Prepositional Phrases in Deaf and Hearing Students' Narratives: A Functional Perspective

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ABSTRACT:

Comprehending the linguistic features of deaf student writers in comparison to those of the hearing group at the further phase helps in providing pedagogical treatment for mitigating the linguistic gap between both. In line with this idealism, the present study aims to reveal the phenomena of prepositional phrase positions and patterns of deaf and hearing students in representing the circumstances of their real-life narratives. Four stories about being chased by a dog were elicited from each of the groups. The analysis was carried out by employing the analysis table adapted from the experiential framework of Halliday and Matthiessen (2004). The findings in general reveal the less flexible prepositional phrase positions and the less complex prepositional phrase patterns of the deaf group. Though the results of this study might not be conclusive, at least they portray the insight into the certain tendency between both groups of students in representing the circumstances for their meaning-making of narratives. In the further phase, the findings of the present study are expected to provide benefits for language teachers and practitioners in the context of special education, especially in the case of deafness.

Keywords: prepositional phrases; deaf; hearing; narrative

INTRODUCTION

In recent decades, there has been a growing interest in the literacy of students with disabilities as people's awareness of equal rights for literacy has been increasing as well. A particular group that has become one of the topics of interest in studies has been addressed to individuals with deafness (Albertini, 1993; Bochner & Walter, 2005; Dostal et al., 2017; Dostal & Wolbers, 2014; Evans, 2004; Mayer & Trezek, 2018; Rottenberg & Searfoss, 1992), due to their limited access to the verbal language. The term deafness is commonly understood as the inability to hear and this subsequently results in the inability to produce spoken verbal language due to the absent or limited linguistic input functioning as the language model, especially during the childhood period. In particular, deafness is categorized into 26 to 40 dB loss as the mild level, 41 to 55 dB as the moderate level, 56 to 70 dB as the moderately severe level, 71 to 90 dB as the severe level, and those above 90 dB as the profound levelv (Marschark et al., 2002). In the case of the present study, being deaf is defined as the total inability to hear speech sounds, resulting in the inability to produce utterances.

Among various aspects of the deaf, the one that has become a researched issue is their linguistic abilities. Again, this correlates with their absence or limited access to the spoken language input. Due to their limitation on spoken language, a written channel for deaf communities has been one of their modes of meaning-making apart from their sign language (Marschark et al., 2002). Whereas sign language is possibly more effective for communication among individuals with deafness, the medium of written communication helps deaf individuals reveal their experiences of 'the world' not only to other deaf individuals but also to hearing people. Nevertheless, as the linguistic experiences between both deaf and hearing groups have been different since the childhood period, the insight into the written language of the deaf group has been more questionable in comparison to that of their hearing counterparts.

Despite their 'special' nature in language, deaf students are often expected to meet the expectation of their environment especially to write in the 'same' way as their hearing peers (Nodoushan, 2008; Spencer et al., 2003). The fact is that their written language has been characterized by unique linguistic features (Andrade et al., 2010; Favero et al., 2007; Lintangsari et al., 2019; Manar, 2022; Strong & Prinz, 1997; Wolbers et al., 2014), as the result of their limited verbal-linguistic input acquired from the environment. The linguistic challenges faced by students with deafness, for example, are reflected in the forms of grammatical features they adopt for making meaning.

In syntax, their clauses can lack either a subject or verb as claimed by Hamidah (2013) in her preliminary examination while their language has been also characterized by problems in employing subordinate clauses (Bowers et al., 2018; Terugi & Gutierrez-Caceres, 2015). Further, their verbs especially the transitive ones have been found to lack objects (Stamp et al., 2021). The 'irregular' adoption of language produced by students with deafness has also been confirmed in their unique vocabulary, for example, the words 'transferred' from their sign language (Andrade et al., 2010). In the case of Indonesian (Bahasa Indonesia), deaf children have been also reported to show linguistic difficulties, to mention one, in employing verbs with affixes in their narratives (Lintangsari et al., 2019). They instead used many basic forms of verbs without prefix or suffix in making meaning of their narratives.

