

# LINGUISTIC VARIATION IN ECONOMIC RESEARCH ARTICLE ABSTRACTS BETWEEN ENGLISH AND INDONESIAN: A SYSTEMIC-FUNCTIONAL ACCOUNT

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## Abstract

Considerable work on contrastive text analysis of abstracts has been conducted between English and other languages to explore the uniqueness between them. However, as far as methodology and language pair are concerned, there remains a paucity of research between English and Indonesian abstracts, and, in particular, in the usage of Systemic Functional Linguistics (SFL) for the purposes of translation. Using annotated and manually collated comparable corpora of abstracts collected from English and Indonesian academic articles (*Bulletin of Indonesian Economic Studies-ANU* and *DINAMIKA-UNES*), this study aims to contrast textual profiles of English and Indonesian abstracts in the field of economics. Based on the results of the analysis on the three metafunction in language at the stratum of lexico- grammar, this study suggests that marked differences between the comparable corpora of English and Indonesian abstracts are in the experiential and textual meanings. The implication of this study is that abstract translators from Indonesian into English need to pay a closer attention to the two metafunction in order to attempt an acceptable English translation.

**Keywords:** abstracts, SFL, metafunction, English translation

## INTRODUCTION

In the rapidly ongoing information explosion, several million research papers are being published each year (see Jinha 2010). As a result, potential academic readers and many researchers are becoming far more selective in their reading, often focusing on skimming abstracts and key words (Swales and Feak 2004). That is, the abstracts as summative renditions of the research articles are required to be informative and appellative as texts. The success of such texts largely depends on the

appropriate use of language in context. This is particularly true in the case of abstracts written or translated into English by non-native speakers of English as is the norm in Indonesia.

Despite a handful of textbooks including Hartley (2008), Feak and Swales (2004), and Koltay (2010) that address and provide guidelines for abstract writing in English that Indonesian researchers in particular can consult with, studies on English abstracts written or translated by Indonesian researchers and translators show that

their abstracts often lack linguistic and rhetorical appropriateness, which can hamper or diminish the readership of their abstracts by English-speaking community (Suharno 2001, Junining 2003, Basthomi 2006, Sukirmiyadi 2014, and Safnil 2014). This is not surprising as the textbooks available only provide them with some criteria that abstract should be objective, impersonal and logical with one or two samples. However, how the criteria are linguistically realized and instantiated seems not to be easily interpreted into practice in order to enable them to create an acceptable abstract for their full paper according to the above criteria. In addition, how the textual norms of academic discourse are linguistically realized and instantiated may vary from one language to another.

As a result, considerable work on contrastive text analysis of abstracts between English and other languages such as Spanish (e.g. Martín-Martín, 2003, 2005; Martín-Martín and Burgess, 2004; Lorés -Sanz, 2006, 2009a), French (Swales and Van Bonn, 2007), Arabic (Najjar, 1990; Alharbi, 1997), Swedish (Melander et al., 1997), Finnish (Mauranen, 1993), Chinese (Taylor and Chen, 1991), Malay (Ahmad, 1997), German (Clyne, 1987), and Polish (Duszak, 1997), has been conducted to explore the uniqueness between languages in terms of abstract writing in addition to more recent ones by Leong (2016) and by Alotaibi (2020) that both focus on thematic aspects of the research article abstracts. These studies were aimed at discovering mismatches and variedness of scholarly written

communication by comparing English with the aforementioned languages on their schematic structures and linguistic realizations from the genre perspective of English for Special Purposes. However, as far as methodology and language pair and focus are concerned, there remains a paucity of research on contrastive text analysis of abstracts between English and Indonesian, and, in particular, in the usage of Systemic Functional Linguistics (SFL) for the purposes of translation.

### **The Current Demand and Condition for English Translation of Indonesian Research Article Abstracts**

The high demand for the translation of Indonesian abstracts into English is partly attributed to the fact that English is still generally taken as a foreign language, even though the subject has been taught from secondary school to university level. Thus, there are a few Indonesian researchers who have a reliable capacity to write their research articles and abstracts in English. This situation coincides with the one that happened with German researchers in the 1990s as observed by Busch-Lauer (1995). She mentions that there are three categories of constraints that make writing an English abstract for nonnative speakers of English so difficult:

- i) inadequate language competence,
- ii) insufficient awareness of summarizing principles and of the discursive/rhetorical macrostructure of abstracts in L1 and consequently in L2, and
- iii) insufficient awareness of cultural,

cross-linguistic peculiarities. Due to these inadequacies, many Indonesian researchers feel less competent and considerably rely on translation services for their English abstracts (Arsyad and Arono, 2016).

