1. Introduction

In the last two decades, computer has been regarded as a useful tool and a new approach for data collection and empirical research in translation studies for the following reasons: objectivity, reliability, replicability, validity, extrapolability, quantifiability and ecological or environmental validity (Neunizig, 1998, p. 95). Since 1990s, electronic parallel corpora have been considered an important asset in translation research and education in that it provides evidence of the mediation process of how specific structures, lexical items or culture-specific references have been translated (Johansson & Hofland 2000). Johansson (2003) indicates that a corpus model that comprises numerous translations in one target language of one source text is designed for the study of the extent and types of variation in translation. With corpus processing software available to explore the whole text and bring the potential examples to the analyst's attention, a more consistent and systematic contrastive analysis can be conducted (Munday 2000, 2002).

Whether the electronic corpuses and corpus tools support the sorts of searches which instructors and students wish to conduct, immediate concern is its application on the part of translator trainees. The pilot study conducted in this paper* attempts to investigate whether students' awareness of language transfer and competence in contrastive analysis can be enhanced by using the model of computer-assisted register analysis. Three research questions are asked in the study: (1) How do we incorporate computer-assisted register analysis into literary translation course? (2) How do the students react to this pedagogical design? (3) What are the potential benefits of using computer-assisted register analysis in translator training? In my corpus-based pedagogical design, a small-size literary parallel corpus is used to facilitate analysis of the translation phenomena involved in the process of transferring one language to another. Concordancer software, ParaConc, is especially employed for aligning the source text (ST) and the target

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texts (TTs) and retrieving evidence about language transfer, namely, how meaning is received, encoded and transcribed between languages and among the different translators. I am also interested in finding out how instructor could best apply this corpus-based approach to develop competence in contrastive analysis. This pilot study, though limited in the sample size, intends to understand how students react to this pedagogical design. The report on actual uses of literary parallel corpus and concordancer by students will contribute to estimation of the applicability towards the corpus-based pedagogy in translator training.

The paper is divided into three main sections. Section 2 brings up the problem pertaining to a conventional elicitation method on the basis of *tertium comparationis* within which analysis of translation shifts is carried out. Developed within its focus on lexico-grammatical features, register analysis, a well-founded functional-linguistic framework, is considered to be a suitable pedagogical methodology for bringing out what is interesting cross-linguistically. Section 3 reports on the construction of electronic literary parallel corpus that consists of Alice Walker's use of black dialect in *The Color Purple* and its three Chinese translations. Particular linguistic features of African American English (AAE) are introduced and selected for in-class demonstration of computer-assisted register analysis. Section 4 is a pedagogical assessment on the effectiveness of using this method in translator training. Some implications will be drawn from the students' reflections upon computer-assisted teaching and learning.

2. A Corpus-based Contrastive Analysis

Conventional elicitation method in contrastive analysis is made of elements or features approached impressionistically. The problem pertaining to this elicitation method is the selection of isolated equivalents which is more or less to follow the researcher's own intuition. With the increasing availability of computerized corpora, contrastive linguists who recognize the value of translation corpora as resources for the evaluation and teaching of translation have started working in a

corpus-based fashion for empirical analysis. It is argued by Jeremy Munday (2002) that linguistically-oriented analysis of texts can be preceded in systematic way by employing corpus-based techniques of analysis. This methodology is rooted in Systemic Functional Linguistics (SFL, Halliday 1976, 1985), a comprehensive theory of language that covers grammar and semantics, context and text. The SFL-based model has been applied within the area of contrastive register studies in textual conventions between languages (Hatim & Mason 1990; Biber 1995; Teich 2003).