To date, writings for deaf students have been studied not in isolation but rather based on various genres with their distinct purposes (see Kilpatrick & Wolbers, 2020; Manar, 2022; Strassman et al., 2019; Wolbers et al., 2022). The study of Kilpatrick & Wolbers (2020) analyzed deaf students' writings of recount and report while that of Wolbers et al. (2022) evaluated recount, report, and persuasive genres. Further, whereas the analysis of Strassman et al. (2019) was on deaf students' writings in relation to academic language, that of Manar (2022) was related to the narrative genre.

One of the genres that has become a prominent medium for investigating the linguistic features of individuals with deafness has been associated with narratives (see Bowers et al., 2018; Lintangsari et al., 2019; Manar, 2022; Terugi & Gutierrez-Caceres, 2015; Wolbers et al., 2014). This phenomenon might be due to the nature of narratives characterized by the demand to pose problematic events followed by resolution. This has also been hinted by Knapp & Watkins (2005) that via the genre of narrative writers can empower their creative and critical thinking as this type of writing requires them to be problem solvers for the problematic case they are telling. Besides, writing a problematic story is also assumed to stimulate interpersonal sensitivity since the writers are needed to position themselves not only as the readers but also as the characters in a story. Existing literature has revealed that deaf individuals in comparison to their hearing peers tend to encounter challenges in positioning their mental state as others (Lecciso et al., 2016; Peterson, 2016; Wellman & Peterson, 2013). The nature of deaf students' social cognition in relation to the nature

of narratives might be the reason why this genre has been the prominent medium for examining the linguistic aspect of the group (Pinto et al., 2017).

In terms of its basic macro function, the genre of narrative according to Gerrot & Wignell (1994) and Knapp & Watkins (2005) consists of at least orientation, complication, and resolution. The orientation is the part where writers introduce the characters, situational background, and sequence of events. The complication section reveals the case that subsequently leads to the peak of the conflict. In the resolution section, the problem is resolved either to the best or even to the worst. The three macro schematic structures of narrative are framed to achieve its functional goals, namely for entertaining the readers, creating moral values, as well as spreading a lesson (Gerrot & Wignell, 1994).

What differentiates narratives from another identical genre especially recount is that the experiences told by the former have a problem or case to be resolved. This hints that narratives as stated earlier develop creative thinking and story-telling skills that exist in our 'everyday' life. According to Cruz (2019), as in narratives student writers are expected to tell a problematic experience that can be their personal experience or imagination, the genre then is categorized as creative writing.

To the present time, again there have been various analyses of the linguistic features of narratives constructed by students with deafness. One aspect of language that has been less investigated in their writings, especially narratives is their adoption of prepositional phrases representing circumstances. From the perspective of experiential Systemic Functional Linguistics, the circumstance is associated with the attendant of a process and it serves either as the time, place, manner, and causes (Halliday & Matthiessen, 2004). Circumstances in many languages including English and Indonesian are realized in the form of adverbial groups or prepositional phrases. Whereas adverbial groups consist of adverbs as the heads, prepositional phrases comprise prepositions as the heads followed by nominal groups.

In general, a prepositional phrase can be defined as a preposition followed by its complements (Richard & Schmidt, 2008). A phrase of the preposition is defined by Halliday & Matthiessen (2004, p. 360) as a phrase that contains "a preposition plus a nominal group, for example *on the burning deck*". To be specific, the complex patterns of prepositional phrases are orderly built by a preposition, *Deictic, Numerative, Epithet, Classifier, Thing,* and *Qualifier.* Further, the functions of prepositional phrases encompass expressing the possession of a

thing, direction, place, and time (Richard & Schmidt, 2008). Hence, one of the main roles of the prepositional phrase is the adverbial function. The study conducted by Rahmanita et al. (2019) on the prepositional phrases employed in the novel 'The Perfect Nanny', to illustrate, has revealed that most prepositional phrases have an adverbial function. The major of their data is prepositional phrases representing the places of events.

Prepositional phrases under the genre of narratives play a role in representing where, when, how, and why experiences happen or are conducted. Since they depict the situational background (e.g. the place and time), they make stories easier to imagine. Based on functional grammar, the complex patterns of prepositional phrases help in providing detailed information about the circumstances to the readers. The more complex prepositional phrase patterns, the more vivid pictures of stories are built in the readers' minds. Briefly speaking, complex prepositional phrase patterns are one of the linguistic strategies for making narratives more functional to read.

