Errors on the Relative Marker WHERE: Evidence from an EFL Learner Corpus

SUPAKORN PHOOCHAROENSIL
Language Institute, Thammasat University
Bangkok, Thailand
yhee143@gmail.com

ABSTRACT

The present study was aimed at investigating Thai EFL learners' grammatical errors on their use of the relative marker WHERE. The data were collected from undergraduate students' writings, which represent intermediate learner English, in Thai Learner English Corpus (TLEC).The findings indicate that the participants experienced the greatest difficulty using WHERE, i.e., as if it were functioning as a noun or noun phrase, which apparently emanates from learners' overgeneralization. In comparison to the results of Phoocharoensil (2012), it seems that a great number of actual errors evidenced by the corpus-based data do not correspond to those found previously. In particular, the errors such as pronoun retention, preposition addition, and non-adjacency of RC to the head, which were prevalent in the past study, evidently occur with far lower frequency in the current study. This probably suggests that such problems reported in the past research may be due to limitations of the elicitation technique, i.e., a sentence combination task.

Keywords: English relative clause; EFL learner; error analysis; learner language; corpus-based data

INTRODUCTION

Learners of English as a foreign language (EFL) face considerable difficulty in their acquisition of the English relative clause (ERC). EFL instructors also find the complex syntactic construction a daunting challenge since students have been so far reported to commit a number of errors in the production of ERCs (Chan 2004, Chang 2004, Izumi 2003, Phoocharoensil 2009, 2010, 2011, 2012, Xiaoling & Mengduo 2010). Even though the ERC is often included in English textbooks of various levels, it seems that learners often encounter difficulties in using such a grammatical structure (Phoocharoensil 2009). Several research studies on ERC acquisition have so far focused on the use of RCs introduced by a relative pronoun, e.g., *who, whom, which*, etc., especially those aiming at confirming or refuting a well-known language universal, such as the Noun Phrase Accessibility Hierarchy (NPAH) (Keenan & Comrie 1977), which highlights the roles of the relative pronoun in RC formation (Flanigan 1995, Gass 1979, Izumi 2003, Phoocharoensil 2009, 2010)

RCs in English, nevertheless, can also begin with a relative adverb, e.g. *where, when* or *why* (Crystal 2004). The past studies that concentrated on ERC acquisition in relation to the NPAH appeared to have their limitations due to the fact that the NPAH does not cover the RC with such a relative adverb. Although the researcher previously conducted a study investigating adverbial ERCs in the interlanguage of Thai EFL students (Phoocharoensil 2012), certain limitations could be noticed. One of these concerns the sentence-combination task, i.e., the elicitation method in which the participants were asked to merge two simple sentences to form a complex one containing a RC. Some deviant tokens evidently turned out to be artefacts of this research instrument, which are not likely to be sentences produced in their natural production of English.

The current study, accordingly, was aimed at addressing such a limitation found in Phoocharoensil (2012), with an emphasis on the authentic L2 ERC use. The data were drawn from a language corpus, i.e., Thai Learner English Corpus (TLEC), to make sure the tokens studied represent naturally-occurring interlanguage RCs. However, while Phoocharoensil (2012) examined both *where*-relative clauses and related prepositional relatives, e.g., those starting with a pied-piping construction like *in which*, the present-study scale is relatively smaller, with the main focus on simply the RCs with the relative adverb *where*.

ENGLISH RELATIVE CLAUSES

English relative clauses (ERCs) are defined as clauses introduced by wh-words, e.g., *who, whom, which, where*, "used to modify nouns or some pronouns –to identify people and things, or to give more information about them" (Swan 2005, p. 477). The wh-words, as well as *that*, used to introduce an ERC are known as *relative markers* or *relativisers*, which are of two main kinds (Cowan 2008):

      a. Relative pronouns – *who, whom, which, whose*, and *that*
      b. Relative adverb – *where, when*, and *why*

With regard to the first type of relativiser, *who* and *whom* are used in a similar manner to refer to a preceding human head, as in (1)-(2) below. Nonetheless, *who* can occupy either a subject or an object position, whereas *whom* occurs in formal styles, e.g., writing, to refer to its head in the object position (Cowan 2008).

    (1) She's going out with a bloke *who*'s in the army.
    (2) She was a celebrated actress *whom* he had known and
         loved, on and off, almost since her first appearance on the
         stage.
                  (Carter, McCarthy, Mark & O'Keeffe 2011, p. 456)

Which is used to refer to animals or things either functioning as a subject, as stated in (3) or an object as in (4).

    (3) You need to tick the box *which* says yes.
    (4) Another activity *which* I have chosen is photography.
           (Carter, McCarthy, Mark & O'Keeffe 2011, p.455)

According to Master (1996) and Carter et al. (2011), *that* can refer to people, as in (5), animals or things, as in (6). Put differently, *that* can replace *who, whom* or *which,* all of which are more formal than *that*, in RCs. Furthermore, *that* can occur in a subject or object position, as in (5) and (6) respectively.

    (5) We met somebody last night *that* did the speech therapy
        course two years after you.
    (6) The 8.30 is the train *that* you need to get.
           (Carter, McCarthy, Mark & O'Keeffe 2011, p. 459)

The last relative pronoun to be discussed here is *whose*, known as the possessive relativiser (Master 1996). Co-occurring with a following noun or noun phrase, *whose* is normally used to modify either a human head, as in (7), or a non-human one, as in (8).

(7) I saw a girl *whose* beauty took my breath away.
(8) He's written a book *whose* name I've forgotten.
<div align="right">(Swan 2005, p. 480)</div>

It is noteworthy that relative clauses in English are sometimes introduced by relative adverbs, i.e., *where, when,* and *why*. Because these relative markers function like adverbs, the RCs formed by these markers are also referred to as *adverbial relative clauses* (ARCs). To be precise, *where, when*, and *why* refer to heads denoting a place, a time, and a purpose/reason respectively (Cowan 2008), as shown in (9)-(11).

