



Yan Liu*

Readability and adaptation of children's literature: an interpersonal metaphor perspective

<https://doi.org/10.1515/jwl-2022-0039>

Received July 23, 2022; accepted October 30, 2023; published online November 28, 2023

Abstract: Readability receives attention from people with different theoretical bases. Starting from a new perspective of interpersonal metaphor, this paper aims to deal with the readability and adaptation of children's literary work. Adopting a qualitative method, this paper selects a small portion of the data from a larger data set for illustration, in the hope of approaching the two aspects: (1) the manners of realization in the adaptation of the parts concerning mood and modality metaphor in the data; (2) the strategies of the adjustment of interpersonal metaphor-related parts in the data, and the effect of these strategies on readability. The research findings are: (1) two manners of realizations have been found regarding adjustment and readability involving either mood or modality metaphor; (2) three strategies are evidenced to be entailed: unpacking, demetaphorization, and maintenance, where the first two reduce readability, and the last one contributes to the same readability. Thanks to the consistency in the exploitation of the theoretical basis, the study offers fresh insights into readability studies.

Keywords: adaptation; interpersonal metaphor; children's literature; readability

1 Introduction

This paper reports a study of readability and adaptation of children's literary work from the perspective of interpersonal grammatical metaphor, as an expansion of other viewpoints based on Systemic Functional Linguistics (hereafter SFL): complexity in language (Huang and Liu 2015), reference (Liu 2019), and ideational grammatical metaphor (Liu 2021), in addition to a fair evaluation of the motivation behind the integration of readability into SFL (Liu 2020).

Readability is also known as text readability, text difficulty, reading ease or accessibility in other studies, and its meaning contains at least three crucial aspects:

*Corresponding author: Yan Liu, School of Foreign Languages, Yunnan University, Kunming, China, E-mail: wyluyan@ynu.edu.cn

(1) the reader's understanding of a text or reading material; (2) the essence of a text or reading material; and (3) finding an appropriate text or reading material for the purpose of gratification of the needs of a reader (Klare 1963; Lin 1995; Lorge 1944; Lv 2003). Over time, the concentration was shifted from traditional research on rhetoric to the study of readability, because graded teaching or instruction was widely used. Aiming to gauge the readability of a text objectively, Thorndike (1921) published *The Teacher's Word Book* in which the relative frequency of several words is measured, which has been pioneering readability studies (Bailin and Grafstein 2016). Concerned with the characteristics of written texts, readability studies deal with how such features make for or impede the effectiveness of idea dissemination. With its enduring appeal, readability has aroused the interests of people in education, applied and text linguistics, library science, and business, medical, and technical communications. Criteria of readability are proposed for careful choice of proper reading materials, effective dissemination of technical, medical, and business information, creation of standardized tests, and instruction of writing and communication techniques. Having expanded the scope, readability has also been essential for applied linguistics, text and discourse theory, and natural language processing. Readability is supposed to be dependent on linguistic factors (e.g. phonological, morphological, syntactic, semantic, and textual features), and non-linguistic ones. The advancement of readability has been steered by (1) inchoate endeavor to gauge readability (e.g. Dale and Tyler 1934; Gray and Leary 1935; Lively and Pressey 1923; Thorndike 1921; Vogel and Washburne 1928); (2) classical readability formulas, such as readable style (Flesch 1943, 1946, 1948), the Dale-Chall formulas (Dale and Chall 1948), the Fog Index (Gunning 1952, 1968), Readability Graph (Fry 1968), and SMOG Grading (McLaughlin 1969); and (3) other approaches to readability, such as the cloze procedure and Coh-Metrix. The topic being intriguing, readability has also attracted considerable attention from linguists. For instance, a body of research whose theoretical framework is SFL has been conducted (e.g. Chen and Huang 2014; Huang and Liu 2015; Lassen 2003; Liu 2019, 2020, 2021).

This research has been inspired by Halliday and Hasan (1985), and Halliday and Matthiessen (2004, 2014), who see language as a semogenic system, and who regard ontogenesis (or language development) as a pivotal process in which language in its adult sense is evolved, generally from several microfunctions to three metafunctions. With the unfolding of ontogenesis, interpersonal grammatical metaphor is developed. The goal of this paper is to probe into the readability and adjustment of juvenile literary works about interpersonal metaphor, and particularly the focus is to be on (1) the manners of realization in the adaptation of the parts concerning mood and modality metaphor in the data; (2) strategies which relate to the taxonomies of metaphor in the adaptation, and the effects these strategies have on readability.

2 Readability studies

This section first summarizes previous scholarship on readability and then makes comments on it. Fascination with the study of readability began in the USA early in the twentieth century when there were a growing number of second-generation students or immigrant students, for whom reading materials then posed some special challenge. To address the issue, graded instruction was needed, and more scientific tools were gradually invented, which paved the way for readability studies.

As a psychologist, Thorndike (1921) wrote *The Teacher's Word Book*, the first one of its category where English words are listed by frequency. How often a word is used is associated with its difficulty: the more frequently it occurs, the less difficult it is (Patty and Painter 1931). The second and third editions of this book were published with larger vocabularies. All these mark the commencement of the ensuing research into readability where words are placed as a significant indicator for text difficulty (DuBay 2006; Huang and Liu 2015; Liu 2019, 2020).

In addition to words, more variables are found to be likely to lead to a change in readability, encompassing linguistic (e.g. phonological, morphological, syntactic, semantic, and textual features), and non-linguistic. In trying to examine and explain 288 factors likely to exert some influence upon the degree of text difficulty, Gray and Leary (1935) delimit four categories: contents that a text has, the style in which it is composed, the fashion in which it is formatted, and how it is arranged. Although more than a dozen variables relate to the factor of style, only less than 10 have been picked out as real variables in a readability formula (Fisher et al. 2012), which can be represented in the following manner: " $X1 = -0.01029X2 + 0.009012X5 - 0.02094X6 - 0.03313X7 - 0.01485X8 + 3.774$ " (Bailin and Grafstein 2016: 31), where X1 represents some score related to readability, and X2, X5, X6, X7, and X8 stand for alternative factors contributing to readability. To some extent, this has commenced the tradition of using formulas as a way to benchmark difficulty levels of reading materials quantitatively, and many later research, despite variation in their adoption of the specific methods and techniques, have been continuing consciously or subconsciously along the quantitative lines mentioned.

There have been plenty of such formulas, although they are not as well received today as they used to be (Bailin and Grafstein 2016). Some factors for readability have virtually no direct links to the formulas since the difficulties relevant to them are hard to quantify. Even for some quantifiable elements, however, the results of predicting readability with recourse to the formulas still fall wide of the mark. Thus, other means of measuring readability are required. The quantitative and qualitative elements seem to be obvious at first sight, but they are not easily established.