From the perspective of application, the contrastive-linguistic investigation into the lexico-grammatical properties of parallel text, original texts and their translations, aims at unveiling language restrictions such as the lack of the same structure in the target language and normative restrictions such as the need to accommodate the target text to the syntactic patterns in the target language. As Roman Jakobson in "On Linguistic Aspects of Translation" points out, "Any comparison of two languages implies an examination of their mutual translatability; widespread practice of interlingual communication, particularly translating activities, must be kept under constant scrutiny by linguistic science" (1959, pp. 233-234). As variability often arises in the translation styles, comparative approach makes one aware of lexico-grammatical properties between languages and the context of texture-creating linguistic means. The inquiry about the nature of variation found in different version of translation should also take relevant levels of cultural and situational contexts into consideration.

The general notion of register is described as functional variation according to

In "Systems in Translation: A Systemic Model for Descriptive Translation Studies," Jeremy Munday illustrates the working of this model with reference to three English translations of the Columbian novelist Gabriel Garc a Marquez's essay, and the analysis procedure he proposed goes as follows: (1) the location of the texts within the sociocultural context, (2) Computer-generated statistics of the texts, including word count, type-token ratio, word frequency lists, and comparative keywords search, (3) the analysis of ideational, interpersonal and textual metafunction of the texts, (4) investigation of possible motivations for the translation shifts. This research is inspired by this systemic model proposed by Munday.

type of situational context. Registers, as Douglass Biber defines, are said to be "text categories readily distinguished by mature speakers of a language" (1995, p. 132). More technical notion of register is, for instance, perceived as dialectal variation of particular lexico-grammatical features. As Hatim and Mason point out, "Register is a configuration of features which reflect the ways in which a given language user puts his or her language to use in a purposeful manner" (1997, p. 100). The need to be aware of dialectal variation becomes crucial in the translation of literary dialect in that dialectal uses of language functions as signs in the portrayal of a certain region or envision of individuality of a persona. Misunderstanding often occurs when translators are not familiar with the semantic meanings associated with the particular use of lexical items and syntactic structures in African American English.

In the context of translator training, the purpose of translation analysis should be practical in selecting and evaluating translation equivalents and defining equivalence relationship between a source language text and its translation. As multilingual concordencer such as ParaConc can be used to elicit translation equivalents based on their computational accessibility, it allows particular linguistic features as search terms to be selected and specific examples to be examined more consistently. Whether this computer-assisted register analysis can be carried out in the context of translator training, the next stage in this study is to reformulate a tentative pedagogical design based on this model and conduct a pilot test on translator trainees to evaluate its effectiveness.

3. Teaching and Learning in Action

Ten students participating in this pilot test are the first-year and second-year graduate students at National Kaohsiung First University of Science and Technology. Chinese is their mother language, and their English level is intermediate. None of them was a translation major in the undergraduate program. They had not been trained in either comparative approach or corpus linguistic

approach to grip with shifts caused by the influence of typical target-language patterns or the translator's specific idiolect.

The parallel corpus constructed for this pilot study consists of Alice Walker's use of black dialect in Alice Walker's *The Color Purple* and its three Chinese translations produced in Taiwan by Hui-qian Chang, Zu-wei Lan and Ji-qing Shi. Concordancer tool, ParaConc, is used to search relevant examples, and the pedagogical aim is to investigate how certain linguistic features of African-American vernacular English are rendered in these three Chinese translations. The primary concern of the training is to provide empowering venue where translator trainee can acquire ability in critical analysis of the ST and the TTs and competency in employing ParaConc to facilitate contrastive translation analysis.

3.1 Pedagogical Procedure in Brief

As the objective of this training is to raise students' awareness of the language transfer between AAE and Chinese by means of computer-assisted analysis, the teaching module proposed is illustrated as follows: (1) preliminary analysis of the original work and the target texts (2) computer-assisted register analysis (3) reflection on translator's mediation. In preliminary analysis, students have to read the whole text and become aware of the context, literary style and discourse factors. Then register analysis will be conducted with assistance of ParaConc to process specially search items. Based on the examples retrieved and identified, students' attention is then drawn to the translation equivalents realized in the target texts, and the translators' linguistic devices of dealing with the dialectal characteristics is examined within the discourse framework of the field, tenor and mode. Finally, students will be led to reflect on the language-related factors intertwined with translational decisions.

