The Use of Semi-automatic Annotation in Speech Acts Performed by Learners of English

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Abstract

Since rare research studied speech acts (SAs) from a macro perspective, this study used a semi-automatic annotation tool named Dialogue Annotation and Research Tool (DART) to examine the most frequently performed SAs by Chinese and Thai learners of English as a foreign language (EFL). It also attempted to reveal the reasons for the similarities and differences in the SA performances of EFL learners from discrete linguacultural backgrounds. This study involved 30 Chinese and 30 Thai EFL learners, totaling 60 participants. A total of 30 dyadic English interlanguage conversations were collected for this study. The learner corpus research with the contrastive interlanguage analysis was adopted for the analysis. The DART annotation revealed that both Chinese and Thai EFL learners most frequently performed the same six SAs. These SAs were labeled by DART as *state*, *hesitate*, *reqInfo*, *answer*, *expressOpinion*, and *stateReason*. Of the six listed SAs, both Chinese and Thai EFL learners most frequently performed the SA labeled *state*; both cohorts also presented the SA *stateReason* least often. Task requirements, the frequent use of certain types of formulaic language, and English proficiency levels were ascertained as factors causing the identical presentation of the six identified SAs. The English proficiency levels of Chinese EFL learners were determined as the principal reason for their discrete performance of SAs. Conversely, the influence of the Thai linguacultural background denoted the primary factor for discrepancies in the SA performance of Thai EFL learners.

Keywords: speech acts, semi-automatic annotation tool, DART, interlanguage pragmatics, learner corpus research, linguacultural backgrounds

1. Introduction

Interlanguage pragmatics (IP) studies "language use in social interaction" by learners using English as a second language (ESL) or foreign language (EFL) in second language acquisition (SLA; Fernández & Staples, 2021, p. 240). Individual speech acts (SAs; Austin, 1962; Searle, 1979) have been focal for IP studies. IP methodologies including learner corpus research (LCR; McEnery et al., 2023) and contrastive interlanguage analysis (CIA[2]; Granger, 2015) have similarly been devised.

Several flaws may be noted in the domain of IP. Many studies used discourse completion tasks (DCTs) to elicit data from ESL or EFL learners to study SAs instead of utilizing naturally occurring data (Khamkhien, 2022). The results of these studies were questioned apropos their ability to reflect the actual use of English by ESL or EFL learners (Pan, 2023a; Staples & Fernández, 2019). Most studies of SAs have also focused solely on the individual performance of SAs such as requests or refusals. It remains uncertain whether such SAs can comprehensively divulge the (im)politeness performed by ESL or EFL learners or showcase their pragmatic competence (Akmal et al., 2022; Pan, 2023a). Moreover, a plethora of studies have compared the use of SAs by ESL or EFL learners against the SAs presented by speakers of English as a first language (L1). Such a comparison has recently been criticized because it "does not align with the current discourse of intercultural communication and lingua franca framework" (Taguchi & Li, 2021, p. 10).

On the other hand, technological innovations in computational pragmatics resulted in the development of some semi-automatic annotation tools to annotate SAs, for instance, the Dialogue Annotation and Research Tool (DART; Weisser, 2018, 2020). However, these semi-automatic annotation tools have rarely been used with learner corpora. Therefore, the current study adopted a macro perspective to utilize DART to annotate the SAs performed by EFL learners from two discrete linguacultural backgrounds and examine the most frequently performed SAs, both in terms of the similarities and differences between the two cohorts of EFL learners. It also attempted to reveal the reasons for the similarities and differences in the SA performances of EFL learners from discrete linguacultural backgrounds. The following two research questions were posited:

1) Which similar and different speech acts do Chinese and Thai EFL learners perform most frequently?

2) What factors cause Chinese and Thai EFL learners to perform the same or different speech acts?

2. Literature Review

2.1 Interlanguage Pragmatics

Harris (2019, p. 53) contended that an SA was an action "with a communicative intention." SAs have undoubtedly received more attention in this regard, because "the central mechanism of human communication is intention recognition" (Harris, 2019, p. 53). Searle (1979) divided SAs into five categories: assertives, directives, commissives, expressives, and declarations. These fundamental SA theories have guided a strand of IP studies, particularly on the form-to-function approach. IP studies have focused primarily on certain individual types of SAs such as requests, refusals, apologies, and compliments (Akmal et al., 2022; McEnery et al., 2019; Taguchi, 2022). These studies have followed Austin's (1962) and Searle's (1979) SA frameworks and employed DCTs to elicit discourses from EFL learners. Every type of SA incorporates varied linguistic forms according to the different cultural, social, situational, or contextual environments in which the interlocutors are positioned in disparate social strata (Ficzere, 2019).