(9) I know a restaurant *where* the food is excellent.
(10) There isn't a day *when* I don't feel rushed off my feet.
(11) Do you know the reason *why* the shop is closed today?
<div align="center">(Carter, McCarthy, Mark & O'Keeffe 2011, p. 460)</div>

According to Swan (2005), the relative pronoun *that* can substitute for *where* as in (12), provided that the antecedent is *the place* or a locative expression ending with *–where* namely; everywhere*, nowhere, somewhere*, and *anywhere*. It is also worth noting that this relative marker in such a particular context is omissible.

(12) We need a place *(that)* we can stay for a few days.
<div align="right">(Swan 2005, p. 483)</div>

In addition, when the head noun phrase (NP) and the relative adverb are repetitive, as in (13), in which *where* repeats the head *the place*, the head can be omitted, as seen in (14).

(13) Sam knows *the place where* we are meeting
(14) Sam knows *where* we are meeting.
<div align="center">(Celce-Murcia & Larsen-Freeman 1999, p. 598)</div>

THAI RELATIVE CLAUSES

A relative clause in Thai is introduced by one of the three major relative markers *thîi, sŷŋ,* and *an* (Suktrakul 1975). The most common relative marker is *thîi*, which can be used in all contexts, whereas *sŷŋ* usually occurs in more formal situations, e.g., formal speech or academic writing. As for *an*, it expresses a more formal tone than the other two, frequently used in highly formal writing, such as in religious texts (Sornhiran 1978). While *thîi* and *sŷŋ* are commonly applicable to animate heads, *an* usually refers to an inanimate nominal antecedent (Suktrakul 1975).

(15) dèk   *thîi*/ *sŷŋ* / **an* chăn   líaŋ   maa…
     child   REL   I   bring up   come…..
     'The child that I brought up …'
<div align="center">(Sornhiran 1978, p. 177)</div>

(16) phét   *thîi*/ *sŷŋ* /*an*   mii   khâa   mahăasăan
     diamond   REL   have   value   tremendous
     'the diamond that has tremendous value…'
<div align="center">(Sornhiran 1978, p. 177)</div>

<div align="center">3</div>

It seems that *an* is not normally used in an informal context, as in (15), where the head being modified, i.e. *dèk* 'child', is also animate, whereas all of these relative words are permitted in a formal context, as in (16).

GRAMMATICAL FUNCTIONS OF THAI RCs

As mentioned in Suktrakul (1975), Thai RCs have four grammatical functions, as follows:

1. Modifying a subject

    (17)   /S + RC/ + V

/ dèk	thîi	kamlaŋ	ráb	raaŋwan/	nâarág	mâag
child	who	being	get	prize	lovely	very

    'The child, who is getting the prize, is very lovely.'

                    (Suktrakul 1975, p. 96)

2. Modifying a direct object (DO)

    (18)   S + V + /DO + RC/

chăn	kin	/ khanŏm	thîi	khun	hâj/	lέεw
I	eat	sweets	which	you	give	already

    'I have already eaten the sweets, which you gave me.'

                    (Suktrakul 1975, p. 100)

3. Modifying an indirect object (IO)

    (19)   S + V + DO + /IO + RC/

khruu	cà	cὲεg	raaŋwan	/nágrian	thîi	rian	dii/
teacher	will	give	prize	student	who	study	well

    'The teacher will give the prizes to the students who study well.'

                    (Suktrakul 1975, p. 101)

4. Modifying an object of preposition (OPREP)

    (20)   S + V + /P + OPREP + RC/

năŋsўy	jùu	bon	/to?	thîi	jùu	troŋ	mum-hɔ́ɔŋ /
book	be	on	table	which	be	at	corner-room

    'The book is on the table, which is in the corner of the room.'

                    (Suktrakul 1975, p. 102)

ERROR ANALYSIS

Corder (1967) indicated significance of learner errors in three major ways. First of all, errors provide researchers with access to how languages are learned. Second, for a pedagogical purpose, teachers are shown through errors what linguistic knowledge learners have acquired and what they are still in the process of learning. The last one is associated with learners' improvement on their language proficiency by means of teachers' feedback on their errors.

Historically speaking, Error Analysis (EA) was proposed and promoted as a more effective approach to Contrastive Analysis (CA) in studying language acquisition. CA itself involved a comparison between learners' native language (NL or L1) and the target language

(TL) for the purpose of prophesying areas of potential difficulty (Ellis 2008). It was believed that differences between NL and TL were principal causes of learners' problems in TL learning. Apart from accounting for sources of errors, CA was also aimed at enabling teachers to identify the difficulties on which teachers are encouraged to focus in their curricula. CA, nevertheless, was susceptible to criticisms in that "…many of the errors predicted to occur by a CA did not in fact occur and, furthermore, that some errors that were not predicted to occur did occur." (Ellis & Barkhuizen 2005, p. 52). Accordingly, in order for second language researchers to more successfully investigate L2 acquisition, EA became more and more well-known as a tool allowing them to see actual problems confronting learners.

According to Corder (1974) and James (1998), an error is different from a mistake in that the former occurs systematically and permanently due to the fact that learners do not know the particular rule governing the usage. In other words, that grammatical structure or usage has not been internalised yet. For instance, if a learner consistently produce *eated rather than *ate* as a past tense form of *eat*, it is likely that s/he is not aware of the irregular form of this verb. By contrast, if *eated and *ate* are used alternately by the same learner, this may be considered a mistake in lieu of an error. Mistakes, which are viewed as far less serious than errors, result from performance factors, e.g. loss of concentration, illness, exhaustion, drowsiness, carelessness, etc. Learners, when a deviation is identified by teachers, will be able to correct it by themselves since they have learned the rule governing such a usage, whereas errors are beyond their ability to self-correct.