The divergent ways of approaching readability, together with their fuzzy and partially unpredictable nature, have added uncertainty to this picture. Despite the current lack of popularity of these formulas, scholars in areas like education and psychology have continued to study readability. For a better understanding of the relationship between adaptation and readability, more studies on this topic taking new approaches are believed to be a viable trend to follow.

Although readability involves linguistic problems, few scholars have based their research on a linguistic theory. Thus, the attempt in this paper is to embed itself into SFL fathered by Michael A. K. Halliday, and reinforced by his followers. In this contemporary linguistic school, language is generally viewed as a semiotic, or semogenic system, which implies that language engages in the making of meaning in human communication. From an SFL viewpoint, there are several dimensions that define language as it is. Intended to settle matters of humanity, the SFL theory has been used in a variety of terrains such as discourse analysis, education, translation studies, and stylistics. One thing to note is that despite there are readability studies from distinct perspectives of SFL, so far the concept of readability has not yet been thoroughly incorporated into it.

3 Ontogenesis, grammatical metaphor, and interpersonal grammatical metaphor

The study of readability in this paper has much to do with ontogenesis, a notion closely related to development. There are at least two models of ontogenesis in SFL, of which the initial appertains to language development proposed by Halliday (1975). Halliday (2013 [2010]) sees ontogenesis as involving one of the three histories of meaning: phylogenesis (i.e. “language evolving” which concerns the history of language as a system), ontogenesis (i.e. “language developing” or the history of the individual speaker), and logogenesis (i.e. “language unfolding”, involving the history of language as instantiated by text).

Beginning from children’s early life, ontogenesis or language development denotes a process in which language in its adult sense comes into being. Instead of language acquisition, Halliday (1975, 2003 [1998]) believes when small children learn their mother tongue they are just “learning how to mean” (Painter 2009: 87). In the theoretical model which he addresses as a language-based theory of learning, Halliday (2003 [1998]) sticks to the view that through the three phases of grammatical generalization, grammatical abstractness, and grammatical metaphor, humans become more adept in their semiotic advancement; furthermore, these steps guarantee that people come to be able to cope with language in its adult sense, literacy, and disciplinary knowledge (Liu 2021).

In the human semiotic development, the last stage is characteristic of grammatical metaphor, which refers to the “interstratal relationship between semantics and lexicogrammar within the grammatical zone of lexicogrammar. This relationship is based on realization” (Matthiessen et al. 2010: 109), and is “a ‘skewing’ of such relations” (Painter et al. 2007: 557). In congruent situations, children produce some utterances in which a semantic unit is realized by a specific lexicogrammatical one. In incongruent utterances, however, the unit is manifested by another lexicogrammatical one (Ravelli 2003; Taverniers 2003).

As grammatical metaphor is used from the later years of the primary school to the whole secondary school, children will gradually familiarize themselves with disciplinary knowledge in pedagogical contexts closely related to specialization. More importantly, the skewed relations of semantics to lexicogrammar have a strong impact on children’s basic ideas of what the world looks like, and how it actually works. Grammatical metaphor is not the intellectual property of older children. Younger children have also been able to articulate utterances entailing metaphor even when they are still in their initial few years of life. One of the earliest forms is an interpersonal metaphor like a declarative clause used as a demand by a child who cannot allow others to touch his toys. As is clear, the child should have used another more congruent utterance like an imperative. Besides, experiential grammatical metaphors also occur in early childhood.

In the architecture of human language, roles and relations are enacted into meaning through the interpersonal sets of meaning, which span two main semantic systems: SPEECH FUNCTION and MODALITY, which are then realized respectively by interpersonal and ideational lexicogrammatical choices (Matthiessen et al. 2010). Interpersonal grammatical metaphor pertains to incongruent mapping between meaning and wording, particularly between the two semantic systems and wording; so, two different types of interpersonal metaphor are involved: mood and modality metaphor, which are showcased to have some influence on readability (Chen and Huang 2014; Lassen 2003).

4 Data and methodology

The data set relates to *Alice’s Adventures in Wonderland*, a children’s literary classic, authored by Lewis Carroll, the pseudonym of Charles L. Dodgson (1832–1898) who was an English writer, mathematician, logician, and photographer. Deriving the enlightenment from some events in 1862 when the English Victorian era reached the midway point, the work is a manifestation of the literary tradition in which small children receive little attention and are treated as nothing other than smaller adults. In other words, physically smaller as children are, their minds in this era are supposed to be developed to the same level as adults’; so, it is not allowable for them to

read fairytales and fantasies. Therefore, the Victorian morality obliges children to behave like adults, which is reflected in the story so that children endeavor to draw others' attention by keeping themselves being seen and heard, and children react in ways beyond current readers' expectations (Carroll 2001).

As a part of the genre of imaginative and nonsense literature, Carroll's work is about dreams, and the contortion of the logic of the dream state is representative. In the work, there are many fantastic features, which are accompanied by nonsensical characteristics. Moreover, *Alice's Adventures in Wonderland* systematically critiques the essence of language, the particular moral principles or rules of conduct in the Victorian era, and unexpected and inexplicable changes in the English legal system. Since its first publication, the work has gained critical reception from not only general readership but also literary critics, giving rise to sequels (Walker 2001).

To approach readability and adaptation of juvenile literary works in terms of interpersonal metaphor, the data set was co-collected and shared by a group of researchers (including Chen and Huang 2014; Huang and Liu 2015; Liu 2019, 2021), consists of the original version of the novel mentioned (hereafter OV) and the seven adapted English versions (hereafter ADPV1 to ADPV7), with varying readership: for example, some ADPVs are targeted at students in primary and secondary schooling, while some others are intended for college students. This variation also involves different English proficiency, especially in relation to reading skills.

Analysis has been enacted through the identification of interpersonal grammatical metaphors (including mood and modality metaphors) in the data set. Yet, only the adaptation of the chapter "Who stole the tarts?" and its relevant parts in the seven ADPVs will be used as the data to illustrate the process of the adaptation.

The study maximizes qualitative methods. The procedures are as follows: (1) In line with Halliday and Matthiessen's (1999, 2014) understanding of interpersonal metaphor, which consists of mood and modality subcategories, parallels in the OV and ADPVs in the data are analyzed in terms of grammatical and semantic features. (2) Analysis is done in terms of the manner of realization in the adaptation of the parts concerning mood and modality metaphor and the strategies taken in adapting parts related to interpersonal metaphor in the OV into distinct ADPVs, and the impact the strategies exert on readability of the ADPVs. (3) A conclusion is to be drawn based on a fair evaluation of the study and a focus on the future.

5 Analysis

Grammatical metaphor develops in individuals who are from six months up to fifteen years of age (Halliday 1975, 2003 [1998]; Painter 2009; Painter et al. 2007). Of the two subcategories of grammatical metaphor, the interpersonal type emerges earlier

than its ideational counterpart. Halliday (2003 [1993]) defines this as *interpersonal first principle* (Matthiessen et al. 2010). It is argued here that interpersonal grammatical metaphor has something to do with the readability of our data in this paper.