A predominant methodology used in such studies is comparing the use of different types of SAs performed by English L1 speakers and by EFL learners. The use of certain types of SAs by English L1 speakers is regarded as the norm to which the SAs of EFL learners are compared based on the frequencies and the distinct linguistic forms used in given situational contexts (Akmal et al., 2022; Ficzere, 2019; McEnery et al., 2019). It has been found that Thai and Chinese EFL learners used a limited range of linguistic forms compared to English L1 speakers when performing specific SAs in different situational contexts (Khamkhien, 2022; Pan, 2023a). Moreover, some Thai EFL learners tended to use more indirect acts for requests or refusals compared to English L1 speakers due to linguacultural influences (Khamkhien, 2022; Ogiermann & Bella, 2020; Pan, 2023a). However, this method of comparison relies on considering English L1 speakers' language use to be the norm. This perspective has recently been criticized because EFL learners "do not always use target language to mimic native speakers" (Taguchi & Li, 2021, p. 10); they simply use EFL to exchange information or achieve mutual understanding (Fernández, 2022, 2023; Ogiermann & Bella, 2020; Taguchi, 2022). In addition, recent studies have revealed concerns about whether the data that are elicited via DCTs are reliable. The use of DCTs has been found to be controversial in the studies of request (Fernández, 2022, 2023; Pan, 2023a). Despite being the most frequently used data collection method, the data elicited from DCTs were too ideal to represent actual situations (Pan 2023a).

Unlike DCTs, LCRs collect naturally occurring data from both spoken and written discourses produced by EFL learners (McEnery et al., 2023). This methodology has been used to investigate how EFL learners use English in various sub-fields of pragmatics, such as SAs, pragmatic markers, formulaic language, and pragmatics in prosody (Fernández, 2022, 2023; Yoon, 2020). The analysis of different pragmatic sub-fields performed by EFL learners can be accomplished via LCR as a result of recent innovations in computational technology. Researchers investigating SAs in IP can understand how EFL learners perform various types of SAs in oral communication by analyzing a collection of naturally occurring spoken discourses among EFL learners and scrutinizing the SAs they perform using modern computational technology (Rühlemann, 2022). Such studies would essentially avoid the risk of the elicited data not reflecting EFL learners' actual use of SAs.

LCR has advanced in recent years, but there are unfortunately fewer learner corpora representing spoken English produced by EFL learners than there are learner corpora comprising written English (Fernández, 2023; Picoral et al., 2021; Yoon, 2020). A few studies have compared individual SAs produced by ESL or EFL learners from different linguacultural backgrounds (Blum-Kulka et al., 1989; Ogiermann & Bella, 2020), but gaps in the macro perspective comparisons of SAs used by Asian EFL learners from discrete linguacultural backgrounds remain. In addition, most of the existing research has focused solely on individual types of SAs; the macro perspective of SAs produced by EFL learners in different types of oral communications has largely been neglected. Such gaps may be bridged by innovative computational annotation programs.

2.2 Pragmatic Annotation

To date, most researchers have manually annotated different pragmatic forms and functions based on their research objectives (Rühlemann, 2022; Taguchi, 2022). Scholars generally complete substantively time-consuming manual annotations based on the theoretical framework of the specific study (Taguchi, 2022). Moreover, manual annotations performed in existing pragmatics studies have primarily attended to certain types of pragmatic applications by individuals, for instance, requests or refusals (Staples & Fernández, 2019). The macro perspective of manually annotating all types of SAs has rarely been adopted because of time, cost, and labor related considerations. Some semi-automatic pragmatic annotation tools have been developed over time, for example, the Discourse Annotation and Markup System of Labeling (DAMSL; Allen & Core, 1997). These "dialogue act annotation" tools are inspired by the SA theory (Searle, 1979), but "must face reality in language databases and computing" (Verdonik, 2023, p. 146) because Austin's (1962) and Searle's (1979) SA classification "contains numerous ambiguities and shortcomings" (Verdonik, 2023, p. 147).

Among the semi-automatic pragmatic annotation tools thus far developed, DART is deemed appropriate for the annotation of SAs. DART uses the Extensible Markup Language (XML) format to provide discrete markups for every utterance. DART is used predominantly to retrieve and analyze SA performances in a given corpus. Therefore, it must be noted that DART offers a more fine-grained and extended SA taxonomy (Weisser 2019a, 2020) than Searle's (1979) SA classification. DART's extended SA organization is "applicable to the annotation and analysis of any type of naturally occurring dialogue" (Weisser 2020, p. 405). It encompasses nine super-categories with 162 SAs and justifies every category. Table 1 illustrates the nine extended SA super-categories and presents an example of the SAs assigned to each super-category based on the DART scheme (Weisser 2018, 2019a, 2020).

Table 1. SA super-categories in the DART scheme

	Super-category	Explanation	Example	Function
1	information or option seeking acts	different categories in requests	reqInfo	requesting verbal information
2	(non)cohesive acts	managing the cohesion for texts and interaction	answer	answering a question
3	information providing and referring acts	providing various types of information	state	conveying information/awareness
4	suggesting or commitment indicating acts	giving various degrees of suggestion or commitment	suggest	proposing joint or interlocutor's potential action
5	negotiative acts	helping to negotiate	accept	responding in an active positive way
6	evaluating or attitudinal acts	indicating personal opinions or stance	agree	signaling explicit agreement
7	reinforcing acts	emphasizing content	emphatic	repeating something for emphasis
8	social, conventionalized acts	expressing daily and social rituals	greet	greeting the interlocutor
9	residual acts	unintelligible or uninterpretable	uninterpretable	uninterpretable, due to missing or incoherent information

DART is accessible, applicable, convenient, and user-friendly (Weisser, 2018). DART is more intricate in its construction vis-à-vis the classification of different types of utterances such as the single *yes* and *no* units, pragmatic markers, and backchannels. It is also more relevant to the linguistic components of the annotation of SAs. A series of studies conducted by Weisser (2020, 2021) elucidated the computational annotation of pragmatics and predicted the prospective trajectory of corpus pragmatics.