EA, according to Corder (1974), normally concerns five main steps, beginning with collecting a sample of learner language no matter whether it is in a spoken or written form. The next step involves error identification through a comparison between the learner's production and what a native speaker would use in the same context. An error is identified when the learner's language use deviates from the native speakers' norm. Closely connected with the previously mentioned step is description of errors, which refers to the way EA researchers specify how the deviant users differ from the TL counterparts and then classify them in terms of the TL categories that have been violated. The fourth important step pertains to explaining the discovered errors. This is when researchers make an effort to find the source of each error. Ellis and Barkhuizen (2005) have concluded that there are two major sources of learners' errors: mother-tongue influence and complexity of the TL. The errors that result from learners' dependence on L1, which in turn often leads to negative transfer, are referred to as interlingual errors. On the other hand, those arising as a consequence of learners' confusion over the TL complex system are termed intralingual errors. Certain errors may belong to more than one category, as noted by Ellis & Barkhuizen (2005), "many errors are likely to be explicable in terms of multiple rather than single sources" (p. 66). As the final stage, error evaluation deals with a set of supplementary procedures for measuring the relative seriousness of errors. Such evaluation benefits language teachers who should base their instruction on the genuine learners' errors. That is, it is their job to determine which errors appear serious enough to be included in language lessons.

A number of researchers have so far analysed errors on English relative clauses (ERCs) used by L2 learners. Sattayatham and Honsa (2004) investigated grammatical errors in Thai medical students' English, using a sentence-level translation, a paragraph-level translation, and an opinion-paragraph writing task as data elicitation methods. The study reported on a variety of syntactic problems which the students faced, one of which was errors on relative clause formation. In particular, the relative markers that they often had difficulty using were *who* and *whose*.

Phoocharoensil (2009) found that ERC errors produced in descriptive essays by Thai learners of English were attributed to three main causes, namely, native language transfer,

transfer of training, and overgeneralization. With regard to L1 transfer, the participants clearly relied on direct translation from Thai, incorrectly using the constructions similar to Thai RCs, e.g. an omission of preposition in the oblique relative, the structure of *who + be* rather than *whose*, etc. Furthermore, the subjects also seemed to avoid using *whom* probably because of transfer of training. To be more precise, several textbooks widely used in Thailand then contained many examples of *who* in different grammatical positions, i.e. subjects and objects, while its objective counterpart *whom* was present in a very small number of instances. Overgeneralisations, in addition, was noticed when the learners extended the use of the relative marker *that* to non-restrictive ERCs, which violated a TL English rule. The students' failure to include an obligatory preposition and their incorrect use of that in non-restrictive ERCs accord with Erdogan (2005), who collected learners' errors from a gap-filling task, a sentence-combination task, and a translation task, and revealed similar problems facing English learners speaking L1 Turkish.

Phoocharoensil (2011) also conducted an error analysis on how Thai EFL undergraduate students inaccurately employed resumptive pronouns, e.g. the pronoun *it* in **It seems to be the truth that we can't refuse it.*, which are forbidden in both standard English and Thai. The high-proficiency learners produced fewer pronoun copies than did those with the low proficiency level as the former group might have had more exposure to English. The learners, moreover, apparently supplied significantly more resumptive pronouns in more marked ERC types. Phoocharoensil claimed that such pronoun retention should be ascribed to universality since cross-linguistic evidence has shown that there exist more languages in which pronoun retention is a relativisation strategy, e.g. Chinese, Arabic, Hebrew, Modern Greek, etc., than languages that disallow resumptive pronouns, e.g. Thai, English, etc. This was why the learners speaking L1 Thai were found to retain pronouns in ERCs despite the fact that their mother tongue does not have resumptive pronouns. As proposed in the pedagogical implications, EFL instructors are advised to pay attention to their students' errors regarding pronoun retention because the study confirmed the problem of such pronouns. The teachers are also expected to prepare lessons that would help prevent students' attempt to produce resumptive pronouns.

RELATIVE CLAUSES IN WORLD ENGLISHES

Although the present study focuses on the learners' errors of ERCs in relation to second language acquisition (SLA) of English syntax, it is worth noticing this syntactic structure in the paradigm of World Englishes (WE) as well. Whilst SLA researchers usually view grammatical uses that differ from those in native varieties, e.g. British or American Englishes, as non-standard, there has been an increasing trend towards accepting uses by speakers of other varieties of English, namely English-as-a-second-language (ESL) countries from Kachru's (1985) the Outer Circle, e.g. Singapore, Malaysia, Nigeria, the Philippines, India, etc., and English-as-a foreign-language (EFL) nations belong to the Expanding Circle, e.g. Turkey, Iran, China, Japan, Indonesia, Lao, Thailand, etc. (Kirkpatrick 2007).

Linguistic features from different varieties of English or Englishes, in WE scholars' view, are not considered erroneous or incorrect. Rather, they are simply representative of the local language and culture of the people in that particular region with which English has been intertwined. In other words, they reflect the cultural and pragmatic norms of indigenous speakers (Kirkpatrick 2007 & 2010). A very clear-cut example is Australian English, which is now regarded as a standard variety in the Inner Circle along with British and American Englishes. Australian English is evidently a reflection of Aboriginal culture, as can be seen from many vocabulary items borrowed from the local language, e.g. *kangaroo, boomerang*. This supports Kirkpatrick's (2007, p. 21) observation that "all varieties of English will have

borrowed words from local languages … to describe local phenomena". In terms of syntax, grammatical rules which are widely accepted in native varieties can be different from those spoken or written elsewhere. As observed by Kirkpatrick (2007), it is probable that varieties of English that are developing amongst people whose mother tongue or indigenous languages lack tense or inflection may come up with a simplification of tense or inflection marking. For instance, verbs in such Englishes are predicted to lose the present tense morpheme {-s} to show agreement with a 3rd person singular subject.

