A Study of Written Noun Pattern Sequences among Secondary School Students in Malaysia

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Abstract

The following research work aimed to investigate the language change of learners through their usage of noun pattern in order to identify which words occur with which patterns and then create a repertoire of the three learners' particular ways of using them. In order to do so, like previous studies, the study relied on the theoretical framework of Hunston's Pattern Grammar Approach (1997) and the conceptual framework of Larsen-Freeman's Complexity Theory (2006). This mixed method study adopted a longitudinal research approach into Chau (2015) students' data to observe the commonly occurred noun pattern sequences within their writing tasks over three years. This helped to understand the changes on the noun pattern about language learning by associating meaning production via noun pattern sequences. Data collection and analysis method was adopted from Tashakkori & Teddlie, 2010. The codification of noun patterns were done quantitatively and then its frequency was quantified. The five nouns have been identified from the analysis at keyness cut-off of 25 via Keywords Extractor followed by a codification of noun pattern sequences done via the framework by Collins Cobuild English Dictionary and Francis et al. (1998). The result of the analysis shows that students do follow noun patterns yet they also tend to produce structures in their very unique ways. Likewise, the repetition of pattern over the years observed in learners suggests language could be both regressing and progressing simultaneously, unlike the developmental leader metaphor applied in most educational settings. In other words, the study suggests that students should be acquainted with patterns instead of words in isolation because their association with different words makes them a natural accompaniment to a lexical approach. This paves the way for unorthodox scoring or marking system, shifting the focus from error analysis to meaningful production of language.

Keywords: *Pattern grammar, noun pattern, longitudinal approach, isolation, lexical approach*

Introduction

The introductory chapter discusses the topic of noun pattern and the background of the study.

Current educational settings of Malaysia prioritize the end aim of language learning as to achieve native like competency. Though in many settings, complete omission of error and native-like competency are often prioritized over actual meaning production, Garcia (2014) encourages translanguaging in classroom and likens language production to merely production of sounds and syllables that gives rise to meaning. Hence, with this, ascends, the question of weighing the significance of viewing language production as merely meaning production guided by sounds and syllables against the practice of achieving native competency that has been espoused by many English Language Teaching (ELT) enterprises. In

this study, meaning production has been adopted to be synonymous to language change. In light of this, the study intends to investigate the significance of alternative methods in meaning production. One of the methods include pattern grammar that has been introduced by Hunston, Francis, and Manning (1997); which would be explored in detail throughout the study.

Hunston et al. (1997) suggests combining both vocabulary and grammar rather than treating them as separate entities to achieve accuracy, fluency, understanding and flexibility in language learning. They explain that pattern of a word is the regular association or co-occurrence of words and structures that contributes to meaning production. Therefore, a pattern can be recognized if a combination of words occurs relatively frequently, if it is dependent on a specific word choice, and if there is a clear meaning associated with it (Hunston & Francis, 2001, p.34).

Corpus research studies carried out by lexicographers at Collins COBUILD worked on illustrating the concept by providing examples on how patterns are created within certain contexts. For example, the adjective 'afraid' can be used with a that-clause (He was afraid that...) or a prepositional phrase with of (She is afraid of...) as stated in Wu, Chen, Chang & Chang (2017, p. 53). In Wu, Chen, Chang, & Chang (2017) words, "It is the study of the words that are used with a particular pattern and which do not form a random collection, but have meanings in common" (p. 53). What he meant is with this idea, most English words tend to follow only a limited set of patterns, which relates to the structure, usage, and the meaning of a word (p.53). Therefore, in light of utilizing pattern grammar against conforming to native speaker competency to produce meaning, this study investigates language change among learners via grammar pattern sequences.

As aforementioned, this study associates meaning production via noun pattern sequences to language development and language change. Thus, by highlighting the variation of noun pattern sequences, instructors are given insight on alternative teaching methodology. Likewise, learners will be aware of the patterns that co-occur together increasing their knowledge on both vocabulary and grammar. This paves the way for unorthodox scoring or marking system, shifting the focus from error analysis to meaningful production of language.

This study therefore aims to look into the language change of three learners through their usage of noun pattern. This would be done in order to notice which words occur with which patterns and therefore build up a repertoire of the learners' particular ways of using them.

With this, the study aims to address the following research questions:

1. What are the noun pattern sequences that can be observed among secondary level students of Malaysia in a writing task?