3.2 Preliminary Analysis

Kirsten Malmkjær has cautioned us of two major problems in parallel text studies. A parallel corpus is often constructed and searched to "highlight some phenomena while hiding others" and "provide, for each instance, the result of one individual's introspection, albeit contextually and cotextually informed" (1998, p. 539). She thus proposes that text analysis must begin to play a part in studies of parallel corpora before we say anything about how one language is realized in the other language. To start with, students need to comprehend all the etymological, cultural and historical associations within the context of a text. The preliminary source analysis can focus on the discussion of two salient features of this novel: the use of the dialect and epistolary form.

Celie's letters to God afforded Walker the distance and control of omniscient narration on the one hand; dialect exploited as a powerful tool affords Celie intimacy of first-person narration that reveals her development of astonishing self-expression through self-awareness on the other hand. According to Elizabeth Fifer (1985), the effects Walker achieves through the employment of dialect to develop Celie's distinct narrative voice are twofold. Firstly, dialect provides its own world view and helps to convey primitive and childlike innocence. It is a medium through which Celie, author and reader must participate in the creation of meaning for themselves. As the epistolary form can be reproduced in translation, whether Celie's dialectal expression, including pragmatic and semiotic features, can be transplanted to contain the same communicative potential in the target culture is in suspect in the domain of translating.

It is also notable that three translations found in Taiwan were caught up with the mania of the fiction and the adapted film directed by Steven Spielberg in 1984. These three Chinese translations were all published in 1986 and the title of the book was all rendered "the purple sisters." Published by Crown Publishing Company in March, Chang's translation included three book reviews from *The New York Times Book Review*, *San Francisco Chronicle*, and *New York Book*

Review, and the Academy Award numerous nominations for the film is noted. Published by Christian Cosmic Light Holistic Care Organization in July, Lan's translation distinguishes itself from the other two versions by its postscript about the movie production due to the translator's experience as a movie-critic. Shi's translation was published by Da-di Publishing House in March, and she is the only one concerned in the preface about the difficulty of rendering the unique characteristics AAE. She claims that the plainest Chinese style is employed for authentic representation of Celie's unadorned oral speech.

Besides attending to the style of the original work and publication history of the three Chinese translations, the instructor should initiate students into the linguistic patterns of AAE and particular features used in this novel. For those who are not familiar with linguistic characteristics of African American English (AAE), Lisa J. Green's African American English (2002) provides a detailed description of nature of AAE (syntactic and semantic, phonological and lexical) and a stimulating discussion of the different contexts (speech events, literature, media, public attitude, and education) in which AAE is used and represented. Some categories of phonological, morphological, semantic, lexical and syntactic patters listed by Green can be used as search items to explored parallel corpus by means of ParaConc. As Green points out, "The African American lexicon and general American English lexicons vary in that there are lexical items that sound the same but have different meanings" (2002, p. 20). For instance, the unique lexical items and collocations (i.e. some, stay, come, steady, get over, call--self, mash, -own-) and lexicons for the verbal markers (i.e. be/bes, bin/been and dəne/done) are entities with unique semantic properties. Although similar in form to auxiliary verbs in standard American English, each verbal marker occur in specific environments and indicates a certain type of meaning. Besides, syntactic patterns (i.e. double and multiple negation construction, negative inversion, wh-questions) contrasts with the patterns in mainstream English. Learning to identify semantic, lexical and syntactic properties of the linguistic system is part of the preliminary analysis.

3.3 Computer-Assisted Register Analysis

The working procedures are very similar as other concordancers. First, load the text you want to work with, after which you can search for a particular word or a collocation. The search term usually is displayed in the center of a window along with a context to either side of the search term. According to the concordances retrieved, the user offers their interpretation. Due to space constraints, the examples will be presented in tabular form, and the discussion will focus on the ones that manifest the particular renderings of linguistic features and patterns in the ST and the TTs. The following analysis aims to show translationally relevant deviations from adequacy and to also take into account the translational relevance.