Until now, there has been a lack of insight into the patterns of prepositional phrases, especially in the case of deafness. Whereas in general there has been a myriad of linguistic studies on the narrative of deaf students, there has been in particular the lack of comparative knowledge on their prepositional phrases especially evaluated based on the Hallidayan experiential framework. Thus, this study focuses on depicting the insight into the adoption of experiential prepositional phrases in the narratives written by deaf students in reference to their hearing peers. To address this issue, two research questions have been formulated as follows: 1) how are the prepositional phrases that represent circumstances positioned in deaf and hearing students' narratives?; 2) how are the prepositional phrases that represent circumstances patterned in deaf and hearing students' narratives?

METHOD

The present qualitative text-analysis case study aims to reveal how the circumstances in the narratives composed by deaf and hearing students are represented by prepositional phrases. In particular, its purpose is to depict the positions and patterns of prepositional phrases representing the circumstances. To obtain the purpose, a qualitative approach with a case study method involving text analysis was adopted. The qualitative perspective was selected as the research approach since the general goal of the present study was to reveal phenomena (not to confirm phenomena), in this case, the linguistic characteris-

Table 1. **The background information of deaf students**

No.	Initials	Deafness level	First identification	Age in years	Sex	Family	Written Indonesian
1	AU	profound	1 year old	18	female	hearing	fair
2	AL	profound	at birth	17	female	hearing	fair
3	UC	profound	at birth	18	female	hearing	fair
4	NA	profound	at birth	19	female	hearing	fair

Table 2. **The background information of hearing students**

No.	Initials	Age in years	Sex	Written Indonesian
1	IR	17	female	good
2	NO	17	female	good
3	NU	16	female	good
4	RA	16	male	good

tics of deaf and hearing students with a deep and holistic understanding. According to Creswell (2012), the perspective of qualitative research is applied to understand a basic phenomenon of purposeful sampling that can be in the form of people or things. In the present study, the participants were also purposively selected, to see the tendency of their linguistic phenomena. The participants were four deaf and four hearing senior high school students. The background information of the four deaf and four hearing students is provided in table 1 and table 2.

As portrayed in table 1 and table 2 above, the attributes of deaf and hearing groups are not equal. First, while the ages of the deaf groups ranged from seventeen to nineteen, those of their hearing peers ranged from sixteen to seventeen. However, as the participants were limited to senior high school students and the deaf group was older than the hearing group, it is quite plausible to compare their writings. It has been commonly known that compared to that of hearing peers the linguistic ability of deaf students is below their biological ages. Second, in terms of the main mode of communication, the deaf group relied on reading as well as Indonesian sign language for their receptive skills and depended on writing and Indonesian sign language for the productive ones. The hearing counterpart, on the other side, mastered listening, reading, speaking, and writing.

More important is that the written Indonesian levels of deaf and hearing groups did not match due to the limited spoken linguistic input acquired by the deaf group. Nevertheless, this issue is not a 'problem' since naturally, this will result in the linguistic gap between both groups. It is the linguistic gap itself that was figured out by the

current study. Thus, in the further phase, it is expected that the linguistic gap between both can be treated through pedagogical intervention. Apart from the different attributes of the deaf and hearing groups, both did not have an intellectual disability.

Further, a case study was adopted as the method of the present study due to its contextual and specific case, namely the language of deaf and hearing students from two different schools. With the case study method, the adoption of language either by groups or even individuals can be comprehended and interpreted holistically, specifically, and contextually (Mackey & Gass, 2005). For analyzing the linguistic case of deaf and hearing students of the present study, a text analysis adapting the prepositional phrase framework of Halliday and Matthiessen (2004) was applied.