2. What do the changes on the noun pattern (if any) suggest about language learning in Malaysian Contexts?

Literature Review

This chapter would give a brief summary of the main theories that were explored within the study.

History of Grammar Pattern

As early as 1966, Sinclair predicted that patterns of lexis "would not yield to anything less than a very large computer", (Hanks, 2008, p.21). In his 1987 paper entitled "The nature of the evidence", Sinclair stresses the importance of distinguishing significant collocations from random co-occurrences (Hanks, 2008). The notion of 'pattern' as a systematic way of dealing with the interface between lexis and

grammar was used in Collins Cobuild English Dictionary (1995) which proposed 'Pattern Grammar' with rules describing the intricate relation between word and grammar in one simple representational scheme, which explores the local regularities such as complementation structure, consisting of a headword with a sequence of preposition, noun phrase, verb phrase, clause (e.g., apologize for), or a limited set of special words and phrases (Wu et. al, 2017). This can be more clear with an idea of practical application of pattern grammar.

Applications of Pattern Grammar

Pattern grammar is importantly an application of corpus observation (Hunston, 2013). It began as a tool for lexicographers, giving them a simple way of noting how a word is used for the benefit of learners of English. Apart from this, the other main application of pattern grammar is in language teaching, especially the teaching of English. It lends itself to a view of teaching grammar that focuses on "consciousness-raising" rather than explicit instruction (for example: Willis, 2003). This will be done so that learners would be encouraged to take notice of which words occur with which patterns. In other words, it will help to build a repertoire on both correct usage, and ways of saying things (Hunston, 2013, p. 35). One way of doing this is through noun pattern.

Noun Pattern

Hanks (2008) defined noun patterns in a simple way. Noun patterns do not necessarily have a syntagmatic structure (p. 56). He also stated examples; e.g. the noun 'doctor' has at least two senses: 1) medical practitioner, and 2) bearer of an advanced academic degree (p.56). The first sense is typically distinguished by collocation with any of a large number of words such as patient, dentist, surgeon or nurse (p.56). If these words are found close to it, the medical sense should be selected. On the other hand, if 'doctor' occurs near words such as degree, philosophy, divinity, or letters, the rarer academic sense is more likely to be the correct one (Hanks, 2008, p. 56). Now the question arises what usage noun pattern can have in case of language learning.

Usage of Pattern Grammar

The following are some of the usage of pattern grammar for which it has been studied and explored within language classrooms:

Interpreting Meaning

According to Hunston (1997), it seems remembering patterns is again another sort of memorization but the amount of information that the learner has to amass about each verb seems to be quite big. The load upon the language learner is not as great as it looks because the association between word and pattern is not random. Groups of words that share patterns also tend to share aspects of meaning (Hunston, 1997, p.43). This becomes apparent if, instead of taking a few examples of verbs with different patterns, as we have done above, we concentrate on a single pattern and look at all the verbs that have that pattern. The common aspects of meaning then become obvious (Hunston, 1997, p. 43).

Promoting Understanding

Patterns are formed in coherence. That is to say, "because patterns are used with words that share aspects of meaning, those patterns can themselves be seen as having meaning. This in turn is useful for a learner who, for example, is trying to guess the meaning of an unknown word in context (Hunston, 1997, p.210) In other words, if a learner is guided towards using the pattern as a contextual clue to meaning, he or she may be able to deduce the meaning of a word without checking the dictionary (p.210). For example,

She charmed the town fathers into letting her plant bulbs along our village streets (p.210). The meaning of the pattern is that someone does something as a result of persuasion, charm, or trickery of someone else (p. 210). Even when a verb with a very different meaning is used in this pattern, the meaning of the pattern remains the same.

Past Studies on Pattern Grammar

The past few years has shown that little research has been done to study pattern grammar based on a corpora of learners' written data (Ellis, O'Donnell & Römer 2015; Römer, O'Donnell, & Ellis (2014). Among the earlier attempts, researchers such as Francis et al. (1996) as cited in Hunston (2002) constructed a study on verb patterns based on the COBUILD project. Results from the study indicated that verb responses of all learner groups show effects of collocational transfer from the learners' first languages. In another study, Ellis (2013) incorporated the pattern grammar method to investigate child language acquisition. Results from the study suggested that "there are scale-free distributions in verb usage frequency within constructions" (Ellis, 2013, p. 21). This signifies how language acquisition is beyond categorization and cannot be confined to any given scale. Individual differences as cited in Man and Chau (2019) could influence the language development highlighted via pattern of noun sequences observed in the writing tasks.

