4,000	98
5,000	98
6,000	98

Table 1 shows the data collection based on the statistical calculation of Yamane's sample size. The sample population is the number of paragraphs in this study. The population of 4,000-6,000 paragraphs equally requires a minimum number of 98 paragraphs to collect the topic sentences. Accordingly, the data collection of 164 topic sentences in this study is considered not too small and adequate for the sake of explanation. The data were collected manually and kept in Microsoft Excel via a concordance line for ease of analysis.

Data analysis

A number of topic sentences were taken to be analyzed by Radford's (2009, 2020) framework via of head-movement mechanism or A-movement. On the other hand, the non-head movement mechanism is DP heads with CP dependent clauses, DP heads with EPP features, PRO and DP heads' copular *be* complement.

Mechanism of A-movement

A-movement, or argument movement, is the movement of argument from the lower clauses to become the subject of a higher clause via *Attached Closest Principle* or ACP. The subject must be moved to be landed to the closest Spec T before reaching the final Spec T. With A-movement, the trace symbolized as $_t$ will be left to indicate where the argument initially originated (Radford, 2009; Radford, 2020). A-movement is used to analyze passive voice, raising constructions and Exceptional Case Marking (ECM) constructions.

Passive voice, or passive construction in generative grammar is analyzed as a counterpart of active voice (Radford, 2009; Radford, 2020). This means that they are syntactically different, but they are semantically the same. There are four steps to producing passive voice in English. The first step is the movement of the object or DP argument to be landed at the subject position of the sentence, called *Spec T*. The second step is to add the copular *be* where the tense is assigned according to the tense of the finite verb in active voice. The third step is the transformation of the main verb of the active voice into the past participle, such as *catch* into *caught*. The fourth step is the adding of the *by*-phrase agent if needed. An example of passive voice is given in (1b).

(1)
(a) The research assistant *collected* the data.
(b) The data *were collected* by the research assistant.

The DP *the data* in (1a) was originally the object of the active voice and it received the sematic role of the patient. To form the passive voice, the patient was moved to be landed in Spec T or the subject position of

the sentence. The copular *be* was added according to the tense of the finite verb in the active voice, which is the past tense. The third step is the transformation of the main verb in active voice into the past participle as in *collected.* Finally, the *by*-phrase agent as in the DP *the research assistant* was added as a new piece of information (Wongkittiporn, 2023a).

Raising constructions is the structure of *to*- infinitive clauses that are colligated with the verbs *seem*, *appear* and *tend* (Radford, 2009; Radford, 2020). The semantic denotations of raising constructions are the writers' comments, evaluations and opinions without presenting oneself on stage, such as using the pronoun *I* and *we,* as exemplified in (2).

(2) The results of previous studies seem $_t$ to be reliable and valid.

Example (2) is analyzed via A-movement as the subject of the sentence was initially originated as the subject of *to*- infinitive clause before moving to be landed at Spec T in a higher clause. Semantically, the writer comments about the results of their study. So data collection is the topic whereas reliable and valid is interpreted as topic comments. The semantic denotations of raising constructions are comparison, advice and subjectivity (Wongkittiporn, 2022d). There are three pragmatic reasons to explain raised arguments in raising constructions which are pragmatic discourse of given and new information and to place emphasis, referring to giving the main focus to the subject (Wongkittiporn, 2022e).

The classification of A-movement also covers Exceptional Case Marking (ECM) construction. ECM is another type of *to*- infinitive clause in generative grammar. The structures in English are case-marking constructions. For example, in a sentence like *the cat ate the rat* it is syntactically interpreted that *the cat* receives a nominative case, whereas *the rat* receives an accusative case. However, the sentence as given in (3a) *Peter* believes *Jane* to be innocent, is ECM because the DP *Jane* is both object of the transitive verb *believe* and the subject of *to be innocent.* The DP *Jane* is moved from the subject of the lower clause to the object position of the higher clause. Common examples of ECM verbs include *believe, expect, find* and *consider* (Radford, 2009, 2020). Pragmatically, ECM is used for the sake of economy principle (Radford, 2020) when comparing noun clauses (Wongkittiporn, 2022b), such as (3).

(3)
(a) Peter believed Jane ***to*** $_t$ ***be innocent***.
(b) Peter believed ***that Jane was innocent.***

The ECM in (3a) is more economical than the *that*-clause complement in (3b) as the tense in the lower clause is not required to be spelt out and the complementizer *that* is allowed to be omitted. The semantic denotations of ECM are used for the reason of subjectivity, referring to the speakers' comments. Further, Wongkittiporn (2022b) discussed that ECM is pragmatically more common in the spoken register.

Mechanics of non-movement

DP heads with CP dependent clauses

Aside from A-movement, this study also investigates the structure analyzed by non-movement arguments. The first one is complementizer phrase abbreviated as CP (Radford, 2009; Radford, 2020). The CP is used as a dependent clause. The syntactic structures that are grouped in this category are adjective clauses, reduced adjective clauses, noun clauses and adverbial clauses (i.e., *when*, *while*). Even though other adverbial clauses could be analyzed as PP, CP is merged with PP.

Adjective clauses with *wh*-expressions, such as *who*, *which* and *that* provide additional information about the head as in *the girl who is talkative*. The DP *the girl* as the non-movement head is merged with CP *who is talkative* (Radford, 2009; Radford, 2020). Most adjective clauses are used to provide additional information, such as numerical data, comments, lists of things and clarification concerning the head DP or *determiner phrases* (Wongkittiporn, 2021b), as in (4).

(4) The participants were 100 undergraduate students who were divided into 60 males and 40 females.

Adjective clauses as in (4), are used in the final position of the sentence. The adjective clause in (4), *who were divided into 60 males and 40 females,* shows numerical data. This constituent denotes the segregation of participants' gender. Since the complementizer phrase is additional information written in a long constituent, it is usually placed at the end of the sentence to conform with the *pragmatic discourse of the end-weight principle* or placing longer information at the final position (Prideaux, 1991). In addition, the relativizers *which* and *that* prefer different entities, referring to someone or something. While the relativizer *which* is preferred to be used with concrete nouns (i.e., *house, books*), the relativizer *that* is preferred to be used with abstract nouns (i.e., *idea, experience*) (Wongkittiporn, 2023a).

Noun clauses are defined as structures to report speech, results and presentations. Radford (2009, 2020) classified noun clauses into the categories of non-movement head. Syntactically, they are usually colligated with certain verbs, such as *believe, know* and *understand*. The whole complement could be replaced by a noun phrase, such as the pronoun *it,* as in (5).

(5)
(a) The researcher believes that the results of this study will be useful for EFL learners.
(b) The research believes it.

The semantic denotations of *that*-clause complements

are expectation (i.e., *wish*), emotion (i.e., *fear*), presentation (i.e., *show*), decision (i.e., *decide*) and subjectivity (i.e., *think*). Pragmatically, the expressions *someone believes*, *someone expects*, and *someone wishes* are formulaic. It is often found that these expressions are not frequently used with the complementizer *that* spelt out (Wongkittiporn, 2021d).

Adverbial clauses are defined as pre-modifiers and post-modifiers of the sentence. There are eight semantic denotations of adverbial clauses, such as adverbial clauses of comparison, concessive adverbial clauses, adverbial clauses of condition, adverbial clauses of result, adverbial clauses of reason, adverbial clauses of place, adverbial clause of purpose and temporal adverbial clauses, as in (6) (Swan, 2016; Wongkittiporn, 2021a; Wongkittiporn 2023b).

(6) After $_{i}$ gathering information, the researcher$_{i}$ transcribed the information.

The DP argument *the researcher*, which has non-movement, remains *in situ* and it is co-indexed with the covert subject in the CP dependent clause as indexed by $_{i}$. Semantically, different genres of writing have different preferences of adverbial connectors. For example, the contrastive *although*, *even though*, and *even if*, which are considered to be more formal, are preferred in applied linguistic research articles, while the adverbial connector *but* is preferred in business news articles (Hongbil and Wongkittiporn, 2023; Wongkittiporn and Hongbil, 2023). Pragmatically, adverbial clauses can be placed in the initial or final positions of the sentence.

Reduced adjective clauses are the post-modifiers of the non-head movement. They are categorized into *past participial reduced adjective clauses* and *present participial reduced adjective clauses*. Semantically, they are used to provide additional information concerning the head DP (Radford, 2009; Radford 2020).