Scant extant research has applied any semi-automatic pragmatic annotation tool to annotate learner corpora incorporating spoken data. Therefore, the present study utilized a semi-automatic pragmatic annotation tool with learner corpora that included EFL in spoken data in an attempt to further examine the problem of annotation inaccuracies vis-à-vis EFL.

3. Methodology

3.1 Participants and Data Collection

This study involved 30 Chinese and 30 Thai EFL learners, totaling 60 participants with 36 male (60%) and 24 female (40%) participants. Gender was not a variable in this study. All the participants were students undergraduate enrolled in years one to three in the English programs offered by four faculties at three public universities in Bangkok, Thailand. The ages of the participants ranged from 18 to 21. Chinese was the L1 of all the Chinese participants, and all the Thai participants spoke Thai as their L1. The participants had all studied EFL for twelve to fourteen years in their home countries. None of the participants had ever resided in an English-speaking country before the data were collected for this study. The English proficiency levels of the participants were evaluated as intermediate based on their scores in valid international English exams such as IELTS and the Common European Framework of Reference for Languages (CEFR; Council of Europe, 2020). The intermediate English proficiency level was chosen since it is the requirement of the Thai university students.

The data were collected at the campuses of the three public universities in Bangkok, Thailand. Each participant consented to the data collection process. Each participant was requested to engage in a casual English conversation with another participant of the same nationality. Therefore, dyadic English interlanguage conversations formed the register for this study. Each pair of participants was allowed to select the topics they would discuss to ensure that every conversation would approximate naturally occurring spoken discourses. All the selected topics pertained to the general daily or social life of the learners: for instance, social media or the university lifestyle. Each pair of EFL learners was requested to engage in a conversation in English for approximately 15 minutes without any prior preparation. The participants were all informed that their conversations would be recorded using the iPhone voice memo application. The researcher was not present when the paired students discussed their chosen topic with each other. Meanwhile, each pair could choose the place where they felt comfortable. These aforementioned decisions were taken to ensure that all learner pairs would feel relaxed and comfortable and to make certain that all the paired interchanges were as natural as possible. Accordingly, a total of 30 dyadic English interlanguage conversations were collected for this study, aggregating to 462 minutes of recorded audio data.

3.2 Data Analysis

Both quantitative and qualitative approaches applicable to the domains of LCR and CIA^2 were utilized for this study. Granger (2015, p. 17) highlighted that CIA^2 counters the criticism of using a native English speaker corpus as the norm: "[T]he corpus does not necessarily need to represent a norm." Further, CIA^2 encourages the second type of comparison between variations in interlanguage tasks and learners to reveal "the highly variable nature of interlanguage" worldwide (Granger, 2015, p. 18).

As previously mentioned, DART uses the XML format to produce different markups for every utterance and this tool was used to examine the SAs performed by the participants. Therefore, all conversations between the paired participants were transcribed in writing in accordance with the XML format. DART performs two major functions. First, it delivers the output of the SAs discovered in all utterances in a corpus. This function correlates to the pre-processing stage in which the original data can be revised. Users can then manually perform the computational process of generating and reporting the SA results and accomplish the post-process of modifying problematic annotations

(Weisser 2018). Second, DART enables relevant pragmatic analysis because it integrates basic analytical tools to retrieve keywords, n-grams, and concordances, and records the frequencies of keywords and lexical patterns.

Two learner corpora were compiled for this study: the Chinese Speech Acts Corpus (CSAC) and the Thai Speech Acts Corpus (TSAC). The CSAC comprised 28,526 tokens obtained from 15 dyadic English interlanguage conversations produced by Chinese EFL learners. The TSAC contained 32,301 tokens obtained from 15 dyadic English interlanguage conversations produced by Thai EFL learners. Every conversation was labeled based on the DART guidelines. For example, the first paired conversation between the Chinese participants designated as CH01 and CH02 was labeled CSAC01. The ten most frequently performed SAs were retrieved from DART to compare the SAs most frequently performed by the participating pairs of Chinese and Thai EFL learners. The factors underlying distinctions between the two cohorts were examined by the bottom-up approach using the concordances provided by DART.

To ensure the reliability of the data transcription, a second rater was involved to examine the transcription and descrepancies between the two raters were discussed until a final decision. In addition, both raters also examined the SAs DART labeled as unclassifiable, which indicated that DART could not identify the SA according to the established scheme. The two raters manually labeled the SA and ascertained the problem with the semi-automatic annotation using the DART-provided concordances and the bottom-up approach based on the DART SA scheme (Weisser, 2019b). No labeling discrepancies occurred during the process of the manual scrutiny performed by the two raters.

4. Results and Discussion

4.1 Identical and Divergent Speech Acts

Table 2 presents the top ten SAs performed most frequently by the participating pairs of Chinese and Thai EFL learners according to their rank (R), normalized frequency (NF per 100,000 tokens) of each SA, and the number (N) of conversations in which each SA was performed.