In contrast to the current high demand for translation and the government's efforts to boost the readership of Indonesian scientific articles, the quality of English translated abstracts seems to be neglected or poorly addressed: a study by Junining (2003) of a small scale corpus of 15 abstracts on the errors in the translation of thesis abstracts in the Accounting Department of Brawijaya University has shown that the translated abstracts display considerable grammatical errors (78%), followed by lexical errors (22%) successively.

The poor quality of English translated abstracts in Indonesia seems to be attributed not only to the unreliable English competence of the translators, but also to the fact that almost all translation students or practicing translators in Indonesia are non-native speakers of English. Thus there might be a strong force for them to follow the rhetorical and textual conventions of their own cultures and languages in constructing knowledge in research article abstract (Arsyad and Arono 2016). This is in contrast to Toury's (1995) target-oriented approach in the practice of academic discourse translation that highlights the adherence of the translated texts to the norms of target culture in order to satisfy the acceptability of the translated

text. This, thus, coincides with what Mauranen (1993: 263) has suggested that "by breaking culture-specific rhetorical rules a writer may seem exotic and command low credibility". This, of course, may have an impact on the ultimate acceptance or rejection of a research article due to some rhetorical flaws in the abstract as the surrogate for readership to the full paper.

Against the background indicated above, the present research thus attempts to explore and describe the textual profiles of economic abstracts for translators to use when translating from Bahasa Indonesia (BI) into English so that translators from BI into English can make informed choices when translating abstracts. With regards to the background of this study indicated above, this study aims to contrast the the textual profiles of English and Indonesian abstracts with evidence and insights from a corpus-based approach. By drawing on the theoretical and analytical frameworks of SFL, the abstracts from two small corpora are examined in order to explain how they are linguistically realized, instantiated and individuated. That is, this study has three specific research questions to investigate how are the English and abstracts in economics lexico-grammatically textualized in terms of:

1. Ideational meaning (Logico-semantic and Experiential);
2. Interpersonal meaning (Mood);
3. Textual meaning (Theme).

With these questions, the objective of this study is twofold. The first one is translation interest. With the results of contrastive text analysis of the two

corpora, matches and mismatches in textual norms of abstract writing between English and Indonesian can be drawn, providing empirical evidence for translators to take into consideration when translating abstracts from Indonesian into English or vice versa. The second one is linguistic interest. The SFL's theoretical and analytical frameworks are deployed to explain how economics abstracts in English and Indonesian are textualized in terms of the three metafunction in language

The overarching framework of this study is Systemic Functional Linguistics (SFL). SFL is a theory of language which rests on language as social semiotic. It theorizes language as a functional semantic resource. Language is modelled as networks of interconnected linguistic systems from which people choose in order to make meanings to achieve their communicative purposes. The choices made construe a text and represent the contextual dimensions, including register, genre, and ideology. With the model, language is seen to constitute appropriate meanings in possible contexts in our culture. In this way SFL differs from the formal, syntactic approach of traditional grammars, and views the relationship between language and meaning is not arbitrary. Thus, SFL asks questions about how language is used by speakers and writers to make meanings in functional contexts and how it is organized to achieve this.

Thus, in this study SFL is considered, due to its strong orientation to meaning and multi-perspectival approach to language, as a thoughtful

choice as framework for describing and explaining the realization, instantiation and individuation of economics abstracts in the two corpora. The former can be clarified by its postulation that that language as text is an instantiation of social activity that is expressed with the three metafunction of language that operate simultaneously: textual for organizing ideas, ideational for representing experiences, and interpersonal for enacting relationship and negotiating attitudes. The latter can be seen in its concepts of realization, instantiation, and individuation (Martin 2006, 2007, 2008a, 2008b, 2009, 2010). Realization refers to the postulation in SFL that language as text is stratified in nature. It deals with the organization of language in strata that enable us to understand the relation between context and text at increasing levels of abstraction, each stratum realizing or recoding the previous one. Instantiation is concerned with the language use and informs us about the relation between language as a system, i.e., an overall meaning potential, and text as a concrete instance of that potential. And individuation provides us with the concept of relation between system as a reservoir of meanings and the repertoires of individual users.