(7) The participants were undergraduate students learning English as a Foreign Language.

Wongkittiporn (2024b) points out the semantic denotations of present participial reduced adjective clauses in that they are commonly used with accomplishment verbs and activity verbs such as *learning* rather than stative verbs such as *loving* and *liking* (Wongkittiporn, 2023e; Wongkittiporn, 2024b). The pragmatic aspects of reduced adverbial clauses are that they are frequently used in the middle position of sentences (Wongkittiporn, 2024b).

DP heads as extended projection principle

EPP features are interchangeably known as the extended projection principle. A finite constituent T that is expected from SPEC TP must contain the subject (Radford, 2009; Radford, 2020). With this mechanic, the subject of the sentence added in this position such as *it* and *there* does not contain meaning, but the subject is given to comply with EPP features. The analysis via this mechanic is made up of expletive *it* constructions and existential *there* constructions.

Expletive *it* construction is the structure that authors use to evaluate entities, such as theories, results, or information and the structures are usually colligated with *to*- infinitive clauses or *that*- clause complements (Radford, 2009; Radford 2020), such as (8).

(8) It is difficult to understand the results without having tables.

Expletive *it* construction is syntactically merged with control constructions in the form of *to*- infinitive clauses. The semantic denotations of adjective phrases in expletive *it* constructions denote difficulties, interest, clarity and importance (Wongkittiporn, 2021c). Pragmatically, the expletive *it* construction is more productive as it conforms with the pragmatic discourse of the end-weight principle. Saying *to explain the results in this way is unclear* might not be practical as the subject of the sentence is too long.

Existential there construction is defined as the structure that points out the existence of something, such as problems, facts, numerical data and limitations. In research studies, existential *there* constructions address research problems as in (9).

(9) There are three limitations in this study.

The researchers employed the existential *there* construction to denote the problems of the study. Wongkittiporn (2022a) points out four semantic denotations of existential *there* constructions, which are subjectivity, numerical data, lists of things and description of comparison and contrast. Pragmatically, *there is/was* and *there are/were* are rather used in spoken register (Ivor, 2005).

The mechanism of PRO

PRO is a covert subject of infinitive clauses. The covert subject PRO is coreferential with the subject in the matrix clauses (Radford, 2009). It is used to analyze *control constructions* that have variants of *to*-infinitive clauses and *-ing* clauses. For example, *studying English* in (10a) syntactically functions as the subject of the sentence, but *to expand their study into a larger scale* in (10b) is a complement of the transitive verb *want* (Radford, 2009; Radford 2020; Wongkittiporn and Chitrakara, 2018).

(10)
(a) PRO Studying English is important.
(b) The researcher hopes PRO to expand their study into a larger scale.

The semantic interpretations of *-ing* clauses are factual and simultaneity. The semantic interpretations of *to*-infinitive clauses are non-factual and sequential events (Duffley, 2020; Wongkittiporn and Chitrakara, 2018; Wongkittiporn, 2022f). Based upon example (10b), the use of control construction with the variant of *to*-infinitive clause seems to be the variant that is suitable for the semantic denotation of recommending future research study as it points out the event in the future. The pragmatic aspect of control constructions is that the different variant complies with the *horror aequi principle* or the avoidance of the same form in a near area. For example, *Austin wants to try studying Russian in his elective courses.* This example allows us to see that the *-ing* variant is selected as in *wants to try to study*.

DP head's copular *be* complements

Copular be complements, interchangeably known as *subjective complements,* are constructions used to provide information concerning the subject of the sentence (Radford, 2009; Radford, 2020).

(11)
(a) ***The participants*** were ***undergraduate students.***
(b) ***Undergraduate students*** were ***the participants.***

For example, *the participants were undergraduate students* and the *undergraduate students were the participants*, are subjective complements. Swapping the syntactic position semantically provides the same truth value. The semantic denotations are exactly the same and do not result in ungrammaticality. However, swapping the position affects the pragmatic aspects of pragmatic discourse of given and new information.

Data validation

In order to ensure the reliability and validity of the results in this study, *methodical triangulation* was applied to this study (Egbert and Baker, 2019). After getting the results of the study, different syntactic structures written in topic sentences were bought to triangulate the abstracts of different authors in the same journal. The reason why the researchers in this study chose to triangulate the data with the abstract is because the abstract is a summary of every section in research papers. Three abstracts by other researchers in the same journal were taken to be validated with the result of this study. The inter-rater reliability was reported at 76.39 percent. This methodology leads one to the findings of this study.

RESULTS

Quantitative results

A total of 20 research articles comprised 303 topic sentences between *LEARN* and *System*. The results of this study are reported based upon the mechanisms of syntax as in Table 2.

Table 2. Topic sentences in applied linguistics research articles.

Mechanism		*LEARN* frequencies	*SYSTEM* frequencies
1. A-Movement		**87 (53.04)**	**83 (59.71)**
2. Non-Movement		**77 (46.96)**	**56 (40.28)**
	2.1 DP with CP dependent clauses	30 (18.29)	16 (11.52)
	2.2 DP to comply with extended projection principle	23 (14.02)	11 (7.91)
	2.3 PRO coindexation	8 (4.88)	8 (5.75)
	2.4 DP's copular *be* complements	16 (9.75)	21 (15.10)
Total		164 (100)	139 (100)

Table 2 represents frequencies and percentages of topic sentences based on the mechanics of syntax in generative grammar (Radford, 2009; Radford, 2020).

The percentage of topic sentences created via the non-movement approach in *LEARN* is 46.96 percent. However, the development of topic sentences via the A-movement mechanism is higher at 53.04 percent. The heads that are adjacent with CP-dependent clauses are 18.29 percent. The arguments that are added to fulfil EPP features are 14.02 percent. The head formed via the mechanic of PRO which is linked with the subject in higher clauses is 4.88 percent. The DP's copular *be* complement in *LEARN* are 9.75 percent.

However, the frequency of topic sentences in *System* that are created by the mechanic of A-movement is higher than the non-movement mechanism. The A-movement of topic sentences in *System* is calculated at 59.71 percent. On the other hand, the non-movement approach is calculated at 40.28 percent. The heads that are adjacent with CP dependent clauses and copular *be* complements are approximately the same at 11.52 percent and 15.10 percent, respectively. The non-movement approach via the mechanic of EPP was found at only 7.91 percent, which is significantly lower than *LEARN.* The qualitative data to support this numerical data is given below.

Qualitative results

The head DP with CP dependent clauses

The syntactic structure in *LEARN* belonging to the classifications of dependent clauses, such as adjective clauses is used similarly to *System*. The major results that make the topic sentences in this classification different from each other are their semantic denotation and pragmatic aspects.

DP heads with CP adjective clauses

Since adjective clauses are dependent clauses, they cannot stand alone, adjective clauses as found in this study are used with independent clause, such as subjective complement and passive voice as in (12) and (13). Eight tokens of adjective clauses were found in *LEARN*, whereas six tokens of adjective clauses were found in *System*. The same patterns were found in both datasets.

(12)
(a) Most word-form recognition tests are either multiple-choice or have ***a list of words*** that students can choose from. (*LEARN*) (Thongsan, 2023, p. 159)
(b) Facebook is ***one of the social networking sites (SNS's)*** which is very popular among users worldwide, especially those between the ages of 18-34 years. (*LEARN*) (Sukrutrit, 2023, p. 275)
(c) Most intriguing are ***the findings from the path analysis,*** which cast further light on the relationships among the variables. (*System*) (Tsang, 2022, p. 6)
(d) The participants of the present study were ***122 Iranian EFL learners*** who were all native speakers of Persian. (*System*) (Zare, 2023, p. 4)

In (12), adjective clauses, which are attached to the subjective complements can be used for either the reason of subjectivity or factual information concerning the complement in the matrix clause. The most dominant examples were found in (12a) from *LEARN* and (12d) from *System* where this pattern is systemic. Subjective complements and adjective clauses report only facts as the data were derived from the section of methodology. The adjective clause in (12b) is interpreted as subjectivity as the data is derived from the section of the literature review. Again, the adjective clause in (12c) denotes subjectivity because it is written in the section of discussion which requires the author to provide their own opinions after the facts in the section of results. In addition, adjective clauses also follow the passive voice, as in (13).