Table 2. The most frequently performed SAs found in the two learner corpora

	CSAC			TSAC		
R	SA	NF	N	SA	NF	N
1	state	401	15	state	472	15
2	hesitate	368	15	expressOpinion	315	15
3	reqInfo	275	15	acknowledge	262	14
4	answer	249	15	expressAwareness	253	14
5	expressNonAwareness	227	14	hesitate	240	14
6	expressOpinion	173	15	reqInfo	236	15
7	referProcess	125	12	init	184	12
8	correctSelf	95	12	answer	146	15
9	stateReason	73	15	abandon	103	14
10	refer	71	13	stateReason	94	15

In terms of DART's taxonomy, both Chinese and Thai EFL learners most frequently performed six types of SAs, as displayed in Table 2. These SAs were labeled by DART as *state*, *hesitate*, *reqInfo*, *answer*, *expressOpinion*, and *stateReason*. Of the six listed SAs, both Chinese and Thai EFL learners most frequently performed the SA labeled *state*; both cohorts also presented the SA *stateReason* least often. The other four SAs were differentially ranked in the two learner corpora. The SA labeled *hesitate* was the second most frequently performed SA in the CSAC but was ranked fifth in the TSAC. Conversely, the SA labeled *expressOpinion* was ranked in second place in the TSAC but ranked sixth in the CSAC. Moreover, the SA labeled *reqInfo* was positioned third and the SA labeled *answer* was placed fourth in the CSAC. However, the rankings for both decreased in the TSAC, in which the SA *reqInfo* was ranked sixth and the SA *answer* was placed eighth.

Four SAs performed most frequently by Chinese EFL learners did not appear in the top ten list for Thai EFL learners. These SAs were labeled *expressNonAwareness*, *referProcess*, *correctSelf*, and *refer*. In contrast, four SAs that were performed most frequently by Thai EFL learners did not appear in the top ten list for Chinese EFL learners: *acknowledge*, *expressAwareness*, *init*, and *abandon*.

Each SA listed in Table 2 and the factors that could cause the identical and divergent performance of the itemized SAs are discussed in the sections that follow.

4.2 Identical Speech Act Performances

4.2.1 SAs of *State*, *Reqinfo*, and *Answer*

A conversation is defined as an exchange of information among interactants (Weisser, 2018); thus, the frequent occurrence of the three SAs of *state*, *reqInfo*, and *answer*, was unsurprising. According to Weisser (2018, 2020), the SA labeled *state* enables interlocutors to convey discrete types of information in a more general and objective manner. The extensive exchange of miscellaneous information in oral communication naturally made it the most frequently performed SA by both Chinese and Thai EFL learners, as Examples (1) and (2) demonstrate.

(1)

<decl n="82" sp-act="**state**" polarity="positive" mode="decl" topic="information">

it [it is a new modern technology <punc type="stop" /> (CSAC03)

(2)

<decl n="91" sp-act="**state**" polarity="positive" mode="decl" topic="information">

something bring the new the [the new life style <punc type="level" /> (TSAC05)

Weisser (2018, 2020) found that the *state* was also the most frequently performed SA in casual conversations between English L1 speakers. This study further confirmed that EFL learners from different linguacultural backgrounds also intended to convey general information to each other to maintain interactions in conversations. In addition, the SA *reqInfo* in the DART taxonomy refers to a general request for different types of information from the listener, and the SA *answer* denotes a general answer to the made request. Examples (3) and (4) illustrate an *answer* in response to a *reqInfo* (Weisser, 2018).

(3)

<q-yn n="62" sp-act="**reqInfo**" polarity="positive" mode="open-query">

is it clear to see <punc type="query" />

</turn>

<turn n="26" speaker="CH14">

<decl n="80" sp-act="**answer**" polarity="positive" mode="decl" topic="information">

it is [is clear and everyone can see <punc type="stop" /> (CSAC07)

(4)

<frag n="18" sp-act="**reqInfo**" polarity="positive" mode="query">

then what your sister said <punc type="query" />

</turn>

<turn n="12" speaker="TH09">

<decl n="38" sp-act="**answer**" polarity="positive" mode="decl" topic="information">

she said <pause /> she ok she's ok and she just sit there <punc type="stop" /> (TSAC05)

Both excerpts elucidate that an answer is tendered after a request for information. Theoretically, there should be a one-to-one correspondence between the SAs classified as *reqInfo* and *answer* (Weisser, 2018). However, these two SA categories do not normally correspond in number because different situations such as a counter-question or a simple agreement could occur in conversations (Weisser, 2018).