Each hierarchy provides specific advantages and focuses on specific aspects for text analysis – realization deals with the comparison of texts in terms of their systemic relations, i.e., how similar/different they are in relation to the systemic options realized (texts as related to system); instantiation is more appropriate for probing intertextual

relations, i.e., how one text is sourced from another (one text as related to (an) other text(s)); and individuation is better suited for studying ideological relations between texts, i.e., what interests they serve and how they seek to align potential addressees (texts as related to user(s)) (cf. Martin, 2006: 295).

With the concepts of SFL indicated above, this study construes the corpus of abstracts from English and Indonesian. From realization perspective, the meaning and wording as represented by the lexico-grammar of the abstracts are the realization of other two more abstract stratum genre and register. From instantiation perspective, the abstracts are seen as the instances of overall potential language as system of meaning making in abstract writing. And from individuation perspective, the corpus of the abstracts become the source material for exploring how each author of the abstracts makes his/her lexico-grammatical choices to achieve the goal of the abstract, that is, reporting the research results in a condensed form and inviting the readership to the full paper.

## **METHOD**

### **The Corpus of the Study**

A total of four abstracts which form the data for this small corpus-based study are collected from two university-based journals in economics from two different countries: two English abstracts from *Bulletin of Indonesian Economic Studies* (Hereafter BIES) published by Australian National University, Australia, two Indonesian abstracts from *DINAMIKA* by Universitas

Negeri Semarang, Indonesia. Even though situated in different countries, both journals publish research articles that cover issues pertaining to Indonesian economy. Thus, they are not just to provide the same text type, research article abstracts in economics, but also to provide specific linguistic data on how research article abstracts on Indonesian economy are lexico-grammatically realized, instantiated and individuated by authors from two different languages, English and Indonesia.

In addition, as for the guidelines for collecting the abstracts for the corpus, three criteria are set: area of research, accessibility, and recognition. The first criterion is motivated by the fact that Indonesia is known as one of the countries with a progressively emerging economy in Asia. Thus, there is a high probability that overseas researchers or stakeholders would more frequently search for research articles by Indonesian researchers that discuss the issue of Indonesian economy. This dimension needs to be taken into consideration in order to relate the aim of the study to Indonesian government's attempt in boosting the scientific publication of Indonesian researchers.

In sum, both journals are considered to have satisfied the three criteria set for this study as they publish abstracts that cover any and all matters pertaining to the Indonesian economy from two different languages. They are also representatives of journals with certain level of recognition in their own domain. In addition, *DINAMIKA* in particular is an open access journal that overseas

researchers or stakeholders can refer to when they want to read scientific articles on Indonesian economy by Indonesian researchers.

### **Analysis technique**

Operating at the stratum of wording or technically known as lexico-grammar in SFL, the analysis in this study begins by firstly parsing each abstract into units of language analysis. SFL argues that the highest rank of grammatical units in language is the clause. It is considered as the central processing unit in which three metafunction of language are mapped into an integrated grammatical structure: ideational, interpersonal and textual. With this in mind, it is necessary to discuss what clause is before proceeding with the analysis of each abstract.

In other words, the number of main verbs found becomes the total number of clauses in each abstract. In addition, the results of the clausal parsing pave the way to the exploration of the three metafunction as realized and instantiated in each abstract. This can be justified by referring to a postulation in SFL that the clause is multifunctional in nature. This means that the clause is a complex entity that integrates three metafunction

of language simultaneously. Thus, the structure of the clause is defined by the configuration of these functions. Furthermore, any individual constituent of the clause is also multifunctional in the sense that 'in nearly all instances a constituent has more than one function at a time' (Halliday, 1994: 30). To illustrate this, the following text is analyzed simultaneously.

*Indonesian democracy **experienced** a near miss in 2014, when Jakarta governor Joko Widodo (Jokowi) **defeated** former general Prabowo Subianto by a margin of 6.3% in the presidential election.*

From the analysis in Figure 1 below, it can be seen that the text is constructed with two ranking clauses with hypotactic interdependency and logical relation of enhancement as shown in the left-hand column. Following this are the analyses of the three metafunction as can be seen in the next column. However, to make the tabulation and description easier to follow, the analysis is done separately and consecutively as follows: i) Clause Complex (Ideational: Logico-semantic), ii) Transitivity (Ideational: experiential), iii) Mood (Interpersonal), and iv) Theme (Textual).