(13)
(a) Students were also asked to indicate ***other digital resources*** *that were not listed in the questionnaire.* (*LEARN*) (Jeanjaroonsri, 2023, p. 177)
(b) This study is grounded in multiliteracies, or ***a theory and pedagogy*** that channels the multiplicity of practices associated with our daily engagement in communication, languages, cultures, and media. (System) (Amgott, 2022, p. 1)
(c) The study was conducted in ***Iran***, which is considered a distance learning environment for the Japanese language due to limited interactions between Iran and Japan over the years. (*System*) (Naderpour, 2022, p. 3)

In contrast with subjective complement, adjective clauses that are used with passive voice usually report only facts in *LEARN.* Adjective clauses with passive voice in *System* are more various as they can denote personal subjectivity.

Aside from adjective clauses, two tokens of present participial reduced adjective clauses were found in *LEARN*, whereas one token of present participial reduced adjective clause was found in *System* where example (14a) came from *LEARN*, but example (14b) came from *System*.

14
(14a) Numerous studies have been conducted on ***synonyms***, focusing on their similarities and differences. *(LEARN)* (Chaokongjakra, 2023, p. 516)
(14b) In particular, there has been a resurgence in ***foreign language studies*** focusing on fanfiction as an informal learning activity. (*System*) (Naderpour, 2022, p. 1)

The use of present participial reduced adjective clauses between the two datasets is the same semantically. The present participial verb denotes process as can be tested by the adverb *intentionally.*

Adverbial clauses

Adverbial clauses are dependent clauses, so standing alone leads to the ungrammaticality of the sentences. As such, the adverbal clauses are always found to be used with independent clauses.

Table 3. Frequencies and percentages of adverbial clauses in *LEARN* and *System.*

Journals	Syntax		Semantic denotations			Pragmatic aspects (positions)	
	Adverbial clasues raw freq. (%)	Reduced adverbial clauses raw freq. (%)	T	C	R	Initial	Final
LEARN	8 (88.99)	1 (11.11)	3 (33.33)	2 (22.22)	4 (44.45)	4 (44.45)	5 (55.55)
System	2 (50.00)	2 (50.00)	2 (50.00)	2 (50.00)	0 (0)	4 (100)	0 (0)

Table 3 represents the similarities of syntax, sematic denotations and pragmatic aspects of positions concerning adverbial clauses between *LEARN* and *System*. The syntactic interpretations are made up of adverbial clauses and reduced adverbial clauses. The data shows that adverbial clauses are frequently used in *LEARN* at 88.99 percent, whereas reduced adverbial clauses are rarely found at only 11.11 percent. However, the use of adverbial clauses and reduced adverbial clauses are equally found at 50 percent. In terms of sematic denotations, T stands for temporality, C stands for concession and R stands for reason. Both datasets show similar semantic denotation concerning adverbial clauses of temporality and adverbial clauses of concession. However, the adverbial clauses of reason are only found in *LEARN*. The major difference in the use of adverbial clauses between *LEARN* and *System* was found in the pragmatic aspect of positions. Adverbial clauses written as the topic sentence in *System* are always used in the initial position of the sentence. On the other hand, the adverbial clauses in *LEARN* are usually found in the final position. This aspect could be explained by L1 interference as the key message or the most important message in writing the Thai language will be written at the end. However, in English what is the most important is informed at the beginning. Some examples are given in (15).

(15) *LEARN*
(a) Vocabulary retention is the ability to remember words and phrases ***after some time has passed***. (Thongsan, 2023, p. 157)
(b) For the limitation of this research, there were some constraints on the research design ***since it was conducted by using phenomenology which might have been exploratory, subjective, and tentative.*** (Chaisuriya, 2023, p. 509)
(c) ***Although the benefits are evident,*** employing writing-related technologies is not without drawbacks. (Jeanjaroonsri, 2023, p. 182)

Most adverbial clauses in *LEARN* are colligated with subjective complement, existential *there*- constructions and control constructions. Let's compare these examples with *System* in (16).

(16) ***System***
(a) ***Although there are studies reporting on peer feedback exchange practices during Covid-19,*** to my knowledge, there are no studies comparing students' achievements in ERT writing to F2F writing. (Rasi, 2023, p. 2)
(b) ***Although the teacher educator had more experience with the ISTE standards,*** she asked the PSTs to co-construct a definition for the term "equitable access" regarding technology use. (Durham, 2023, p. 9)
(c) ***After measuring learners' performance in each construct,*** the results were used to assess the overall level of agency. (Naderpour, 2022, p. 6)
(d) ***When examining mediation***, it is important to consider the zone of proximal development (ZPD). (Durham, 2023, p. 2)

In regard to similarity, the use of adverbial clauses is used with existential *there*-constructions and control constructions. In terms of differences, adverbal clauses in *System* are also used with passive voice and expletive *it* constructions.

Noun clauses

The noun clause is the structure used to report someone's speech. The main verbs in finite clauses that are colligated with the noun clauses are usually communication verbs, such as *state*, *report* and *indicate*. The frequencies of noun clauses between *LEARN* and *System* are presented in Table 4.

Table 4. Frequencies and percentages of noun clauses written in topic sentences.

Interpretations	*LEARN*	*System*
Syntactic structures		
That-Spelt Out	11 (100)	5 (100)
That-Omission	0	0
Semantic denotations		
Presentation Verbs	6 (54.55) (i.e., *illustrate*, *reveal*, *show*)	2 (40.00) (i.e., *reveal, show*)
Communication Verbs	5 (45.45) (i.e., *indicate, report, state*)	3 (60.00) (i.e., *explain, suggest*)

Table 4 presents frequencies and percentages of syntactic structures and semantic denotations of noun clauses as topic sentences between *LEARN* and *System*. The syntactic structure is the interpretation of the appearance or the omission of $_{CP}$*that* as used in noun clauses. The results show that 100 percent of the complementizer *that* in the noun clause used in *LEARN* is spelt out. In regard to semantic denotations, the finite verbs in the matrix clauses that denote the meaning of presentation, such as *show* and *reveal* are 54.55 percent. On the other hand, the finite clauses in the matrix clauses that denote the meaning of communication, such as *state* and *report* are 45.45 percent. With regard to *System*, the finite verbs of

matrix clauses, such as *reveal* and *show* that denote presentation appear at 40 percent. However, the finite verbs of matrix clauses that denote communication such as *explain* and *suggest* appear at 60 percent.

The syntactic structure shows that 100 percent of the noun clauses are used with the spelling out of *that* complementizers.

(17) *LEARN*
(a) ***Results from the tests*** showed that students performed best in meaning recognition. (Thongsan, 2023, p. 159)
(b) ***A further 6.01% of students*** stated that using technologies for L2 writing inspired confidence

(18) ***System***
(a) Also related to RQ1, ***the patterns of motivational shifts on the charts*** suggest that L2 teacher motivation in online settings is in a state of constant flux and experiences fluidity. (Sak, 2022, p. 9)
(b) As for the positive motivational factors, ***the results*** showed that active student participation and engagement facilitated motivational progression in the case of both participants. (Sak, 2022, p. 9)

According to the exemplification above, syntactic structures of noun clauses with the semantic denotation of presentation between the two journals are the same. The use of noun clauses with semantic denotation of communication is different between the two journals. The verbs *indicate, report* and *state* found in *LEARN* seem to give the sense of reporting facts only, while the verbs *explain* and *suggest* found in *System* seem to have personal opinions included.

The mechanic of PRO

While the use of ECM was not found in the topic sentences of either publication, control constructions syntactically consist of *to-* infinitive clauses and *-ing* forms (Radford, 2009; Radford, 2020). They are non-finite clauses which when standing alone, lead to ungrammaticality. The semantic denotations of *to-*infinitive clauses are habits, sequential and non-factual events, while the semantic denotations of *-ing* clauses are factual and simultaneity (Wongkittiporn and Chitrakara, 2018).

Table 5. Frequencies and percentages of control constructions written as topic sentences.

Journals	*to-* Infinitive clauses frequency (%)	*-ing* Form frequency (%)	Total
LEARN	4 (50.00)	4 (50.00)	8 (100)
System	7 (87.50)	1 (12.50)	8 (100)

Table 5 represents the similarities and differences of control constructions as topic sentences between *LEARN* and *Systems*. The percentage of different forms of control constructions between *to-* infinitive clauses and *-ing* forms are exactly the same at 50 percent in *LEARN*. On the other hand, the syntactic structures of *to-* infinitive clauses and *-ing* forms in *System* are 87.50 and 12.50 percent, respectively. Some Examples are given in (19)-(20).