Similarly, the frequent occurrence of the SAs *reqInfo* and *answer* was naturally found in the conversation registers because the interlocutors exchanged information with each other via general questions and answers. In addition, the frequent occurrence of the three aforementioned SAs could be attributed to the requirements of the assigned task. Every participant pair was required to use English to complete a dyadic conversation that lasted around 15 minutes. Thus, each participant was expected to ask the other party to the conversation to provide different types of information and to answer every question asked by the other. The participant pairs sustained their discussions by continually asking and offering general information. Hence, the three SAs performed most frequently reveal that the participants attempted to comply with the requirements of the assigned task. Previously conducted studies have found that different tasks such as group discussions or semi-structured interviews differentially influenced the results obtained by participants and affected participant behaviors (Pan, 2023a; Weisser, 2018, 2020). Weisser (2018) discovered that the SAs of *reqInfo* and *answer* were utilized at different frequencies in face-to-face and telephone conversations. Moreover, the present study found that Chinese EFL learners performed both these SAs more frequently than Thai EFL learners. Therefore, Chinese EFL learners tended to issue more requests for information and produced more responses to questions than Thai EFL learners. This result indicates that the participating Chinese EFL learners relied on both SAs to complete the conversation task more often than the participating Thai EFL learners.

4.2.2 SAs of *expressOpinion*, *stateReason* and *hesitate*

DART identified two SAs, categorized as *expressOpinion* and *stateReason*, primarily on the basis of the formulaic language associated with them. The SA classified as *expressOpinion* refers to expressing one's opinion on something. Such speech often uses formulaic language such as "I think." DART captures such standard phrases to label this SA. The SA labeled *stateReason* refers to an explanation of a cause. Therefore, DART captures formulaic language such as "because" to label this SA. Examples (5) and (6) demonstrate both these SAs.

(5)

<del n="26" sp-act="**expressOpinion**" polarity="positive" mode="opinion-decl">

i think she gets happy to become more beautiful <punc type="stop" /></decl> (TSAC02)

(6)

<del n="58" sp-act="state" polarity="positive" topic="arrival" mode="information">

my dad [dad do not angry <punc type="level" />

<del n="59" sp-act="**stateReason**" polarity="positive" mode="reason-decl">

because he [he know i don't want bad to him <punc type="stop" /></decl> (CSAC07)

A keener investigation of the interrogative sentences in both learner corpora revealed that the interlocutors answered many of the questions by offering opinions or reasons because they inquired about the personal opinions of the interlocutors or queried the reasons for certain phenomena. According to the NF, Thai EFL learners ranked higher in performing the SA *expressOpinion* and more frequently presented this SA compared to the Chinese EFL learners. Pan (2023b) recently studied the formulaic language used by Thai EFL learners evaluated at discrete English proficiency levels and found that they frequently used "I think" to express their opinions. The results of the present study aligned with these findings: Thai EFL learners tended to use "I think" very often to express their opinions in conversations. However, the SA ranking results revealed that Chinese EFL learners also used the term "I think" regularly to express personal opinions. Both Chinese and Thai EFL learners routinely used the word "because" to introduce utterances that offered varied rationales. Table 2 shows that the SA labeled *stateReason* was very similarly ranked for both groups. Thus, both Chinese and Thai EFL learners tend to routinely explain their motivations in conversations.

The SA labeled *hesitate* denotes a pause between utterances that is typically filled with indeterminate vocalizations such as *um* or *uh* (Weisser, 2018). Weisser (2018) indicated that fillers such as *um* or *uh* did not represent disfluency in spoken discourses. English L1 speakers often use such vocal markers in communication to buy time to think about the next utterance. DART labeled *um* or *uh* found in different situational contexts in the learner corpora compiled for this study as the SA *hesitate*. Examples (7) and (8) exhibit this SA.

(7)

<del n="85" sp-act="state" polarity="positive" mode="decl">

i can reach it <punc type="level" /></decl>

<dm n="104" sp-act="**hesitate**">

um </ dm>

<del n="86" sp-act="state" polarity="positive" mode="decl">

i need to <pause /> continue study and don't give up <punc type="stop" /></decl> (CSAC10)

(8)

<q-wh n="46" sp-act="reqInfo" polarity="positive" topic="place" mode="info-query">

where did you go then <punc type="query" />

</ turn>

<turn n="39" speaker="TH22">

<dm n="104" sp-act="**hesitate**">

uh <pause length="3s"></ dm>

<del n="73" sp-act="answer" polarity="positive" mode="place-decl">

Just go back to school <punc type="stop" /></decl> (TSAC11)

Both these examples illustrate that the interlocutors needed more time to consider their next utterance, either during the process of making a series of statements, as in (7), or before offering an answer to a previously asked question, as in (8). Tübben and Landert (2022) also studied the use of *um* or *uh* and found in congruence with Weisser (2018) that these vocal indicators discharged different pragmatic functions. For instance, one of the main functions of these expressions was to allow interlocutors to formulate their subsequent statement during an interaction and they were thus uttered initially by interlocutors as planner expressions. In the present instance, the overt intention of the interlocutors when using either of these fillers was to search for the right words for use in their next utterance. On the other hand, it should be noted that the use of *um* or *uh* could reflect (dis)fluency since the English proficiency of the present study's participants was evaluated at the intermediate level (Council of Europe, 2020). Therefore, they could also have required additional time to prepare their next statement. Although the use of *um* or *uh* in the corpora for this study may not have been directly connected to issues of (dis)fluency (Tübben & Landert, 2022), the indeterminacy of spoken discourses requires interlocutors to manage their expressions to some extent in different situational contexts (Pan, 2023a). Therefore, the performance of the SA labeled *hesitate* could have been caused by both the English proficiency level of the participating EFL learners and the very nature of the spoken register.