The impact of ideational grammatical metaphor on readability and adaptation of children's literary works has been discussed in previous studies (e.g. Chen and Huang 2014; Lassen 2003; Liu 2021), whereas the influence of the interpersonal counterpart on readability is less fully examined, with only certain topics touched upon. This section, therefore, looks more specifically into the issue by taking into account the two categories of interpersonal metaphor: mood and modality metaphor. The manners of realization in the adaptation of the parts concerning mood and modality metaphor in the data will be discussed. As each example is adapted into various versions, the techniques of the adaptation of interpersonal metaphor-related parts in the data, and the effect of these techniques on readability will also be probed.

5.1 Readability and adaptation involving mood metaphor

The semantic system of SPEECH FUNCTION is manifested in the lexicogrammatical system of MOOD, which is further realized by the phonological system of TONE. Speech functions are connected with speech roles, and the essence of the exchanged commodity. Speech roles, as roles of people engaged in a dialogue, include two categories: giving and demanding. If language is exploited to render information to others, the clauses used in the negotiation will assume the status of a proposition that is debatable; if language is drawn upon to demand something from the listeners or readers, the clause will be a proposal. Besides, what could be given or demanded covers information and goods-&-services. Based on the two speech roles and the two types of commodities, four basic speech functions could be identified: statement, question, offer, and command. Thus, a clause realizing a statement or question acts as a proposition, while one realizing an offer or command functions as a proposal (Halliday and Matthiessen 2014).

With a broad range, the lexicogrammatical system networks of MOOD extend across "other systems such as POLARITY, MOOD, PERSON, FREEDOM, and MODALITY TYPE" (Matthiessen et al. 2010: 146), but the MOOD is used more often to denote the last system mentioned. There are two general types of mood: indicative and imperative, where the first consists of declarative and interrogative. On congruent occasions, a statement is manifested in the declarative mood, a question in the interrogative mood, and a command in the imperative mood; in metaphorical situations, as the congruent mappings are distorted, unexpectedly new mappings emerge so that semantic junction occurs. This provides opportunities for looking at the lexicogrammatical resources in both ways.

In a probe into how mood metaphor influences readability, mood choices are to be concentrated on in the OV and its rewritten counterparts in the ADPVs. More specifically, the focus will be on the parallel parts pertaining to the conversations or dialogues in the OV and the ADPVs, since they are common features in narrative texts, which contain a variety of typical mood selections. In our analysis, it is found that occurrences of mood metaphor in the texts have something to do with the readability of the adaptation.

Because the parallel parts are set in the courtroom where a trial is taking place, the field of discourse is one of law. Thus, the most frequent dialogues are concerned with legal discourse which moves the trial forward. Giving information, demanding information, and demanding goods-&-services are all readily related. In the data, it is obvious that two types of mood metaphor identified by Halliday and Matthiessen (2004, 2014) are entailed: one confining the realization of any of the speech functions to a single clause, and the other about interpersonal projection in forms of ideational projection.

5.1.1 Readability and adaptation involving mood metaphor realized by a single clause

In the most frequent occurrences of mood metaphor in the dialogic parts, the congruent relations of the basic speech functions to the relevant mood choices are distorted, so that new mappings come into being. In the data, there is a set of such occurrences of mood metaphor, where clauses of distinct moods are selected by the adaptors to realize agnate speech functions.

During the trial, the White Rabbit, who serves as the Herald, is asked to present the accusation, which is thought over by the jurymen in the court. Then, the witnesses are supposed to present the evidence to the court, before an important person has been allotted some time to decide on the verdict. The King nevertheless seems to have lost memory of that, and just asks the jurymen to think over the verdict without listening to the evidence. For this reason, the Herald notifies him that more measures have to be taken before that. When the King becomes attentive, he orders the Herald to ask the first witness to be present in the courtroom. Carrying with him some tea and bread-and-butter, the Hatter appears earliest and says something. (1) occurs under that condition:

(1) ||| “I beg pardon, your Majesty,”|| <<he began,>>|| “for bringing these in:|| but
I hadn’t quite finished my tea|| when I was sent for.” (OV: 98)

In the Hatter’s turn as part of a conversation with other more dominant people in the court, two stages are believed to be relevant in terms of the genre. In the first stage, the initial two non-enclosed clauses function as his apology for what he has done. The

second stage is marked by *but*, a cohesive Conjunctive. Being declarative in mood, the latter two non-enclosed clauses give more reasons to justify his apology and even ask for permission to drink the tea before he presents his evidence. In some way, it is possible to interpret the first of the last two non-enclosed clauses as realizing the speech function of a command, which has the most congruent realization such as the clause *Please allow me to finish my tea in the court!* Obviously, the semantic junction is entailed when the congruent utterance becomes metaphorical in (1), because a command, typically manifested in an imperative clause, is disguised as if it were a statement congruently manifested in a declarative clause.

As (1) is adapted, six out of the seven ADPVs follow suit, paraphrasing (1) differently into instances from (1a) to (1e). It must be noted that the focus here is on the mood choices instead of other differences.

- (1a) ||| “Please, Your Majesty, I’m only a poor man,” || <<the Hatter began shakily,>> “and **I hadn’t even begun my tea** – || and you know|| that bread and butter are hard to find – and the twinkling of the tea – ” ||| (ADPV1: 132)
- (1b) ||| ‘I’m sorry about this|| but **I was having my tea**|| when they called me,’|| <<said the Hatter>>. ||| (ADPV2: 105–106)
- (1c) ||| ‘I’m very sorry, Your Majesty,’|| <<he said.>> ||| **I was in the middle of tea**|| when the trial began. ||| (ADPV3: 54)
- (1d) ||| ‘Oh, I am sorry|| for bringing these in,’|| <<he said to the King,>> **I hadn’t quite finished my tea.**’ ||| (ADPV5: 46)
- (1e) ||| ‘Why did you call me? || **I wanted to finish my tea**,’|| <<he said>>. ||| (ADPV4: 33)

In all of the relevant ADPVs, the third clause in (1) is rewritten without changing the mood pattern: the clauses in bold in (1a), (1b), (1c), (1e), (1d), and (1e) keep the declarative subcategory of the indicative mood, where the Finite in each clause goes after the Subject. The transference from (1) to (1a), (1b), (1c), and (1d) is pertinent to the strategy of maintenance, so that the same readability is involved. However, there is some difference: although all the clauses are declarative, (1e) is further modulated, where the mood metaphor is unpacked in some way, making it more congruent than any other clauses, now that modulation relates more closely to the two speech functions of proposal and offer than to the other two speech functions of statement and question. The transference from (1) to (1e) involves the strategy of unpacking, where lower readability is produced. Therefore, the adaptation of (1) in various ways forms a cline from non-congruent to more congruent, without reaching the most congruent end. Because of this, (1e) in the ADPV4 is more readable than its parallels in the OV and the other ADPVs.