Like other syntactic constructions, relative clauses (RCs) of World Englishes demonstrate some specific features of English influenced by local languages. For instance, Alsagoff and Lick (1998) discovered that the RC of colloquial Singapore English (CSE) is rule-governed, having its root in the grammars of English and Chinese. Put differently, Chinese, as one of the most dominant local languages of CSE speakers, has considerable influence on this variety development. RCs in CSE are of two major characteristics. First, it is very interesting to note that the RC in CSE, like those in Standard English, follows a head. However, influenced by Chinese, the CSE RC has a relative pronoun coming at the end of the RC. Such a combination of RC features from English and Chinese has resulted in the RC system in CSE. In addition to the ordering of RC and head, *one* is commonly used as a relative marker and a nominaliser, as in *the fruit they grow one very sweet*. Since its appearance makes a string nominal, and it is also pronominal in function.

Gisborne (2000) pinpointed significant features of RCs in Hong Kong English (HKE). Similar to CSE previously mentioned, HKE also has its own formal, rule-governed syntactic properties. Many phenomena of RCs in HKE are explicable with reference to the Cantonese influence on this variety. Among the main features of HKE are participial relatives with a relative marker, as in *this is the student who admitted last year*; (Gisborne 2000, p. 361) and relative word modifying abstract head nouns, as in *this is a basis where we can go on*. These two are considered to be unique HKE features, whereas others like resumptive pronoun use, preposition omission, zero-subject relatives, are also existent in other Englishes. The RC in HKE was also the focus in Yan's (2011) study. It is very likely that the relative marker *that* is widely used in non-restrictive HKE RCs, which is indicative of system simplification, i.e. a phenomenon noted by James (1998).

PREVIOUS RELATED STUDIES ON THE RELATIVE MARKER *WHERE* AND ENGLISH LEARNERS' USE

Many research studies have investigated the production of the English relative adverb *where* by speakers of different first languages (L1s). A number of these were dedicated to ERCs in Hong Kong English. One of the interesting findings, revealed by Newbrook (1998), is the prevalent use of *where* to refer to an abstract head, aside from a locative one. For instance, in (21), the relativiser *where* refers to the precedent abstract head *a theory*, despite the fact that the pied-piping construction *in which* is preferred in standard varieties of English.

(21) This is a theory *where* transformations are used.
(Newbrook 1998, p. 51)

Apart from Newbrook (1998), Chan (2004) also demonstrated syntactic transfer in the ERCs produced by Hong Kong Chinese ESL learners differing in L2 English proficiency levels. The data were elicited through three instruments, viz. self-reporting in an individual interview, a translation task, and a grammaticality judgment test. Chan discovered that the learners' grammatical errors were largely ascribed to native-language influence. As regards the ERCs in their interlanguage, those of lower-intermediate proficiency adopted an

avoidance strategy due to the difference in head directions between L1 and L2. Thus, many of the participants resorted to other constructions similar to L1's, rather than RCs.

Evidence regarding L1 transfer was dominant in Chang (2004)'s study of ERCs used by first-year undergraduate EFL students. Based on the data from a comparison and a multiple-choice test, the researcher reported on the learners' mother tongue interference on their ERC use. The composition data revealed a low frequency of L2 ERCs, which Chang claimed to be derived from L1-L2 differences in RC head directions. What is more, the study demonstrated pronoun retention in the production of the relative adverb *where*, as in (22), where the pronoun copy *it* is obviously redundant with *where*. Such an ungrammatical occurrence could be influenced by L1 Chinese, which allows pronoun retention in all relativised positions except the subject one (Yip & Matthews 1991).

(22)*I want to join the piano club where I could learn and enjoy *it*.
(Chang 2004, p. 12)

The data from the multiple-choice test, in addition to the composition ones, also provide evidence of interlingual RC errors, i.e. errors caused by the differences between L1 and L2. A total of 55.9% of the participants allowed *where* to be filled in the sentence like (23), which results in a grammatically incorrect structure in the target language. Chang assumed that the relative word *where* was associated with the locative head *the address*. In fact, the preposition *to* here requires a wh-word relative pronoun that refers to a non-human antecedent, i.e. *which*.

(23) * Is this the address to _____ you want the package sent?
(Chang 2004, p. 14)

In an examination of ERCs found in the Brunei Learner Corpus (BLC), Crompton (2005) indicated an overuse of the relative marker *where*. Of all the ERCs introduced by *where*, approximately 38.66 % (46 out of 119 tokens) were ungrammatically produced. One of the most common kinds of error deals with the relativiser *where* referring to a non-locative head, as in (24)-(25). Such an inappropriate use of *where* was attributed to the learners' lack of awareness of pied-piping structure, as the BLC data confirm no existence of pied-piped relativisers, e.g*., on which, to which,* or *by whom*, in their L2 RCs.

(24) *It is not only the Blacks, but it includes all races *where* in
recent decades, the wives headed the households. [Among
which/whom]

(25) *All members must report to the central authority, the head of
Department in this case *where* the final decisions will be
reached and the syllabus adopted. [By whom]
(Crompton 2005, p. 164)

Crompton (2005), in accordance with Chang (2004), also presented ERC deviations concerning resumptive pronouns. For example, in (26), the pronoun *them*, with reference to head NP *Japanese and Korean companies*, unnecessarily repeats the relative word *where*.