(19) *LEARN*
(a) **PRO** Reading is important for improving language skills. (Thongsan, 2023, p. 155)
(b) **PRO** Speaking English in front of a crowd or front of a class can cause anxiety in a speaker because of low-self confidence in public, fear of making mistakes, lack of preparation, lack of public speaking skills, and shyness. (Sukrutit, 2023, p. 277)
(c) ***Many researchers$_i$*** have created specialized word lists **PRO$_i$** to assist students in different fields of study. (Kongcharoen, 2023, p. 313)
(d) Apart from the existing discussion questions from the textbook, this strategy allowed the students$_i$ **PRO$_i$** to work in groups and come up with at least one question related to the reading text. (Apairach, 2023, p. 327)

(20) *System*
(a) With the ever growing plethora of digital tools available, language teachers$_i$ must be ready **PRO$_i$** to find, evaluate, and implement technology effectively and confidently in the classroom. (Durham, 2023, p. 1)
(b) After creating multimodal transcriptions, I$_i$ open coded **PRO$_i$** to identify recurring patterns regarding student experiences with multimodal composing. (Amgott, 2022, p. 5)
(c) **PRO$_i$** Using a sociocultural lens within language teacher education allows
researchers to examine teacher learning as a process that is mediated by tools, including the support that teacher educators provide to guide PSTs' learning within their ZPD. (Durham, 2023, p. 2)

Examples (19)-(20) represent control constructions in English. The *-ing* clause in the subject position of both datasets denotes factuality, referring to activities applicable to everyone. The *to-*infinitive clauses semantically denote sequential events. The distinctive pragmatic aspects of control constructions between *LEARN* and *System* are that the subject position is always used with the *-ing clause*. The *to-* infinitive clause is applicable as in *to read is important for*

improving language skills, but it was not found in either of the datasets.

DP heads to comply with EPP features

In terms of applying EPP features or the subjects *it* and *there,* there are some differences of syntactic colligations and semantic denotation between the two constructions in *LEARN* and *System.* Although the frequencies of the expletive *it* constructions between the two journals are similar, the writers in *LEARN* syntactically preferred to use the expletive *it* constructions to colligate with *that*- clause complements. The frequencies of existential *there* constructions between *LEARN* and *System* show a significant difference where the use of existential *there* constructions in *LEARN* is three-time higher than *System*.

Expletive *it* constructions

Expletive *it* constructions denote comments or subjectivity where the non-movement head *it* is added to comply with EPP features. The use of expletive *it* constructions can stand alone. However, it is often used with *to*- infinitive clauses and *that*- clause complements.

Table 6. Frequencies and percentages of expletive *it* constructions with *to*- infinitive clauses and *that*- clause complements written as topic sentences.

Journals	Zero	*To*- infinitive clauses	*That*- Clause complements	Total frequencies (%)
LEARN	0 (0)	1 (33.33)	3 (66.67)	4 (100)
System	1 (20)	2 (40)	2 (40)	5 (100)

Table 6 presents expletive *it* constructions with three variants, which are zero, *to*- infinitive clauses, and *that*-clause complements. In LEARN, only two of these variants were found. The variants of expletive *it* constructions with that- clause complements in *LEARN* is most productive at 66.67 percents. However, expletive *it* constructions were found with three variants in *System*. The use of expletive *it* constructions with zero, *to*- infinitive clauses and *that*-clause complements are 20 percent, 40 percent and 40 percent, respectively, as shown in (21)-(22).

(21) *LEARN*
(a) ***It*** is undeniable that the majority of language learners struggle to differentiate the various meanings and applications of synonyms, leading to confusion. (Chaokongjakra, 2023, p. 513)
(b) From the definitions presented above of 'important,' 'significant,' and 'crucial,' ***it*** is clear *that these three adjectives can be considered near-synonyms as they have similar meanings of conveying the idea of something being necessary, noteworthy, or something being of great importance or value and cannot be ignored or underestimated.* (Chaokongjakra, 2023, p. 513)

(22) *System*
(a) While connection to peers was a recurring theme, ***it*** *was especially prevalent with the Spring 2020 participants.* (Amgott, 2022, p. 9)
(b) ***It*** is important to note the affordances and limitations of the ISTE portfolio. (Durham, 2023, p. 9)
(c) Looking at these categories, ***it*** is clear that students make efforts to achieve their common goal. (Naderpour, 2022, p. 7)

Both datasets have the expletive *it* constructions that are used with *to*-infinitive clauses and *that*- clause complements. The semantic denotations of adjective clauses colligated with *to*- infinitive clauses and *that*-clause complements point out subjectivity, such as clearness and importance.

Existential *there* constructions

The existential *there* construction is used to delay the subject of the sentence to be located after the auxiliary *is*, *are*, *was*, *were*, *has* and *have*. The information given in existential *there* constructions are numerical data, statements of problems, gap of the study, arguments and limitations of the study. The frequencies and percentages of existential *there* constructions between *LEARN* and *System* are given in Table 7.

Table 7 reveals frequencies and percentages of the topic sentences written with existential *there* constructions between *LEARN* and *System.* There are six semantic denotations of existential *there* constructions in LEARN. The semantic denotations of existential *there* constructions as related studies and gaps of the study appear equally at 26.32 percent. This construction is used to denote the limitations of the study at 15.79 percent. The semantic denotation of existential *there* constructions; argumentation, numerical data and the result of the study are equally at 10.53 percent.

Table 7. Frequencies and percentages of existential *there* constructions between *LEARN* and *System.*

***Journals*/ Semantic denotations**	***LEARN* frequencies (%)**	***SYSTEM* frequencies (%)**
1. Related studies	5 (26.32)	1 (16.66)
2. Gaps of the study	5 (26.32)	2 (33.33)
3. Limitations of the study	3 (15.79)	1 (16.66)
4. Argumentation	2 (10.53)	2 (33.33)
5. Numerical data	2 (10.53)	0 (0.00)
6. Results of the study	2 (10.53)	0 (0.00)
Total Frequencies	19 (100)	6 (100)

In comparison with *LEARN*, only four semantic denotations of topic sentences in existential *there* constructions were found in *System*. The semantic denotations of related studies and limitations of the study are the same at 16.66 percent. On the other hand, the semantic denotations of gaps in the study and argumentation occur at 33.33 percent each. Some examples of existential *there* constructions between the two datasets are illustrated below. It is quite similar for both academic writers in *LEARN* and *System* to use the semantic denotations of argumentation in existential *there* constructions. Although the semantic denotations of related study, gaps of the study, and limitations of the study are most used in *LEARN*, the use of existential *there* constructions to report the result of the study and numerical data were not found in *System*. More examples between the two datasets are given below.

(23) *LEARN*
(a) Apart from the background of the use of Facebook groups for educational contexts,
there is some research related to this study in terms of using videos to engage students in speaking English. (Related Studies) (Sukrutit, 2023, p. 276)
(b) So far, ***there*** has been no single measure of reading self-efficacy. (Gaps of the study) (Oranpattanachai, 2023, p. 199)
(c) Nonetheless, ***there*** are some limitations to be considered. (Limitations of the study) (Lertcharoenwanich, 2023, p. 380)
(d) On the issue of study time, ***there*** was a difference in opinion among the teachers interviewed. (Argumentation) (Chaisuriya, 2023, p. 502)
(e) ***There*** are 499,948 running words, accounting for 19.46%, that are not GSL and AWL. (Numerical data) (Kongcharoen, 2023, p. 319)
(f) First of all, ***there*** was a significant difference in the total CA or trait-like CA. (Results of the study) (Rimkeeratikul, 2023, p. 436)

(24) *System*
(a) ***There*** is a growing consensus that engagement is a crucial condition for learning, especially in instructed language learning contexts, without which no learning is likely to take place. (Argumentation) (Zare, 2023, p. 1)
(b) Although ***there*** are studies reporting on peer feedback exchange practices during Covid-19, to my knowledge, there are no studies comparing students' achievements in ERT writing to F2F writing. (Gaps of the study) (Rasi, 2023, p. 2)
(c) The studies cited above suggest that ***there*** is a growing literature on the complex process of L2 teachers' motivation change. (Related Studies) (Sak, 2022, p. 1)
(d) As for the second category, writing awareness, ***there*** are problems related to students' voice in writing and dependency on textbooks. (Argumentation) (Naderpour, 2022, p. 7)
(e) Also, ***there*** were both similarities and differences across the three L1 groups in their inclusion of thesis and concluding statements as evident in Table 5. (Results of the study) (Jo, 2022, p. 5)

In terms of the semantic denotations of related studies, examples of the phrases used are *some research papers related to this study* and *a growing literature*. In terms of the gaps of the study, *there are no studies* is a common clause used in this semantic denotation.

