



Explicitation of Pronouns in the Translation of Math Children's Storybooks from English into Indonesian

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Abstract—Translating children's stories, particularly those enriched with math concepts, is challenging because the translator is demanded to produce a translation that can entertain children and teach them about math concepts through stories. Since the stories translated contain math education, the translation was performed by applying particular techniques, one of which is explicitation to the pronouns to improve the narrative flow in the stories and help children digest the math concept embedded. This study examined the explicitation of pronouns in the translation of three children's stories--*Sam's Sneaker Squares*; *Everybody Wins*; and *The Blast Off Kids*--containing mathematics education from English into Indonesian, and the impacts of the explicitation on the accuracy, acceptability, and readability of translation. This is a descriptive qualitative case study. The research data include the explicitation of pronouns found in the translation of the three stories and the results of the assessment of translation quality. The data analysis has revealed that the majority of pronoun explicitation in the target texts could produce an accurate message, improve translation acceptability, and promote enhanced and smooth reading experiences, and thus, the translation could bridge the needs of readers to comprehend the narrative flow and understand the mathematical concepts in the stories. However, this study also exposed a case of explicitation that did not achieve the expected goals, where an unfamiliar term for children caused the translation to be less acceptable and less digestible.

Keywords—*explicitation; math children's stories; pronouns; translation quality*

I. INTRODUCTION

Children's literature is defined as literature written for or intended for children [1]. Children's literature tells stories about children, their world, and various events involving children. This literature can be about the lives of humans, animals, and plants. The contents should depart from the children's perspective, specifically in viewing and dealing with things, as well as being within the reach of their emotions and thoughts [2].

One of the purposes of children's stories is to educate children, in terms of knowledge and values. Children's stories enriched with educational content are intended to hone children's ability to read and comprehend reading content through interesting and stimulating stories so that children can understand particular scientific concepts through contextual stories [3]. The presence of children's stories loaded with educational content is regarded as a

positive effort to aid in the achievement of learning objectives [4]. The stories raised are commonly related to children's daily lives, making it easier for them to grasp the embedded conceptual content.

Mathematics is one of the five contents (Science, Technology, Engineering, Art, and Mathematics /STEAM) in children's stories. Children's stories containing mathematics are prepared as an effort to help improve children's understanding of mathematical concepts by providing context to help understand mathematical concepts, showing children how they view the world around them from a mathematical perspective, giving children an idea of how mathematics is used by humans to live their daily lives, and provides illustrations of interdisciplinary relationships with mathematics that can arouse children's imagination and curiosity [4]. In addition, all these elements are packaged in an entertaining story so that children learn mathematical concepts without realizing it because they are immersed in the excitement of reading. To date, mathematics has been considered a difficult and unpleasant subject. With children's storybooks containing mathematics education, this problem may be overcome: children have fun reading while learning mathematical concepts.

One effort to provide stories containing mathematical concepts is through translation activities. However, in carrying out their role, translators of children's stories face challenges because they have to be able to bring children's stories that are both exciting and educational into the target language, even though stories and mathematics have contradictory characteristics. In stories containing mathematics education, there are several mathematical terms and concepts that need to be explained carefully and clearly so that readers can understand these terms and concepts well. In addition, the source language and cultural system are different from the target language and cultural system, making translation more challenging. Moreover, the narrative flow of the story must be digestible so that children can enjoy reading and thus catch the information well.

One of the challenges that a translator faces in rendering children's stories is translating pronouns. In children's stories, there are pronouns generally used to build cohesion between sentences in a story. Because the readers are children, translating pronouns is a challenge to produce a translation that is easy for children to understand and acceptable for them. The use of language, content, and diction must be adapted to children's knowledge and fantasy [5]. If not translated carefully, pronouns can be understood inaccurately by child readers, hampering children's understanding of the entire story and its educational content. To avoid this problem, translators of children's stories must be able to make the right decisions to produce high-quality translations, which are translations that can reproduce the message well in the target language (accurate), have a high degree of naturalness (acceptable), and can be easily understood by children readers so that the translated text can carry out its role (high level of readability) [6].