4.3 Factors of Different Speech Act Performances by Chinese EFL Learners

4.3.1 English Proficiency Level

Of the four different SAs performed frequently by the participating Chinese EFL learners, the interlocutors indicated their uncertainty about something by using the SA labeled *expressNonAwareness*. DART generally identified this SA when the interlocutors used formulaic

terms such as “I don’t know” or “no idea” (Weisser, 2018). The present study found two types of situations in which the Chinese EFL learners performed this SA using formulaic language such as “I don’t know”: first, express their lack of knowledge about something in answer to a previously asked question, and second, as a filler term that would allow them to think about how they could phrase their response to a question for information. Example (9) displays the use of the expression “I don’t know” to answer a previous SA identified as *reqInfo* to indicate that the interlocutor was unaware of the answer to the question.

(9)

<q-wh n=“58” sp-act=“reqInfo” polarity=“positive” topic=“duration” mode=“info-query”>

do you remember how long is it last <punc type=“query” />

</ turn>

<turn n=“51” speaker=“CH19”>

<del n=“71” sp-act=“**expressNonAwareness**” polarity=“negative” mode=“nonawareness-decl”>

i don’t know <punc type=“stop” /></decl> (CSAC10)

Accordingly, the first situation in which this SA was frequently found in the conversations of Chinese EFL learners could be attributed to their habitual employment of the formulaic term “I don’t know” to express their lack of knowledge. In the second instance in which the participating Chinese EFL learners utilized the SA labeled *expressNonAwareness*, the use of formulaic terms such as “I don’t know” in answer to a question was followed by their offering of additional information, as is shown in Example (10).

(10)

<q-wh n=“35” sp-act=“reqInfo” polarity=“positive” topic=“cause” mode=“reason-query”>

how come you don’t realize it <punc type=“query” />

</ turn>

<turn n=“29” speaker=“CH06”>

<del n=“46” sp-act=“**expressNonAwareness**” polarity=“negative” mode=“nonawareness-decl”>

i don’t know <punc type=“level” /></decl>

<del n=“47” sp-act=“swear” polarity=“positive” mode=“swear-decl”>

i swear i didn’t see him there and <pause /> i don’t mean to do that <punc type=“stop” /></decl> (CSAC03)

As Example (10) illustrates, the expression “I don’t know” is not the complete answer to the question asked by the other party to the conversation. The interlocutor extends the answer by offering an explanation after saying “I don’t know.” In such instances, the expression “I don’t know” cannot be construed as indicating a lack of awareness because an explanation is provided to complete the answer to the asked question. Pan (2023b) found that EFL learners used “I don’t know” in their interactions in the same manner as fillers such as *um* or *uh*: to buy more time to think about their next statement. As previously mentioned, such usages could be elucidated as the effects of two factors, the indeterminacy of the spoken register and English proficiency levels of the participating Chinese EFL learners.

In fact, the English proficiency levels of the Chinese EFL learners influenced another two frequently performed SAs, *referProcess* and *correctSelf*. In DART’s taxonomy, the SA labeled *referProcess* may be identified when the information is provided in an utterance without a finite verb. The SA designated as *correctSelf* can be observed when the interlocutor repairs an original utterance that contains certain errors. Examples (11) and (12) present both these SAs.

(11)

<frag n=“14” sp-act=“**referProcess**” polarity=“positive” mode=“frag”>

we with our friend <punc type=“level” /></frag>

<frag n=“15” sp-act=“**referProcess**” polarity=“positive” mode=“frag”>

playing football [football and swim <punc type=“level” /></frag>

<dm n=“26” sp-act=“hesitate”>

um </dm>

<frag n=“16” sp-act=“**referProcess**” polarity=“positive” mode=“frag”>

<pause /> very happy and tiring <punc type=“level” /></frag> (CSAC12)

(12)

<frag n=“35” sp-act=“answer” polarity=“positive”>

i [i don’t my dad </frag>

</dm>

<dm n="68" sp-act="hesitate">

uh <punc type="stop" />

<decl id="78" sp-act="**correctSelf**" polarity="positive">

i don't see my dad and my sister also </decl> (CSAC07)

The three utterances labeled as the SA *referProcess* in example (11) all lack a finite verb. This series of statements pertain to the actions of the interactants. DART categorized the utterance "we with our friends" as a fragment because it did not contain a verb. DART also marked the expression "playing football and swim" as a fragment because it began with an infinite verb form. The utterance "very happy and tiring" was also considered a fragment because it does not incorporate a subject or a finite verb. EFL learners incorrectly use the finite verb and that this grammatical error occurs regularly in their discourses (Akmal et al., 2022; Pan, 2023a). Hence, the English proficiency of the participating Chinese EFL learners limited their ability to produce grammatically accurate utterances in their conversations. The absence of finite verbs or the incorrect use of verb forms resulted in the SA labeled as *referProcess* because DART did not identify any finite verbs in the utterances and thus classified these statements as fragments.