After the Hatter, the first witness, is summoned, and says that he is sorry for what he did, he continues drinking tea in the court. As the King requests information about the time when he started eating and drinking, the Hatter says that he began on the fourteenth of March. Thinking of this as a fault, the March Hare, a character in the story who came into the courtroom with the Hatter, rectifies it, arguing for the correctness of a day after that day. What the jurymen are expected to do is to take notes of all these relevant dates. Yet, the witness does not think of this to be true, contradicting what the other two characters have confessed, but the King does not take it seriously, and demands that the witness quit the court. To avoid ejection from the courtroom, the Hatter continues the utterances in an attempt to provoke the Dormouse into saying more, but the plan falls through, since the Dormouse is asleep. Then, comes a clause complex as the one below:

(2) ||| “After that,” <<continued the Hatter,>> **“I cut some more bread-and-butter –”** ||| (OV: 100)

This involves a projection nexus, where the projecting clause is enclosed, and the projected clause is a direct quote. The clause in bold is a declarative clause, normally realizing a statement. However, it is inferable from the co-text and its context of situation that the declarative clause functions also as a command, which can be reworded along more congruent lines like the following: *“After that,” continued the Hatter, “please allow me to cut some more bread-and-butter!”*

The utterance in (2) is adapted in two ways. The first involves the strategy of maintenance, just to preserve the status quo without any modification of the metaphorical mood pattern in (2). The mood selections in the quoted parts of three of the ADPVs are basically the same as the one in the quoted part of the projection nexus in (2), although there are slight changes in the projecting parts, and/or the projected ones. In this way, the metaphorical effects are reserved, and the same level of reading ease is kept.

(2a) ||| <<He was asleep|| so the Hatter went on,>>|| ‘Well, **I cut more bread and butter.**’ ||| (ADPV2: 106)

(2b) ||| ‘After that,’ <<said the Mad Hatter,>> **‘I cut some more bread-and-butter.’** ||| (ADPV4: 33)

(2c) ||| “After that,” <<the Hatter said,>> **“I cut some more bread-and-butter.”** ||| (ADPV6: 74)

The second way involves another strategy, demetaphorization, which is characteristic of (2d) from the ADPV1. Different from the instances above, no change occurs in the projecting clause, and what undergoes slight modification is the projected one here. Our focus is just on the substitution of the lexical verb *cut* by *make*.

(2d) ||| “After that,” <<continued the Hatter,>> **“I made some more bread and butter.”** ||| (ADPV1: 132)

The modification alters the ideational meaning because making some more bread and butter varies considerably from cutting it. Moreover, the interpersonal meaning has also changed a lot. One is likely to claim that the mood choice is basically the same; so, the clause is still declarative. Admittedly, this is the case, yet it is still to be argued that when one lexical verb is replaced, the metaphorical effect or semantic junction in (2) has died out in (2d) since what the bold clause in (2d) does is not to demand goods-&-services from any particular person, but to render some information. To put it simply, the declarative clause here serves not as a command but as a statement, and this is just a congruent manner of expressing a statement's meaning. The demetaphorization in (2d) is to lessen the difficulty that readers will probably encounter and to promote the level of ease. In terms of readability, the former four (i.e. 2, 2a, 2b, and 2c) are less readable than the last one (i.e. 2d).

Another group of adaptation of mood metaphor involves the addresser-Subject. Let's look at one example from the OV. In the court, Alice's size continues to grow, which makes the courtroom too packed. Owning to this, the Dormouse conveys disapproval of her. The relevant example is as follows:

(3) ||| **You've no right** to grow *here*,”<<said the Dormouse.>> ||| (OV: 99)

Clearly, the bold clause in (3) is a declarative whose Subject is the listener, i.e. Alice next to him. In terms of speech function, it is not a mere statement that is normally manifested by a declarative, but a command whose usual lexicogrammatical realization is an imperative. A more congruent way of expressing this would be like this: *“Don't grow here,” said the Dormouse*, where there is, if any, an implicit Subject *you*.

As (3) is abridged, five of the seven ADPVs contain its parallels, where it is observable that three manners are adopted to keep the above speech function. The first entails the fuse of declarative mood and modulation. Here, the metaphors are unpacked to some extent, since the strategy of unpacking is involved. This is quite similar to one of the ways of adapting (1) into (1e) discussed above. Examples (3a) to (3c) belong to this category.

(3a) ||| **Well, you can't do that here,’**|| <<said the Dormouse crossly,|| and he got up|| and moved to another seat.>> ||| (ADPV3: 54)

(3b) ||| **You can't get bigger here,’**|| <<said the Mouse.>> ||| (ADPV4: 34)

(3c) ||| **You shouldn't grow here,’**|| <<said the Mouse.>> ||| (ADPV5: 47)

The choice of mood in the instances is concerned with selection of modal verbs (i.e. *can* in 3a and 3b, and *should* in 3c), which are fused together with the mood

Adjunct *not*. Despite their relevance to different kinds of modulation, the two negated modal verbs contribute to an identical speech function in the distinct ADPVs: a command, instead of a statement. Although the lexicogrammatical choices in (3a), (3b), and (3c) are metaphorical, the levels of readability for these instances are slightly higher than that in (3), now that the modulated declarative clauses in (3a), (3b), and (3c) have a closer relationship with the proposal (including command and offer) than a common declarative in (3).

The next way in which the mood metaphor in (3) is rewritten is associated with a declarative clause where the Subject is not the listener. This is shown in the following instance:

(3d) ||| “**This isn’t the time or place [[for you to grow]]**,”|| <<said the Dormouse.>> ||| (ADPV1: 130)

Unlike the bold full clauses in (3), (3a), (3b), and (3c) where the addressee is seen as the Subject, assuming “modal responsibility” (Halliday and Matthiessen 2014: 148), the one in (3d) has neither the speaker nor the listener as its Subject, and the modal responsibility is now transferred to the pronoun *This*. However, the speech function is still one of a command, through which someone is asked or ordered to do something for the Dormouse, the speaker here. The command is targeted at the addressee, which is marked by the pronoun *you*. The shift from (3) to (3d) involves the strategy of maintenance, so almost no unpacking is required, resulting in the same readability.

Although all the clauses in (3), (3a), (3b), (3c), and (3d) are metaphorical, (3a), (3b) and (3c) share similar readability, owing to their similar options of modulation (i.e. *can’t* in 3a and 3b; and *shouldn’t* in 3c). However, (3a), (3b), and (3c) are more readable than (3) and (3d), in the sense that the latter two are commands but in the guise of statements.

