## **CHAPTER I**

# **INTRODUCTION**

This chapter discusses the general idea or the background of the study, research questions, the purpose of the study, the scope of the study, and the significance of the study.

## 1.1. Background of the Study

Grammatical intricacy is defined as the number of ranking clauses divided by the number of complex clauses (Eggins, 2004). A ranking clause is a clause that, while could be understood by itself, serves as an element in another clause, while a clause complex is a grammatical construction consisting of two or more simple clauses. Halliday (2004) states that grammatical intricacy is a feature often seen in spoken text. meaning is often conveyed by clauses in spoken form, thus a complex spoken text would have a lot of clauses, hence the high level of grammatical intricacy.

This is in contrast to lexical density, a feature also introduced by Halliday (1989). Lexical density is the ratio of lexical items to the number of clauses. Unlike spoken texts, written text gets more complex by being lexically dense. This is due to meaning being condensed into nominal groups, which in turn, are made of lexical items. Halliday stated that meaning in the spoken form is conveyed 'clausally', while written form conveyed it 'nominally'.

According to Biber, D. (1988), "Lexical density and grammatical complexity are two independent dimensions of text complexity, which are closely related to the level of formality of a text. The lexical density is more closely related to the level of formality, whereas grammatical complexity is more closely related to the level of expertise of the writer or speaker.

A text with high grammatical intricacy uses a variety of sentence structures, subordination, and embedding, indicating a more sophisticated level of language use. It is important to note that the level of grammatical intricacy can vary between written and spoken forms. In written forms, sentences tend to be more compressed and convey denser information, while in spoken forms, the information is spread out over a set of phrases with complex logical relations.

Effective writing skills are central both in higher education and the world of work that follows. Gains in informative and analytical writing ability are, moreover, taken as a good indicator of the value added by higher education (Benjamin & Chun, 2003). Writing well is a major cognitive challenge because it is at once a test of memory, language, and thinking ability. It demands rapid retrieval of domain-specific knowledge about the topic from long-term memory (Kellogg, 2001).

For final-year students of universities in Indonesia, they are required to write research called skripsi, in which they must display their knowledge and ability in scientific inquiry, which includes the ability to report in an efficient and concise manner. There's also a recent push to have this final paper to be published online, meaning it will be accessible to international readers. As a result, it is

imperative to enhance the quality of students' writing. This includes being able to apply more sophisticated grammar and utilizing effective writing techniques.

In 2022, TESOL Quarterly is in the top twenty in terms of their h-index (their citation impact and productivity), top 40 in terms of their CiteScore (how frequently they are cited), and 17<sup>th</sup> in terms of their SJR (their scientific influence). To investigate how an internationally published article is written, it may be worthwhile to examine TESOL Quarterly articles and see their grammatical intricacy.

The part of the research article and skripsi that will be examined is the discussion section. A writer's ability is most notable in the discussion section as in this section a writer would describe their findings (Sanli, Erdem, & Tefik, 2013).

Many studies about lexical density and grammatical intricacy in written language have been produced by applied linguistics researchers. Vinh To (2013) investigated the textbook's lexical density and grammatical intricacy. The language used in English textbooks for elementary school students of grade 1 to grade 6 indicates appropriate for each level. It means the harmony of LD and IG can be tolerated. Refnaldi (2015, cited in Syarif, 2019) showed that EFL students' writing (paper, abstract) was lexically sparse and grammatically intricate. There seems to be a use of few numbers of content words per clause, a limited number of nominalizations, and more grammatical complexity with spoken mode. As a result, they are difficult to be understood.

From the results above, it can be seen that grammatical intricacy seems to affect the readability and coherence of a text. Text with high grammatical

intricacy, as in having many subordinate clauses, embedded clauses, and conjunctions to express ideas and information, may end up being difficult to read. However, high grammatical intricacy could also indicate a higher level of ability to write. To examine this further, additional examination of their process type may be necessary, as it may indicate what kind of message is being written.