A-movement

The syntactic structures analyzed by A-movement in this study include passive voice, raising constructions and ECM constructions.

Passive voice

The section presents the use of passive voice in *LEARN* and *System.*

Table 8. Frequencies and percentages of passive voice written in *LEARN* and *System.*

Journals	**Passive voice frequencies (%)**	**Agentless**	***By*-phrase agent**
LEARN	85 (100)	77 (90.58)	8 (9.42)
System	75 (100)	64 (85.33)	11 (14.67)

Table 8 presents frequencies and percentages of passive voice created as the topic sentences in *LEARN* and *System*. The percentages of agentless passive voice are 90.58 percent and 85.33 percent, respectively. On the other hand, the percentages of by phrase agents are 9.42 percent and 14.67 percent, respectively. Some examples are shown in (25).

(25) *LEARN*
(a) ***This study*** was conducted $_t$ at a university in Thailand during the first academic year of 2021. (Thongsan, 2023, p. 157)
(b) ***The consistency and suitability*** of question items and research objectives were checked by an assistant professor who holds a PhD in English language teaching. (Jeanjaroonsri, 2023, p. 175)

The distinctive feature of passive voice in the topic sentence in applied linguistics research articles is that the agent is omitted, called *widely known agent*. In example (25a), it is commonly known that the one who conducted the research paper is the researcher. So, spelling out the agent is unnecessary. Examples of passive voice in *System* are given in (26).

(26) *System*
(a) ***This study*** was done remotely during the COVID-19 pandemic in Iran. (Zare, 2023, p. 4)
(b) ***All essays*** were scored for writing quality according to the holistic rubric from the TOEFL by two secondary-school teachers who speak English as their L1. (Jo, 2022, p. 4)

In (26a), the omission of the *by*-phase agent is due to it being a widely known agent as in the researcher. In (26b), the *by*-phrase agent is not generally predictable and presenting the *by*-phrase agent helps increase the validity and reliability of the way essays are scored.

Raising constructions

The raising verbs that are frequently used in this study are *seem* and *appear*. The frequencies of raising constructions written as topic sentences are shown in Table 9.

Table 9. Frequencies of raising constructions written as topic sentences.

Journal	Frequencies
LEARN	2
System	8

The use of raising constructions in *System* was found 4 times higher than *LEARN.* The examples of raising constructions that were found in *LEARN* and *System,* written as topic sentences, are given in (27).

(27)
(a) Importantly, ***the critical literacy practice in the present study*** appeared $_t$ to be highly supportive of students' learning. (Apairach, 2023, p. 334)
(b) **The presence of modified output** seems to be more common in interactions where learners choose to use Spanish for the entire LRE. (Canals, 2022, p. 6)

To-infinitive clauses that are colligated with the raising verb *appear* and *seem* provide certain ideas or comments concerning the subject in Spec T. Usually, *to*-infinitive clauses colligated with the verbs *seem* and *appear* are used with adjectives such as *highly supportive* and *common.*

Copular *be* complements

Copular *be* complements provide additional information regarding the subject. Swapping the information between the subject and complement does not affect the meaning and grammaticality of the sentence.

(28)
(a) ***Extensive reading (ER)*** is the practice of reading a large number of texts at the appropriate level for students. (*LEARN*) (Thongsan, 2023, p. 156)
(b) ***The practice of reading a large number of texts at the appropriate level for students*** is extensive reading (ER). (Modified Version)

Example (28a) is made up of the subject *extensive reading*, the copular *be* and the complement *the practice of reading a large number of texts at the appropriate level for students.* Swapping the position of information between the subject and the complement results in the same semantic denotation. The example given in (28b) is a modified version where the term *extensive reading* is merged with the copular *be*.

DISCUSSION

According to the results of the study, the syntactic structures of topic sentences with A-movement between *LEARN* and *System* show slight differences in percentages. The topic sentences created via the machinic of A-movement in *LEARN* is 53.04 percent, whereas the topic sentences that are created via the mechanic of A-movement in *System* are almost 60 percent. This phenomenon shows the differences in pragmatic aspects between the two journals.

Pragmatic aspects

The DP Head movement is strongly associated with pragmatic aspects (Wu and Chitrakara, 2020). *Pragmatic discourse of given and new information* is the major interpretation in this study. It refers to the

writing of the old information to link with the previous discourse and placing the new or unknown information in the final position (Wongkittiporn, 2024a). Not only can this principle explain the topic sentences applied by A-movement, such as passive voice and raising constructions in *System*, but it also helps explain why 100 percent of adverbial clauses in *System* are written in the initial position of the sentences, but only 44.45 percent was found in *LEARN.* The salient differences between the two journals are the use of raising constructions as in (29).

Excerpt from this study

(29) The presence of **modified output** seems to $_t$ be more common in interactions where learners choose to use Spanish for the entire LRE. (Canals, 2022, p. 6)
`

(30) […] However, the difference between the amount of explicit corrective feedback or **modified output** that each type of LRE exhibited was not statistically significant.

The presence of ***modified output*** **[HEAD MOVEMENT]** seems $_t$ to be more common in interactions where learners choose to use Spanish for the entire LRE […]

The DP head *modified output* is moved from the subject of the lower clause which is signaled by *t,* called trace, to become the subject of the sentence. Doing this allows the head to get closest to the previous information. Psychologically, the DP head *modified output* is the old information linking with the information in the previous discourse which reduces the workload of the brain to manage the old and new information. Radford called this *economy principle* sometimes known as *least effort of requirement*.

Regarding linking information, the terms or terminologies in applied linguistics research articles are raised to become the prominence of the sentence called *salience* or *focus*. However, this result shows a contrast with Wongkittiporn (2022d) who studied the raising verbs *seems* in English novels where the protagonists are raised to the subject position to receive comments. This principle is also applied with the use of passive voice, as in (31).

(31)
Original Text
As briefly mentioned, **fanfiction** is a writing activity carried out by fans. Here, a fan describes someone who has an emotional attachment [….]
Paragraph Continued
Fanfiction is characterized $_t$ by affinity spaces […] (Naderpour, 2022, p. 2)

The DP *fanfiction* is moved by A-movement to the Spec T position in a continued paragraph in order to comply with the old information. The above paragraph is written by subjective complement. The *by*-phase is added to comply with the new information. This interpretation is supported by Wongkittiporn (2022c) and Wongkittiporn (2023c) who studied the pragmatic aspects of the raised subject. Not only is this principle generally applied in applied linguistic research articles, but Wongkittiporn (2022c) also addressed that it was frequently found in English novels. However, the differences between the two genres are that the term or terminology in the raised subject is written exactly the same, but the raised subject in English novels, such as *Mary*, will be changed into the pronoun *she*. Observe this claim as found by Wongkittiporn (2022c), as in (32).

(32)
(a) ***Information gap (goal-convergent)*** tasks have been deemed better at promoting negotiation during interaction than personal information exchange tasks. (Canals, 2022, p. 2)
(b) ***TAWR*** was developed to score students' review papers for free writing practice. (Rasi, 2023, p. 4)

If we read Canal's (2022) research paper again, it allows us to see that previous paragraphs have already mentioned the term *information gap* several times, but the term is not replaced by the pronoun *they.* In addition, acronyms are also not replaced by the pronoun *it*. Wongkittiporn (2022c) explained this phenomenon as the importance of keywords in one's study. This terminology is considered the main keyword of a study. It could affect how an article will be discovered when searching in scholarly document websites leading to boosting opportunities for citation scores.

Aside from passive voice, the pragmatic discourse of given and new information is also applicable to the position of adverbial clauses, as in (33).

(33)
Therefore, the analysis examined whether participants expressed ***each construct*** only as they felt (emotional level), went beyond that and realized how they could solve the problem (awareness level), or took tangible action to achieve their goals (acting level). To determine the level of **each construct**, the data was examined to understand whether it was at the emotional, awareness, or action level, ranging from 1 to 4. Based on this analysis, […]
After measuring learners' performance in each construct, the results were used to assess the overall level of agency. (Naderpour, 2022, p. 6)

The adverbial clause of temporality is placed according to the principle where an old piece of information that links with the above paragraph must be written in the initial position of the sentence.