For the data sets, the four best real-life narratives about being chased by a dog were elicited from each of both deaf and hearing groups. The elicitation process from the deaf group was assisted by a special education teacher mastering Indonesian sign language. Apart from the sign language, the instructions given to the four deaf participants were also delivered in the form of written language. For the data analysis, only prepositional phrases representing the circumstances were selected. Prior to this phase, the narratives were analyzed into clauses with the transitivity system analysis table of Halliday and Matthiessen (2004). Then the analysis of the prepositional phrases was carried out by adapting their prepositional phrase table analysis as well. The adaption was due to the different order of prepositional phrase patterns between Indonesian and English especially the constituent order following the

Table 3. **The positions of prepositional phrases**

Positions	Group	
	Deaf	Hearing
After the process/verb	12 (100 %)	14 (60.87 %)
Before the process/verb	0 (0 %)	9 (39.13 %)
Total	12 (100 %)	23 (100 %)

Table 4. **Prepositional phrase patterns in deaf and hearing students' narratives**

No	Patterns	Deaf		Hearing	
		Frequency	%	Frequency	%
1	Preposition + Thing	4	33.3	8	34.8
2	Preposition + Thing + Deictic	4	33.3	4	17.4
3	Preposition + Thing + Classifier	2	16.7	1	4.3
4	Preposition + Thing + Qualifier	1	8.3	3	13.0
5	Preposition + Thing + Epithet	0	0	1	4.3
6	Preposition + Thing + Epithet + Qualifier	1	8.3	0	0
7	Preposition + Numerative + Thing	0	0	1	4.3
8	Preposition + Thing + Classifier + Qualifier	0	0	3	13.0
9	Preposition + Thing + Deictic + Qualifier	0	0	1	4.3
10	Preposition + Thing + Deictic + Epithet + Qualifier	0	0	1	4.3
	Total	12	100	23	100

prepositions as the head. Despite the different sequence of patterns of prepositional phrases between English and Indonesian, the constituents are still the same.

FINDINGS

This functional-based linguistic study reveals two categories of findings. The first one is the positions of prepositional phrases denoting the circumstances in the written narratives of deaf and hearing students. The second one is the patterns of their prepositional phrases. Both types of findings are portrayed in comparative ways. The positions of prepositional phrases are depicted in table 3 while their patterns are portrayed in table 4.

Prepositional phrases (in brackets) after the processes/verbs of the deaf group (D)

Saya dan teteh **datang** *(kerumah teman teteh).* D-UC
My elder sister and I **came** *(to the house of her friend).* D-UC

ada *anjing (didepan)* D-NA
there **was** *a dog (in front of us)* D-NA

pernah suatu waktu aku **lewat** *(depan rumah yang ada anjing itu).* D-AL
one day I **passed** *(in front of the house where the dog existed).* D-AL

saya baru **pulang** *(dari Bandung)* D-AU
I just **returned** *(from Bandung)* D-AU

Prepositional phrases before the processes/verbs of the hearing group (H)

(Dalam perjalanan ke toko), saya **melewati** *rumah berwarna putih dan* **mendengar** *suara anjing "guk... guk... guk.."*. H-IR
(On my way to the shop), I **passed** *a white house and heard a dog sound "woof...woof...woof...".* H-IR

(Di dekat sekolah ku) **ada** *rumah guruku yang benama bu Merry dan ia* **memelihara** *anjing yang tidak dipelihara dalam kandang melainkan berkeliaran begitu saja.* H-NO
(Around my school) there **was** *house of my teacher whose name was Mrs. Merry and she* **had** *a dog that was not kept in a cage but it just roamed around.* H-NO

*(Dengan bantuan ayah yang mendorong bagian be-lakang sepeda) lalu aku yang **berusaha mengayuh** sepeda sekencang-kencangnya* H-NU
*(**With the help of my father who pushed the back of the bicycle) then I **tried to pedal** as fast as I could* H-NU

*(Setelah beberapa langkah) **melewati** anjing* H-RA
*(After a few steps) I **passed** the dog* H-RA

Based on table 3 and extracts of the deaf group, it can be seen that all of the prepositional phrases denoting the circumstances of events in the narratives are after processes or verbs. Most prepositional phrases employed by the deaf group are the ones that by nature cannot commonly precede processes like *datang* (came) and *pulang* (returned) as in *datang kerumah teman teteh* (came to the house of her friend) and *pulang dari Bandung* (returned from Bandung). In the data set of the hearing group, though most prepositional phrases (about 61%) follow processes, the rest precedes them. There are about 39% that exists before processes. Until this point, the prepositional phrases employed by the hearing group are more diverse or flexible in terms of their positions in relation to the verb positions.

