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THEMATIC PROGRESSION PATTERNS AND MEANING PORTRAYAL IN FOREST INSPECTION REPORT

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Abstract

Studies investigating the concept of theme and how a text progresses in various text types successfully uncover how meanings are portrayed. However, very little is known about how texts are organized in the professional context, particularly in the forestry discipline. As the forestry discipline combines other scientific disciplines, various concerns about its nature can be elucidated. This study investigates the thematic progression patterns in the field inspection report found in the forestry discipline to provide preliminary explorations on how language is used to convey meaning and fulfill its communicative function. Six field inspection reports written by forestry professionals were analyzed to uncover how meanings unfold in the reports utilizing the Hallidayan systemic functional linguistics approach. The results revealed that the report mainly concerns how forest areas are managed and that the derived Theme is used dominantly to establish specific contexts of each section of the report. The thematic progression patterns observed in the study provide instances of not only the report's structure but also how its function is realized. Further work investigating various scientific reports in the forestry discipline is recommended to see whether these patterns are robust in the context of the forestry discipline and across other disciplines.

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1. Introduction

Thematic progression is among the most important concepts in Systemic Functional Linguistics (SFL) in that it allows an understanding of how the internal organization of a text is achieved, which is reflected through the development and relations between the Themes and Rhemes in the text. Webster (2019, p. 42) contends that thematic progression relates to the 'successive choices of what is rendered thematic'. In this study, analysis of thematic progression is essentially based on Daneš (1974) notion of thematic progression pattern. Various studies have explored the thematic progression of different text types (Guo, 2021; Rahayu et al., 2020), language (Alrajhi, 2020) and disciplines (Alrajhi, 2020; Babaii et al., 2016; Leong, 2022). While many studies focus on academic texts, there is a dearth of research on professional texts due to the limited access to professional texts that often deal with confidentiality and the reluctance of professionals to allow further explorations in real-life contexts (Candlin, 2002; Louhiala-Salminen, 2002; Sarangi, 2002). Despite various attempts to explore how language is used in different professional disciplines and contexts (Alrajhi, 2020; Babaii et al., 2016; Forey, 2002; Flowerdew & Wan, 2010; Nwogu & Bloor, 1991), the forestry discipline has received little attention. This study aimed to demonstrate how meanings are constructed in the field inspection report written by forestry professionals practicing sustainable forest management through analysis of thematic progression patterns.

Forestry is a multi-disciplinary field that incorporates many scientific disciplines; soils, wildlife, civil engineering, economics, ecology, agriculture, environmental science, recreation, silviculture and utilization of timber products (Green, 2006). With such complexities of the discipline, analysis of professional text in forestry is most opportune in the hope of uncovering the nature of forestry discipline and the ways meanings are constructed through language in its context of use. As pointed out by Kong (2014, p. 3), language used by professionals serves a crucial role 'in socializing their professional roles and identities'. Professional discourse is thus seen as an identity (Wenger, 1998) and a license (Candlin, 1997) to a particular profession.

One of the most significant contributions of the forestry discipline to the sustainable development of a nation is sustainable forest management (SFM), especially in countries richly endowed with forests (Islam et al., 2010). Based on the definition provided by ITTO (1999), SFM is defined as the process of managing permanent forest land to achieve one of the more clearly specified objectives of management concerning the production of a continuous flow of desired forest products and services without undue reduction of its inherent values and future productivity and undue desirable effects on the physical and social environment. SFM practices integrate and balance three key pillars; economic, social and environmental, and they are impossible to achieve without a proper management system (Islam et al., 2010). As language is perceived to play an important role in 'socializing' professional roles (Kong, 2014, p. 3) and that professional discourse act as a 'banner of identity' (Wenger, 1998), investigation of the kind of text produced by forestry professionals is therefore necessary to further understand how forestry discipline functions and serves its purpose.

In a study conducted by Alrajhi (2020) exploring medical texts written by native and non-native writers, it was found that medical texts are organized most dominantly through the constant Theme pattern across both groups of writers, followed by linear theme and split Rheme progression patterns. The results corroborate with other studies (Alyousef, 2015; Patpong, 2013) regarding the typical thematic

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progression patterns found in the respective texts analyzed. In another study undertaken by Leong (2022) investigating scientific text in nanotechnology, the constant thematic development as the typical thematic choices corroborate with the findings obtained by Nwogu and Bloor (1991) in the medical discipline concerning research article publications. Constant Theme pattern thus provides writers with the strategy to foreground the central idea of a text and as a point of departure of the textual message.