To provide translations of mathematics-loaded children's storybooks that are digestible for children, explicitation technique is applied. Explicitation is a translation technique that adds information to the target text that is not originally contained in the source text, to increase the reader's understanding [7]. The information that is made explicit is commonly contextual.

The use of the explicitation technique in the translation of children's literature has been previously carried out by several researchers [8] [9] [10]. [8] compared the uses of explicitation and implication techniques in the translation of children's stories in the form of fairy tales. This research concluded that explicitation is more dominant in translations of children's stories and is applied to make it easier for readers to understand the translation. [9] examined the explicitation of personal pronouns from English into Mandarin in children's stories in the form of fables. This corpus-based study reported that personal pronouns are used more often in translated texts from English than in non-translated texts due to the characteristics of the source text. [10] studied the application of explicitation in the translation of children's books in the form of fairy tales to increase the level of understanding of target readers.

Studies regarding explicitness in children's stories focus more on fairy tales [8] [10] and fables [9], while studies on children's stories containing mathematics education have never been carried out. Meanwhile, more specific studies on the explicitation of pronouns are also limited to personal pronouns from English into Mandarin [9]. However, there are still other types of pronouns that are challenging for translators and are translated using explicitation. By taking into account these research gaps, a study of the use of explicitness in children's stories containing mathematics education, with an emphasis on analysis of pronoun translation, is interesting and significant to carry out.

This article raises the following research questions:

- (1) What pronouns experienced explicitation in the translation of three children's stories containing mathematics education from English into Indonesian?
- (2) What are the impacts of explicitation in the translation of pronouns on the translation quality, in terms of accuracy, acceptability, and readability?

II. LITERATURE REVIEW

A. *Children's Stories Enriched with Mathematics Education*

Children's literature is works produced and intended for children or enjoyed by children [1]. Children's stories are written for various purposes, including entertaining, conveying information, and teaching empathy [11]. Children's stories are prepared by considering the entertainment elements enjoyed by the children who read them, as well as the educational and moral values included in the stories. These goals are in line with [12] that children's stories provide entertainment, enrich their mastery of literature, encourage understanding, teach cultural values, and share experiences. Moreover, children's stories expand children's imagination and stimulate the development of their minds.

Children's stories, with various purposes, are packaged in such a way and given certain educational content, which in its development is known as STEAM (Science, Technology, Engineering, Art, and Mathematics). Mathematics as one of the educational loaded materials is a science that connects the concepts of quantities, numbers, patterns, and space, which require logical arguments with or without empirical evidence. With this mathematics concept enrichment, children are triggered and directed to apply problem-based learning and learning through daily-life context, to improve their cognitive, psychomotor, and affective aspects [13].

B. *Pronouns as Cohesive Devices*

As narratives, children's stories contain the use of cohesive devices such as pronouns to link the parts of a piece of writing so that the parts of the story can hang together. A story that can hang together can improve the narrative flow and promote an uninterrupted reading experience [14].

As mentioned previously, one of the explications in the translation of children's stories occurs in the translation of pronouns. A pronoun stands in a place of a noun phrase, or a part of a noun phrase when the reference to that noun phrase is clear from the text [15]. English, like other languages, resists the duplication of nouns in sentences and replaces duplicated nouns with what are called pronouns [16].

Pronouns are divided into several types, such as personal (subjective (I, you, we, they, she, it, we) and objective (me, you, her, him, it, them, us), possessive (mine, yours, his, hers, ours, theirs), reflexive (myself, yourself, himself, herself, itself), demonstrative (this, that, these, those), interrogative (who, whom, whose, which, what), indefinite (anyone, someone, everyone, something, all), relative (who, whom, whose, which, that), reciprocal (each other, one another), intensive (my, yourself, himself, herself, itself), indefinite relative (whoever, whomever, whichever, whatever), and distributive (each, either, neither) pronouns [15][16][17].

C. *Translation of Children's Stories*

Through translation, children's stories are offered to children in a language style that is easy for them to understand. Translating children's stories containing mathematics education is challenging because the translator must be able to present both entertaining and educational nuances. Indeed, mathematics has been less popular among children because it is considered complicated and difficult to understand.

Given that the readers are children with limited understanding of words, terms, and sentences, especially those related to mathematical concepts, translators must be able to make the right decisions to produce high-quality translations, translations that can reproduce the message in the target language, have a high degree of naturalness, and are digestible to child readers so that the translated texts can carry out its role well.