(26) *This is proven by Japanese and Korean companies *where*
team work is vital to *them*.
(Crompton 2005, p. 165)

Braidi (1999) postulated that pronoun retention is indicative of universality in L2 RCs irrespective of learners' first language. Hence, regardless of whether learners' L1 permits resumptive pronouns or not, they are often found to employ such pronominal reflexes in interlanguage RCs. A clear example is Thai, in which resumptive pronouns do not exist (Sornhiran 1978). However, Thai learners evidently produced shadow or resumptive pronouns as well as resumptive NPs in L2 RCs, as shown in (27)-(29) (Phoocharoensil 2009, 2011, 2012), where all the pronouns in italics are resumptive pronouns.

(27) *It is the first dog that my father bought *it* for me.
<div align="right">(Phoocharoensil 2009, p. 186)</div>

(28) *There are some place that you think of *it* but it is amazing.
<div align="right">(Phoocharoensil 2011, p. 190)</div>

(29) *Catherine wrote her novel about the haunted castle where *it* allows no one to enter.
<div align="right">(Phoocharoensil 2012, p. 104)</div>

Ramat (2000) suggested that retaining such a pronoun enables interlocutors to identify the antecedent being referred to, notably when there is a long distance between the head and the gap, i.e. the position where a resumptive pronoun appears. It is worth noticing that not only do resumptive pronouns occur in L2 ERCs but they can also occasionally be seen in native English speakers' RCs in some dialects, e.g., Southwest England (Kortmann 2006), as in (30), where the pronominal copy *it* and the relative marker *which* have the same reference, i.e., the head *this*.

(30) *They sold this and some at Cary and I jumped in and bought this, which I were lucky in a way to get *it*.
<div align="right">(Kortmann 2006, p. 614)</div>

In a recent study, Phoocharoensil (2012) found that Thai EFL learners, differing in L2 English proficiency levels, in the process of learning English locative ARCs, faced difficulties using the relative adverb *where*. The most serious problem they encountered was the ungrammatical use of *where* as a relative pronoun, as in (31)-(32); in both instances, *where* serves as though it were the RC subject, which is considered incorrect. This problem occurs because of overgeneralisations applied when learners extend the use of *where* to a subject-focus relative pronoun function.

(31) *Daniel was born in this hospital *where* is in Bangkok.

(32) *He came from that Japanese company *where* hires only Japanese-speaking employees.
<div align="right">(Phoocharoensil 2012, p. 102)</div>

Another outstanding error lies in pronoun retention, regarded as a universal problem facing L2 learners since, cross-linguistically speaking; there exist more languages that allow resumptive pronouns in RCs (Song 2001). In other words, retaining a pronoun in a RC is an unmarked relativisation strategy. As predicted, Thai students were found to produce resumptive pronouns and NPs, as in (33) and (34) respectively.

(33) *His house is located near a small café where people can get a
light meal *here*.

(34) *His house is located near a small café where people can get a
light meal *at the cafe*.

(Phoocharoensil 2012, p. 103)

The researcher proposed that the occurrences of resumptive NPs, as in (34), could stem from the sentence-combination task. Since these redundant NPs were originally given in the simple sentences, the students might leave them untouched, i.e. not omitting or changing them into resumptive pronouns, in the sentence merging process. Additionally, preposition addition was also viewed as another error type of ERC production. To be specific, the preposition was inserted in a RC introduced by *where*, which violates an English grammar rule in that the relative adverb *where* cannot co-occur with a preposition, e.g., *in* in (35). In this context, the relative pronoun *which* or *that* is preferable.

(35) * The town *where* I was born and grew up *in* was destroyed in
World War II.

(Phoocharoensil 2012, p. 105)

This error as such may emanate from either the complicated structure of English as the target language or the elicitation task, i.e., the sentence-combination test, where the preposition was present at the end of a simple sentence given. The students possibly fused the two simple sentences to constitute a complex one with a RC the relativiser of which is *where*. They might have carelessly forgotten to remove, for the sake of grammaticality, such a preposition from the final merged version.

In addition to the aforementioned RC errors, the Thai learners were also found to commit an error of non-adjacency of a RC to the head, as in (36), where the RC *where we spent our vacation* is positioned far from the head *the city*. The researcher claimed that this particular type of problem may again be due to the sentence-combination task. When asked to form a complex sentence with a RC from two simple sentences, the students probably failed to place the RC right after the head. In other words, they just put the RC next to the preceding main clause regardless of its position being non-adjacent to the head.

(36) * The city was beautiful *where* we spent our vacation.

(Phoocharoensil 2012, p. 106)

RESEARCH QUESTION AND HYPOTHESES

The present study was aimed at providing an answer for the research question as well as proving the hypotheses below:

Research question
What are the difficulties, based on corpus data, which Thai EFL learners encounter with respect to their use of adverbial RCs?

Hypothesis 1
Thai EFL learners will over generalise the relative adverb *where* as if it could function as a relative pronoun to refer to a locative head.

Hypothesis 2
Thai EFL learners will employ pronoun retention in the adverbial RCs beginning with *where*.

Hypothesis 3
Thai EFL learners will incorrectly add a preposition to a locative adverbial RC.

Hypothesis 4
Non-adjacency of RCs to the heads is existent in the learner corpus consulted.

RESEARCH METHODOLOGY

The RC data in this study were collected from Thai Learner English Corpus (TLEC), which comprises three sub corpora, viz. intermediate, advanced, and professional Thai learner English. The first two sub corpora were compiled based on essays written by Thai EFL students. The corpus of intermediate learner English, in particular, was obtained from the writings of freshman undergraduate students from a variety of faculties of two reputable universities in Thailand. The advanced-learner corpus, in contrast, contains essays written by second-year students majoring in English from both universities. With regard to the professional corpus, the data consist of the writings of Thai journalists in two well-known English newspapers in Thailand.