Prepositional phrase patterns (in brackets) in deaf (D) and hearing (H) groups' data

<u>Preposition + Thing</u>
***Ada** anjing (di depan^P pagar^T)*. D-UC
*There **was** a dog (in front of the fence)*. D-UC

*Saya pun **pergi** (ke^P toko^T)*. H-IR
*I then **went** (to the shop)*. H-IR

<u>Preposition + Thing + Deictic</u>
*Saya dan teteh **datang** (ke^P rumah^T <u>teman teteh^D</u>)*. D-UC
*My elder sister and I **came** (to her friend's house)*. D-UC

*anjing itu pun **berhenti** dan **kembali** (ke^P rumah^T nya^D)* H-NO
*then the dog **stopped** and **went back** (to its house)* H-NO

<u>Preposition + Thing + Classifier</u>
***ada** (di^P daerah^T ciwidey^C)* D-NA
*It **was** (in Ciwidey area)* D-NA

*Lalu (disaat^P jam^T pulang^C) aku bersama teman-teman ku lainnya **melewati** rumah bu Merry* H-NO

*Then (on the way back home), my friends and I **passed** Mrs. Merry's house* H-NO

<u>Preposition + Thing + Qualifier</u>
*pernah suatu waktu aku **lewat** (depan^P rumah^T <u>yang ada anjing itu^Q</u>)*. D-AL
*one day I **passed** (in front of the house where the dog existed)*. D-AL

*(Pada^P <u>sore hari^T sekitar jam 5^Q</u>) saya lagi **duduk** santai di depan rumah* H-RA
*(In the afternoon around 5 o'clock) I **was sitting back** in front of my house* H-RA

<u>Preposition + Thing + Epithet + Qualifier</u>
*Disitu saya **pulang** (lewat^P jalan^T biasa^E <u>yang suka ada jalan berlubang^Q</u>)* D-AU
*There I **returned** (via the usual road which had many potholes)* D-AU

Prepositional phrase patterns in hearing students' narratives only
<u>Preposition + Thing + Epithet</u>
*tiba-tiba **datang** tiga anjing (dari^P arah^T <u>yang berbeda^E</u>)*. H-NU
*suddenly three dogs **came** (from different directions)*. H-NU

<u>Preposition + Numerative + Thing</u>
*(Setelah^P beberapa^N langkah^T) **melewati** anjing* H-RA
*(After a few steps) I **passed** the dog* H-RA

<u>Preposition + Thing + Classifier + Qualifier</u>
*terus saya **membeli** pulsa (ke^P tempat^T orang^C <u>jualan pulsa^Q</u>)* H-RA
*then I **purchased** credit (to someone's place that sold credit)* H-RA

<u>Preposition + Thing + Deictic + Qualifier</u>
*(Dengan^P bantuan^T ayah^D <u>yang mendorong bagian belakang sepeda^Q</u>) lalu aku yang **berusaha mengayuh** sepeda sekencang-kencangnya* H-NU
*(**With the help of my father who pushed the back of the bicycle) then I **tried to pedal** as fast as I could* H-NU

<u>Preposition + Deictic + Thing + Epithet + Qualifier</u>
(Pada^P suatu^D pagi^T <u>yang cerah^E dimana aku harus bergiat kesekolah untuk menimba ilmu^Q</u>). H-NU
(On a sunny morning when I was going to study hard at school to gain knowledge). H-NU

As shown by table 4, there are five patterns of prepositional phrases found in the circumstances of narratives written by deaf student writers. In the data set of their hearing peers, nine patterns are reported. In reference to the analyzed data of hearing student writers, the most noticeable patterns that are absent in the writings of deaf students are *Preposition + Numerative + Thing, Preposition + Thing + Classifier + Qualifier, Preposition + Thing + Deictic + Qualifier,* and *Preposition + Deictic + Thing + Epithet + Qualifier.* What can be seen from the four patterns that are absent in the deaf group's data set is that two of them are those with four-constituent patterns. Further, while there is one occurrence of the five-constituent pattern (*Preposition + Thing + Deictic + Epithet + Qualifier*) in the data set of the hearing group, none was found in the data set of their hearing counterparts. Another gap that can be seen from both data sets is addressed to the adoption of *Numerative.* Whereas there is one adoption of *Numerative* in the prepositional phrase written by a hearing student (*Preposition + Numerative + Thing*), none was found in all data sets of deaf student writers.