Taxis and Logical relation		Clausal Analysis of the Three Metafunction in Language						
ii	A	Text	Indonesian democracy		experienced	a near miss	in 2014,	
		Clause structure	Subject		Finite/Predicate	Complement	Adjunct	
		Ideational	Carrier		RelationalProcess	Attribute	Loc: Time	
		Interpersonal	Mood		Residue			
		Textual	Topical unmarked		Rheme			
iii	Xβ	Text	when	Jakarta governor Joko Widodo (Jokowi)	defeated	former general Prabowo Subianto	by a margin of 6.3%	in the presidential election.
		Clause structure	Conjunction	Subject	Finite/ Predicate	Complement	Adjunct	Adjunct
		Ideational	Actor		Material Process	Goal	Manner: Degree	Loc: Time
		Interpersonal	Mood		Residue			
		Textual	Textual	Topical Unm.	Residue			
			Theme					

**Figure 1. Datasheet**

To make the analysis easier to follow, all ranking clauses are put on a new line. In addition, to simplify the appearance of the clausal parsing, all ranking clauses are provided with Arabic numbers (1, 2, 3..) to indicate the boundary between clause complexes, and with Romanian numbers i,ii, iii.. to indicate number of ranking clause in each clause complex. Finally, by convention, any included dependent clauses are enclosed in double angle brackets (i.e. <<...>>) and reproduced on the line below the clause they interrupt. The analyses can be found in the Appendix accompanied by a key to each analysis.

## RESULTS AND DISCUSSION

### i) Clause Complex analysis

Although this study operates mainly at clause rank, it is necessary to begin the elaboration of the findings by looking at the unit of language below the clause, the word, in order to accommodate

textual technical restriction in abstract writing. This is because almost all journals have some restriction on the number of word for an abstract, which often varies from one journal to another. Table 1 below presents the number of words and sentences in each abstract. It displays a difference in number and the proportion of words distributed into sentences in each abstract: 28.8. in Text 1, 26.3 in Text 2, 19.7 in Text 3, an 15.6 in Text 4. As this study consists of two comparable corpora, Text 1 and Text 2 representing the English corpus are the densest in packing their words into sentences with 28.8 and 26.3. By contrast, Text 3 and Text 4 representing the Indonesian corpus spread the words over a larger number of sentences with the proportion of 19.7 and 15.6. It can thus be seen that the English abstracts are denser in packing their words into sentences than Indonesian abstracts. In other words, information in English

abstracts is conveyed with denser words into fewer sentences. In contrast, Indonesian abstracts employ fewer words across number of sentences to do the same function.

The proportion of words into sentences indicated above correlates with the number of ranking clauses and the proportion of clause complex among the two corpora. The Indonesian abstracts employ a larger number of clause simplexes. By contrast, in the English abstracts words are distributed across a number of clause complexes. Table 1 shows that there is a sharp contrast between the two languages. The English abstracts use complex construction with 5 clause complexes (85%) in Text 1 and 4 clause complexes (66.6%) in Text 2. The Indonesian abstracts, in contrast, use a higher proportion of simplex construction as can be seen in Text 4 with 7 clause simplexes (87.5%). Despite the fact that

the two comparable corpora have similar register dimensions, English abstracts in this study tend to be structured using clause complexes. In addition, there is also a marked difference in the use of clause complex resources between Text 3 and Text 4 as the representation of Indonesian abstracts. Text 4 uses much less complexing (only 12.5%) than Text 3. As a result, Text 4 appears to employ the least complexing in the corpus.

Table 2 below shows the taxis and logico-semantic relations in the two corpora. While Indonesian abstracts (Text 3 and Text 4) use a smaller number of paratactic interdependencies, it is clear from the table that the two corpora tend to favor hypotactic interdependency. However, the proportion of its use is higher in the English corpus. Another marked finding in relation to taxis is the absence of parataxis interdependency with logical relation of projection in the two corpora.