Finally, there is a further manner in which mood metaphor in (3) is made suitable for a new situation. This occurs most notably in one ADPV:

(3e) ||| “Oh, my!!| **You’re growing bigger**,”|| <<said the Dormouse.>> ||| (ADPV7: 34)

When the clause in bold is isolated from the text, it is a declarative, functioning as a description of Alice’s changing size as it is being uttered by the speaker. In a congruent situation, it assumes the speech function of a statement. This is nevertheless the case when it intervenes in the text. In the first clause of (3e), something is omitted. However, it can be inferred that the clause implies unexpectedness, surprise, or even shock. Accordingly, the second clause in (3e) can be interpreted as a command which is disguised as a statement. Thus, the semantic junction will probably interfere with the readability, making the text less readable.

However, this command, which is intended to ask Alice to stop growing, is manifested not by negation of some kind, but by choices of the marked tense ‘present

in present' together with the relevant pitch movement that the speaker is likely to produce on authentic occasions. Despite readers are unable to perceive the intonation pattern as they read (3e) in the text, they are unlikely to be oblivious to it. Although the negated declarative clause in (3e) does not deviate from those in (3), (3a), (3b), and (3c) in terms of the general mood choices, it is not demetaphorized because of the semantic blending. Yet, as far as the levels of readability are concerned, (3e) has the lowest level, in spite of the fact that it takes an identically explicitly subjective orientation as the clauses in (3), (3a), (3b), and (3c).

5.1.2 Readability and adaptation involving mood metaphor realized by projection nexus

From the above, it is obvious that the first category of mood metaphor is concerned, for the most part, with how different realizations of the speech function of demanding goods-&-services are reflected by the mood choice of single clauses. Semantic junction poses a difficulty for readers since a clause could be understood in two alternative ways. It takes more trouble to process mood metaphor than congruent realization. In addition to this group, there is a minor category whose occurrence has a less frequent basis, and whose domains of lexicogrammatical realization go beyond the confines of individual clauses and are extended to clause nexuses of projection.

In the OV of Alice's story in the data, the most typical mood metaphor of the second type is associated with a mental process of desire which normally occurs in the projecting clause of a projection nexus. More specifically, the clause occurs in the OV, where the narrator concentrates readers' attention on what happens before the trial attended by the King of Hearts, the Queen of Hearts, the Knave of Hearts, soldiers, Alice, and an array of animals. Suspected of the theft of some tarts made by the Queen, the Knave is brought to the court, waiting to be tried. Given his dominant position, the King is appointed judge and prosecutor, while Alice performs the role of the Herald, who makes clear the arrival or approach of people involved in the trial. Presented on a table in the courtroom is a dish of tarts, which makes Alice hungry immediately upon seeing it. Because the trial takes a long time to begin, she remarks something. Refer to (4) relevant to that.

(4) ||| “**I wish**|| **they'd get the trial done**,”|| <>*she thought*,>> || “and hand round the refreshments!”||| (OV: 96)

The clause complex in (4) involves two projection nexuses. Of the four clauses, the third is an overarching one: as a reporting clause, *she thought* betokens a mental process of cognition, through which the other clauses are projected. The second projection is made possible by *I wish*, a mental process of desire that reports two

more clauses. It is the second projection nexus that is readily relatable. Besides the reporting clause, the reported clause is also important. In this case, a shortened modal verb 'd, which stands for *would*, is also taken advantage of. With the speaker as its Subject, the projecting mental clause *I wish* is declarative, so congruently realizes a statement. In contrast, the projected material clause *they'd get the trial done* has the target addressees as Subject, but it realizes a command, now that it is modulated.

The foregoing analysis showcases the potential for modulated declarative clauses to be commands of some kind; so, the second clause in (4) has been entailed in one level of semantic junction. However, the first two clauses in (4) or similar grammatical combinations are deemed as "a reported proposal" (Halliday and Matthiessen 2014: 527). Thus, two levels of the semantic junction involving a command are locatable in the two clauses, because the local metaphorical effect is added to the global metaphorical effect. A more congruent way of conveying the command is something like the following: "*They'd get the trial done*," *she thought*, "*and hand round the refreshments!*" A compromise is made in the rewritten version: although the speech function of demanding some goods-&-services is congruently realized by an imperative, it is extremely difficult to use an imperative clause instead without taking the pronoun *they* into account. This is argued to be almost the most congruent realization.

In the adaptation process, three out of the seven ADPVs paraphrase (4) into different parallels. Ideationally speaking, great changes take place as the clause complex as a whole, and the first two clauses, in particular, are modified. In terms of mood selections, only two general ways could be found. The first entails the strategy of maintenance, i.e. to maintain what it is in (4), use the same mood in the initial clauses, and take advantage of the shortened form of the same modal verb. This is visible in (4a) and (4b).

(4a) ||| **I wish**|| **they'd hurry up**|| and finish the trial,"|| <<*Alice thought*,|| thinking about [[how hungry she was]],|| "and start giving everyone food and drinks.">> ||| (ADPV1: 126)

(4b) ||| **I wish**|| **they would finish**,'|| <<*she thought*,>> || 'and give us those tarts to eat!' ||| (ADPV5: 44)

Because of the consistency in mood, the clauses in the instances above will still be a command in terms of the speech function, as long as the fundamental frameworks in the ADPVs such as the gist and plot are maintained. Here, the strategy of maintenance makes sure that the semantic blending remains, leading to the identical readability of (4), (4a), and (4b).

Another way of adapting (4) is to make changes to the previous mood pattern, but even here the variation is less conspicuous. (4c) below is a case in point.

(4c) ||| **I hope**|| **they finish the trial quickly**,|| << she thought. >> ||| 'Then we can eat the tarts.' ||| (ADPV4: 31)

Being declarative, the reporting clause *I wish* is replaced by another declarative *I hope*, which still acts as an indication of a mental process of desire; so, there is almost no change in the projecting clause. As regards mood, the projected clause in (4c) is almost the same as the parallel ones in (4), (4a), and (4b), because they are all declarative. Yet, each of the relevant clauses in (4), (4a), and (4b) contains a shortened modal verb, but the one in (4c) does not.

It is believed that the speech functions also differ on the two occasions: with such modal verbs, the reported clauses in (4), (4a), and (4b) that stand alone are more congruent realizations of the speech function of a command than the reported clause in (4c) because the former clauses are modulated declaratives, which are more akin to proposals than the latter one, which is more like a statement for its intrinsic declarative mood.

Furthermore, it is also argued that the projecting parts in the projection nexus add different degrees of the sense of a command to the four instances above. In either (4), (4a), or (4b), the projecting clause *I wish* multiplies this sense since the immediately projected clause or clauses have already had such sense for reasons of semantic junction. Contrastively, the projecting clause *I hope* in (4c) has triggered this sense, since, as mentioned earlier, the projected declarative operates more like a command.