To produce adequate math children's storybooks, a translator uses several techniques, one of which is explication. Explication is a translation technique that adds or makes explicit information that is previously implicit or implied. This information is made explicit by considering the context of the situation [7].

Explications in the translation of children's stories occur in several aspects, one of which is in pronouns. Explication, as a translation technique, can influence the translation results [7]. This theory underlies that the quality of translation needs to be studied in depth as an impact of the application of translation techniques. A translation of a children's story needs to consider several aspects, including accuracy, acceptability, and readability [6].

Accuracy is related to message equivalence, which refers to whether the message in the translated text and the one in the source text are equivalent or not [6]. This concept is supported [18] that accuracy is a term used in translation evaluation to refer to the extent to which a translation matches its original. The accuracy of the translation determines whether or not the quality of a translated work is good because the essence of translation is the correspondence between the message contained in the original text and the message of the translated text [6].

Acceptability refers to whether a translation has been articulated following the rules, norms, and culture that apply in the target language or not, both at the micro level and at the macro level [6]. The rules include linguistic rules, including structure and parts of the text (macro level), technical terms, sentence structures, and expressions (micro level). The more natural (ordinary) a translation is, the higher its quality, and conversely, the more awkward the translation sounds, the lower the quality.

Readability refers to the degree to which a translation is easy or difficult for the target reader to understand. Further, [19] define that readability refers to how easily written materials can be read and understood. The readability of the translated text determines its quality because the translation is made to be used and enjoyed by the target reader. A translated text is said to have a high level of readability if the translation is easily understood by the ideal reader of the target language text. The high level of readability of a translated text allows the text to carry out its function of bridging the gap between the author of the original text and readers who do not have access to the source language and vice versa [6].

III.

METHOD

This research on the use of explicitation in the translation of pronouns in children's stories containing mathematics from English into Indonesian is considered qualitative research. This research is a case study because it was conducted to reveal the phenomena of explicitation of pronouns in the translation of children's stories containing mathematics education. The phenomena were scrutinized using translation theory.

The first data in this research are the personal pronouns translated using explicitation technique [7]. The data were taken from the translation of three children's stories containing mathematics concepts entitled *Sam's Sneaker Squares*; *Everybody Wins*; and *The Blast Off Kids*. Pronouns that experienced explicitation in the translation were then categorized into various types, including personal, possessive, reflexive, demonstrative, interrogative, indefinite, relative, reciprocal, intensive, indefinite relative, and distributive pronouns [15][16][17]. The other data are the results of assessments of translation quality, covering the accuracy of the message; language, norm, and cultural acceptability; and the level of ease of translation for readers. This quality was measured using translation quality assessment parameters formulated by [6]. The results of the analysis were then examined further and a conclusion was drawn.

IV. RESULT AND DISCUSSION

A. Pronouns experienced explicitation in the translation of three children's stories containing mathematics education from English into Indonesian

TABLE 1. TYPES OF PRONOUNS EXPERIENCING EXPLICITATION IN THE TRANSLATION

Title	Types of Pronouns				Total per title
	Personal	Possessive	Demonstrative	Distributive	
<i>The Blast Off Kids</i>	10		2	1	13
<i>Sam's Sneaker Squares</i>	5	6	1		12
<i>Everybody Wins</i>	5				5
Total per type of pronoun	20	6	3	1	30

The data analyses identified five types of pronouns experiencing explicitation in their translations, including personal (20), possessive (6), demonstrative (3), and distributive (1) pronouns. The following is a detailed explanation of the cases.

1) Personal pronouns

A personal pronoun refers to a person, thing, or animal [20] and replaces a duplicated noun. In other words, the pronoun refers to the person [17] (or object) speaking or being spoken to. A total of 10 personal pronouns were translated by making implicit information explicit for various reasons. Explicit personal pronouns are found in the translation of *The Blast Off Kids* (10 data), *Sam's Sneaker Squares* (five data), and *Everybody Wins* (five data). The following are some cases of personal pronoun explicitation in math children's storybooks.

Example (1)

ST : Jim heard a girl say, "Blast Off Kid" and laugh. Ugh. **He** felt embarrassed.