The SA labeled *correctSelf* indicates an intrinsic reflection of the direct relationship between the frequent performance of this SA and the factor of the English proficiency levels of the participating Chinese EFL learners. Example (12) illustrates that the expression "I don't my dad" is amended to "I don't see my dad and my sister" with a filler pause (*uh*) inserted between them. The interlocutor in Example (12) adds the finite verb "see" along with the extra object "my sister" to the repaired utterance, indicating that the speaker notices the grammatical errors during the vocalization and attempts self-correction. In such an instance, the SA *correctSelf* directly reveals the limited abilities of Chinese EFL learners in engaging in English L2 conversations because their English proficiency levels do not allow them to fluently produce every statement without any grammatical error.

4.3.2 Incorectness of Use of Verb Forms

The SA labeled *refer* by DART was ranked tenth in the CSAC. The SA *refer* functions as a counterpart of the SA *state*. In a manner akin to the labeling of the SA *referProcess*, DART marked general information lacking a finite verb as *refer*. This SA was noted in the CSAC either when an utterance did not incorporate a finite verb but was otherwise grammatically accurate or when the statement was grammatically incorrect. Examples (13) and (14) display the performance of this SA.

(13)

<frag n="96" sp-act="**refer**" polarity="positive" mode="frag">

with my family on that day <punc type="stop" /></frag> (CSAC01)

(14)

<frag n="67" sp-act="**refer**" polarity="positive">

to going to home <pause /> to coming home </frag> (CSAC03)

The statement in Example (13) provides general information using a grammatically correct fragment that lacks a finite verb. However, the utterance showcased in Example (14) is grammatically incorrect in the forms used for both the verbs, "going" and "coming." Two reasons may be posited for the frequent use of this SA in the CSAC. First, the task required every participant to exchange information. Thus, the SA *refer* was performed frequently like the SAs of *state*, *reqInfo*, and *answer*. Moreover, the participating Chinese EFL learners could not always utilize the correct verb forms in their speech because of their English proficiency levels. Thus, DART assigned this SA label to such erroneous expressions.

4.4 Factors of Different Speech Act Performances by Thai EFL Learners

4.4.1 English Proficiency Level

The SA labeled *abandon* ranked ninth in the TSAC. Like the performance of certain SAs by the participating Chinese EFL learners, the English proficiency levels of the Thai EFL learners were also found to factor in their use of specific SAs. As the name indicates, DART labels an SA as *abandon* when an interlocutor rejects an utterance that is inapt for the context (Weisser, 2018). The TSAC revealed that the participating Thai EFL learners abandoned utterances to repair errors, as shown in Example (15).

(15)

<frag n="48" sp-act="**abandon**" status="abandon" polarity="positive" topic="time">

it [it is night </frag>

</dm>

<no n="35" sp-act="negate">

no <punc type="stop" />

<decl id="92" sp-act="state" polarity="positive" topic="time" mode="decl">

it is <pause /> was sunday night but not late night <punc type="level" /></decl> (TSAC05)

Example (15) typifies the use of the SA *abandon* by Thai EFL learners. In this example, the interlocutor does not complete the expression "it is night" and abandons the speech fragment. This action is followed by the discourse marker "no," which signifies a negation. The interlocutor then produces a new utterance that includes the time-related information "it was Sunday night" along with an additional explanation "but not late night." Two reasons can be postulated for the occurrence of this SA. First, the interlocutor decides to reject the previous fragmented version in an attempt to correct the provided information. In such an event, the decision to quit the utterance midway is taken because the interlocutor plans to modify the statement and offer the correct information (Weisser, 2018). Moreover, the interlocutor clearly continues to repair the grammatical structure of the statement by changing the verb form "is" to "was" and provides additional information by changing "night" to "Sunday night." This SA thus accomplishes a function that resembles the purpose of self-correction mentioned in the previous section of this paper. Thus, it is undeniable that the English proficiency of Thai EFL learners triggers their performance of the SA *abandon* to some extent.

4.4.2 Thai Linguacultural Influence

DART identified and labeled the other three frequently performed SAs by the Thai EFL learners as *acknowledge*, *expressAwareness,* and *init*. This evaluation was based on the words or expressions routinely utilized in performing the three SAs. The SA labeled as *acknowledge* indicates a short response to either an interrogative sentence or to a previous statement. Responsive words such as "yes," "no," and "okay" are thus typically employed in the performance of this SA. The SA designated by DART as *expressAwareness* indicates the awareness of interlocutors about some phenomenon and thus is the converse of the SA *expressNonAwareness*. The SA *expressAwareness* is characterized by expressions such as "I know" and "I understand." The SA labeled as *init* denotes that an initial or transitional word is inserted before an utterance to start or link the current speaker's new turn. Thus, words such as "okay," "now," and "then" are often used in the performance of this SA (Weisser, 2018).

Scrutiny of the use of these three SAs revealed that the task requirements caused many instances that instigated the use of linguistic forms which would then elicit their corresponding SAs. In other words, the interlocutors would need to use one or more of these three SAs to respond to the previous utterance. However, some unusual instances were observed and are presented in Examples (16), (17), and (18).