2. Materials and Methods

A qualitative approach to the study of six field inspection reports representing analysis of 242 clauses was taken on the basis that a qualitative perspective on the meaning construction presented in the report could be derived as it allowed insights on '...how people make sense of their world and the experiences they have in the world' (Merriam, 2009, p. 13). Genre analysis was used in the present study as it was regarded as a suitable method of 'reading' texts, an approach which seeks to explore the relations of language, communication, knowledge, power and social practices to one another thus emphasizing on 'the meaning and structure of acts of communication in context' (Jupp, 2006, p. 74).

This study investigated naturally occurring language in the context of a field inspection report written by forestry professionals working at one of the districts and state forestry departments in Peninsular Malaysia. Previous studies have been conducted investigating naturally occurring language use, particularly in business and medical disciplines (Helan, 2012; Mizusawa, 2008), in the hope of contributing towards a better understanding of the use of language in fulfilling specific communicative and social needs purposes. Results obtained from naturally occurring language use suggest that research in real-life tasks, such as in the professional context, has the potential to not only sustain scholarly discussions on language but also advance more explorations in various contexts and disciplines parallel with the intent of this study. By investigating real-life task forestry professionals are required to perform, it is hoped that insightful findings on how forestry professionals use language to derive meaning and fulfil their communicative and social tasks in the report investigated. To achieve this, document analysis was employed as it is regarded as 'a social fact' which is 'produced, shared, and used in socially organized ways (Atkinson & Coffey, 1997, p. 47). Document analysis allows researchers to analyze and interpret texts in order to elicit meaning, obtain understanding and develop empirical knowledge within the context of which the text is analyzed (Corbin & Strauss, 2008).

2.1. Field inspection report

The field inspection report is a confidential report which includes official government data on forest reserves in Peninsular Malaysia. As the reports are confidential, important details were omitted from the reports conforming to the request made by the forestry department. Details that were omitted include the state logo, officer details and contact information, reference number, date of the report issued, subject of the report, name of officers and applicants, forest information (location, coordinate, size, type of tree species, road access), signature and file data. The report is typically four pages long, written in Malay and segmented into several headings. Specifically, six reports were analyzed in the study. The reports were gathered from forestry officers working at one of the district forestry offices in Peninsular

Malaysia. As highlighted at the onset of this study, difficulties faced by researchers in gaining full access to professional texts have led to the scarcity of literature on professional report genres (Candlin, 2002; Louhiala-Salminen, 2002; Sarangi, 2002). Therefore, although some parts of the field inspection report are obscured from the analysis of this study due to confidentiality issues, it is hoped that the overall representation of meaning construction by looking into the thematic progression in the field inspection report would enrich the literature on professional report genres, particularly in the forestry discipline.

The field inspection report explored in this study is written in Malay. In order to make the findings of the study more understandable and visible to a wider audience apart from those familiar with Malay, glossing is required. This provides the reader with information and understanding regarding meanings and grammatical properties of words and parts of words evident in the texts analyzed. This study uses the Leipzig glossing rules (Croft, 2003; Lehmann, 1982) to accommodate the interlinear morpheme-by-morpheme glosses. It is important to understand that glossing is merely part of the analysis and does not represent part of the data (Croft, 2003). The glossing rules employed in the study aimed at providing readers with relevant information on the theme organization of the field inspection report.

2.2. Analysis of thematic progression

In Systemic Functional Linguistics (SFL), one of the key areas that has received increased attention is the thematic progression of a text (Eggins, 2007). Thematic progression is concerned with the relationship that exists surrounding Themes and the preceding Themes and Rhemes, aiming at identifying where the content of each Theme is derived from (Halliday, 1994; Thompson, 2014). In doing this, Daneš (1970, 1974) notion of thematic progression was used to analyze the thematic progression of the field inspection report by examining the Theme and Rheme of the preceding clauses and their relation to other clauses. Thematic progressions is defined by Daneš (1974) as "the choice and ordering of utterance themes, their mutual concatenation and hierarchy, as well as their relationship to the hyperthemes of the superior units (such as paragraph, chapter), to the whole of the text, and to the situation" (p. 114).