**Table 1. Basic Clause Complex Summary of the abstract**

	Clause complexes			
	English Abstracts		Indonesian Abstracts	
	Text 1	Text 2	Text 3	Text 4
No of Words	170	158	138	125
No of sentences in each abstract	6	6	7	8
No of Ranking Clause	13	12	12	12
No of Clause simplexes	1	2	3	7
No of Clause Complexes	5 (83%)	4(66.6%)	4 (57%)	1(12.5%)
No of embedded clauses	2	-	1	3
No of clause complexes of 2 clauses	3	1	3	-
No of Clause Complexes of 3 clauses	2	3	1	-
No of Clause complexes >4 clauses	-	-	-	1



**Table 2. Taxis in the Abstracts**

Taxis		English Abstracts		Indonesian Abstracts	
		Text 1	Text 2	Text 3	Text 4
Parataxis	Projection	-	-	-	-
	Expansion	2	2	1	3
	Total	2	2	1	3
Hypotaxis	Projection	-	3	2	1
	Expansion	5	4	2	-
	Total	5	7	4	1

**Table 3. Logico-Semantics relation in the abstracts**

Logico-semantic relation		English Abstracts		Indonesian Abstracts	
		Text 1	Text 2	Text 3	Text 4
Projection	Idea	-	1	-	-
	Locution	-	2	2	1
	Total	0	3	2	1
Expansion	Elaboration	-	2	-	-
	Extension	3	1	1	3
	Enhancement	4	3	2	-
	Total	7	6	3	3

Table 3 above shows the subcategories of projection and expansion. The data in the table demonstrate that hypotactic interdependency with projection relation is present in 3 abstracts, except Text 1. The logical relations of locution are employed when conveying findings or conclusions with the following clause complexes:

- (1) *this article suggests that..*(Text 2),
- (2) *Hasil pengujian hipotesis menggunakan regresi linear berganda menunjukkan bahwa..* (The results of hypothesis testing using multiple linier regression show...) (Text 3)
- (3) *Hasil penelitian menunjukkan bahwa...* (The research results show...) (Text 4)

Text 1, in contrast, expresses such proposition with direct and personal expression:

- (4) *We attribute the strength of Prabowo's campaign to superior organisational and financial support.*

From this finding, it can be seen that when expressing the research results or conclusions, the Indonesian abstracts are restrictive with impersonality by employing logical relation and research related words (e.g.: The results of hypothesis, The research results) as the sayer, whereas the English ones are not so restrictive as shown in Text 1.

As for the use of the logical relation of expansion, the data indicate that there is also a marked difference between English and Indonesian abstracts. Table 3 shows that English abstracts have a higher proportion of enhancement relations than Indonesian abstracts. Text 1 and Text 2 use a relatively even proportion of enhancement: four (4) in Text 1 and three (3) in Text 2. In addition, both abstracts employ that kind of logical relation in the same section of the abstracts. For example, the two abstracts of the English corpus begin with these expressions to describe the object of the study:

- (5) *Indonesian democracy experienced a near miss in 2014, when Jakarta governor Joko Widodo (Jokowi) defeated former general Prabowo Subianto by a margin of 6.3% in the presidential election* (Text 1)
- (6) *Having reduced its fertility rate over the past 40 years, Indonesia has reached a new demographic crossroad* (Text 2)

Similarly, in expressing the conclusion Text 1 uses hypotactic interdependency and logical relation of enhancement:

- (7) *Nevertheless, democracy's future remains uncertain, given that Prabowo and his supporters now control a sufficiently large number of parliamentary seats to continue promoting a rollback of democratic reforms.*

Thus, with the use of logical relation of expansion, enhancement relation in particular, the English abstracts are facilitated not only to offer the readers a more closely controlled logic between events in the abstracts but also to provide the readers with the explanation or reasoning of Appraisal resources (e.g.: a near miss, a new demographic crossroads, democracy's future remains uncertain) used to evaluate the object of the study or conclusion drawn.

In contrast, from the two Indonesian abstracts examined, such use of expansion relation is only found in research conclusion section, and this can only be found in Text 3. There is also an indication that the use of enhancement relation is relatively lower in Indonesian abstracts. In addition, both abstracts directly begin with the expression of research purposes, without giving any instances or expressions about the object of the study.

In sum, the discussion of the clause complex findings clearly demonstrates that there is a marked difference in the use of clause complexes and their logical meaning relations between English and Indonesian abstracts. The former highly favors clause complexes with enhancement relations in constructing the abstract, while the latter tends to use a smaller number of clause complexes with extension relations and accordingly to distribute words into a larger number of sentences. In addition, the two corpora indicate that the writers avoid using paratactic interdependency with projection relation. This is confirmed by the data as there is no such expression found in the two corpora.