These studies show how pattern grammar can reveal learners' language change through a series of frameworks and adaptations. However, they do not address how language develops over time. This study thus aims to address this research gap by replicating findings from previous studies in order to see how it can be applicable to the local setting of Malaysian context.

Research Methodology

As the last chapter focused on the overview of the theories related to pattern grammar, this chapter would lead to the research methodology used for the study.

Theoretical and Conceptual Framework

The theoretical framework used for this study is the Hunston's Pattern Grammar Approach (1997) while the conceptual framework is based on the Larsen-Freeman's Complexity Theory (2006).

Pattern grammar sheds new insight in analyzing learners' language, as now meaning is viewed in the form of whole pattern rather than a word of its own (Hunston, 1997, p.213). It has been used to gain insights into how a language changes in usage and that made the researchers use Hunston's Pattern Grammar Approach (2009) as the theoretical base.

On the other hand, according to Larsen-Freeman (2006), language development is an organic and dynamic process. Therefore, the development of language in language learners could be measured via noun sequences because creation of meaning is possible via noun patterns rather than words/structure occurring in isolation. This is in line with Larsen-Freeman's (2013) view of innovation or errors. Therefore, the derived findings from the survey were discussed and described in the light of Larsen-Freeman's Complexity Theory (2006) which has suggested that second language development is non-linear and individual differences influence learners' language development.

This research employs a convergent parallel mixed method as its research approach. This is because it is a form of mixed method design in which the researcher converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem (Creswell, 2014, p. 43). Moreover, according to Creswell (2014), with this method, the investigator typically collects both

forms of data at roughly the same time and then integrates the information in the interpretation of the overall results involving the integration of both quantitative and qualitative data (p.45). Therefore, this method was well suitable for carrying out this sort of study.

Apart from this, previous studies like (Tashakkori & Teddlie, 2010) also relied on similar approaches. More over the data analysis procedure is also designed on the basis of Tashakkori & Teddlie (2010) where the codification of the noun patterns are done quantitatively and then its frequency is also quantified.

Data Collection Procedure

Data for this study was collected in the following two phases:

1st Phase

Five nouns have been identified from the analysis at keyness cut-off of 25 via Keywords Extractor website designed by Cobb (2015). This means that all these verb forms were at least 25 times more numerous and frequent in the chosen students' corpus than in the Brown corpus which was the first text corpus of American English as mentioned by (Johansson, 1961, p.32), and calculated on a per-million basis. The five nouns identified were pointed out as to occur in at least two out of the three students' data before they were codified.

2nd Phase

A codification of noun pattern sequences was done via the framework adopted mainly from noun patterns by Collins Cobuild English Dictionary and Francis et al. (1998) as cited in Hunston (2009). For the patterns that were new to the students' data, another set of noun patterns was adapted from 'Collins English Dictionary', a website by COBUILD Grammar Patterns. (See reference for URL).

Sampling

For the purpose of this research, a collection of writings made by three anonymous students adopted from Chau's (2015) student data was used. Chau (2015) data (see appendix A) was undertaken from Chau Meng Huat's personal collection of students' essays of Faculty of Language and Linguistics, University of Malaya. Due to ethical and professional restrictions, details of the data have not been disclosed. In order to see a change in language use over a period of time, the longitudinal data from Chau's (2015) study satisfies the diachronic nature needed for the succession of this study. In addition, Chau's (2015) student data is also chosen for this study due to ethical issues involving the collection of authentic students' data.

Data Analysis Procedure

The following are the main nouns patterns taken into consideration for analyzing the students' data adopted from CCED and Francis et al., (1998):

1.   *Patterns with elements preceding the noun*

- *a N; the N* The noun is preceded by an indefinite or definite article:

- *poss N* The noun is typically preceded by a possessive determiner

- *adj N* The noun is preceded by an adjective:

- *n N* The noun is preceded by another noun:

- *from N, on N, to N etc.* The noun is preceded by a specific preposition:

- *supp N* The noun is preceded by a range of the elements given above: determiner, possessive determiner or possessive noun group, adjective or noun.