Thus, the strategy of unpacking is used, but still different readability is involved since the metaphor is more fully unpacked from (4) to (4a) or (4b) than from (4) to (4c). (4a) and (4b) are more readable than (4c), although all of them realize the general speech function of a command.

5.2 Readability and adaptation involving modality metaphor

In addition to mood metaphors, modality metaphors are also important features of interpersonal grammatical metaphors in the adaptation. For a better understanding of this subcategory of interpersonal metaphor, what we need to do is to know the essence of *modality*, which relates to another notion, *polarity*, which entails the making of an option between positive *yes* and negative *no*. Intermediate between the two poles, modality just refers to the transitional semantic domain. Modality transforms into meaning what is inserted between the two ends, and this is achieved through two manners: proposition and proposal. The former implies the transitional regions between 'it's' and 'it isn't', and the latter between 'do' and 'don't'.

Therefore, modality relates to mood in some ways. As is demonstrated in the previous section where readability of our data is explored from the perspective of mood metaphor, a clause rendering or demanding information is labeled semantically as a *proposition*, which encompasses a statement and question; and a clause giving or demanding goods-&-services is termed semantically a *proposal*, which consists of offer and demand. Through *modalization*, the semantic domain of a proposition, which is realized congruently by the indicative mood, is graded by interpersonal meanings into different degrees of probability or of usuality; and through *modulation*, the semantic domain of a proposal, which is manifested congruently by the imperative mood, is put into degrees of obligation and of inclination (Matthiessen et al. 2010). Modality is commonly gauged in terms of three general values: high, median, and low, and can be expressed via different orientations in line with the two pairs of distinctions: subjective/objective and explicit/implicit (Halliday and Matthiessen 2014).

The type of modality that has been elaborated is implicitly subjective modality metaphor, where modal meanings are commonly realized by modal verbs that function as Finite in mood structure in individual clauses. These are the most congruent realizations. There is also another category of modality that is congruent but does not find its expression in the ADPVs, and this is implicitly objective, which is manifested by an adverb or prepositional group acting as mood Adjunct in a single clause. Instead of these two types of metaphor, our analysis reveals that two other categories of modality metaphor are relevant, as the OV undergoes some adaptation.

5.2.1 Readability and adaptation involving modality metaphor realized by a projecting clause

The first category that occurs denotes one in which the modal meanings related are expressed not through those grammatical items functioning as Finite or mood Adjunct in clauses, but through summation of a projecting clause before the projected. When the King asks the Herald to summon the first witness into the courtroom, the Hatter comes in, carrying with him some food and drinks. Because he has not yet consumed them, he is very sorry for that. In a previous chapter entitled “At the Tea Party” in the OV, it is stated that any time will be teatime for the Hatter because his actions always diverge from Time. The King enquires of him when he starts eating the food and drinking the meal, and he responds in a certain fashion. Look at the pertaining sentence below:

(5) ||| “Fourteenth of March, <<I think>> it was,”|| <<he said>>. ||| (OV: 98)

(5) is a clause complex encompassing two levels of projection: at a global level, the second enclosed clause *he said* is the projecting clause, and the remaining ones the

projected; and at the local level, the first enclosed clause *I think* acts as the projecting one, while the discontinuous clause “*Fourteenth of March [...] it was*” is the projected.

The focus now will be on the local projection, where the projecting clause *I think* enables the connection with the relevant projected clause. Ideationally, the projecting clause indicates a mental process of cognition, and the projected an identifying relational process. Interpersonally, however, the meaning of the projecting clause approximates one of ‘probably’. Instead of being realized by those grammatical units that function as Finite or mood Adjunct, this modal meaning is manifested in the projecting clause, which can be seen as metaphorical. Thereby, (5) could be reworded in the following two ways (i.e. “*Probably it was Fourteenth of March,*” *he said*; and “*It might be fourteenth of March,*” *he said*) so that the metaphorical effect is removed.

While analysis is done in terms of the mood structure of the projection nexus in (5) as a whole, it is appropriate to assign to the projecting clause the role of mood Adjunct placed immediately before the projected clause. Here, the semantic junction consists of the fact that the projecting clause, which is supposed to perform ideational tasks, is now drawn upon to serve interpersonal purposes. Through the modality in (5), the overtly subjective attitude of the speaker is conveyed.

As this is adapted, the same mood Adjunct is reserved in four out of the seven ADPVs, so the same level of readability is produced. While the adaptor in the ADPV2 keeps the same clause pattern as (5a), three others make modifications. See the ensuing instances.

- (5a) ||| ‘(It was on) March the fourteenth, <<**I think**,’>> <<answered the Hatter>>. ||| (ADPV2: 106)
- (5b) ||| <<Then he said,>> ||‘(It was on) March the fourteenth||—<<**I think**>>.’ ||| (ADPV4: 33)
- (5c) ||| ‘(It was) On the fourteenth of March|| <<**I think**,’>> <<he said>>. ||| (ADPV5: 46)
- (5d) ||| ||Then <<he said,>> “(It was on) March the fourteen, || <<**I think**>>.” ||| (ADPV6: 74)

In (5a) and (5b), the parentheses are added to show possible wordings for the full clauses. In each example, attention needs to be simultaneously paid not to the whole projection nexus or to the projecting clause, but to the projected clause that is elliptical. It must be noted that no single ADPV in our data has put mood Adjunct in a position that comes before the projected clause, and all the instances (i.e. 5a, 5b, 5c, and 5d) favor an ending location. Therefore, the adaptation of (5) into (5a), (5b), (5c), and (5d) serves as a proof of the flexible positions of mood Adjunct, since it is transferrable from the middle to the end or in an opposite direction. Furthermore,

the strategy of maintenance is used, and the same readability is maintained since the modality metaphor in (5) is manifested in the same way in (5a), (5b), and (5c).

5.2.2 Readability and adaptation involving modality metaphor with flexible realization

Besides, there is another category of modality metaphor that has less regular occurrence and assumes less prominence. Also, the modal meanings are realized by a grammatical unit or units in a clause, but this domain of realization can be expanded from a single clause to a clause nexus. Metaphors like that occur in the OV with few or even no parallel parts in the ADPVs. In advance of the trial, Alice catches sight of the tarts on the table, which makes her mouth water. As she expresses her desire to be given some food after the trial, someone goes on to comment. Refer to the germane instance (6): "Objective, explicit ↴ existential clause with a noun of modalization as Existential" (Thompson 2014: 249).