3.3.1 Field

A semantic field is defined as "a conceptual category that serves to label an area of experience and which is constituted by lexical items" (Marco, 2000, p. 6). Certain words and phrases of AAE have unique meanings. For the purpose of demonstration, search words of African American lexicon include *come*, *some*, *stay*, *steady*. According to Green, *come* expresses "speaker indignation;" *some* means "very" and is generally pronounced with stress, *stay* can mean "to live, to engage in activity frequently or to be in some physical or emotional state;" *steady* is a verbal marker that proceeds V-ing and has function of indication that "an action or process specified by the verb is carried out in an continuous manner" (2002, pp. 21-23).

ParaConc search retrieves 226 concordance lines that contain the marker *come*, but not all of them are relevant to the present analysis. Only twelve concordances show *come* proceeds the main verbs that end in *-ing*. Misinterpretation easily occurs due to the way *come* is used for a particular semantic purpose. Its unique meaning can be lost in translation if translators are not familiar with the specific

meanings stored in the given semantic field of AAE. Example (1) is used for illustration. It literally means white men walk across the yard with indignation, but this semantic meaning is missing in the Chinese translation:

Example (1)	Pretty soon a bunch of white mens <i>come</i> walking cross the yard.
Chang	不久一群白人 穿過 院子走來。
Lan	沒多久,一群白人從院子那邊 走過來 ,
Shi	不久,一群白人 走過去 。

The marker *steady* is also a problematic African American lexicon. Three concordances are found, and two of them precede the verbs that do not end in V-ing. Example (2) indicates that the verb *try* is characterized as a state in which an activity is still carried out by Nettie in a consistent manner. All of the translators' renderings are glossed with adverbial phrases such as "仍然繼續" (Chang), "都會持之以恆地" (Lan) and "一直想法子" (Shi):

Example (2)	No matter what happen, Nettie steady try to teach me what go on
	in the world.
Chang	不論發生什麼事,奈蒂 仍然繼續 告訴我世界上發生的事。
	(Literally: still continue)
Lan	不論世事如何變化,奈蒂 都會持之以恆地 教導我認知天下事,
	(Literally: will preserve)
Shi	不管發生什麼事, 妮蒂 一直想法子 教我世界上發生的事。
	(Literally: keeps figuring out ways)

This verbal marker can also precede verbs that end in V-ing. In example (3), *steady* is a verbal marker that precedes a V-ing and is used to "describe the manner in which something is done" (Green, 2002, p. 24). Lang's rendering "-xx

次" conveys that the activity of operating the gears is carried out in an intense manner; however, this rendering actually misinterprets the original meaning:

Example (3)	I clam in the back seat, lean over the back of the front, <i>steady</i>
	trying to show her how to operate the gears.
Chang	我爬進後座,把身體向前傾。教她操縱方向盤的方法。
Lan	我爬進後座,趴在前座椅背上,一次又一次地教她如何倒檔,
	(Literally: again and again)
Shi	我爬上後座,身子向前,教她如何換檔。

Another translation challenge is the three verbal marker of AAE, *be/bes*, *bin/been* and *dəne/done*, which have to occur obligatorily to denote the type of meaning intended. According to Green, *be/bes* "denotes habitual or iterative meaning" (2002, p. 47). In the parallel corpus, the use of *be* occurs 203 times, and the use of *bes* is not found. In example (4), only Lan's renderings express the habitual meaning of the source text:

Example (4)	By time I git back from the well, the water be warm.
Chang	我打完水回來,水已經溫了。
Lan	說我 每次 去井邊提水回來,那水 都 開了。
	(Literally: every time)
Shi	當我把水從井裡拎回來時,水已經溫了。