As discussed above, passive voice in *System* is mostly used to connect the topic sentence with the previous paragraph. Although passive voice is frequently used in *LEARN*, it is sometimes used as the counterpart of active voice.

(34) The quantitative research design was used in this study. (Oranpattanachai, 2023, p. 201)

It seems that passive voice in example (34) is only used as a counterpart of the active voice. It just said that this study used qualitative research design without prominence in the subject position. Another clear example is presented in (35).

(35) **Original Text**
[…] This can guarantee that ***the students*** will not have any significant lexical problems. Moreover, reading speed is important in order to make sure that ***the students*** are fluent and comprehend enough to understand the text. They should be able to read it at their natural pace which is at least 100 words per minute […].

Ten graded readers were selected as ***a candidate list*** for the current study. Each graded reader has a range of headwords from 300-400 which is considered easy for students at the intermediate level […] (Thongsan, 2023, p. 159)

According to example (35), it is clear that the previous paragraph mentions *the students* several times. The students could be paraphrased into *a candidate list* as an old piece of information to link with the previous paragraph first as in *a candidate list in this study was ten graded readers.* However, passive voice with the mechanic of A-movement is applied without the hidden reason behind it. Therefore, pragmatic aspects of given and new information to present continuity could be a salient difference between the two.

Semantic denotations

Based upon the evidence in this study, *System* is considered to provide more subjectivity than *LEARN*. *Subjectivity* refers to the researchers' attitudes, evaluation and personal viewpoints towards theories, principles, terms, and previous research articles. Several constructions in both A-movement and non-movement approaches are used for giving subjectivity. According to Wongkittiporn (2022c), the raising construction is the structure for the authors to give personal comments concerning the topic of the sentences. This was also found in this study as in (36).

(36)
(a) Intrapersonal factors appeared ***to play a prominent role in shaping positive emotions such as satisfaction and accomplishment.*** (Sulis, 2022, p. 7)
(b) The presence of modified output seems ***to be more common in interactions where learners choose to use Spanish for the entire LRE.*** (Canals, 2022, p. 6)

The raising constructions written as the topic sentences in *System* are used to give personal comment concerning terminologies, such as *intrapersonal factors* and *modified output* before adopting the terms to be used in own research studies. However, the rising constructions in *LEARN* provide a comment about the writers' own studies rather than evaluating others.

(37) Importantly, the critical literacy practice in the present study appeared ***to be highly supportive of students' learning.*** (Apairach, 2023, p. 334)

The writer avoids commenting about the idea of critical literacy alone, but putting the phrase *in the present study* to show that commenting is only given in the scope of his/her study. In addition to raising constructions, Wongkittiporn (2021b) found that subjectivity is also common in adjective clauses as in (38).

(38)
(a) The study was conducted in Iran, ***which is considered a distance learning environment for the Japanese language due to limited interactions between Iran and Japan over the years.*** (Naderpour, 2022, p. 3)
(b) Most intriguing are the findings from the path analysis, ***which cast further light on the relationships among the variables.*** (Tsang, 2022, p. 6)

Example (38a) is the subjectivity in regard to the location where the research study was conducted.
Example (38b) is the evaluation of the findings from the path analysis.
Another difference in subjectivity was found in noun clauses where the communicative verbs suggest one's opinions, such as *suggest* is found more frequently in *System* than *LEARN.*

(39) The studies cited above ***suggest*** that there is a growing literature on the complex process of L2 teachers' motivation change. (Sak, 2022, p. 1)

In contrast to *LEARN*, finite verbs such as *indicate*, *report* and *state* to report fact, are frequently found.
However, subjectivity or personal comments in *LEARN* are frequently used in the structure of expletive *it* constructions, where the mechanics of EPP features are two times higher in *LEARN* than *System* as in (40).

(40) *LEARN*
(a) From the definitions presented above of 'important,' 'significant,' and 'crucial,' ***it is clear*** that these three adjectives can be considered near-synonyms as they have similar meanings of conveying the idea of something being necessary, noteworthy, or something being of great importance or value and cannot be ignored or underestimated. (Chaokongjakra, 2023, p. 513)
(b) When examining mediation, ***it is important*** to consider the zone of proximal development (ZPD). (Durham, 2023, p. 2)

The subjectivity in (40a)-(40b) is presented via the adjective expression such as *clear* and *important*.

The semantic denotation of subjectivity concerning the importance of the study in *System* complies with Wongkittiporn's (2021c) study about the subjectivity in applied linguistics research articles. In contrast to subjectivity, *LEARN* preferred to employ a non-movement approach, such as control constructions and subjective complements to present facts.

(41)
(a) ***Reading in English***, especially in the EFL/ESL context, plays a crucial role in gaining information from original printed English and digital texts. (Oranpattanachai, 2023, p. 195)
(b) ***Speaking English in front of a crowd or in front of a class*** can cause anxiety in a speaker because of low-self confidence in public, fear of making mistakes, lack of preparation, lack of public speaking skills, and shyness. (Sukrutit, 2023, p. 277)

Control constructions as topic sentences in *LEARN* are used to denote *genericity,* referring to general information that is applicable to everyone or all English language learners. The use of control constructions in *LEARN* appears to be systemic in terms of its semantic denotations. The syntactic interpretations of control constructions between *LEARN* and *System* are different. Wongkittiporn and Chitrakara (2018) indicated that there are three forms of control constructions in English. There are *to-* infinitive clauses, null infinitive clauses and *-ing* forms. In *LEARN*, the control constructions with the *-ing form* is preferred to be used in the subject position to report facts.

When comparing with *System,* the use of existential *there* constructions in *LEARN* is two times higher. Wongkittiporn (2022a) reported that existential *there* constructions are employed for reporting numerical data, lists of things and comparisons. These factual interpretations are obviously applicable to existential *there* constructions as found in *LEARN* as in (42).

(42)
(a) There are ***499,948 running words***, accounting for 19.46%, that are not GSL and AWL. (Kongcharoen, 2023, p. 319)
(b) There were **15 questions** for the interview session. (Sukrutit, 2023, p. 284)
(c) Nonetheless, there are **some limitations** to be considered. (Lertcharoenwanich, 2023, p. 380)

Although Wongkittiporn (2022a) reported that existential *there* constructions can denote subjectivity, this was only found in *System* as in (43).

(43)
(a) Moreover, there is ***a lack of appropriate resources*** that would support students' learning. (Naderpour, 2022, p. 6)
(b) As for the second category, writing awareness, there are ***problems*** related to students' voice in writing and dependency on textbooks. (Naderpour, 2022, p. 7)

Although *a lack of appropriate resources* or *problems* could be treated as gaps in the study, they were presented with the authors' evaluation that these problems should be fixed. Another difference between the two journals is the use of copular *be* complements. The copular *be* complement in *LEARN* is also applied for giving subjectivity, but it is used to report facts in *System.*

(44)
(a) Extensive reading is ***currently one of the most effective ways for improving non-native learners' reading skills.*** (Thongsan, 2023, p. 155)
(b) English is ***a necessary language for international communication in areas such as education, business, and entertainment as a global lingua franca.*** (Chaokongjakra, 2023, p. 513)
(c) Speaking English is ***one of the language skills that English as a foreign language (EFL) students are worried about, including Thai EFL students.*** (Sukrutit, 2023, p. 273)
(d) Facebook is ***one of the social networking sites (SNS's) which is very popular among users worldwide, especially those between the ages of 18-34 years.*** (Sukrutit, 2023, p. 275)

In addition to the use of the topic sentence at the beginning of the introduction, subjective constructions in *System* were often used to report methodology. The other structure that writers in *System* used for reporting methodology is subjective complement where additional information about the subject is given as in (45).

(45)
(a) The participants in this study were ***32 learners.*** (Subjective Complements) (Canals, 2022, p. 2)
(b) The participants of the present study were ***122 Iranian EFL learners who were all native speakers of Persian.*** (Zare, 2023, p. 4)
(c) The instruments of the study were ***the Oxford Online Placement Test, a TOEFL iBT independent writing task, a task engagement questionnaire, reflective frames, and semi-structured interviews.*** (Zare, 2023, p. 4)
(d) The participating students were ***26 learners from five classes at a British university***. (Sulis, 2022, p. 4)
(e) The third construct of the model is ***autonomy***. (Naderpour, 2022, p. 2)
(f) Self-confidence is ***another important motivational variable in education.*** (Tsang, 2022, p. 2)

The evidence in this study shows only 9.5 out of 100 percent of copular *be* complement in *System* is used for presenting subjectivity.