Daneš (1974) proposes four thematic progression patterns including the simple linear theme progression, constant theme progression, derived theme progression, and the split Rheme pattern. A Theme that is derived from the Rheme of the previous clause is referred to as the simple linear theme, where each Rheme becomes the Theme of the following clause. The constant Theme pattern (Daneš, 1974) is labelled as such when the Theme of a given clause is derived from the Theme of the previous clause. On the other hand, the constant Theme progression pattern is regarded as such when the same Theme appears in a series of utterances whereby the subsequent Rhemes are linked up (Daneš, 1974; Patpong, 2013). The derived Theme progression is when the Themes derived from a single general notion known as Hypertheme, where the patterns allow introduction of New information which is typically taken up as the Theme of the subsequent clause (Daneš, 1974; Patpong, 2013). In addition, Daneš (1974) contends that these main thematic patterns may also be combined in various ways to produce the fourth type of thematic progression pattern referred to as the split Rheme. The split Rheme progression refers to those in which the Rheme may include multiple types of information that can be taken up as the Theme in a number of subsequent clauses.

This study conducted an analysis of thematic progression patterns proposed by Daneš (1974) was conducted to investigate how meanings are constructed and progressed thematically from one element to the other. Analysis of whether linear, constant, derived or split Rheme progression of the reports was carried out following the explanation provided by Daneš (1974). However, the researchers were also cautious in categorizing the types of thematic progression found in the reports so that the patterns found were not restricted only to those proposed by Daneš (1974).

Results and Discussion

Thematic choices serve two functions; creating frameworks by which the Rhemes of the clauses can be interpreted (Fries, 1973) and providing empirical evidences of a text's thematic progression (Daneš, 1974) or 'method of development' (Fries, 1973). Halliday and Hasan (1985, p. 67) asserts that analysis of thematic structures of a text can allow 'insights into its texture and understand how the writer makes clear to us the nature of his underlying concerns'. A development method of a text is achieved by a typical thematic selection that contextualizes the thematic progression of a given text (Daneš, 1974). In field inspection reports analyzed in this study, all the four types of thematic progression were observed; linear Theme, constant Theme, derived Theme and split Rheme progression patterns.

Results of the study indicate that the derived Theme progression pattern is dominant in field inspection reports (50.41%), whereas other patterns, namely the linear Theme, constant Theme pattern and split Rheme progression recorded a similar frequency of use with 40 occurrences (16.53%) as shown in Table 1.

Table 1. Thematic progression patterns in the field inspection report

Pattern	Occurrences (clauses)	Percentage (%)
Derived Theme	122	50.41
Linear Theme	40	16.53
Constant Theme	40	16.53
Split Rheme	40	16.53

The Theme and Rheme boundaries labelling follows Daneš (1974) and Patpong (2013). Daneš (1974) advocates that the constant and linear Theme progression patterns form the basic or typical thematic patterns in a relatively simple text. However, as shown in Table 1, the derived Theme pattern occurs most frequently (122 occurrences). Derived Theme progression patterns refer to Themes derived from a single general notion known as Hypertheme, whereby the pattern serves as a means of conveying New information, realized through the Theme of the subsequent clause (Daneš, 1974; Patpong, 2013).

3.1. Linear Theme progression

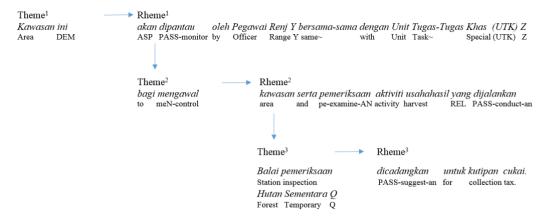
Forty (40) linear Theme progression pattern occurrences were found in the field inspection reports (16.53%). Figure 1 illustrates the linear Theme progression pattern in the reports analyzed.



Figure 1. Linear Theme progression pattern in field inspection reports

Figure 1 illustrates a linear Theme progression pattern in field inspection reports. Simple linear theme progression refers to a Theme derived from the Rheme of the previous clause, where each Rheme becomes the Theme of the next clause (Daneš, 1974). In the reports analyzed, the linear Theme pattern is used to further describe material entities described in the Rheme of the previous clause, such as the water flow shown in Figure 1. It also provides details regarding activities taking place in forest areas. These include using a linear Theme to highlight i) the harvesting activity and ii) the log access road.

Out of all the elements of the field inspection report, information regarding how monitoring of forest activities will take place, including the officers in charge of recording activities in the forest areas and tax collections, are done through more constant use of linear Theme patterns and is used identically in all the reports analyzed to describe the work monitoring activities that will be taking place in the area as shown in Figure 2.