(6) ||| But **there seemed to be no chance of this**,|| so she began looking at everything about her,|| to pass away the time. ||| (OV: 96)

In the ideational guises, the first clause in (6) is an existential one, in which Process (i.e. *seems to be*) and Existential (i.e. *no chance of it*) are involved. (6) is a clause complex composed of three clauses, of which concentration is to be in the first one, standing for an existential process. In this existential clause, the Process is held by the verbal group complex (i.e. *seemed to be*), where two verbal groups (i.e. *seemed* and *to be*) are in a hypotactic grammatical relationship, and the first verbal group is semantically expanded by the second, which is imperfective. The Existential (i.e. *no chance of this*) involves a noun (i.e. *chance*) indicative of the modal meaning 'probably'. The demonstrative (i.e. *this*) refers back to what is said in a previous clause complex involving her hope to accelerate the trial and to be given some start. Because the noun is a potential one of modalization, (6) can be reworded as follows: *But there seemed to be no chance that people in the court would accelerate the trial and hand over some refreshments, so she began looking at everything about her, to pass away the time*, where a fact clause is embedded.

Admittedly, ideational grammatical metaphor interferes in the unpacking of the grammatical metaphor in (6) above and will be disregarded here. Attention is to be paid only to the interpersonal metaphor in general, and the modality metaphor in particular. To arrive at the relatively more congruent modes of expression, three more steps are needed to unpack the modality metaphor in (6), where three different realizations of the metaphor are introduced: (a) *it was impossible* in *But it was impossible to accelerate the trial and be handed over some refreshment*; (b) *possibly* [...] not in *But people in the court possibly would not accelerate the trial or hand over*

some refreshments; (c) would not in *But the trial would not move faster, and people in the court would not hand over the refreshments.*

Ideationally speaking, the modal meanings in (6) are realized differently in the ADPVs: in a single relational clause (i.e. *it was impossible*) with Carrier (i.e. *it*) and Attribute (i.e. *impossible*) in (a); in part of the Process (i.e. *possibly [...] not*) in (b); and in *would not* as part of the Process (i.e. *would not move*) in (c). In the interpersonal guises, however, the three realizations can be interpreted as being similar in one aspect, but different in another. They are alike, for they can be seen as possessing a similar modal structure where the part acting as Modality functions as part of Mood; and they are also unlike, because of their distinct orientations. In line with Thompson (2014), it is argued that the structure *there seemed to be no chance of* in (6) as a whole is explicitly objective. Besides, *it was impossible* in (a) is explicitly objective, *possibly [...] not* in (b) is implicitly objective, and *would not* in (c) is implicitly subjective.

Due to the blending of both ideational and interpersonal aspects of meaning, readers are likely to face trouble sorting out the interpersonal nature of (6), which could be in alternative manners such as the three mentioned realizations, although they have similar modal meanings. Therefore, (6) is associated with certain level of readability.

As (6) is adapted, no parallel is identifiable except one, where a structure similar to (6) is entailed. The following is just the case in point:

(6a) ||| But she knew|| **there was no chance of this**,|| so she began looking about her|| to take her mind off [[how hungry she was]]. ||| (ADPV1: 126)

The transition from (6) to (6a) is of lesser prominence than that from (6) to either of the three realizations discussed just now. In the second clause in (6a), which also stands for an existential process, the Existent is without any modification, and the Process is held not by *seemed to be*, a hypotactic verbal group complex involving the imperfective phase, but by a one-verb verbal group *was*. In this connection, therefore, the strategy of maintenance is employed, so the readability of (6a) is almost identical to that of (6), now that maintenance of the metaphor is related.

6 Conclusion

This study, whose goal is to research the general topic of readability of work of literature for children from a viewpoint of interpersonal metaphor, comes to an end, and a conclusion needs to be drawn. Readability and adjustment of children's literary works have been a topic receiving heated discussion and exploration from educators, publishers, authors, adaptors, and scholars. The data set has been analyzed in accordance with interpersonal metaphor (including mood and modality

metaphor). In addition, the qualitative method has been adopted to approach the specific data (i.e. one chapter in the OV and the pertinent portions in the seven ADPVs) to serve illustrative purposes, concentrating on two aspects: (1) the fashions of manifestation in the adaptation of the parts in relation to mood and modality metaphor; (2) the strategies of the adjustment of interpersonal metaphor-related portions of the data and the effect of these strategies on readability.

In terms of adaptation and readability involving mood metaphor, the two manners of realizations (i.e. single clauses and projection nexus) have been discussed. Similarly, as regards adaptation and readability involving modality metaphor, the additional two manners of realizations (i.e. a projecting clause and flexible realization) have been taken into account. Along the path, different from Liu (2021) who approaches readability and adjustment of children's literature in the light of ideational grammatical metaphor, where five strategies have been identified, only three could be found in addressing identical issues and in taking into account the angle of interpersonal metaphor. These involve (1) unpacking, i.e. giving a rendering where metaphor becomes partly or completely congruent, resulting in lower readability; (2) demetaphorizing, a strategy through which total or certain metaphorical words, groups, or phrases are deleted, leading to lower readability; (3) maintenance, concerned with the same mood or modality choice, and the same level of readability.

This paper, regardless of its strength, is limited in some way. Firstly, identical to some other research, it continues with a text-internal perspective, confining the subject matter to how readability varies as the adjustment occurs in relation to interpersonal metaphor, failing to cover text-external aspects, such as readership, interest, and motivation. Secondly, through the qualitative method, a set of instances is made possible, which is revealing to a certain extent, but is still confined. In line with these drawbacks, future research could be done by taking into account, amongst others, the following issues. First, more thorough research could adopt a text-external perspective, looking into, for instance, how readability is affected by variation of reader's motivation or interest, or other text-external factors. The most thorough research would be to integrate both perspectives simultaneously. Second, more methods, such as interviews with readers, questionnaires about readability, and corpus-based or multimodal approaches, could enrich readability studies, providing a holistic picture, leading to showcasing its nuances.

References

Bailin, Alan & Ann Grafstein. 2016. *Readability: Text and context*. New York: Palgrave Macmillan.
Carroll, Lewis. 2001. *Lewis Carroll's Alice's adventures in wonderland*. New York: Hungry Minds.

Chen, Yumin & Guowen Huang. 2014. Yufa yinyu kuangjia xia yingyu wenxue yuanzhu yu jianxieben yidudu yanjiu [On the readability of original literary work and simplified versions: A grammatical metaphor perspective]. *Waiyu Jiaoxue yu Yanjiu [Foreign Language Teaching and Research]* 46(6). 853–864.

Dale, Edgar & Jeanne S. Chall. 1948. A formula for predicting readability: Instructions. *Educational Research Bulletin* 27(2). 37–54.

Dale, Edgar & Ralph W. Tyler. 1934. A study of the factors influencing the difficulty of reading materials for adults of limited reading ability. *The Library Quarterly* 4(3). 384–412.

DuBay, William H. (ed.). 2006. *The classics of readability studies*. <http://www.ecy.wa.gov/quality/plaintalk/resources/classics.pdf> (accessed 24 June 2020).

Fisher, Douglas, Nancy Frey & Diane Lapp. 2012. *Text complexity: Raising rigor in reading*. Newark: International Reading Association.