## ii) Transitivity analysis

Table 4 presents the total number of clauses of each process type in each abstract. From the table, it is clear that material processes are dominant in the two corpora. However, there is a difference among them in terms of participants involved. The participants involved in the material process in the English abstracts are mainly participants of the object of the study. For example, in Text 1 the participants of the material processes are *Indonesian democracy, Joko Widodo, and Prabowo* or the people involved in the presidential election. Similarly, in Text 2 the participants of the material processes are entities related to object of the study, *demography in Indonesia and its neighboring countries*, while the Indonesian abstracts concerns the participants of the study (respondents) and methodology of the study as can be

seen in Text 3 and Text 4. The former is the abstract with the highest proportion of material processes (9 processes) in the corpus.

(8) *Penelitian ini menggunakan desain survei... (This study used survey design..)*

(9) *Metode pengambilan sampel menggunakan purposive sampling berdasarkan... (The sample collecting method used purposive sampling..).*

From this finding, it needs to be taken into consideration that the difference of the focus of the participants involved in the material processes in English and Indonesian abstracts may be attributed to the type of research between the two corpora. The English abstracts are qualitative research, while the Indonesian abstracts are correlation research or quantitative ones. As a result, the participants involved in the material processes vary between the two. Moreover, there is a strong indication that methodology section of Indonesian abstracts is realized with material processes as can be seen in Text 3.

In addition, the dominant use of material processes in the Indonesian abstracts can be attributed in particular to the explanation of the methodology use in the research. This is clearly demonstrated in Text 3 and Text 4. In contrast, in the English corpus such proposition is only present in Text 1 with only one material process:

(10) *We (Actor) trace (material) democracy's close call (Goal) through five phases: the dying months of Yudhoyono's presidency, the rise of populist alternatives, the*

*parliamentary elections of April 2014, the July presidential campaign, and the aftermath (Manner: means).*

That is, the high proportion of material processes in the Indonesian corpus concerns the explanation of what happens to the respondent involved and the explanation of the methodological activities done by the writers.

Table 4 also shows that the next dominant process type in the abstracts is relational attributive. This is strongly evident in particular in the English abstracts. The attribute processes are used to describe the participants of the object of the study. For example, Text 1 expresses the participants of the object of the study through:

(11) *Both candidates (Carrier) were (Relational Attributive) populists (Attribute) [[who rose to prominence in the context of public disillusionment with incumbent president Yudhoyono]].*

Similarly, Text 2 also includes attributive process in the description of the participants of the object of the study:

(12) *Its fertility rate (Carrier) is (Relational attributive) now (Loc: Time) around 2.5 births per woman (Attributive).*

The attributive process is also used when the writers express the conclusion of their research such as in the following clause:

(13) *Nevertheless, democracy's future (Carrier) remains (Relational Attributive) uncertain (Attributive).*

As far as relational is concerned, there is also a difference in the use of relational identifying in the two corpora. The English corpus has no

relational identifying process, whereas in the Indonesian corpora, both Text 3 and 4 use the process type to express the aim of the research (14) and to express the conclusion of the research (15).

(14) *The purpose of this study (Token) is (Relational identifying) to investigate the impact of Emotional Intelligent, Organizational commitment and Organizational Citizenship Behavior on employee performance (Value)*

(15) *The conclusion of this research (Token) is (Relational Identifying) that the higher of consumer's trust will increase the online purchasing decision although it may make higher risk and higher price for consumers (Value).*

Another finding in relation to process type is the presence of verbal process in almost all the abstracts, except Text 1 for conveying the writers' stance regarding the conclusion or findings of the research by using research related words as the sayers in Text 3 (16) and Text 4 (17):

(16) *This article (Sayer) suggests (Verbal).. in Text 2, 4i. Hasil pengujian hipotesis [[menggunakan regresi linear berganda]] (Sayer) menunjukkan (Verbal) (lit.*

*tran: the results of hypothesis testing [[using linear regression]] indicate)*

(17) *Hasil penelitian (Sayer) menunjukkan (Verbal) (lit. trans: the results of the study show)*

This is in contrast, as indicated above in the logico-semantic discussion, with what the writer of Text 1 chose. The finding is personally expressed by using *we* (referring to the writers) as the participant in the clause.