2.   *Patterns with elements following the noun*

- N to-inf All four teams have shown a desire to win.

- N that   There was a suggestion that the whole thing was a joke.

- N n The noun frequently modifies another noun.

- N prep The noun is followed by a prepositional phrase introduced by a wide range of prepositions.

- N of n, N for n, N from n etc. The noun is followed by a prepositional phrase introduced by a specific prep.

Apart from these noun patterns, the noun pattern categories from the URL: https://grammar.collinsdictionary.com/grammar-pattern are also taken into consideration (see Appendix B)

Findings

This section would shed light on the findings of the study followed by a thorough discussion in the light of the existing literature.

Identification of Nouns

Phase 1 findings show that the keywords in the student data are 'Flower', 'Fish', 'Friend', 'Girl' and 'River' Use lower case in single words here which are 25 times more numerous in the input text as compared to the Brown corpus as mentioned by Johansson (1961) and Hunston (1997). Brown corpus is chosen as the reference corpus as it contains roughly over one million words collected from English language texts of 15 genres. This implies that there has been a more frequent use of these particular nouns among these students compared to the others. This might have several reasons including the fact that the students had encountered these words more often in their classroom teachings. They had enough exposure for these nouns via raising awareness as suggested by Hunston (1997). Usually students tend to use the patterns more which they got to identify in texts, for example, used in reading classes (Hunston, 1997). Table 1shows the distribution of noun pattern variation frequency of each noun in the three students' data throughout essays a, b, c, and d.

Noun	Example	Student 001	Student 002	Student 003
Flower	S001a- They also pluck *the flower beside* the lake (the N prep)	5	6	2
Fish	S001b- they got *a big fish* (adj N)	5	7	9

Friend	S002d- Ahmad with *his friends* (poss N)	6	1	4
Girl	S002d- Farah promised to her parents to be a *careful girl* (adj N)	4	1	8
River	S003d- went fishing *by a river at the end* of their village (by N at n)	1	0	11
Total		11	15	34

Table 1: *Distribution of Noun Pattern Variation in the Three Students' Data*

The distribution above exhibits that Student 003 had displayed the most varied noun patterns among the three students' data while Student 001 exhibits the least. This could infer that Students 003 possesses a wider range of noun patterns than Student 001 and Student 002. A further detail on each student's performance is analyzed in the following section.

Codification of Noun Patterns

In order to identify and explain each student's language progress, this section shall address the noun patterns produced by Student 001, Student 002, and Student 003, respectively. The following table shows the distribution of noun patterns produced by Student 001 throughout essays a, b, c, and d.

Student 001	A	B	C	D
Flower	the N prep	the N	N that	N p that N
Fish	num N	the N	a N	adj N of N for
Friend	poss N poss N for adj N	poss N adj N a N	poss N poss N that a N	poss N poss N to-inf
Girl	adj N poss N that N	adj N num N	adj N	N/A
River	N/A	N/A	the N	N/A

Table 2: *Variation of Noun Patterns by Student 001*

Table 2 shows that the first student used noun patterns associated with possessive pronoun preceding nouns more than any other patterns. For example, in the initial stage, he/she used patterns with mainly poss N, as in 'her friend' or 'his friend'. Though there were structures where noun was used with num, adj or that, but they were very negligible in quantity. This indicates that the student's write up was quite simple during that time. In b, it can be said that the student used quite a number of patterns like the N and num N along with poss N. This indicates a change within his/her write up over the time. The essay in c shows a tendency to use 'poss N that' which was not in the previous write ups. This shows that the student

was able to use patterns that were complex compared to the previous ones. The fourth essay d can also be marked with three items in the patterns yet this time the use of to-inf was seen. The student was using poss N to-inf to his/her noun patterns which showed that write ups becomes complex over time. This can also be interpreted from Chau's (2012) idea that learners begin with a basic communicative resource of cluster than they slowly produce a flood of clusters before developing a systematic or refined set of clusters.