In the present study, the data analysed were derived from the corpus of intermediate-learner English, for plenty of deviant RC uses were anticipated in this particular one, as opposed to the other two made up of English of far higher-proficiency users. The data collection process commenced with searching for the ERCs in the learner corpus in question. An output of 200 tokens was targeted, and those non-RC constructions with *where*, e.g., interrogative statements, reported questions, were then excluded; 142 tokens of real RC use were left. Next, erroneous RCs were distinguished from the well-formed ones, for further analysis. After all the incorrect RCs were identified, they were assigned to different categories. A detailed explanation for each error type finally followed.

FINDINGS AND DISCUSSION

Upon analysis of the data, 86 sentences with a RC were labelled ungrammatical; furthermore, double errors appeared, i.e., two types of errors in a single sentence. Therefore, 91 total errors were found.

LEARNERS' ERRORS IN ADVERBIAL RELATIVE CLAUSES

All the errors are arranged according to frequency in Table 1.

TABLE 1 Frequency of errors on adverbial RCs beginning with *where* in TLEC

Types of Error	Token	%
1.WHERE as a relative pronoun	46	50.55
2. a lack of comma in NRCs	24	26.37
3. incorrect use of relative markers	10	11.11
4. preposition addition	5	5.49
5. selectional restriction violation	3	3.30
6. resumptive pronoun	2	2.20
7. non-adjacency of a RC to the head	1	1.10
TOTAL	**91**	**100**

WHERE AS A RELATIVE PRONOUN

The most frequent problem confronting Thai learners, as indicated in the corpus-data, is the inappropriate use of *where* as a relative pronoun. As a matter of fact, *where* is regarded as a relative adverb (Cowan 2008, Crystal 2004). Thai learners, however, often use *where* in a NP position, e.g., RC subject, RC object, and object of preposition. As clearly shown in (37)-(40), *where* functions as the subject of the RC.

> (37) * I love France since it is a country *where* has a history for a
>   long time.

> (38) * When we reached to the university, we went to a hotel *where*
>   is in the LSU and rest.

> (39) *My idea of a fun weekend is go to special place *where* have
>   lightly pollution than Bangkok.

> (40) * I have never been to go to another country *where* was very
>   far.

Interestingly, when the relative marker *where* acts as the RC subject, the following verbs are often limited to *be* (e.g., *is, was*) and *have* (e.g., *has, have*). Rarely does *where* occur with other verbs like *preserves* in (41).

> (41) * Du Louvre that is a museum *where* preserves the most
>   famous artists' works.

In addition to RC subjects, *where* is also used as RC direct objects, as in (42), in which *where* is the direct object of the verb *like*.

> (42) * I really miss the beach *where* I like.

Moreover, (43)-(45) illustrate how *where* occupies the object-of-preposition position. More precisely, in (43), *where* seems to be the object of the preposition *in*. *Where* in (44) occurs as the object of *for*, while the one in (45) apparently serves as the object of *through*.

> (43) * So 'home' is the place *where* people be in and it relaxes
>   their tension.
> (44) * After long, home is the place *where* I yearn for.

> (45) * These are the flower gardens in Srinakarin Park *where* I'd
>   walk through from the bus stop to the beach.

The occurrences of *where* as a relative pronoun, i.e. as a RC subject, direct object and object of preposition, mentioned earlier, seem to be associated with overgeneralisation, which is a very common learning strategy L2 English learners adopt in ERC learning. It is assumed that Thai learners use *where* when the head is a locative expression, no matter what grammatical function within the RC it will become. This found support for Phoocharoensil (2012), in which such a problem is ranked first in frequency as well. The findings also

support Hypothesis 1, which claims that Thai EFL learners will use *where* as though it were able to function as a noun phrase.

A LACK OF COMMAS IN NON-RESTRICTIVE RELATIVE CLAUSES

The second kind of error occurring with high frequency (26.37%) is concerned with a lack of commas in non-restrictive RCs (NRCs). In English, where the head NP is definite, the RC just gives additional information rather than define the head; this type of RC, known as a NRC, is always set off by commas (Cowan 2008). (46), (50) are examples of errors regarding NRC misuse due to a comma shortage.

> (46) * First day after to arrive, I went to "DOI-SU-TEP" *where* is
>   holy place.

> (47) * I studied at Muangsamutsongkram School in
>   Samutsongkram *where* I studied in Pratom one-six.

> (48) * My host sister took me to the Eiffel tower *where* I want to
>   go most.

> (49) * Sometimes we like scuba diving at Koh Samet *where* is only
>   thirty minutes from my house.

> (50) * Her hometown is Hatyai, Songkhla *where* is same to me.

The lack of commas in NRCs, as shown in the above instances, may result from the complexity of the target language itself, i.e. English. In L1 Thai, commas are not used to mark NRCs (Sornhiran 1978). The application of commas in this specific context is a special feature of English. Hence, the learners' problem concerning whether or not to set off NRCs with commas is probably connected with the arbitrary, sophisticated RC system of English, which L2 learners should observe and conform to. According to James (1998), learners may simplify the complex L2 system by substituting a single form where the target language uses two or above. In this case, the participants might have ignored or even simplified the distinction between the two RC types. The discovered difficulty as to comma usage is consistent with the researcher's previous studies (Phoocharoensil 2009, 2010), which demonstrated non-use of commas in NRCs introduced by relative pronouns, e.g., *who, which, that.*

INCORRECT USE OF RELATIVE MARKERS

Another type of difficulty in ERC learning by Thai EFL students pertains to syntactically unacceptable use of relative markers (11.11%), as in (51)-(53).

> (51) * It collects the top famous shop and boutique abundantly
>   *where* too expensive for us

> (52) * I will move to the hospital *where* near my house because I
>   would like to stay with my family.

> (53) * I accept that France is the place *where* the most beautiful in
>   the world.