TT : *Jim mendengar seorang murid perempuan berkata, "Kolektor bungkus Blast Off Bar" lalu tertawa. Duh. Jim merasa malu.*

In Example 1, the personal pronoun "he", which takes the position of a subject", replaced "Jim". Jim heard a girl calling him "Blast Off Kid" and then she laughed. Because of this, Jim was embarrassed. "He" replaced "Jim" to avoid the reduplication of a similar word. This subjective personal pronoun was made explicit, instead of using "dia". This explicitation was intended to avoid misunderstanding who was embarrassed. In the target language (TL), "dia" is a personal pronoun that can replace the male or female

individual. Using “*dia*” could cause misinterpretation, whether the shy one was either “Jim” or “a girl”. By making “Jim” explicit, the target readers could be more confident that it was Jim, instead of “a girl”.

Example (2)

ST : Jim ran inside. He got a Galactic Grape Blast Off Bar and tore it open. He added the wrapper to the nine loose wrappers. That was enough to make a bundle. Now he had ten bundles. He put **them** into a grocery bag. Now he had ten grocery bags. He put them into a trash bag. Now he had ten trash bags! “I have 10,000 wrappers!” Jim shouted.

TT : *Jim berlari ke dalam rumah. Dia mengambil Blast Off Bar rasa Anggur Galaksi dan membukanya. Dia menambahkan 1 bungkus itu ke 9 bungkus satuan. Jumlahnya cukup untuk dijadikan 1 bundel. Sekarang dia memiliki 10 bundel, lalu memasukkan **10 bundel itu** ke dalam kantong belanja, sehingga menghasilkan 10 kantong belanja. 10 kantong belanja itu dia masukkan ke dalam sebuah kantong sampah. Sekarang dia punya 10 kantong sampah! “Aku punya 10.000 bungkus!” seru Jim.*

Example 2 narrated that Jim added one wrapper to the nine wrappers to make a bundle. After having one more bundle, Jim could add one bundle to the nine bundles to make a complete ten bundles. Then, he put the ten bundles into a grocery bag. In the ST, the “ten bundles” was replaced by an objective personal pronoun “them”. In the translation, “them” was made explicit into “10 bundel itu (the ten bundles)” instead of “*nya* (them)”. *First*, “them” contains a mathematical concept of addition, which results from the addition of 1 to 9. This concept could be more understandable to target readers in the TL when made explicit. *Second*, the repetition of mentioning numbers could potentially increase its readability level to the target readers, as detailed by [21] that repetition (redundancy) is required when one is handling cognitively demanding tasks, such as explaining or trying to understand difficult concepts or complicated augmentation.

2) Possessive pronouns

A possessive pronoun functions in a genitive case, such as indicating ownership and expressing a possession relationship to the person speaking or being spoken to [17]. The possession can be of a person, place, or thing. It takes two forms, which are absolute (e.g., mine, hers, and theirs) and adjective (e.g., my, her, and their) possessive pronouns. Explicit possessive pronouns were only identified in *Sam’s Sneaker Squares* (six data). The cases can be observed in the following examples from the translation of *Sam’s Sneaker Squares*, which is a story that loads the math concept of measuring the area of a shape.

Example (3)

ST : “I’m sure **his** lawn is a lot bigger than hers,” I said. “I wish I could prove it. Then maybe he’d pay me more.”
 “I could show you how,” said Dave.
 “Great,” I said. “So . . . how?”
 “What’s in it for me?” Dave asked.
 “I’ll clear your dishes for a week,” I offered.”

TT : *“Aku yakin halaman **Tuan Hill** lebih luas daripada milik Nyonya Green. Kalau aku bisa membuktikannya, mungkin aku bisa mendapatkan bayaran yang lebih banyak,” jawabku.
 “Sini, aku tunjukkan caranya,” kata Dave. “Wah asyik! Bagaimana?” sambutku. “Apa imbalannya untukku?” tanya Dave. “Aku akan mencuci piringmu selama seminggu,” sahutku.”*

Example (4)

ST : “I’m sure his lawn is a lot bigger than **hers**,” I said. “I wish I could prove it. Then maybe he’d pay me more.”
 “I could show you how,” said Dave.
 “Great,” I said. “So . . . how?”
 “What’s in it for me?” Dave asked.
 “I’ll clear your dishes for a week,” I offered.”