Been/Bin situates an activity or state in the remote past and continues up to the moment of utterance (Green, 2002, pp. 54-55). ParaConc search retrieves 58 concordances that contain been, and the use of bin is not found. Green points out there are three types of meaning in Bin/Been construction. The first type is as displayed in example (5) where bin/been precedes a verb that ends in -ing, past

form or an noun phrase to indicate the state started in the remote past and continues to the moment of speech. Adverbial phrases "打從一以來" and "自從一以來" are used by Chang and Lan to express habitual occurrence except Shi's rendering "教過," which seems to mark the completion of action:

Example (5)	She say long as she <i>been</i> a teacher she never know nobody want
	to learn bad as Nettie and me.
Chang	她說打從她當老師以來,從來沒見過像奈蒂和我這樣喜歡唸書
	的人。(Literally: since)
Lan	她說自從她當老師以來,從沒有看過像奈蒂和我那樣好學的學
	生。
	(Literally: since)
Shi	她說她 教過 這麼久的書,沒看過像妮蒂和我這麼想唸書的人。
	(Literally: taught)

The second type is as displayed in example (6) where *bin/been* only precedes a verb that ends in *-ing* to indicate the verb beings at some point in the remote past and continues habitually. Again, all three translators rely on adverbial phrases to express the continuation of action:

Example (6)	And she <i>been going on for months</i> bout how ungrateful I is.
Chang	她 連續幾個月 埋怨我不知感激。
Lan	而她 接連幾個月一直 數落我忘恩負義。
Shi	她有 好幾個月 說我是如何忘恩負義。

The third type is as displayed in example (7) where *bin/been* only precedes a verb in its present form or past tense form to indicate the activity ended at some moment in the remote past. Compared to Shi's rendering without adverbial modifier,

Chinese adverbial modifiers such as "似的" and "樣子" used by Lan and Shi make their renderings sound more colloquial in terms of target language use:

Example (7)	He reach down and rub his stomach, look off side her head like
	nothing been said.
Chang	他把手伸到肚子揉揉,望著她的上方,好像她什麼都沒 說過似
	的。
Lan	他把手放到肚子上,來回摸著,看著雪兒的側面,裝著雪兒啥
	也沒說的樣子。
Shi	他摸摸他的肚子,偏過頭去,好像她什麼也沒說過。

dəne/done denotes that an event has ended (example 8), having had some experience (example 9) or event of recent past (example 10). It may precede the present form or verbs ending in -ed. ParaConc retrieves 35 concordances that contain done, and the use of dəne is not found. The following three sentences show that particular activities occur in a different time frame:

Example (8)	He say one night in bed, Well, us <i>done help</i> Nettie all we can.
Chang	一天晚上他在床上說,我們 已經儘可能幫 助奈蒂了,
Lan	有天晚上他在床上告訴我,我們 已經盡心盡力 ,
Shi	一天晚上他在床上說,我們 已盡力幫 妮蒂的忙了,

Example (9)	I feel bad sometime Nettie <i>done pass</i> me in learnin.
Chang	有時候當奈蒂把她學的東西 教給我 ,我覺得好難受。
Lan	奈蒂每次 教我 唸書時,我都覺得難過。
Shi	有時妮蒂 教我 唸書,我覺得很難過。

Example (10)	His mammy <i>done said</i> No More.
Chang	他媽媽 說 不准再用人了。
	(Back Translation: His mother said hire people no more)
Lan	他母親也受不了。
	(Back Translation: His mother can't stand any more.)
Shi	他媽說再也不幫忙了。
	(Back Translation: His mother said no more help.)

The *done* sequence in example (8) is similar to the present perfect in American English, but it denotes that an event has ended. All three translators use "已經" to specify the event is already ended at some period in the past. In example (9), the meaning expressed by *done* construction to depict a particular experience is similarly rendered as "教給我" or "教我". However, the sentence in example (10) that denotes an event that occurs in the past receives different interpretations. Lan's and Shi's interpretation of "done said" is closer to the original meaning, except that Lan did not translate *said* literally.