This area will be monitored by Y Range Forest Officer together with Z Special Task Unit to control the area as well as to do inspection of harvesting activities that are conducted. Temporary Q Forest Inspection Station is suggested for tax collection.

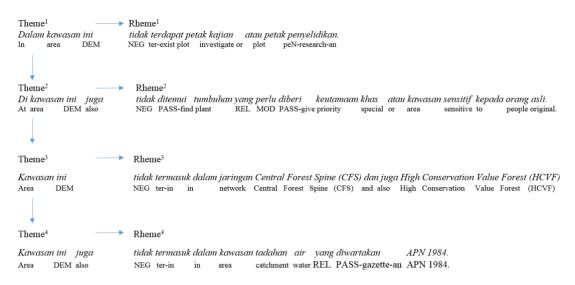
Figure 2. Use of Linear Theme progression pattern in the field inspection report

Overall, the use of linear Theme patterns is widespread in field inspection reports and can occur in any elements of the reports which require further information to be presented in the Theme that eventually addresses the details provided in the previous Rheme of the respective clauses. Since linear Theme progression pattern is the most typical type of progression pattern found in any text (Patpong, 2013), it is expected that linear progression pattern is also used in the reports analyzed. However, as shown in Figure 2, a linear Theme pattern is typically used when providing details regarding work

monitoring plans proposed by the district forestry department. As shown in Figure 2, the Theme is picked up by either a Process (akan dipantau – will be monitored), as shown in the second clause or a Complement (pemeriksaan aktiviti usahahasil – harvesting activity inspection), as shown in the third clause within the Rheme of the previous clause.

3.2. Constant theme progression

Another thematic progression pattern used in field inspection reports is the constant Theme progression pattern with 40 occurrences (16.53 per cent). In the constant Theme progression pattern, a similar Theme is picked up and recurs at the beginning of each subsequent clause (Fontaine, 2013). The constant Theme progression pattern is used in the editorial genre (Caffarel-Cayron & Rechniewski, 2014). It is also regarded as one of the key methods of text development (Patpong, 2013). The results obtained revealed that forest areas are given thematic prominence (33 occurrences) in the constant Theme progression, as well as the river (six occurrences) and tree distribution (one occurrence). From the findings the constant Theme pattern often follows the derived Theme pattern, which established the first Theme in each subheading of the reports. This means that once the derived Theme was instantiated in the first clause, the following clause was extended by the constant Theme progression pattern, as illustrated in Figure 3.



In this area, there is no study plot or research plot. In this area, no plants are found which require special priority or sensitive area to *orang asli*. This area is not included in the Central Forest Spine (CFS) network and also High Conservation Value Forest (HCVF). This area is also not included in the water catchment area gazetted in APN 1984. (General Information Element, R5)

Figure 3. Constant Theme progression pattern in field inspection reports

It was found that forest areas were given thematic roles in the clauses, which are sustained through the use of constant Theme progression patterns. As can be seen in Figure 3, the constant Theme progression pattern with the forest area being given thematic prominence allows discussion to be maintained and information to be presented on the specific type of forest the area falls into as well as the department's record concerning the long-term plan or agenda to be provided to the reader. Overall, the constant Theme pattern occurred in the reports mainly to maintain the topic on forest areas in a series of

subsequent clauses where the Rhemes are linked up. Besides, it is also used to maintain the discussion on the river flow (six occurrences) and tree distribution (one occurrence), albeit less frequently compared to the thematic prominence given to forest areas in the reports (33 occurrences – 82.5%), as shown in Figure 3.

3.3. Derived theme progression

The derived Theme progression refers to the Themes derived from a single general notion known as Hypertheme, whereby the pattern serves as a way of introducing New information, which is taken up as the Theme of the subsequent clause (Daneš, 1974; Patpong, 2013). The derived Theme progression occurs when the Theme is derived from a Hypertheme, a general overriding topic of a more extensive stretch of text (Fontaine, 2013). The findings of this study reveal that the use of derived Theme progression patterns in field inspection reports can occur in two contexts; firstly, from abiding by standard Malay formal letter writing conventions and secondly, from the main sub-headings of the reports that are specifically dedicated to specific details of the forest areas. In the first context, derived Themes were used to acknowledge the reader through typical formal letter-writing conventions in Malay in which identical derived Theme patterns occurred in all the reports analyzed (six occurrences, one per report). In this context, the derived Theme, as shown in Excerpt 1, is used to acknowledge the officers to whom the reports were issued.