(16)

<q-wh n="87" sp-act="reqInfo" polarity="positive" topic="cause" mode="reason-query">

why you send email not call <punc type="query" />

</ turn>

<turn n="68" speaker="TH02">

<dm n="62" sp-act="**acknowledge**" polarity="positive">

yes <punc type="level" />

<del n="79" sp-act="state" polarity="positive" mode="decl">

send email to polite him <punc type="stop" /></decl> (TSAC01)

(17)

<decl n="61" sp-act="state" polarity="positive" mode="decl">

my mom shout to me and loudly <punc type="stop" /></decl>

</ turn>

<turn n="22" speaker="TH27">

<decl n="62" sp-act="**expressAwareness**" polarity="positive">

i know i know <punc type="level" /></decl> (TSAC14)

(18)

<q-wh n="15" sp-act="reqInfo" polarity="positive">

what do you do on weekend <punc type="query" />

</ turn>

<turn n="12" speaker="TH24">

<decl n="18" sp-act="**init**" polarity="positive">

yes <punc type="level" />

<decl n="19" sp-act="state" polarity="positive" mode="decl">

i sleep <pause/> and play game <punc type="stop" /></decl> (TSAC12)

Example (16) displays the unusual response of including the word "yes" because the previously articulated question utilized the interrogative term "why" and pertained to a special query seeking a reason. Similarly to Example (16), the response registered in Example

(18) curiously contains the initial word "yes" in response to the prior question, which inquired about the interlocutor's activities on weekends. In Example (17), the first interlocutor narrates some childhood stories and ends with the utterance, "my mom shout to me and loudly." The response includes "I know" verbalized twice and was labeled *expressAwareness*. This expression appears unusual because the second interlocutor did not actually know the story recounted by the first party to the conversation. The CSAC did not include such instances. Thus, the Thai linguacultural background could be inferred as the reason such expressions were observed in the TSAC. Females belonging to the Thai culture are likely to use the polite Thai particle /kh à/ and Thai males would utter /khr áp/ as the initial term in responding to any question. These terms semantically simulate the English "yes" and formally demonstrate politeness when used initially in an answer (Boonsuk, 2021; Jocuns, 2022). Similarly, the Thai people tend to maintain harmony in their interactions and are inclined to agree with their interlocutors rather than register disagreement (Jocuns, 2022). A previous study found that the EFL used by Thai people is largely influenced by Thai culture (Boonsuk, 2021). Therefore, the responses noted in Examples (16), (17), and (18) may be expected. These findings confirm that the linguacultural backgrounds of EFL learners influence their speech production to some extent.

Combining the factors affecting the SA performances of both Chinese and Thai EFL learners revealed that English proficiency levels were the primary influencing factor for the frequency of the performances of SAs by the participating Chinese EFL learners because this factor had an impact on five SAs: *hesitate*, *expressNonAwareness*, *referProcess*, *correctSelf*, and *refer*. Task requirement was the predominant factor affecting the Thai EFL learners' performance of SAs because it influenced six SAs: *state*, *acknowledge*, *expressAwareness*, *reqInfo*, *init*, and *answer*. China's overall language policy for the entire country and its education system precludes English from being used for everyday oral communication in mainland China (Xu, 2019). As English remains a foreign language for mainland Chinese citizens, it is conceivable that the participating Chinese EFL learners performed different SAs for reasons that were related to their limited English proficiency. Conversely, although English is deemed to be a foreign language in Thailand, it is regularly utilized in the Bangkok area and other tourist destinations. Moreover, Thailand is closely connected to numerous other nations due to the development of various sectors, including economics, tourism, and education (Boonsuk, 2021; Jocuns, 2022). Therefore, the participating Thai EFL learners attempted to complete the assigned conversation tasks by performing SAs differently from their Chinese peers.

5. Conclusion

From the macro perspective, the findings of this study indicate that the expansion of SA-based scholarly investigations in the IP domain requires the use of semi-automatic annotation tools. As mentioned in the previous sections, prior research has only focused on specific individual SAs in the fields of IP or politeness. In contrast to the previous research, a wider range of SAs that the EFL learners used in oral communication was found in this study. Moreover, the use of these SAs was directly correlated with their English proficiency levels and linguacultural backgrounds, which reflects the importance of studying the SAs that EFL learners use from a macro perspective.

In addition, this study found the different rankings of the same SAs in the two corpora that were compiled to represent the naturally occurring data provided by the participants in this research, and demonstrated the performance of different SAs by the two learner groups from different linguacultural backgrounds. Therefore, prospective research on the performance of SAs should encompass different origins and linguacultural backgrounds. It is anticipated that the use of semi-automatic annotation tools in IP studies and the comparison of the performances of SAs by EFL learners from different linguacultural backgrounds in this study will contribute to the existing literature by providing a different perspective, which will lead to the further advancement of studies of SAs and the use of LCR.

Future research initiatives could use DART or other semi-automatic annotation tools in the field of LCR to examine the performance of SAs from a macro perspective. Other cohorts of EFL learners from different linguacultural backgrounds and English proficiency levels could also be included to validate the findings of this study and to examine the similarities and differences in the use of SAs in naturally occurring discourses.

Bio:

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Authors contributions

Dr. Zhaoyi Pan was responsible for designing this research, conducting the data, doing the analysis, and writing the entire research paper.

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Appendix

XML conventions

<>	XML format for decoding information
[	repetition of the same word
<pause />	longer pause
del	declarative
sp-act	speech act
"level"	uncompleted utterance
"stop"	utterance completed
"query"	a question
<turn />	the turn-taking to a new interlocutor