With regard to field, the level of technicality of the source text manifests through the lexical items and lexicons for the verbal markers. In terms of the former, the type of translation problem is less challenging in that mistranslation found in examples (1), (3), (4) and (10) may be due to the translator's failure to grasp the degree of specificity or precision of the lexical items of the source language and to relate to one another by virtue of their semantic affinity. In terms of the latter, the type of translation problem is more predictable in that translation difficulty often arises from systemic lack of fit in linguistic transfer due to the fact that available verbal markers may vary across languages. It is impossible, therefore, for translation to reach the desired degree of accuracy in a given semantic field.

3.3.2 Tenor

The tenor can be related to the role relations of speaker and hearer in a discourse reflected in the speech functions in mood, including declarative for statement, interrogative for question and imperative for command (Hatim & Mason, 1997, p. 23). The systematic nature of sentence formation in AAE is quite different. In forming a declarative statement or imperative command, multiple negation constructions often occur in the spoken speech in AAE. In forming an interrogative question, Wh-questions in AAE share similarities with wh-questions in general American English, but they can be formed in three major patterns.

The system of negative marking contrasts with the system in mainstream English in that it allows more than one negative element in clauses that are interpreted as negative (Green, 2002, pp. 77-78). Most importantly, extra negative elements in the AAE sentence do not contribute any additional negative to the sentences. That is, two negatives do not yield a positive. Example (11) and (12) are double and multiple negation constructions. As extra negative elements *can't* and *don't* contribute negative meaning to the sentences, *nobody* and *nothing* simply adds emphasis without adding any negative meaning:

Example (11)	Can't nobody tell 'em nothing even today.
Chang	直到今天都沒有人指揮得動,
Lan	直到今天都還沒有人能開導他們,
Shi	甚至到今天, 沒人 能告訴他們做什麼,

Example (12)	Her mouth open showing all her teef and <i>don't nothing</i> seem to be
	troubling her mind.
Chang	張著嘴露出所有的牙,好像 沒有任何 心事。
Lan	嘴唇張著,牙齒微露,一副 無憂無慮 的模樣。
	(Literally: carefree)

Shi	她的嘴張開,牙齒全露出來, 似乎沒什麼想不通的事 。
	(Literally: it seems nothing cannot be straightened out)

In example (11), the unique construction of multiple negation disappears in the Chinese translation in which only one negation "沒有" is found. Moreover, the three translators tend to interpret and clarify the meaning of *nothing*, and the cohesive means employed by translator to render *nothing* comprise addition of extra reference. In example (12), Lan's and Shi's renderings "無憂無慮" and "沒什麼想不通" are intended with the reconstruction of double negation, but Lan's use of Chinese idiom creates a less confusing effect than Shi's unusual use of two negatives in her rendering.

Wh-questions introduced by words begin with who, which, what, why, when and where, form interrogative questions that make direct request for information or interrogation. There are three patterns for wh-questions: (1) the auxiliary follows the wh-word and precedes the subject as displayed in example 13 (2) there is no overt auxiliary in the third type as displayed in example 14 (3) the auxiliary immediately follows the subject as displayed in example 15 (Green, 2002, p. 87). Whether there is an auxiliary in the question or the auxiliary is omitted, all of the three patterns are rendered in accordance with the Chinese syntactic construction of wh-questions:

Example (13)	But what do it look like? I ast.
Chang	那麼祂長得是 什麼 樣子呢?我問。
Lan	那祂到底長得像 什麼 樣子?我問。
Shi	但是它長得像 什麼 樣子?

Example (14)	What you setting he laughing like a fool fer?
Chang	你 為什麼 坐在這兒,笑得像個傻瓜?

Lan	妳 怎麼 坐在這兒笑得像個笨蛋一樣?
Shi	你笑什麼?笑得像個傻瓜一樣。

Example (15)	Why you don't work no more? he ast his daddy.
Chang	你為什麼不 再工作了?他對他爸爸說。
Lan	為什麼你不 再下田工作了呢?他問他爸爸。
Shi	你為何不 再工作了?他問他的爸爸。

Only Chang's translation in example (14) turns *what* question into *why* question that reveals a more striking shift. Further, Mr._____'s dialectal use is replaced by the more formal and polite tenor. In establishing translation adequacy, the three translators somewhat deals with idiolectal characteristics as not being particularly noteworthy.