Syntactic structures

Syntactic structure is the aspect that makes *LEARN* mostly identical to *System.* This section presents the similarity of present participle reduced relative clauses (PPRRCs) in topic sentences between *LEARN* and *System*. Although there are a few examples used by these two journals, their examples allow us to see both similarities and differences in PPRRCs between the two publications.

(46) Numerous studies have been conducted on synonyms, ***focusing on their similarities and differences.*** (*LEARN*) (Chaokongjakra, 2023, p. 516)
(47) Using a sociocultural lens within language teacher education allows researchers to examine teacher learning as a process that is mediated by tools**,** ***including the supports that teacher educators provide to guide PSTs' learning within their ZPD.*** (*System*) (Durham, 2023, p. 2)

The bold examples in (46) and (47) represent how present participle reduced relative clauses (PPRRCs) are used in these journals. According to Wongkittiporn (2024a), the semantic denotations of PPRRC usually denote *activity* or ongoing process or accomplishment. The present participial verbs *focusing* and *including* are interpreted as activities that can be tested by the adverbial *intentionally.*

Although the semantic denotations of the two examples above are interpreted as the same, the pragmatic aspects in terms of the positions of the clauses are different. Wongkittiporn (2024b) found that it is more common for the use of PPRRCs to occur at the medial position of the sentence. On the other hand, PPRRC is not commonly used with PPRRC as it is practical for a longer clause to be placed in the final position and it does not violate the principle of pragmatic discourse of end-weight principle. Accordingly, the use of PPRRC in *System* is more consistent with Wongkittiporn's (2024b) results semantically and pragmatically. ECM was not found as the topic sentence in either of the datasets. This could be the reason for the spoken register (Wongkittiporn, 2022b).

In addition, the syntactic structures of *that*-clause complements in *LEARN* and *System* are identical where 100 percent shows that the complementizer *that* is always spelt out.

(48)
(a) Results from the tests ***showed that*** students performed best in meaning recognition. (Thongsan, 2023, p. 159)
(b) As for the positive motivational factors, the results ***showed that*** active student participation and engagement facilitated motivational progression in the case of both participants. (Sak, 2022, p. 9)

When comparing the results of this study with Wongkittiporn (2023d) who studied the use of *that*-complementizers in bedtime stories, most *that*-complementizers are omitted when they are used with subjective verbs, such as *I thought* and *I believe*. However, when they are used with evidence or presentation verbs, such as *show, reveal* and *illustrate, that*-complementizers have to be colligated or spelt out.

Last, but not least, the use of passive voice in *LEARN* and *System* are similar in terms of agentless by-phrases at 91.96 percent and 85.33 percent, respectively. The results of this study comply with Smith and Rayson (2007) who stated that over 80 percent of passive voice is used with agentless *by*-phrases.

Triangulation of the results of the study

To ensure the reliability of the results of this study, three abstracts, known as the summary of each section, were randomly picked from *LEARN* which were used to observe how syntactic structures were used in this summary. Therefore, the consistency of structure could be seen. The interrater reliability was reported at 76.39 percent which is considered to be rather high. The example given is written by Sojisirikul and Chanchula (2023) from *LEARN,* which is a different data collection from the main current study.

(49) **Abstract**
(a) Reflection in language learning plays a key role in promoting a deeper understanding of one's own learning. (b) Previous studies show that reflective speaking could raise students' higher critical thinking, and that technology helps facilitate this reflection effectively **[NOUN CLAUSE].** (c) This study aimed to investigate the use of VoiceThread for a reflective speaking task for students. **[CONTROL CONSTRUCTIONS].** (d) The participants consisted of 67 undergraduate students enrolled in an English course who were assigned to do four video recordings of their self-study **[PASSIVE VOICE].** (e) They found their own English materials to study and made their own choices of answering the five guided questions representing the four reflective levels **[PPRRC].** (f) Only 156 video recordings from out of 39 students, who posted all four video recordings, were transcribed and analyzed **[PASSIVE VOICE].** (g) All 67 students answered the questionnaire regarding their attitudes towards the use of Voice Thread. (h) The findings show that the majority of the students' reflective level was at Level 1 (Non-reflection), and a few of their expressions were found at Level 3 (Reflection) **[NOUN CLAUSE].** (i) The students also said they were confident when speaking, and VoiceThread helped facilitate their reflective speaking **[NOUN CLAUSE]** (Sojisirikul and Chanchula, 2023, p. 333).

There are 9 sentences written in the abstract. 8 out of 9 sentences, or 88.89 percent, are predictable and consistent with the results of this study. For example, the noun clause *show that* is used for presentation

and passive voice is used in the section of methodology.

CONCLUSION

The current study applied A-movement principles in generative syntax to answer the following research questions:

1. What are the frequencies of the A-movement mechanism and non-movement mechanism applied in writing topic sentences in *LEARN* and *System* journals?
2. What are the similarities and differences between how the A-movement mechanism and the non-movement mechanism are applied in writing topic sentences in *LEARN* and *System* journals?

The results of this study show that both journals applied the A-movement mechanism to write topic sentences more than the non-movement mechanism. However, the percentages of the A-movement mechanism used in writing topic sentences in *System* is slightly higher than *LEARN.* This reflects that the tool of the pragmatic discourse of given and old information in *System* is used more effectively than *LEARN*. This is illustrated through passive voice, raising constructions and adverbial clauses.

The semantic denotations of topic sentences in terms of subjectivity are rather different between the two datasets. It seems that The Thai authors in *LEARN* in this study show avoidance to evaluate previous studies, terminologies and theories applied in their studies. Sometimes they show evaluation, but they evaluate their studies. On the other hand, commenting on, or evaluating other people's studies and terminologies adopted in one's study is presented via raising constructions, adjective clauses, noun clauses and expletive *it* constructions.

Although the pragmatic discourse of given and new information and the semantics of subjectivity are more outstanding in *System* in Q1 SCOPUS database, both datasets show similarities in regard to syntactic structures, for example, noun clauses with *that*-complementizer, passive voice without *by*-phrase agents and present participial reduced adjective clauses.

Although over 300 topic sentences are considered in this study, the results are not generalizable to all Q1 and Q2 SCOPUS database journals in the field of applied English linguistics. It is believed that all international journals continuously strive to improve their standard. The intention of conducting this research paper is to contribute to applied linguistics publications owned by Thai public universities. One day, we will have several publications in the field, ranked in the Q1 SCOPUS database for Thai people and others to share their knowledge.

REFERENCES

Amgott, N. (2022). The challenge was fun: Critical literacy and growth mindset in L2 multiliteracies. *System*, *113*, 1-13.

Apairach, S. (2023). Going the extra miles in a reading lesson: Insights from a Thai EFL classroom. *LEARN Journal: Language Education and Acquisition Research Network, 16*(1), 320-338.

Canals, L. (2022). The role of the language of interaction and translanguaging on attention to interactional feedback in virtual exchanges. *System, 105*, 1-10.

Chaokongjakra, W. (2023). Is it 'important,' 'significant,' or 'crucial'? A corpus-based study of English synonyms. *LEARN Journal: Language Education and Acquisition Research Network*, *16*(2), 512-532.

Chaisuriya, A. (2023). Circumstances of and challenges in providing inclusive English education for Thai novices and monks. *LEARN Journal: Language Education and Acquisition Research Network, 16*(2), 499-511.

Duffley, P. (2020). *Linguistic meaning meets linguistic form*. Oxford University Press.

Durham, C. (2023). Teacher educator toolbox: Strategic mediation in teacher preparation coursework focused on technology. *System, 114,* 1-12.

Egbert, J., and Baker, P. (2019). *Using corpus methods to triangulate linguistic analysis*. Routledge.

Hongbil, N., and Wongkittiporn, A. (2023). Lexical expressions of compare and contrast in applied linguistics research articles. *Lawarath Social E–Journal*, *5*(2), 77-90.

Jeanjaroonsri, R. (2023). Thai EFL learners' use and perceptions of mobile technologies for writing. *LEARN Journal: Language Education and Acquisition Research Network, 16*(1), 169-193.

Jo, C. W. (2022). Mapping adolescent literacy across L1 backgrounds: Linguistic and discourse features as predictors of persuasive essay quality. *System*, *104*, 1-14.