Excerpt 1

Dengan segala hormatnya saya merujuk surat tuan bil (x). dlm. xxx 1/1/1 bertarikh 1 Januari 2022 mengenai perkara tersebut di atas.

With all due respect, I refer to your letter Volume (x).dlm.xxx 1/1/1 dated 1st January 2022 regarding the matter mentioned above.

As shown in Excerpt 1, the derived Theme progression pattern is realized by the circumstance of Manner (Dengan segala hormatnya - With all due respect), which establishes the introduction to the report and is also a typical reference marker used in Malay formal letters (Asmah, 2016). The Rheme is established not only as a response to the previous letter received from the state forestry department but also refers to the subject line of the report, which signals the content of the reports (e.g. mengenai perkara tersebut di atas - regarding the above matter). Derived Theme pattern occurs not only at the beginning of the reports but also at the end. Derived Theme pattern progression occurs at the end of the reports to signal that additional materials are supplemented along with the reports referred to by Asmah (2016) as participation markers. Excerpt 2 shows the derived Theme progression pattern used to signal participation markers in the reports analyzed.

Excerpt 2

Bersama-sama ini dikepilkan sesalinan pelan kawasan dan juga gambar bagi kawasan yang dipohon untuk tindakan tuan selanjutnya.

Attached herewith is a copy of the map area as well as photographs of the area that has been applied for your further action.

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In Excerpt 2, *Bersama-sama ini* (Attached herewith) is regarded as a derived Theme pattern because the use of *ini* (demonstrative pronoun), referring to the report, is signalled as the Theme of the clause. Thus, the context is derived based on the information presented in the report, whereby the Rheme includes the types of information attached to the reports, including photographs and the aerial map of the forest areas. As Van Nus (1999) noted, this element is commonly found in a letter genre to acknowledge that additional information is included in a text. Additionally, Asmah (2016) advocates that the phrase *Bersama-sama ini* (Attached herewith) acts as a participation marker in Malay formal letters. Therefore, the use of the derived Theme patterns both at the start and the end of the reports are associated with typical language expressions commonly found in the letter genre, as aptly shown in the findings of this study.

The most frequent use of derived Theme progression pattern concerns the second context of its use in the reports, which is from the context related to each sub-heading of the reports. Figure 4 illustrates the use of derived Theme patterns in the first clause of the sub-headings of the reports.

Hypertheme (Area Location Element)

Theme Rheme

Kawasan dipohon terletak di sebelah Barat dalam Hutan Simpan A.

Area PASS-apply ter-locate at next West in forest reserve A.

The applied area is located at the west side of A reserved forest.

Hypertheme (Terrain/Topographical Element)

Theme Rheme

Keadaan muka bumi di kawasan ini adalah berbukit sederhana tinggi.
Condition face earth at area DEM descriptive particle ber-hill moderate high.

The terrain condition in this area is moderately hilly.

Hypertheme (Area Size Element)

Theme Rheme

Luas kawasan mengikut catatan dalam Rancangan ialah 100 hektar. Size area me-follow record in Plan descriptive particle 100 hectare. Tebangan dan Rawatan Tahunan (RTRT) bagi Kompartmen X

Felling and Treatment Year (RTRT) for Compartment X

The area size according to Yearly Felling and Treatment Plan for Compartment X is 100 hectares.

Hypertheme (Forest Status Element)

Theme Rheme

Kompartmen 1 Hutan Simpan belum pernah dijalankan aktiviti pembalakan.

Compartment 1 Forest Reserve NEG ASP PASS-perform-an peN-log-an.

Compartment 1 forest reserved has never been conducted any harvesting activities.

Figure 4. Use of Derived Theme progression pattern related to sub-heading of field inspection reports

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Figure 4 illustrates the derived Theme progression pattern in the first clause of all the sub-headings of the reports. As expected, the derived Theme progression pattern is construed from the sub-elements of the reports that would provide specific details and context regarding relevant information about the forest areas. For example, for the report's Terrain/Topographical Condition section, derived Theme patterns are used to provide details regarding the topographical and terrain condition of the forest areas (see Figure 4). A closer observation of the derived Theme progression pattern reveals that the first clause of all the sub-headings of the reports utilizes the derived Theme progression pattern in expressing the context of each sub-heading in the field inspection reports. This is perhaps the most significant finding yielded from this study, as previous studies reported a more dominant use of constant Theme patterns in scientific texts (Alyousef, 2015; Alrajhi, 2020; Leong, 2022; Patpong, 2013). This could be influenced by the generic structure of the field inspection report that has embedded sub-elements in the reports that are required to be included by the forestry department when reporting on their fieldwork inspection concerning the forest areas under its management.