3.3.3 Mode

The mode represents the patterns with which cohesive and coherent texts are created in the category of theme. It is generally known that the central property of text is coherence, which is realized by means of cohesion markers such as referent pronouns, connectives (conjunctions and conjunctive adverbials), collocation, lexical repetition, synonymy, etc. In the case of particular collocation found in American English, *get over*, *call—self*, *get—possessive pronoun—noun—on* are collocated to form special semantic meaning. According to Green, *get over* means take advantage of someone or a situation; *call—self* means making attempt to do something or be someone but not quite doing it as the observer thinks it should be; *get—possessive pronoun—noun—on* means to engaged in some activity (2002, p. 21, 30). The following examples are retrieved by ParaConc:

Example (16)	I can't <i>get over</i> having a house.

Chang	我還是不習慣擁有一幢房子。
	(Literally: am used to)
Lan	我真沒 想到會 擁有一幢屬於自己的房子,
	(Literally: think of)
Shi	我還無法相信這幢房子是我的。
	(Literally: believe)

Example (17)	I brought you here to love you and help you get on your feet.
Chang	我帶你來是為了愛你,讓你 站起來 。
	(Literally: stand up)
Lan	我帶妳來這兒,是因為我愛妳,要幫助妳 獨立 。
	(Literally: independent)
Shi	我帶你來這兒是因為我愛你,我要幫你 站起來 。
	(Literally: stand up)

In example (16), Lan's and Shi's renderings of *get over* is more consistent with the definition for the lexical entry of *get over* in AAE. In example (17), *get on your feet* is received with appropriate rendering. However, Lan's rendering "獨立" is more dynamic and powerful compared with Chang's and Shi's literal translation.

In search of *call—self*, example (18), though not an exact match, is an interesting example for discussion. Uncle Tom is a pejorative racial term that describes an African American who is subservient to white authority. As at this point Sophia is jailed because she refuses to be the maid of the mayor's wife, Squeak is sent to negotiate with warden about keeping Sophia in jail. To Shug, this negotiation is not aimed at currying favor with the warden. Therefore, being compared to Uncle Tom is unfair. Shi chooses not to translate this sentence, and both Chang and Lan misinterpret the meaning of "Uncle Tom wasn't call Uncle for nothing," which could be translated as "湯姆大叔這名字並非空穴來風":

Example (18)	Shug snort, Well, she say, Uncle Tom wasn't call Uncle for
	nothing.
Chang	夏格哼一聲說,他不能平白被人叫叔叔。
	(Back Translation: He cannot be called uncle for nothing.)
Lan	雪兒嗯了一聲,她說:湯姆大叔不會平白無故,一無所求地
	叫人大叔的。
	(Back Translation: Uncle Tom cannot be called uncle for
	nothing, called others uncle for nothing.)
Shi	N/A

In addition, negative inversion construction is another special type of collocation which has unique meaning. The mark of negative inversion, of declarative intonation when uttered, consists of an auxiliary obligatorily followed by an indefinite noun phrase which does not name anyone or anything in particular. In the source text, six examples are found with a negative auxiliary with a negative indefinite noun phrases: don't nobody, can't nobody, don't nothing, can't nothing, ain't nothing. As displayed in example (11) and (12), both sentences have a negated auxiliary (can't, don't) followed by a negative indefinite noun (nobody, Although the negative inversion construction resembles the nothing). construction of yes-no questions in the general American English, they are not questions and should be uttered with declarative or assertive intonation. rendering of negative inversion in example (11) is worth mentioning in terms of the shift of syntactic patterning. In the source text, negative inversion occurs in the initial position of the sentence; however, all three translators place temporal adverbial in first position instead. This shift seems to conform to typical target language norm.