In sum, while material processes are dominant over other processes in the two corpora, a closer analysis indicates that both English and Indonesian abstracts are distinct in the use of the material processes. The former employs it to explain what happened to the participants of the object the study, while in the latter, material processes are used to explain what happened to the respondents involved in the research. That is, this variation can be attributed to the difference of the type of the research, between qualitative and quantitative studies. The use of attributive process is more favored in the English abstracts than in the Indonesian ones.

**Table 4. Transitivity in the Abstracts**

	English Abstracts		Indonesian Abstracts	
	Text 1	Text 2	Text 3	Text 4
Material	6	5	9	5
Mental	1	1	-	1
Verbal	2	3	2	1
Behavioral	-	-	-	-
Existential	-	1	-	-
Existential	-	-	-	-
Relational Attributive	4	5	-	4
Relational Identifying	-	-	1	1
Total Process	12	15	12	12

**Table 5. Circumstances in the Abstracts**

	English Abstracts		Indonesian Abstracts	
	Text 1	Text 2	Text 3	Text 4
Location	3	4	-	-
Extent	-	1	-	-
Manner	2	1	2	-
Role	-	-	-	-
Cause	-	-	1	-
Angle	-	-	1	-
Total	5	6	4	-
No of ranking clauses	13	12	12	12

Table 5 above presents numbers of each type of circumstances in each abstract. As this table shows, the English abstracts are high in the number of circumstance proportion compared to the Indonesian abstracts. In addition, the circumstances predominant in the English abstracts are location of time and place. This is, in fact, not surprising as the object of the study is back-grounded by events. That is, the difference can be attributed to the different schematic structure used between the two corpora. The former starts with the report of the object of the study, Presidential election in Text 1, and fertility rate in Text 2. By contrast, the Indonesian abstracts go straight forward to explain the aim of the research without giving the background of the research reported in the abstracts. As a result, in the corpus of Indonesian abstracts only Text 3 has 4 circumstances that add further information about the manner, cause and angle of the research findings.

### iii) Mood Analysis

Table 6 summarizes the results of the mood analysis of the four abstracts. As the table shows, the two corpora use predominantly full declarative

clauses. This pattern is not surprising as the abstracts are conveyed in written medium in which feedback between writers and readers are not possible. However, it is necessary to note that the SFL framework to analyze the mood system is not applicable to the Indonesian corpus due to the difference in the way of realizing the time of speech between the two languages. Unlike English, Bahasa Indonesia does not have tense system. The time of speech is not inflected with the verb or verb group; it is instead expressed with choice of adverbs. That is, expression of time in each clause is not the verb or verb group. It is expressed either in the adverb or the context of the text. As the Table 6 shows, the occurrence of elliptical declarative in the English and Indonesian corpora is attributed to the presence of paratactic interdependency; the same participants are presented to be expanded with extension relation. Such case can be seen in Text 1.

(18) *Prabowo (Subject), however (Adjunct), condemned (Finite/Predicate) Indonesia's democratic system (Complement) and promised (Finite/Predicate) to take Indonesia in a more authoritarian direction (Complement).*

Similarly, the Indonesian corpus has the same construction of elliptical

declarative in clause (19) and (20) below.

(19)

bahwa	karyawan [[yang mempunyai kecerdasan emosional tinggi]]	akan bekerja	lebih baik	sesuai standar organisasi
that	<i>the employees [[who have high emotional intelligence]]</i>	<i>will perform</i>	<i>better</i>	<i>in accordance with the organization standard</i>
	<b>Subject</b>	<b>Predicate</b>	<b>Adjunct</b>	<b>Adjunct</b>

(20)

dan pada akhirnya	akan mencapai	kinerja yang lebih baik
<i>and eventually</i>	<i>will achieve</i>	<i>a better performance</i>
<b>Conjunction</b>	<b>Predicate</b>	<b>Complement</b>

**Table 6. Mood in the abstracts**

	English Abstracts		Indonesian Abstracts	
	Text 1	Text 2	Text 3	Text 4
Full declarative	10	12	10	11
Elliptical declarative	3	3	2	1
Ranking clauses	13	12	12	12

**Table 7. Modality and Polarity in the abstracts**

	English Abstracts		Indonesian Abstracts	
	Text 1	Text 2	Text 3	Text 4
Modalization	-	-	3	-
Modulation	-	2	1	-
Negation	-	-	-	-
Ranking clauses	13	12	12	12

In addition, the dominance of full declarative in all two corpora indicates that abstracts are mainly focused on giving information. However, the results of modality analysis indicate that the abstracts are also used to present a proposal. This can be seen in Table 7 with Text 2 using modulation (high obligation) in (21) below.