TT : *“Aku yakin halaman Tuan Hill lebih luas daripada **milik Nyonya Green**. Kalau aku bisa membuktikannya, mungkin aku bisa mendapatkan bayaran yang lebih banyak,” jawabku.
 “Sini, aku tunjukkan caranya,” kata Dave. “Wah asyik! Bagaimana?” sambutku. “Apa imbalannya untukku?” tanya Dave. “Aku akan mencuci piringmu selama seminggu,” sahutku.”*

In Examples 3 and 4, Sam measured the area of Mr. Hill’s and Mrs. Green’s lawns to help him determine the cost of mowing their lawns. In the ST, “Mr. Hill’s lawn” was replaced with an absolute possessive pronoun “his (lawn)” and “Mrs. Green’s lawn” was replaced by an adjective possessive pronoun “hers”. In the TT, the implicit information contained in the possessive pronoun was made explicit into “(halaman) Tuan Hill (Mr. Hill’s lawn)” and “*milik Nyonya Green* (Mrs. Green’s lawn)”. In the TL, to

represent the third person's singular possession, the pronoun “*nya*” is commonly used, either for male or female. However, in these cases, the use of “*-nya*” can be confusing to understand because two possessions were compared and the positions were not interchangeable. Mr. Hill's lawn was predicted to be a lot bigger than Mrs. Green's lawn. If the positions were exchanged, the meaning would be different.

3) Demonstrative pronouns

Demonstrative pronouns are used to indicate or point out the person or thing being referred to [17]. The demonstrative pronouns *this*, *that*, *these*, and *those* are used to represent an already mentioned or implied word or phrase, helping make communication faster and easier [22]. A total of two demonstrative pronouns in *The Blast Off Kids* and one in *Sam's Sneaker Squares* experienced explicitation in the translation. The following example illustrates the demonstrative pronoun explicitation.

Example (5)

- ST : Jim and his mom carried his wrapper collection to the garage. They got trash bags and put ten grocery bags in each one. When they were done, they had filled six trash bags. They also had three grocery bags, five bundles and four loose wrappers. “**That**'s 6,354 wrappers!” Jim said.
- TT : *Jim dan ibunya membawa kumpulan bungkus itu ke garasi. Mereka mengambil kantong sampah dan memasukkan 10 kantong belanja ke setiap kantong sampah. Setelah selesai, mereka berhasil mengisi 6 kantong sampah. Jim dan ibunya juga memiliki 3 kantong belanja, 5 bundel, dan 4 bungkus satuan. “Semuanya 6.354 bungkus!” kata Jim.*

Example 5 was taken from *The Blast Off Kids*. In this context, Jim and his mother brought the wrappers collected to the garage. They put ten grocery bags in each trash bag, and the total number of trash bags they filled was six. They also brought three grocery bags, five bundles, and four wrappers. Then, Jim shouted, “*That's 6,635 wrappers!*” to show his excitement and conclusion. “*That*” represents the overall objects they collected. In the TL, “*that*” means and is commonly replaced with a demonstrative pronoun “*itu*”. However, the use of “*itu*” in this context was less natural. Therefore, explicitation into “*semuanya* (all)” is required. Moreover, “*semuanya*” gives definite mathematical information to the readers that what Jim referred to is the overall wrappers he and his mother gathered.

4) Distributive pronouns

A distributive pronoun (e.g., each, either, and everyone) is a type of pronoun that is commonly used to refer to members of a group separately instead of referring to them collectively [23]. It refers to a person or an object in a group in a singular manner. The explicitation of the distributive pronoun was identified in the translation of *The Blast Off Kids* (1 datum).

Example (6)

- ST : Jim and his mom carried his wrapper collection to the garage. They got trash bags and put ten grocery bags in **each one**. When they were done, they had filled six trash bags.
- TT : *Jim dan ibunya membawa kumpulan bungkus itu ke garasi. Mereka mengambil kantong sampah dan memasukkan 10 kantong belanja ke setiap kantong sampah. Setelah selesai, mereka berhasil mengisi 6 kantong sampah.*

In Example 6, the distributive pronoun “each one” was used to replace the “trash bag” that Jim and his mother used to put the grocery bags. In the TT, “each one” was made explicit into “*setiap kantong sampah* (each trash bag)” to make it clearer for the target readers, because there were two types of bags mentioned in the story, which were trash bags and grocery bags.