3.4. Split rheme progression

Another thematic progression pattern used in the reports is the split Rheme progression pattern. The split Rheme pattern refers to the Rheme of the clause, which has two or more components, each of which is taken in turn as the Theme of the subsequent clause (Patpong, 2013). It should be noted that the split Rheme progression pattern is used almost exclusively when discussing the forest area location, with 30 occurrences out of 40 occurrences in the reports (75%). When discussing the forest area location, the elements in the Rheme (bersempadan and kawasan berikut) are taken up as the Theme to introduce the exact location of the forest area described in terms of its cardinal location; north, east, south and west as shown in Figure 5.

Area Location element

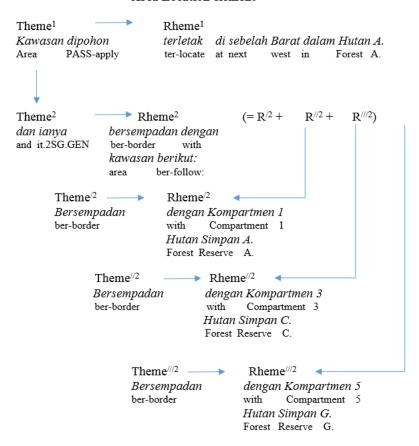


Figure 5. Split Rheme progression pattern in Area Location element

In Figure 5, the information from the Rheme of the second clause of the Area Location element is sustained over both the Theme and Rheme of the subsequent clauses. Thus, the findings show that the split Rheme pattern as found in the study, particularly when explaining forest area locations, somewhat varies from the pattern of split Rheme proposed by (Daneš, 1974), which typically include multiple types of information that are being taken up as the Theme in a series of subsequent clauses. In this particular example, the Rheme of the previous clause is sustained both as the Theme (bersempadan – at the border with) as well as the Rheme (the specific location of the forest area) of the subsequent clauses addressing the four cardinal locations of the forest areas. Patpong's (2013) analysis of thematic progression patterns in Thai's Song Dam folktales reveals that this type of progression pattern is not observed in her study. However, in this study, it was found that the split Rheme progression pattern is used in the reports and that it can be sustained both as the Theme and Rheme of the clause with the Theme realized by a Material Process (bersempadan - bordering) and the Rheme realized by the location of the forest areas (New information) in the subsequent clauses.

4. Conclusion

Matthiessen (2014) advocates that the thematic organization of the clauses 'is the most significant factor in the development of the text' (p. 105). The method of thematic selection and text development

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thus plays significant roles in organizing field inspection reports. Various thematic progression patterns are used to develop the message and meanings in the reports, as previously discussed. In this study, the field inspection reports provide information regarding forestry professionals' practices in managing forest areas in Peninsular Malaysia. When highlighting the events of harvesting activities and how timber transportation will be managed, the linear Theme progression pattern is used, which is centrally focused on the forest areas. On the other hand, when the text maintains the topic on forest areas, river flow and tree distribution in forest areas, the constant Theme progression pattern is used to sustain the topic on the respective elements.

Meanwhile, the derived Theme progression pattern is used to accomplish these purposes by abiding by the writing conventions of Malay formal letter and addressing the sub-headings of the reports. Finally, detailed information regarding the location of the forest areas is established exclusively through the split Rheme progression pattern. Through the use of this type of split Rheme thematic pattern, multiple types of information are presented. They are taken up as Themes in a series of subsequent clauses, thereby establishing the relevance of field inspection reports in addressing key concerns concerning the forest areas being evaluated for forest harvesting activities. Findings on thematic organization and progression indicate that the scientific nature of the report analyzed, which is often written in a more complex manner, is presented through the effective use of independent, paratactic and hypotactic clauses to establish coherence in the meanings presented in the reports. Halliday and Hasan (1985) asserts that the thematic structure of a text allows an understanding of 'how the writer makes clear to us the nature of his underlying concerns' (p. 67). It is evident that the information conveyed in the report addresses the key concerns of the forestry community: the sustainable forest management practices that pledge to integrate a balanced outcome concerning economic, social and environmental aspects of forest management (Islam et al., 2010). In this study, forestry professionals convey their concerns related to the fieldwork on forestry management. Meaning construction in the field inspection report thus revolved around how forestry professionals convey information related to these concerns.