In general, based on the compared data sets in table 4 above, the least complex prepositional phrases contain two constituents (*Preposition + Thing*) and this is the most similar pattern of prepositional phrase features between deaf and hearing students. For the complex patterns, there lie differences. The most complex prepositional phrase in the deaf group's narratives is the one with four constituents, namely *Preposition + Thing + Epithet + Qualifier* (only one occurrence). In the data set of the hearing group, the most complex prepositional phrase is the one with five constituents, that is *Preposition + Deictic + Thing + Epithet + Qualifier* (one occurrence). Further, the most common complex patterns of prepositional phrases written by the deaf group are those with three constituents while the ones in their hearing peers' narratives are those with four elements.

DISCUSSION

The first finding of the present study has revealed that all prepositional phrases adopted by deaf students to realize circumstances in their stories are located after the processes or verbs. In the case of the hearing group, they can precede or follow processes though the dominant ones are after processes. Based on this finding, it is noticed that the location of prepositional phrases representing circumstances employed by the hearing group is more flexible. Under the genre of narratives, this variability of prepositional phrase positions serves as making the meaning of experiences more dynamic. The various locations of circumstances in a story avoid the feeling of being monotonous for the readers. Thus, this will make a story more interesting to read.

Further, prepositional phrases positioned before the processes help in leading readers to the setting of experiences, especially places and time. When they are located before processes, especially at the beginning of clauses, prepositional phrases representing circumstances play roles in assisting the readers to first imagine the situation of a story. Briefly speaking, the earlier the prepositional phrases appear in a clause, the earlier the story can be imagined by the readers. However, not all prepositional phrases can appear at the beginning of a clause, to illustrate, the prepositional phrase *to + place* follows the process of *go* or *come.*

Although all prepositional phrases representing circumstances in the stories of deaf student writers are located after processes, the present study does not claim that deaf participants cannot tell their experiences with circumstances put before a process. Some deaf students even put circumstances at the beginning of clauses. However, when the circumstances were in the form of prepositional phrases, there was the tendency to put them after processes.

To the present time, there has been limited literature about the position of prepositional phrases representing circumstances in the narratives written by students. Due to this lack of literature, it is quite challenging to compare the current and previous knowledge. One previous study that can be related to the issue of preposition phrase position refers to the analysis of Sari et al. (2018). Though their qualitative scrutiny, in general, has focused on revealing that deaf students had problems in employing the correct pattern of Subject Verb Object Adverb (SVOA), their analyzed specific data on the other side has shown that deaf students could still position the preposition phrase at the beginning of a sentence. This, to illustrate, is reflected by *pada hari minggu (on Sunday)* at the beginning of a clause used by a deaf student.

The present study, on the other hand, has revealed that all explicit prepositional phrases employed by deaf students to represent circumstances appear after the processes. Due to the specific context of the present study, it might be rather tricky to draw an absolute conclusion. Besides, the data set of the present study is in the form of natural writing especially real-life narratives about being chased by a dog. Despite the different context between the current study and that carried out by Sari et al. (2018), what can be noticed is that deaf senior high

school students compared to their hearing peers have the tendency not to position prepositional phrases at the beginning of a sentence.

In other words, it might be far easier for deaf student writers to make meaning with prepositional phrases positioned after processes or verbs than before them. One of the reasons behind this phenomenon might correlate with what has been argued by Cannon & Kirby (2013) in their discussion section of study report. Their study has claimed that deaf students tended to stick to the pattern of Subject Verb Object (SVO) when making sentences. Indonesian, as the same as English, is the type of language that follows this syntactic pattern. As an effect, when there is another constituent of the syntactic structure apart from the SVO, especially prepositional phrases representing circumstances, students with deafness might tend to consider that the position must be after verbs or objects.