In (51)-(53), the target-like relativiser should be *which*, to be combined with the missing main verb like *is* or *are*. The problems arising involve double errors as two types of error come into play, one being the inappropriate choice of relative words and the other being the absence of main verb. The learners seem to use *where* just in connection with the locative heads, such as *famous shop and boutique, the hospital*, and *the place,* without any main verb in the RCs. Such a construction probably reflects Thai influence or direct translation from Thai, as in (54), where *sǔay* 'beautiful' can be the main verb in the RC.

(54)   / sàthǎanthîi   thîi   sǔay   thîisùd /
        place   relativiser   beautiful   superlative
        'the place that is the most beautiful'

PREPOSITION ADDITION

The learners, based on the corpus data, also inserted a preposition to a locative ARC where there should be none, which is ranked fourth in terms of frequency (5.49%). Such results confirm Hypothesis 3, which claims that preposition addition will be discovered in L2 English ARCs.

(55) * The soft but rough snow white carpet *where* I take my steps
       On is shining brightly under the gentle beach.

(56) * So home is the place *where* people be *in* and it relaxes their
       tension.

(57) * I don't know *where* she got her energy *from*.

(58) * Took-Dang community is the place *where* we went *to*.

The above examples, i.e., (55)-(58), are of RC errors arising as a consequence of the co-occurrence of the relative adverb *where* and a preposition, namely *on* in (55), *in* in (56), *from* in (57), and *to* in (58). Actually, the relativiser *where* is syntactically equal to a pied-piping construction, e.g., *in which, from which, to which*, etc. Having a preposition within a RC where the relative adverb *where* appears, as in (55)-(58), is considered to be redundant and ungrammatical. To rectify these errors, we need to replace *where* with the relative pronoun *which*, resulting in a construction of preposition stranding (Celce-Murcia & Larsen-Freeman 1999). Another means to error correction involves the pied-piping structure, which is more formal and complicated for L2 English acquirers (Klein 1995, Phoocharoensil 2012, Sadighi, Parhizgar & Saadat 2004). That is to say, the preposition must be moved to the position right before the relative pronoun *which*.
As mentioned in Phoocharoensil (2012), such preposition addition may stem from the learners' confusion over the complex English RC system as well as when to omit or retain a preposition in a RC. It is quite difficult for intermediate EFL learners to observe the distinction in syntactic usage between relative adverbs, e.g., *where*, and relative pronouns, e.g., *which*, possibly resulting in the incorrect use of both *where* and a preposition in the RC.
It is also interesting, nevertheless, to see the lower percentage of this error type (5.49%), in comparison with 22.67% produced by the high-proficiency learners in the researcher's past study (Phoocharoensil 2012). As one of the limitations of the previous work, the sentence-combination test might have caused the subjects to produce significantly

more ungrammatically-added prepositions because these extra prepositions were available in the given simple sentences prior to the combination process. In other words, the subjects presumably retained these prepositions in the RCs they constituted, which is regarded as ill-formed structure in English. Conversely, in the present study, participants' RCs were constructed in essays where it was more likely for them to naturally employ L2 ERCs. This may suggest that when Thai EFL learners use ERCs in a natural context, e.g., writing, they do not seem to produce many tokens of preposition-addition errors. The findings from the current study confirm such a limitation of the elicitation method in the previous work of the researcher.

SELECTIONAL RESTRICTION VIOLATION

Some of the RC errors (3.30%) pertain to violation of selection restriction, i.e., semantic restrictions that a word imposes on the environment in which it occurs. As the data revealed, some words within the RCs do not collocate with its head.

(59) * Park where I'd walk through from the bus stop to the beach
      where I liked to swim.

(60) * I found myself walking along the beach, *where* emerald
      sparkling sea crashing upon the shores.

The error in (59) is primarily concerned with a violation of the lexical collocation of the verb *swim*. Although *swim* and *beach* are related in some ways, the collocational pattern of *swim the beach* is unacceptable in English. A possible collocate of *swim*, in this context, is *the sea*. In (60), the relative marker *where*, which as a rule requires a finite clause to follow precedes a reduced relative clause with the verb in the present participle form *crashing*. The finite past tense form *crashed* should be supplied instead.

PRONOUN RETENTION

As hypothesised earlier, resumptive pronouns were also found in this study despite there being only two tokens (2.20%), which confirms Hypothesis 2.

(61) * The famous place that I went after that was "Fisherman
      Wharf" *where* we bought a lot of seafoods *here*.

(62) * It also a place *where* I can entrust my heart and my soul to
      it.

The locative shadow pronoun *here* in (61), as well as the relative adverb *where*, refers to the head *Fisherman Wharf*. Likewise, the resumptive pronoun *it* in (62) redundantly repeats *where*, both of which refer to the head *a place*. These pronoun copies, i.e., *here* and *it*, are not allowed, either in Standard English or the learners' L1 Thai. There is a high possibility that EFL students rely on resumptive pronouns in a long sentence so as to identify the head that is located far away (Ramat 2000). Furthermore, resumptive pronouns are universally unmarked since there are many more languages that permit pronoun retention in RC formation, e.g., Chinese, Japanese, etc., than those prohibiting it, e.g., English, Thai, etc. (Song 2001). This could be a reason why English learners, regardless of the existence of resumptive pronouns in L1, often supply pronoun copies in their ERCs. The discovery of

resumptive pronouns in the current study lends support to several previous studies (Chang 2004, Crompton 2005, Phoocharoensil 2009, 2011).

In addition, the researcher also remarked in the past study (2012) that the high frequency of resumptives in both a high-proficiency group (14.67%) and a low-proficiency group (25.38%) may be partially attributed to the sentence-combination task, in which many redundant pronouns were given in simple sentences to be combined. After merging two sentences to form a RC, it was highly probable that the learners retained these pronouns. However, the corpus-informed data from authentic written L2 use indicate merely two tokens of resumptive pronouns. This apparently confirms that the resumptives found in the sentence-combination test in the researcher's past study were inclined to result from the data elicitation method.