Kongcharoen, P. (2023). Investigation of vocabulary for ESP classrooms from academic journals in physical education and sports science. *LEARN Journal: Language Education and Acquisition Research Network*, 16(2), 311-332.

Kroeger, P. R. (2023). *Analyzing meaning: An introduction to semantics and pragmatics*. Language Science.

Lertcharoenwanich, P. (2023). Analysis of collocations and semantic preference of the near-synonyms: Blank, empty, and vacant. *LEARN Journal: Language Education and Acquisition Research Network, 16*(1), 365-383.

McCutchen, D. (2011). From novice to expert: Implications of language skills and writing-relevant knowledge for memory during the development of writing skill. *Journal of Writing Research*, *3*(1), 51-68.

Naderpour, Z. (2022). A contribution of fanfiction writing to improving voice and fluency of learners of Japanese from an agentic perspective. *System, 105*, 1-13.

Oranpattanachai, P. (2023). Relationship between the reading strategy, reading self-efficacy, and reading comprehension of Thai EFL students. *LEARN Journal: Language Education and Acquisition Research Network, 16*(1), 194-220.

Petelin, R. (2022). *How writing work: A field guide for effective writing*. Routledge

Prideaux, G. D. (1991). Syntactic form and textual rhetoric: The cognitive basis for certain pragmatic principles. *Journal of Pragmatics*, *16*(2), 113-129.

Radford, A. (2009). *An introduction to English sentence structures*. Cambridge University Press.

Radford, A. (2020). *An introduction to English sentence structures*. Cambridge University Press.

Rasi, S. (2023). Emergency remote teaching adaptation of the anonymous multi–mediated writing model. *System, 113*, 1-19.

Rimkeeratikul, S. (2023). Communication apprehension and intercultural communication apprehension among MA students at a public university in Bangkok. *LEARN Journal: Language Education and Acquisition Research Network, 16*(1), 429-447.

Sak, M. (2022). Dynamicity of language teacher motivation in online EFL classes. *System, 111*, 1-12.

Smith, C. G. (2008). Braddock revisited: The frequency and placement of topic sentences in academic writing. *The Reading Matrix*, *8*(1), 78-95.

Smith, N., and Rayson, P. (2007). Recent change and variation in the British English use of the progressive passive. *ICAME Journal, 31*(1), 129-159.
Sojisirikul, P., and Chanchula, N. (2023). Use of voicethread for reflective speaking. *LEARN Journal: Language Education and Acquisition Research Network, 16*(2), 333-347.
Sukrutrit, P. (2023). Students' perceptions of speaking English in front of the class versus speaking English via self-recorded videos posted on a private Facebook group. *LEARN Journal: Language Education and Acquisition Research Network, 16*(1), 272-295.
Sulis, G. (2022). Engagement in the foreign language classroom: Micro and macro perspectives. *System*, *110*, 1-13.
Swan, M. (2016). *Practical English usage.* Oxford: Oxford University Press.
Tsang, A. (2022). FL listening motivation, interest, linguistic self-confidence, and overall proficiency: A complete double mediation model. *System, 108*, 1-9.
Thongsan, N. C. (2023). Vocabulary uptake and retention from reading a graded reader. *LEARN Journal: Language Education and Acquisition Research Network, 16*(2), 154-167.
Thonney, T. (2015). *Academic writing: Concepts and connections*. Oxford University Press.
Vizzi, F., Angelelli, P., Iaia, M., Risser, A. H., and Marinelli, C. V. (2023). Writing composition ability andspelling competence in deaf subjects: A psycholinguistic analysis of source of difficulties. *Reading and Writing*, *36*(5), 1201-1226.
Watcharapunyawong, S., and Usaha, S. (2013). Thai EFL students' writing errors in different text types: The interference of the first language. *English Language Teaching*, *6*(1), 67-78.
Wongkittiporn, A. (2021a). Adverbial clauses in English cookbooks. *Thoughts*, *1*(2021), 72-104.
Wongkittiporn, A. (2021b). Analysis of non-restrictive relative clauses in interior design texts. *Journal of Social Science and Humanities Research in Asia, 27*(1), 35-80.
Wongkittiporn, A. (2021c). Making impersonal comments via *it*-extraposition: Perspectives of syntactic structure, semantic denotations and pragmatic aspects via literature, magazines and applied linguistics articles in English. *Journal of Rattana Bundit University*, *16*(2), 20-38.
Wongkittiporn, A. (2021d). Semantic denotations and pragmatic aspects of *that*-clause complements in English bedtime stories. *Academic Journal of Humanities and Social Sciences Burapha University*, *29*(2), 217-242.
Wongkittiporn, A. (2022a). Existential *there* constructions in English applied linguistics articles and novels: Perspectives of pragmatic aspects, semantic interpretations and vicinity of syntactic structures. *Wiwitwannasan Journal of Language and Culture*, *6*(1), 47-70.
Wongkittiporn, A. (2022b). Pragmatic aspects and semantic denotations of exceptional case marking constructions in English novels, English applied linguistics articles and English magazines. *Liberal Arts Review*, *17*(2), 32-58.
Wongkittiporn, A. (2022c). Pragmatic interpretations of raised arguments in English novels. *Journal of Liberal Arts Prince of Songkla University*, *14*(1), 27-54.
Wongkittiporn, A. (2022d). Raised and unraised conditions, semantic interpretations and pragmatic aspects of the verb "seem" in English novels. *Liberal Arts Review*, *17*(1), 77-99.
Wongkittiporn, A. (2022e). Semantic interpretations of passive constructions in business news articles. *Journal of Language, Religion and Culture*, *11*(2), 1-29.
Wongkittiporn, A. (2022f). Syntactic structure and semantic denotations of gerunds in biographical texts. *Phranakhon Rajabhat Research Journal: Humanities and Social Sciences*, *17*(2), 250-268.
Wongkittiporn, A. (2023a). Agentless passive in English novels. *Rajabhat Maha Sarakham University Journal, 17*(2), 46-57.
Wongkittiporn, A. (2023b). Pragmatic aspects of temporal adverbial clauses in English novels. *Journal of MCU Humanities Review*, *9*(1), 329-342.
Wongkittiporn, A. (2023c). Pragmatic perspectives of the raised DP in raising and passive constructions in applied linguistics articles. *Liberal Arts Review*, *18*(1), 40-64.
Wongkittiporn, A. (2023d). Syntactic interpretations of noun phrases used with the relativizers *which* and *that* in English novels. *Journal of Liberal Arts, Ubonratchathani University*, *18*(2), 181-205.
Wongkittiporn, A. (2023e). Syntactic interpretations of reduced adverbial clauses in applied linguistics research articles and novels. *Multidisciplinary in Humanities and Social Science*, *6*(5), (in press)
Wongkittiporn, A. (2024a). Syntactic interpretations of the raised determiner phrases in passive voice: Perspectives of applied linguistics research articles and travel guidebooks. *Language and Linguistics*, *42*(1), (in press).
Wongkittiporn, A. (2024b). Syntactic interpretations, semantic interpretations and pragmatic aspects of present participial reduced relative clauses in English novels. *Muban Chombueng Rajabhat University Journal (Humanities and Social Science), 12*(2), (in press).
Wongkittiporn, A., and Chitrakara, N. (2018). Control constructions in British and American English. *Bulletin of the Transilvania University of Brasov. Series IV: Philology and Cultural Studies*, 19-48.
Wongkittiporn, A., and Hongbil, N. (2023). Lexical expressions of compare and contrast in business news articles. *Journal of Liberal Arts RMUTT*, *4*(1), 53-69.
Wu, H., and Chitrakara, N. (2020). Topics of English sentences in expository and narrative proses. *Journal of Pan-Pacific Association of Applied Linguistics*, *24*(2), 69-93.
Yamane, T. (1973). *Statistics: An introductory analysis*. HarperCollins.
Yassin, O., and Hames, P. K. (2023). Difficulties Saudi, undergraduate, male students encountered in topic-sentence writing and Bloom's cognitive competencies they relate to: A case study of (PMU). *World Journal of English Language*, *13*(2), 141-158.
Zare, J. (2023). The impact of L2 learners' altruistic teaching on their task engagement in English essay writing. *System, 118,* 1-15.

Citation: Wongkittiporn, A. (2025). Applying (non)head-movement mechanism to study topic sentences in applied linguistics research articles. *African Educational Research Journal, 13*(1), 65-82.