The absence of prepositional phrases preceding processes as found by the current study can be attributed to deaf students' lack of a linguistic model or input provided by their environment either verbal or sign language during the childhood period. Previous studies have proved that the limited access of deaf children to verbal or sign language especially during their critical period can contribute to a lower level of literacy. This case is especially found in deaf individuals from hearing families where there is a lack of linguistic input received from the parents (Hall, 2017; Stamp et al., 2021). In the present study, all the deaf participants came from a hearing family.

The second finding of this study has depicted the gap in prepositional phrase complexity between the narratives composed by deaf and hearing senior high school students. The patterns of the former are less varied (five patterns) compared with the latter (nine patterns). Further, there is a different tendency in terms of the number of constituents of prepositional phrases between both data sets. In the circumstances of the deaf group, the most complex prepositional phrase consists of four constituents (*Preposition + Thing + Epithet + Qualifier*). In those of the hearing peers, the most complex structure comprises five constituents (*Preposition + Deictic + Thing + Epithet + Qualifier*). Besides, whereas the most common complex patterns constructed by the former refer to those with three constituents, those written by the hearing group consist of four constituents.

Apart from the gap, the finding of the study has also revealed a similar tendency of prepositional phrase patterns between both data sets, namely *Preposition + Thing* and *Preposition + Deictic + Thing* as the most frequently used simple patterns. The structure of *Preposition + Deictic + Thing* as the 'easy' pattern has also long been found by the study of Goodluck (1986) that four-to-six-year-old hearing study participants in the study could produce the structure. A recent study carried out by Juliarta (2021) on the prepositional phrases of a novel also has indicated that two of the most common patterns in the novel refer to *Preposition + Thing* and *Preposition + Deictic + Thing*. The finding reported by the functional analysis of Manar (2022) has also shown that both deaf and hearing students tended to employ *Thing* only or *Thing + Deictic* in the nominal groups of their stories. Although nominal groups are different from prepositional phrases, the latter contains the former.

Another similar insight into the prepositional phrases employed by deaf and hearing groups in the present study is the ability of both to produce prepositional phrases with *Qualifiers* especially relative clause (though those of the hearing group is more complex). Prepositional phrases with *Qualifiers* avoid not only the 'sense' of a monotonous way of representing circumstances but also create specific images in the readers' minds. From another genre like knowledge building, prepositional phrases containing relative clauses as *Qualifiers* were found to be frequently used (Putri et al., 2020).

Concerning stories, the narrative genre is characterized by a problematic event preceded by orientation and followed by the resolution while one of the goals of this genre is to entertain the readers (Gerrot & Wignell, 1994; Knapp & Watkins, 2005). For the obtainment of this goal, narratives must be written in such a way that can make the experiences in the stories more imaginable in the readers' minds. One of the strategies to make a story easier to imagine is to depict the experiences in detail and this can be accomplished by the adoption of specific circumstances. The linguistic feature that commonly plays role in realizing the circumstances apart from the adverbial group is prepositional phrases.

Further, though there have been rare previous studies on the complexity of prepositional phrases in narratives, there have been some on the patterns of nominal groups. This indirectly can explain the case of prepositional phrases since inside them there are nominal groups as well. Based on the studies of Correa & Domínguez (2014) and Cruz (2019), for instance, the nominal groups in the stories of hearing students were quite simple or less complex in reference to the target writings expected by the discourse community of written stories. The nominal groups of hearing students in their studies, in particular still lacked modifiers which ideally have a

function to give qualities or descriptions to a thing. The more current study was conducted by Kilpatrick & Wolbers (2020). Their study has reported that one of the deaf students' linguistic problems in making meaning was prepositional phrases. The most current study reporting less complex patterns of deaf students' nominal groups in comparison to those of their hearing peers has been the one carried out by Manar (2022). Whereas prepositional phrase patterns play a role in representing circumstances or situations of an event, nominal group patterns serve to represent the things of the event.