B. The impacts of explicitation in the translation of pronouns on the translation quality, in terms of accuracy, acceptability, and readability

TABLE 2. TRANSLATION QUALITY OF EXPLICIT PRONOUNS

Title	Quality								
	Accuracy			Acceptability			Readability		
	Accurate	Less Accurate	Inaccurate	Acceptable	Less Acceptable	Unacceptable	High	Average	Low
<i>The Blast Off kids</i>	13			12	1		12	1	
<i>Sam's Sneaker Squares</i>	12			12			12		
<i>Everybody Wins</i>	5			5			5		
Total	30			29	1		29	1	

Explicit information applied to the translation of pronouns affects the quality of the translation, in terms of accuracy, acceptability, and readability. This section describes the effect of explication on the delivery of the message, the naturalness and suitability of the explication to the target language system, norms, and culture, as well as the young readers' level of understanding.

1) Accuracy

The information explication in pronouns contributes to accurate translation (30 data). The explicit information is based on the context. The translation is considered accurate if there is no difference in the message between the translation and the original text, as well as no additional message or subtracted message [6] unrelated to context.

Example (7)

- ST : Oscar and Hugo told Emmy about the contest. "Twelve boxes," **she** said. "That's a lot of bubble gum." "I'll enter with you," said Tony. "Great!" said Hugo. "Then we can all share the prize."
 TT : *Oscar dan Hugo memberi tahu Emmy tentang kontes itu. "Dua belas kotak. Banyak sekali permen karetanya," seru **Emmy**. "Aku ikut mendaftar bersama kalian," ucap Tony. "Bagus! Kalau begitu kita semua bisa berbagi hadiahnya," jawab Hugo.*

In Example 7, which is taken from *Everybody Wins*, the subjective personal pronoun "she" replaces "Emmy". In the SL system, "she" is used to replace a female singular third person. Emmy responded to Oscar and Hugo who had just informed her about the contest at the village fair. Emmy considered that twelve boxes of bubble gum for the contest were abundant. In the TT, "she" was made clear into "Emmy" instead of implicitly rendered into "*dia* (he/she)". This explication was accurate because the one who said "twelve boxes" is Emmy, instead of Oscar or Hugo. In English (SL) language system, the singular third-person pronoun is gendered, meaning that the pronoun shows whether the person is male or female. However, in the Indonesian (TT) language system, the singular third-person pronoun is genderless, meaning that the referred person can be male or female. Therefore, explication is obligatory to make the message clearer. This finding is in line with [24] his findings on the translation of pronouns in the Hungarian language that the use of nouns must be repeated in the TT to make an unambiguous reference. [23] also signifies that the nouns replacing pronouns usually refer to men or women when dealing with explication of sex in the TT.

Example (8)

- ST : Dave drew a rectangle on his napkin. "Say this is a lawn," he said. "You measure the two sides—the length and width. Then you divide **it** into equal squares—like this."
 TT : *Dave kemudian menggambar persegi panjang di atas kain serbetnya. "Anggap saja ini halaman rumput. Kamu harus mengukur berapa panjang dan lebarnya. Lalu, bagi **persegi panjang itu** menjadi beberapa kotak kecil yang berukuran sama. Seperti ini."*

Example 9 was a passage from *Sam's Sneaker Squares*. Dave was drawing a rectangle on his napkin to show Sam how to measure the lawn area. The rectangle he was drawing on the napkin was like a miniature for measuring the lawn. He showed Sam that to measure the area, he had to measure the length and the width of the rectangle. Then, he had to divide the rectangle into equal squares. "Rectangle" in the last sentence was replaced by an objective personal pronoun "it". In the TT, "it" was conveyed explicitly into "*persegi panjang itu* (the rectangle)". This translation is accurate since it contains equivalent meaning to "it" in the ST. In this case, the pronoun that is made explicit in the TT is in the form of a noun phrase, and this finding is consistent with [23] that several cases of pronoun explication take the form of replacing pronouns with noun phrases on the sentence level.