Systemic functional linguistics is a theoretical framework that looks at language as a system of social semiotic practices. It analyzes language in terms of its functional and structural aspects and considers how language is used to convey meaning in different contexts. According to SFL, language is utilized by humans to talk about their experience in the world, and this experience is expressed by the system of transitivity (Halliday & Matthiessen, 2004).

Process is pivotal to transitivity, and is where participants and circumstances are incumbent upon (Gerot & Wignell, 1994). Process is realized by verbs, not just in their doing sense, but also in having and being. This suggests there is more than one type of 'going-ons' and indeed Halliday identified 7 of them; 1) Material, the process of physically doing, 2) mental, the process of thinking/feeling 3), verbal, the process of saying/conveying a message, 4) relational, the process of being or having, 5) behavioral, the process of physiological or psychological behavior, 6) existential, the process of existing, and 7) meteorological, the process of climate/weather.

In academic writing, different process types are said to reflect the different characteristics of research reports (Zheng, 2021). Material, relational, and existential processes may reflect the informative and objective feature of research

reports, while verbal and mental processes may help in building narrative, reflecting the interpersonal and persuasive feature of research report. Relational and existential processes may also reflect the impersonal feature (Martinez, 2001). Martinez (2001) also argued that a balance needed to be stuck between the informative, objective, and impersonal feature with the interpersonal and persuasive feature. Behavioral and meteorological processes are said to not be prominent in research reports (Martinez, 2001).

There have been several studies done on process types in research reports. One such research is conducted by Emilia (2010), which analyzes students' writing in their thesis discussion section using the transitivity system. It was found that students mostly use the material process to describe their actions in retrieving and analyzing the data. Verbal and existential processes were found as well. However, the research found that the verbal process is insufficient. Another research conducted by Zheng (2021), examines the transitivity structure of ten applied linguistics articles published between 2018-2020. It was found that the transitivity structure could indicate the informative, objective, and impersonal character of research articles' discussion section.

From the research above it can be seen that examining a text by its process types can be beneficial, and will reveal more about the text. Therefore, it would be worthwhile to examine the process types along with their grammatical intricacy in this research.

#### 1.2. Research Questions

The research questions are formulated as follows:

- 1. What is the grammatical intricacy level of the discussion section of research articles and skripsi?
- 2. How are the process types of the discussion section of research articles differ from skripsi?

## 1.3. Purpose of the Study

The purpose of this study is to find out the grammatical intricacy level of the discussion section of skripsis (SK) written by undergraduates and see how they differ from research articles (RA) written by researchers published in journals. SK is written by a novice writer who has comparatively less experience in writing scientific reports while RA is written by experienced academic writers who have honed their craft in writing efficient and concise scientific reports and published in TESOL Quarterly.

The study also aims to reveal whether the texts reflect the objective, informative, impersonal, and argumentative feature of research reports. This is done by identifying what process types are utilized in RA and SK.

#### 1.4. Scope of the Study

Texts that will be analyzed in this research are the discussion section of three RAs published in TESOL Quarterly and three SKs of Universitas Negeri Jakarta's English Education Study Program, all selected at random. The quality of each text will not be inferred by its grammatical intricacy score. Instead of comparing the quality of one text with another, the research instead looks into their grammatical intricacy and the process types of the texts.

Due to a time and resource limitation while conducting this research, only three research articles and three skripsi were able to be examined. This research also focuses on the discussion section of the texts.

## 1.5. Significance of the Study

The data on the grammatical intricacy of research articles and skripsi shows how intricate could undergraduates write their skripsi compared to research articles written by experienced writer. Findings on the process types involved in research articles and skripsi shows how well undergraduate students have balanced their research report between being impersonal and informative and being interpersonal and argumentative compared to research articles. This could inform policy makers and curriculum makers of higher education on what to improve on students' research report writing. This could come in the form of change in the curriculum and alteration or introduction of new writing materials for students. These are imperative to do as more and more of students' work are set to be published.