Another insight into the linguistic gap between deaf and hearing students, that can be interpreted further, is the adoption of *Numerative*. This linguistic feature does not exist in the data set of the deaf group but exists in the data set of the hearing group. This might imply that deaf students in comparison to their hearing peers tended to have challenges in making meaning with *Numerative*. This scientific speculation can be linked to what Lintangsari et al. (2019) and Manar (2022) have shown in their analyzed data on deaf students. In particular, one of the study participants of the former missed *Numerative* in recreating a story based on the audio-visual narrative. In its original version in the form of audio-visual mode, the nominal group contained a *Numerative*. Besides, the comparative nominal group analysis conducted by Manar (2022) on deaf and hearing groups' narratives has revealed that whereas there was a Numerative in the hearing group's writings, none was found in the deaf group's data set.

As elaborated earlier, whereas nominal groups function as representing participants or things of experiences, prepositional phrases serve as representing the circumstances accompanying the experiences. Thus, the more complex or long patterns of nominal group patterns in narratives, the more specific and detailed the participants or things in a story are. This also applies to prepositional phrases. The more complex patterns of prepositional phrases in representing the circumstances in a story, the more specific the situation is described. Hence, complex prepositional phrases in narratives play a salient role in making a story more imaginable for the readers.

Prepositional phrases should be represented accurately. The ambiguous adoption of prepositional phrases whether as the circumstance or as the modifier of a thing, for example, may lead readers confused and can affect their imagination. This ambiguity, however, can be solved by evaluating the semantic relation between the process and the things (Maghsoud, 2018). Nevertheless, when multimodal representation is employed, for exam-

ple by using images, ambiguous prepositional phrases do not matter (Delecraz et al., 2020). Based on this previous finding, it can be further interpreted that without the accompaniment of images, prepositional phrases representing circumstances must be patterned correctly and specifically so that the readers can build their correct imagination suitable to the writer's intention. Though all prepositional phrases employed by deaf and hearing students in the current study are unambiguous ones, the point is that prepositional phrases denoting circumstances assist readers in imagining a story. Therefore, they must be represented in various and complex ways.

The less various positions and the less complex patterns of prepositional phrases in deaf students' narratives of the present study are suspected to correlate with the limited lexical resources in their cognition. This is possibly due to their lack of access to the verbal language provided by the environment during childhood (Hall et al., 2019; Henner et al., 2016; Higgins & Lieberman, 2016; Stamp et al., 2021). However, the current study still believes that by nature all individuals without intellectual disability including deaf writers have the circumstances of events stored in their cognition but in implicit ways. The experiences about being chased by a dog, as researched by the present study, are assumed to have been recorded in the cognition of student writers including the circumstance of space and time. This implicit meaning or 'picture' in their cognition however needs explicit linguistic resources for explicit meaning making especially in the written forms.

In the further phase, the implicit circumstantial meaning in the cognition of deaf students demands explicit pedagogical language treatment. Through explicit language teaching and learning intervention, it is expected that the circumstances in the cognition can be represented explicitly and functionally with complex prepositional phrases, especially in the written form. As underpinned by Schley & Trussel (2019), the teaching and learning of language use for students with deafness or hearing limitations are suggested to be explicitly conducted.

CONCLUSION

The present functional-based study has indicated that deaf students in comparison to their hearing peers tend to have more challenges in representing their experiences functionally and specifically. This is confirmed by their less flexible prepositional phrase position as well as their less complex prepositional phrase structure. The current study believes that this phenomenon is the result of de-

layed linguistic input received by deaf students, especially during their childhood. This research, however, still argues that deaf students without an intellectual disability have circumstances stored in their cognition but in 'implicit ways'. When the circumstances are needed to be represented explicitly in the written representation, explicit and rich linguistic resources are needed by the cognitive function.

Despite the findings, still, the claims made by the current study are not conclusive. This is due to the limited number of participants writing their stories as well as because of the specific case of the research. What the present study offers is rather about the certain tendency of deaf students' linguistic difficulties in reference to that of their hearing counterparts. By having proficient linguistic abilities in writing, deaf writers especially students are expected to achieve their goals of communication functionally as well as to fulfill their rights for advanced literacy.

This work is only one of the initial attempts among other studies contributing to the pedagogical practices for the deaf. For further knowledge development, other studies can extend the issue of deaf students' language by focusing on other types of functional linguistic frameworks or by making use of other genres apart from narratives.

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