Student 002	A	B	C	D
Flower	the N of N	adj N n N a N the N	of N	the N N prep the N
Fish	to N-ing num N	to N-ing of N	to N-ing	to N of N
Friend	poss N	poss N	poss N	poss N
Girl	N/A	N/A	N/A	adj N
River	N/A	N/A	N/A	N/A

Table 3: *Variation of Noun Patterns by Student 002*

Among the five nouns, Flower, Fish, and Friend exhibit more varied noun pattern sequences as compared to Girl and River. In fact, there is an absence of noun pattern in River for Student 002 although it is evident in the other two students. In 'Friend', for instance, a constant use of possessive pronouns preceding the noun can be seen throughout a until d. For both nouns Flower and Fish, a fluctuation in the number of pattern variation indicates that Student 002 utilizes new patterns, abandon the use of those patterns, and re-utilize those patterns again at a later time. For instance, the for 'of N' in Flower in essay a is not evident in b but reemerges in c. Another observation could be made for the pattern 'to N-ing' in the noun Fish which is essentially a gerund in this context (to fishing). This pattern is used in a, b, and c but is not used in d. Interestingly, the noun Girl is not evident at all until it the point of time essay d was written. In essence, the emerging and neglecting use of a certain noun pattern is not static, it disappears and reappears randomly at various points of time in Student 002.

Student 003	A	B	C	D
Flower	N by n N n	N by n	N by n	N by n
Fish	poss N	N by n poss N poss N n N n the N n	N adj n to poss N n poss N n	N by N n poss N n the N n
Friend	poss N for poss N	adj N poss N poss N n	N/A	poss N

Girl	num N the N the N from num N to	num N the N the N off num N	num N the N the N from the N to adj N	num N the N the adj N num N
River	by N the N into N from N	by N into N to N	by N into N to N n	by N at n by N n into N with into N to N n the N n

Table 4: *Variation of Noun Patterns by Student 003*

Among the three students, Student 003 exhibits the most variation of noun patterns. This is predominantly due to the evidently longer length of essays produced by Student 003 as compared to the other two. In the table above, the noun Girl and River display the most number of noun patterns used in essays **a, b, c**, and **d.** The noun Flower utilizes the 'N by n' pattern consecutively throughout the four essays. In the case of noun Fish, an obvious increase of noun patterns use can be seen: from 'poss N' to 'N by n', 'poss N n', 'N n', 'the N n', 'N by', and 'to poss N n'. This indicates a staggering amount of new noun patterns being used. However, the opposite situation occurs for the noun Friend, in which Student 002 uses less varied noun patterns in essay **d** as compared to essay **a** and **b** in the beginning. Similar to Student 001 and 002, Student 003 also displays fluctuations in the use of noun pattern variations, as evidenced in the nouns Girl and River. This could signify that Student 003 also employs the same progress as Student 001 and 002 in terms of language development.

Discussion

The result of the analysis shows that students do follow noun patterns yet they also tend to produce structures in their very unique ways. As stated by Larsen Freeman (2006), there is a great amount of variation at one time in learners' performances and clear instability over time (p.53). Variation and fluctuation are important characteristics of dynamic systems (Thelen and Smith, 1994; van Geert and van Dijk, 2002 as cited in (Larsen Freeman, 2006, p.31) and should not be dismissed as measurement error. The fluctuation and variability is in part because language learners dynamically adapt their linguistic resources to the context, and the context is always changing (Tarone, 1979, p.43).

Likewise, the repetition of pattern over the years observed in learners suggests language could be both regressing and progressing simultaneously, unlike the developmental leader metaphor applied in most educational settings. Such regression and progression is likened to meaning production that tantamount to language change in this study. Similarly, linguistic sophistication, as suggested in Crossely and McNamara (2012), could be viewed here in terms of noun pattern sequences. Similar order of words used leading to simple meaning of production or variety order of words leading to sophisticated meaning production is still accounted as observed in data reflects linguistic sophistication.

Conclusion

To sum up, it can be said this study employs pattern grammar, a somewhat radical construct, on viewing language change and meaning production in comparison to error-analysis, target-language use

analysis and developmental sequence analysis. Thus, it allows a new perspective of looking at learners' language and learner themselves as their meaning production through noun pattern sequences was utilized to gauge language change. This dismisses the lens of viewing learning as problems and mistakes. Therefore, the pedagogical implication of this study includes modelling grammar pattern practice to suit learners' needs. Also based on the findings, teaching grammar could be made centralized on meaning production as the ultimate criteria, rather than error analysis and lexical variations. In other words, the main focus should be on how the students are making meaning with noun patterns other than anything else.

The limitation of the study is due to the ethical considerations, a small sample has been adopted for the study. Therefore, the results cannot be generalized and applied to other studies.

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