NON-ADJACENCY OF A RC TO THE HEAD

The final kind of error found with the lowest frequency (1.10%) concerns a RC that is not placed right next to the head it modifies, which accords with Hypothesis 4.

(63) * The home is stay for me, *where* is the best security.

In (63), the relative adverb *where* obviously refers to the NP *the home*. Even though the non-adjacency as such does not cause a flagrantly ungrammatical structure as the entire sentence is still understood, such an abnormal RC is harder to process than one next to its head (Gass 1979). The learner who produced such an error in (63) might not have been careful enough to place the RC in the proper position, i.e., next to its head. Another possible explanation to this error is that a RC that occurs as the last element of a sentence tends to be acquired earlier than one in the middle (Kuno 1974, Phoocharoensil 2009). This may be the reason why most learners prefer to have a RC in the sentence-final position. It should be noted here, however, that since only a single token of non-adjacency was noticed, it would be too risky to come to a firm conclusion on the cause of the error. If more tokens had been witnessed, it would have been safer to draw conclusions regarding the occurrence pattern(s).

Overall, there are significant similarities between the frequency orders of errors committed by intermediate learners in the present study and the interlanguage of the high-proficiency students in Phoocharoensil (2012), as shown in Table 2. This may suggest that Thai learners of English, with an intermediate English level, are inclined to have these problems when learning RCs in English.

TABLE 2 A Comparison between Frequency Orders of the Two Research Studies

Types of error	Phoocharoensil (2012)	Present study
1.WHERE as a relative pronoun	29.33%	50.55%
2. preposition addition	22.67%	5.49%
3. resumptive pronoun	14.67%	2.20%
4. non-adjacency of a RC to its head	9.33%	1.10%

CONCLUSION

The present study has demonstrated the real problems with which Thai EFL learners with an intermediate proficiency level are confronted. With the authentic language data from Thai Learner English Corpus (TLEC), it is evident that the use of *where* as a relative pronoun is the most problematic. Such a deviation is viewed as an interlingual error, i.e., an error that is caused by L1 transfer. The other errors found are intralingual, stemming from the learners' confusion over the complexity of English as the target language. These problems are a lack of commas in NRCs, preposition addition, incorrect use of relative markers, and non-adjacency of a RC to the head. Pronoun retention, furthermore, appeared to be influenced by the universality of resumptive pronouns as a prevalent L2 relativisation strategy.

The naturally-occurring linguistic data also show both similarities and differences between the findings from the sentence combination task, which is sometimes considered an imperfect tool to reflect learners' true interlanguage (Mackey & Gass 2005), and the essay, where learners can freely produce the target language. In terms of similarities, the learners in both studies, namely Phoocharoensil (2012) and the current one, employed *where* as if it were functioning as a relative pronoun, e.g., as a RC subject, object, and object of preposition. This kind of deviation clearly occurred with the highest frequency in the two sources of data. In addition, Thai learners' errors on preposition addition, resumptive use, and non-adjacency of a RC to its head were noticed.

On the other hand, whereas the researcher's study in 2012 revealed problems of preposition omission, substitution of *that* for *where*, and preposition redundancy, the current research revealed a lack of commas in NRCs and incorrect use of relative markers, the former of which was not assessed in the previous study as the elicitation task created then concentrated on only restrictive RCs.

The corpus-based data from TLEC offer tremendous research benefits in that awareness of real problems with regard to ERC learning has been raised. In other words, although many errors are commonly found in both datasets, certain errors, e.g., preposition addition, pronoun retention, seem to occur partially as a result of the limitation of the sentence-combination task, rather than as a reflection of the learners' real L2 competence.

PEDAGOGICAL IMPLICATIONS

Now that the results of the present study, based on the real corpus data, indicate the frequent problems affecting the ERC acquisition of Thai learners of English, EFL teaching-material designers in Thailand should become aware of such problems and incorporate into textbook contents these common errors on ERCs. Moreover, attention should be given to the methods of constituting the corresponding target-like forms, as in (64). Finally, a clear explanation needs to be provided along with each error type so that self-studying students or teachers will be able to identify the source of the error and know how to rectify or even prevent it.

(64)   INCORRECT: *I once went to a country ***where*** is very far
        from Thailand.

        CORRECT: I once went to a country where ***which*** is very
        far from Thailand.

This study shows Thai EFL learners' production of the top-three error types accounts for up to 88.03%, namely *Where* as a relative pronoun (50.55%), a lack of commas in NRCs (26.37), and wrong use of relativisers (11.11%), with the others occurring with far lower

frequency. It is highly advisable that teachers highlight these problems in ERC lessons. From the researcher's own experience, learners' use of *where* as a noun phrase persists in the interlanguage ERCs of Thai learners of various proficiency levels, for they apparently just associate *where* with any locative antecedent without great care, thus violating a syntactic restriction of a relative adverb as discussed earlier. Comma absence from NRCs also causes trouble for Thai learners despite the fact that this problem seems to be less serious than the former as the sentence meaning can still be understood. The differences between restrictive and non-restrictive RCs should be pointed out to students; moreover, the significance of commas in NRCs also needs to be emphasised in lessons, especially for learners whose L1, e.g., Thai, does not have punctuation differentiating the two types of RCs.

ENDNOTES

[1] In this research article, the term *resumptive pronoun* is used interchangeably with *pronominal reflex, pronominal copy, pronoun copy,* and *shadow pronoun*.

[2] It should be noted here that the data analysis has focused only on the errors regarding ERCs, with other kinds of errors, e.g., lexical, orthographic, or other syntactic ones, left unanalysed as these are beyond the scope of the present study.

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