It is also observed that the meaning organization in the report is appropriately established to sustain the concerns highlighted in the report through Derived Theme, Linear Theme, Constant Theme, and Split Rheme progression patterns. The Derived Theme pattern is dominant in the reports, establishing context to the information presented in each sub-headings of the Body Paragraph element. Thus, this study's findings shed light on another type of thematic progression not observed in previous studies looking into the typical thematic patterns in other disciplines (Alrajhi, 2020; Leong, 2022; Patpong, 2013). Meanwhile, the Linear Theme pattern in the organization of meaning in the report is used to provide further descriptions of the information presented in the Rheme of the previous clause. Meaning organization in the field inspection report utilizing the Constant Theme pattern allows thematic prominence to be established on forest areas whereby relevant discussions are maintained to provide information related to the issues presented in the reports. Themes in the field inspection report function as a means to orient the reader towards the main focus on forest areas and their surroundings as the point of departure.

Based on the evidence presented in this study, analysis of how a text develops through analysis of thematic progression patterns yields significant findings on how its functions are achieved through means

of language. While the results shed light on an atypical choice of theme pattern (derived Theme pattern), more work needs to be done to analyze whether the pattern is robust across other professional scientific texts in the forestry discipline and other disciplines in the sciences. The findings of the study thus provide some preliminary evidence of forestry discourse from a functional perspective on how the report is constructed thematically. The emergence of other thematic patterns is inevitable given the fact that each discipline has its own 'identity' (Wenger, 1998) and the social functions it serves. Therefore, more work needs to be carried out to provide concrete evidence of how aspects of scientific writing can be understood not only by understanding scientific discoveries or phenomenon but also by how they are communicated and deciphered.

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References

- Alrajhi, M. (2020). Thematization in Native and Nonnative Medical Discourse: A Systemic Functional Approach. *International Journal of Language and Literary Studies*, 2(2), 1–17. https://doi.org/10.36892/ijlls.v2i2.270
- Alyousef, H. S. (2015). A multimodal discourse analysis of international postgraduate business students' finance texts: An investigation of theme and information value. *Social Semiotics*, 26(5), 486-504. https://doi.org/10.1080/10350330.2015.1124518
- Asmah, H. O. (2016). *Pengunaan bahasa dalam surat rasmi: Bahasa dalam komunikasi* [Language use in official letters: Language in communication]. Edisi Keenam (6th Ed.). Kuala Lumpur: Language and Library Council.
- Atkinson, P. A., & Coffey, A. (1997). Analysing documentary realities. In D. Silverman (Ed.), *Qualitative research: Theory, method and practice* (pp. 58-78). Sage.
- Babaii, E., Atai, M. R., & Shoja, L. (2016). A comparison of thematic choices and thematic progression patterns in the research articles of well-established and emerging disciplines. *Iranian Journal of Applied Linguistics*, 19(2), 33-60. https://doi.org/10.29252/ijal.19.2.33
- Caffarel-Cayron, A., & Rechniewski, E. (2014). Exploring the generic structure of French editorials from the perspective of systemic functional linguistics. *Journal of World Languages*, *1*(1), 18-37.
- Candlin, C. N. (1997). General editor's preface. In B. L. Gunnarsson, & B. Nordberg (Eds.), *The construction of professional discourse* (pp. ix-xiv). Macmillan.
- Candlin, C. N. (Ed.). (2002). *Research and practice in professional discourse*. City University of Hong Kong Press.
- Corbin, J., & Strauss, A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory (3rd Ed.). Sage.
- Croft, W. (2003). Typology and universals (2nd Ed.). Cambridge University Press.
- Daneš, F. (1970). One instance of Prague School methodology: Functional analysis of utterance and text. *Method and theory in linguistics*, 132-146.
- Daneš, F. (1974). Functional sentence perspective and the organization of the text. *Papers on functional sentence perspective*, 23, 106-128.
- Eggins, S. (2007). An introduction to systemic functional linguistics (2nd Ed.). Continuum.
- Flowerdew, J., & Wan, A. (2010). The linguistic and the contextual in applied genre analysis: The case of the company audit report. *English for Specific Purposes*, 29, 78-93. https://doi.org/10.1016/j.esp.2009.07.001