(21) *and, accordingly (Aj), that fertility (S) should (Fml) be reduced (P) to the replacement level of births per woman as soon as possible (Ac).*

With the use of modulation, Text 2 can be interpreted that it is not merely aimed to give information but also to ask someone to do something.

**Table 8. Theme in the six abstracts**

Category	English Abstracts		Indonesian Abstracts	
	Text 1	Text 2	Text 3	Text 4
Textual Theme	6	3	5	2
Interpersonal Theme	0	0	0	0
Topical unmarked	10	5	9	11
Topical Marked	0	2	0	0
Dependent clause as theme	0	1	0	0
Ranking Clause	13	12	12	12

**i) Theme Analysis**

Table 8 above summarizes the proportion of each type of theme in the four abstracts. However, as for the textual themes, the table only includes those that are made of internal and external conjunctions. The former concerns conjunctions that link logical steps that are internal to the text, while the latter is used to link events beyond the text. Textual themes that are made of connectors (that and which) as the results of hypotactic clauses are excluded as their use as the textual theme is attributed to the English structural rules for building clause complexes with projection relation. Thus, they do not contribute directly to the internal and external conjunctions used as the textual theme in the abstracts. As the table shows, the appearance of a number of textual themes in each abstract in the corpus indicates that the abstracts tend to be organized explicitly using textual themes. Each abstract employs the resource to guide the readers in relation to the theme organization. However, how textual themes are employed in the English and Indonesian abstracts are different from each other. From the table below, it is clear that Text 1 representing the corpus of English abstracts relies heavily on textual resources in

organizing the information as it has the largest number of textual themes used. In contrast, Text 4 representing the corpus of Indonesian abstracts employs only two textual themes. As a result, English abstracts appear to be more textually explicit than Indonesian ones. As for the interpersonal theme, the table also shows that there is no abstract in the corpus that uses the resource as the point of departure to convey the clause as a message.

As far as Topical Theme is concerned, one striking feature can be seen in Text 2. There are two Topical marked themes; one is made of a dependent clause and the other one is an adjunct. This can be seen in the following clauses:

(22) *Having reduced its fertility rate over the past 40 years, Indonesia has reached a new demographic crossroad that with the right policy settings Indonesia can avoid this outcome.*

In contrast, such option does not occur in either of the two of Indonesian abstracts. That is, there seems to be a difference in the use of the topical marked theme in organizing the abstract between the two languages. The English abstracts tend to exploit marked choice to organize the rhetorical structure of the text. In contrast, such option is not

made in either of the two Indonesian abstracts. In other words, the thematic organization in Indonesian abstracts relies heavily on the Topical unmarked themes.

## CONCLUSIONS

Based on the results of the analysis on the three metafunction in language at the stratum of lexico-grammar, this study suggests that marked differences between the comparable corpora of English and Indonesian abstracts are in the experiential and textual meanings. In terms of clause complexing, the most marked difference is in the exploitation of clause complexes. The corpus of English abstracts tends to use a larger number of clause complexes to construe the experiential meaning of the abstracts in relation to logical subcomponent. In contrast, the corpus of Indonesian abstracts tends to use a larger number of clause simplexes.

As for the transitivity, the English abstracts through dominant use of material processes focus more on the description and explanation of what happens to the object of the study, while Indonesian abstracts focus their description and explanation more on the respondents of the research and the research methodology. Thus, this difference can be attributed to the type of research used. The English abstracts are approached with qualitative research, while Indonesian abstracts are approached with correlation or quantitative research.

Textually, while all abstracts of the three comparable corpora embody the presence of textual themes, the English

abstracts tend to use and have more explicit use of textual theme. In addition, due to use of a larger proportion of clause complexes, English abstract writers are offered the option to employ a marked theme using a dependent clause. In contrast, such case does not occur in either of the two Indonesian abstracts as they are construed heavily by simplex clause. The only option available for making a marked theme for Indonesian writers is by beginning the clause with other constituents of the clause except the subject.

The implication of this study is that abstract translators from Indonesian into English need to pay a closer attention to the two metafunction (ideational and textual) in order to attempt an acceptable English translation. However, the conclusions and implication needs to be investigated and clarified further by examining a larger number of abstracts for the corpus.

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