2) Acceptability

A translation is said to be acceptable when it has been expressed in accordance with the rules, norms, and culture that apply in the target language, both at the micro level and at the macro level [6]. The majority of pronoun explications in the target texts promote acceptable translations of math children's storybooks. The following examples, collected from *Everybody Wins* and *The Blast Off Kids*, illustrate the degree of acceptability attributed to explication of contextual information.

Example (9)

- ST : A week later at the village fair Oscar saw some people selling raffle tickets. First prize was a giant-screen TV. "Wow," **he** thought. "It would be so cool to watch baseball on a giant TV! I've just got to enter!"
 TT : *Seminggu kemudian di pekan raya desa, Oscar melihat beberapa orang menjual tiket undian. Hadiah pertamanya sebuah TV layar lebar. "Wah," pikir **Oscar**. "Pasti keren sekali bisa menonton pertandingan bisbol di TV layar lebar! Aku harus ikut undiannya!"*

Example 9 shows the explicitation of the subjective personal pronoun “he” into “Oscar”. This explicitation is contextual because it was Oscar the one who was amazed by witnessing several people selling lotteries with a giant-screen TV as the first prize. The explicitation is acceptable in terms of language use because “Oscar” is written with an initial capital letter for it is a proper noun.

Example (10)

ST : Jim ran inside. He got a Galactic Grape Blast Off Bar and tore it open. He added the wrapper to the nine loose wrappers. That was enough to make a bundle. Now he had ten bundles. He put them into a grocery bag. Now he had ten grocery bags. He put them into a trash bag. Now he had ten trash bags! “I have 10,000 wrappers!” Jim shouted.

TT : *Jim berlari ke dalam rumah. Dia mengambil Blast Off Bar rasa Anggur Galaksi dan membukanya. Dia menambahkan 1 bungkus itu ke 9 bungkus satuan. Jumlahnya cukup untuk dijadikan 1 bundel. Sekarang dia memiliki 10 bundel, lalu memasukkan 10 bundel itu ke dalam kantong belanja, sehingga menghasilkan 10 kantong belanja. 10 kantong belanja itu dia masukkan ke dalam sebuah kantong sampah. Sekarang dia punya 10 kantong sampah! “Aku punya 10.000 bungkus!” seru Jim.*

Although the majority of pronoun explicitation (29 data) goes hand in hand with translation acceptability, there is a case of explicitation that has a negative effect on the acceptability of the translation for children target readers. Taking a look at Example 10 from *The Blast Off Kids*, the objective pronoun “them” replaces “the 10 bundles” in the ST. In the TT, based on the context of the story, “them” was made explicit into “10 bundel itu (the 10 bundles)” to help reduce ambiguity and improve the reading comprehension of the target readers. However, the diction “*bundel*” is less familiar to children in the TL. The term “*ikat*”, which also means “bundle” is more common and acceptable for young readers.

3) Readability

A translation is said to have a high level of readability if the translation is easy to understand by the ideal readers of the target language text [6]. The following examples illustrate the readability of the translation attributed to the pronoun explicitations.

Example (11)

ST : The raffle drawing was two weeks later. They didn’t win a prize. Oscar walked over to Emmy’s house to tell her. Just as he finished, Hugo rode up. “Guess what I’m getting for my birthday?” **he** said. “Four tickets to the baseball game. We can all go together!”

TT : *Hadiah akan diundi dua minggu kemudian. Ternyata mereka tidak memenangkan hadiahnya. Oscar berjalan ke rumah Emmy untuk mengabarkan hal itu. Tepat saat Oscar selesai berbicara, Hugo datang. “Tebak apa yang aku dapatkan untuk ulang tahunku?” tanya **Hugo**. “Empat tiket pertandingan bisbol. Kita semua bisa pergi bersama!”*