Flesch, Rudolf. 1943. *Marks of readable style: A study in adult education*. New York: Teachers College, Columbia University.

Flesch, Rudolf. 1946. *The art of plain talk*. New York: Harper & Brothers.

Flesch, Rudolf. 1948. A new readability yardstick. *Journal of Applied Psychology* 32(3). 221–233.

Fry, Edward. 1968. Readability formula that saves time. *Journal of Reading* 11(7). 513–516, 575–578.

Gray, William S. & Bernice E. Leary. 1935. *What makes a book readable: With special reference to adults of limited reading ability: An initial study*. Chicago: University of Chicago Press.

Gunning, Robert. 1952. *The technique of clear writing*. New York: McGraw Hill.

Gunning, Robert. 1968. *The technique of clear writing*, rev. edn. New York: McGraw Hill.

Halliday, Michael A. K. 1975. *Learning how to mean*. London: Arnold.

Halliday, Michael A. K. 2003 [1993]. Learning how to mean. In Johnathan J. Webster (ed.), *The language of early childhood: Volume 4 in the collected works of M. A. K. Halliday*, 28–59. London: Continuum.

Halliday, Michael A. K. 2003 [1998]. Representing the child as a semiotic being (one who means). In Jonathan J. Webster (ed.), *The language in early childhood: Volume 4 in the collected works of M. A. K. Halliday*, 6–27. London: Continuum.

Halliday, Michael A. K. 2013 [2010]. Language evolving: Some systemic functional reflections on the histories of meaning. In Jonathan J. Webster (ed.), *Halliday in the 21st century: Volume 10 in the collected works of M. A. K. Halliday*, 238–253. London: Bloomsbury.

Halliday, Michael A. K. & Ruqaiya Hasan. 1985. *Language, context and text: Aspects of language in a social-semiotic perspective*. Geelong: Deakin University Press.

Halliday, Michael A. K. & Christian M. I. M. Matthiessen. 1999. *Construing meaning through experience: A language-based approach to cognition*. London: Continuum.

Halliday, Michael A. K. & Christian M. I. M. Matthiessen. 2004. *Introduction to functional grammar*, 3rd edn. London: Arnold.

Halliday, Michael A. K. & Christian M. I. M. Matthiessen. 2014. *Halliday's introduction to functional grammar*, 4th edn. London: Routledge.

Huang, Guowen & Yan Liu. 2015. Yuyan fuzaxing de gongneng yuyanxue yanjiu: Ailisi manyou qiyu ji yuanzhu yu jianxieben nanyi chengdu bijiao [A functional linguistic study of complexity in language: A comparison between the original simplified versions of *Alice's Adventures in Wonderland*]. *Waiyu Jiaoxue [Foreign Language Education]* 36(2). 1–7.

Klare, George C. 1963. *The measurement of readability*. Ames: Iowa State University.

Lassen, Inger. 2003. *Accessibility and acceptability in technical manuals: A survey of style and grammatical metaphor*. Amsterdam: John Benjamins.

Lin, Zheng. 1995. Yingwen keduixing, nandu jiqi kecexing [Readability, difficulty and predictability of the English language]. *Fujian Waiyu [Foreign Languages in Fujian]* 12(1–2). 18–22.

Liu, Yan. 2019. Ailisi manyou qiyu ji yuanzhu yu bage jianxieben yidudu yanjiu: xitong gongneng yuyanxue zhaoying shijiao [Study of *Alice's Adventures in Wonderland* and its eight adaptations: A systemic functional linguistics perspective]. *Beijing Keji Daxue Xuebao (Shehui Kexue Ban)* [Journal of University of Science and Technology Beijing (Social Sciences Edition)] 35(3). 20–29.

Liu, Yan. 2020. Xitong gongneng yuyanxue shijiao xia de yidudu yanjiu [Readability studies from the perspective of systemic functional linguistics]. *Beijing Keji Daxue Xuebao (Shehui Kexue Ban)* [Journal of University of Science and Technology Beijing (Social Sciences Edition)] 36(3). 11–18.

Liu, Yan. 2021. Readability and adaptation of children's literary works from the perspective of ideational grammatical metaphor. *Journal of World Languages* 7(2). 1–19.

Lively, Bertha A. & Sidney L. Pressey. 1923. A method for measuring the "vocabulary burden" of textbooks. *Educational Administration and Supervision* 9(7). 389–398.

Lorge, Irving. 1944. Predicting readability. *Teachers College Record* 45. 404–419.

Lv, Zhongshe. 2003. *Keduxing lilun yu yingyu jiaocai* [Readability in reading materials selection and coursebook design for college English in China]. Beijing: World Knowledge Press.

Matthiessen, Christian M. I. M., Marvin Lam & Kazuhiro Teruya. 2010. *Key terms in systemic functional linguistics*. London: Continuum.

McLaughlin, Harry G. 1969. SMOG grading – a new readability formula. *Journal of Reading* 12(8). 639–646.

Painter, Clare. 2009. Language development. In Michael A. K. Halliday & Jonathan J. Webster (eds.), *Continuum companion to systemic functional linguistics*, 87–112. London: Continuum.

Painter, Clare, Beverly M. Derewianka & Jane Torr. 2007. From microfunctions to metaphor: Learning language and learning through language. In Ruqaiya Hasan, Christian M. I. M. Matthiessen & Jonathan J. Webster (eds.), *Continuing discourse on language: A functional perspective*, vol. 2, 563–588. London: Equinox.

Patty, Willard W. & W. I. Painter. 1931. A technique for measuring the vocabulary burden of textbooks. *The Journal of Educational Research* 24(2). 127–134.

Ravelli, Louise J. 2003. Renewal of connection: Integrating theory and practice in an understanding of grammatical metaphor. In Anne-Marie Simon-Vandenbergen, Miriam Taverniers & Louise J. Ravelli (eds.), *Grammatical metaphor: Views from systemic functional linguistics*, 37–64. Amsterdam: John Benjamins.

Taverniers, Miriam. 2003. Grammatical metaphor in SFL: A historiography of the introduction and initial study of the concept. In Anne-Marie Simon-Vandenbergen, Miriam Taverniers & Louise J. Ravelli (eds.), *Grammatical metaphor: Views from systemic functional linguistics*, 5–33. Amsterdam: John Benjamins.

Thompson, Geoff. 2014. *Introducing functional grammar*, 3rd edn. London: Routledge.

Thorndike, Edward L. 1921. *The teacher's word book*. New York: Teachers College, Columbia University.

Vogel, Mabel & Carleton Washburne. 1928. An objective method of determining grade placement of children's reading material. *The Elementary School Journal* 28(5). 373–381.

Walker, Bruse (ed.). 2001. *Lewis Carroll's Alice's adventures in wonderland*. New York: Hungry Minds.