- Fontaine, L. (2013). Analysing English grammar: A systemic functional introduction. Cambridge University Press.
- Forey, G. (2002). Aspects of theme and their role in workplace texts [Doctoral dissertation]. University of Glasgow.
- Fries, C. C. (1973). The structure of English: An introduction to the construction of English sentences. Longman.
- Green, C. C. (2006). Forestry education in the United States. *Issues in Science and Technology Librarianship*, 46(8), 1-15. https://doi.org/10.5062/F4FX77CX
- Guo, X. (2021). A Comparative Study of Thematic Progression Patterns Between Narration and Argumentation in New Concept English. In *Proceedings of the 7th International Conference on Humanities and Social Science Research* (ICHSSR 2021) (pp. 1170-1174). Atlantis Press.
- Halliday, M. A. K. (1994). An Introduction to Functional Grammar (2nd Ed.). Edward Arnold.
- Halliday, M. A. K., & Hasan, R. (1985). Language, Context, and Text: Aspects of Language in *a Social-Semiotic Perspective. Victoria*. Deakin University Press.
- Helan, R. (2012). *Analysis of published medical case reports: Genre-based study* [Doctoral dissertation]. Masaryk University, Czech Republic.
- Islam, R., Siwar, C., Ismail, S. M., & Chamhuri, N. H. (2010). Criteria and indicators for sustainable forest management in Malaysia. *American Journal of Environmental Sciences*, 6(3), 212-218. https://doi.org/10.3844/ajessp.2010.212.218
- ITTO. (1999). Annual Report for 1999. Lima: International Tropical Timber Organization.
- Jupp, V. (Ed.). (2006). The SAGE Dictionary of Social Research Methods. SAGE Publications.
- Kong, K. (2014). *Professional Discourse*. Cambridge University Press. https://doi.org/10.1017/CBO9781139177962
- Lehmann, C. (1982). Directions for interlinear morphemic translations. Folia Linguistica, 16, 199-224.
- Leong, A. (2022). Thematic and Rhematic Progression in Scientific Writing: A Pilot Study. *Journal of Language and Literature*, 22(1), 238-254. https://doi.org/10.24071/joll.v22i1.4117
- Louhiala-Salminen, L. (2002). The Fly's Perspective: Discourse in the Daily Routine of a Business Manager. *English for Specific Purposes*, 21(3), 211-231.
- Matthiessen, C. M. I. M. (2014). Appliable Discourse Analysis. In F. Yan & J. J. Webster (Eds.), *Developing Systemic Functional Linguistics Theory and Application* (pp. 138-208). Equinox Publishing.
- Merriam, S. B. (2009). *Qualitative Research: A Guide to Design and Implementation*. John Wiley & Sons.
- Mizusawa, Y. (2008). Investigating the Directive genre in the *Japanese and Australian workplace: A systemic functional approach* [Doctoral dissertation]. University of Wollongong.
- Nwogu, K. N., & Bloor, T. (1991). Thematic progression in professional and popular medical texts. In E. Ventola (Ed.), *Functional and Systemic Linguistics: Approaches and Uses* (pp. 369-384). Mouton de Gruyter.
- Patpong, P. (2013). Thematic progression of Thai Song Dam folktales. *Journal of the Southeast Asian Linguistics Society (JSEALS)*, 6, 189-215.
- Rahayu, A. R., Krisnawati, E., & Soemantri, Y. S. (2020). Theme and thematic progression in narrative texts of Indonesian EFL learners. International *Journal of English Literature and Social Sciences*, 5(3), 812-817. https://doi.org/10.22161/ijels.53.36
- Sarangi, S. (2002). Discourse practitioners as a community of interprofessional practice: Some insights from health communication research. In C. N. Candlin (Ed.), *Research and practice in professional discourse* (pp. 95-135). City University of Hong Kong Press.
- Thompson, G. (2014). Introducing functional grammar (3rd Ed.). Routledge.
- Van Nus, M. (1999). Business genres and their corporate context. Document design, 1(3), 187-197.
- Webster, J. (2019). Key terms in the SFL model. In G. Thompson, W. Bowcher, L. Fontaine, & D. Schönthal (Eds.), The Cambridge handbook of systemic functional linguistics (pp. 35-54). Cambridge University Press.
- Wenger, E. (1998). Communities of practice: Learning as a social system. Systems Thinker, 9(5), 2-3.