The passage in Example 11 was taken from *Everybody Wins*. Oscar walked over to Emmy’s house to inform her that they (Oscar, Emmy, and Hugo) did not win a prize. Just after Oscar finished telling Emmy about their unluckiness, Hugo came to let them know about the good, surprising news, that Hugo got four tickets to the baseball game. In the ST, the subjective pronoun “he” in “he said” represents “Hugo”. In the TT, the pronoun was made explicit into “Hugo”. The explicitation contributes to high readability level because of two factors. *First*, the explicitation of Hugo minimizes and overcomes the ambiguity of repeated pronouns that represent different persons. In the example above, “he” was mentioned twice, as in “Just as he finished, ...” and “he said”. The former replaces “Oscar”, while the latter represents “Hugo”. Since the translation was made explicit, the target readers are more facilitated to digest the message contained in the pronouns to avoid misinterpretation of “he”. *Second*, the explicitation helps improve the readers’ understanding of the chronological sequencing of the story.

Example (12)

ST : “On a piece of paper I drew a rectangle. I drew six sneaker prints on one side, like **the ones** I’d made on Mom’s clean floor.”

TT : *Kemudian aku menggambar persegi panjang di selembar kertas. Aku menggambar 6 jejak sepatu di satu sisi, sama seperti **jejak sepatu** di lantai bawah tadi. Lalu aku menggambar 3 jejak sepatu di sisi lainnya.*

Example 12 from *Sam’s Sneaker’s Square* showcases the use of the pronoun “(the) ones”, which refers to the sneaker prints. The explicitation of “*jejak sepatu* (the sneaker prints)” helps reinforce the information about “sneaker prints” explained in the story.

In this study, pronouns were made explicit in target texts, which in some cases made redundancy of proper nouns and common nouns happen. This sort of redundancy may also be required because the readers need to handle cognitively demanding tasks, such as understanding difficult concepts [23].

Example (13)

ST : Jim ran inside. He got a Galactic Grape Blast Off Bar and tore it open. He added the wrapper to the nine loose wrappers. That was enough to make a bundle. Now he had ten bundles. He put **them** into a grocery bag. Now he had ten grocery bags. He put them into a trash bag. Now he had ten trash bags! "I have 10,000 wrappers!" Jim shouted.

TT : *Jim berlari ke dalam rumah. Dia mengambil Blast Off Bar rasa Anggur Galaksi dan membukanya. Dia menambahkan 1 bungkus itu ke 9 bungkus satuan. Jumlahnya cukup untuk dijadikan 1 bundel. Sekarang dia memiliki 10 bundel, lalu memasukkan **10 bundel itu** ke dalam kantong belanja, sehingga menghasilkan 10 kantong belanja. 10 kantong belanja itu dia masukkan ke dalam sebuah kantong sampah. Sekarang dia punya 10 kantong sampah! "Aku punya 10.000 bungkus!" seru Jim.*

Despite the positive contribution to readability (29 data), the explicitation of pronouns in the translation of math children's storybooks can also make the readability level of explicit information remain low (one datum), as illustrated in Example 13 collected from *The Blast Off Kids*. As explained in *Readability* section, "them" replaces "the 10 bundles" in the ST. Considering the context of the story, "them" was made explicit into "*10 bundel itu* (the 10 bundles)" in the TT to help minimize ambiguity and improve the reading comprehension of the target readers. Nevertheless, the word "*bundel*" is less memorable for children in the TL, and this potentially hinders readers from digesting the meaning, causing an interrupted reading experience to happen. Instead of "*bundel*", the term "*ikat*", which has an equivalent meaning to "*bundel*", is more familiar and digestible for children. This case also signifies that the explicitation of pronouns does not always help readers process text, particularly when the diction selected is not suitable for children or beyond children's reach of thought.

V. CONCLUSION

This study concludes that explicitation of pronouns was applied by translators in order to produce a translation of pronouns that could render an accurate message, improve the acceptability of language, norm, and culture, and promote better and uninterrupted reading experiences so that the translations can perform the role in bridging the needs of children readers to understand the narrative flow of the stories and grasp mathematical concepts more optimally. Although the majority of the explicitations could improve the acceptability and readability levels of translations, there was a case explicitation that did not achieve the expected goals. The explicitation by using an unfamiliar term for children, such as *bundel*, caused the translation to be less acceptable and less digestible. This study limits its focus on the explicitation of pronouns in the translation of children's storybooks. Further studies that center on other focuses are required to improve the research on the translation of children's literature.

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