3.4 Evaluation of Translator's Mediation

As the result of register analysis shows, all three translators use "variation" to change linguistic or paralinguistic elements such as dialectal markers for characters that affect aspects of linguistic variation. This strategy leads to using paraphrasis, particularization, substitution and transposition techniques to realize African American lexicon, negative inversion, wh-question, and double/multiple negation. Shi's translation is also involved in using the other two techniques, namely, compensation and reduction. Compensation technique is used when she mentions in the preface about the task of authentically representing the vernacular of Celie in the translation into Chinese. Reduction technique is used when Shi suppresses description of Celie's homosexual tendency and omits the translation of some cultural references (see example 18). It is apparent that these three translators' linguistic transcodification and modification of semiotic categories alters the correlation between grammatical and lexical levels in AAE. The result achieved is a discursive creation rather than an authentic representation of literary black dialect.

Translators may find it impractical to translate literary black dialect into another local dialect used and spoken by the target readers. If resemblance of target text to the source text can really be achieved by means of local dialect, i.e. Taiwanese or Taiwanese Mandarin, used as compensation to solve the representation problem of the unique linguistic properties of AAE, the communication is likely to fail because it will cost the readers more processing effort since Taiwanese is a spoken language rather than a written one. We may infer that a loss of adequate resemblance for gain in accessibility reveals that the translators' priority is to yield adequate utterances and contextual effects that do not cost their reader any unjustified processing effort. In order to maintain successful communication, translators have to modify stratum of literary dialect that may hinder acceptability principle at the expense of making the textual properties of the target text resemble the source text. However, such modification will inevitably

make the source language text and that of the target language different to a greater degree, and the relevance of source text to the target audience is minimized.

4. Pedagogical Reflections

In order to know more about each student's reaction to this corpus-based pedagogical design, interview survey method was used with ten students who were encouraged to talk about their perception of literary translation analysis and to provide insights into computer-assisted translation analysis. Six guiding questions for interview are based on two categories: the general applicability of computer-assisted register analysis for evaluation of the ST and the TTs and the effectiveness of this corpus-based approach in enhancing translator trainee's awareness of language transfer and development of competence in contrastive analysis. These questions are listed as follows:

- (1) How do you see analysis of literary translation as an important and necessary training required in translation degree?
- (2) How do you feel about using computer-assisted register analysis in the classroom?
- (3) Which stage of analysis (preliminary analysis of ST and TT, computer-assisted register analysis, or evaluation of translator's mediation) do you find difficult to proceed?
- (4) Do you feel capable of operating ParaConc by yourself?
- (5) Do you find ParaConc a useful tool to facilitate analysis of translated texts?
- (6) Are you willing to use computer-assisted register analysis to facilitate analysis of literary translation in the future?

In terms of the general applicability to practical evaluation, all students display a general understanding that analysis of literary translation is a primary

work prior to literary translating. Drawing upon the actual practice of employing ParaConc to help explore and analyze how dialectal features are rendered in the translation into Chinese, all of the students feel "capable of using ParaConc to elicit translation equivalents and conducting contrastive linguistic analysis on their own." The employment of ParaConc somehow "makes the task of investigating how one language is realized in the other language more manageable and attainable." Through this in-class demonstration, they also realize "text analysis and interpretation of findings play an important part in the study of parallel corpus and production of contextually informed explanation to the type of equivalent being elicited." However, half of the students feel that "they need more training on how to evaluate translator's mediation."

In terms of the effectiveness of the computer-assisted register analysis in enhancing awareness of the differences and similarities between the source text and the target text, most students display positive attitudes toward the training as such. The feedbacks all indicate that the training is constructive in "increasing awareness of language constraints encountered during language transfer." The exemplars elicited from corpus by ParaConc "help them apprehend the extent and type of variation between Chinese and AAE." Although a few students reveal that "this sort of input may not be of immediate help in enhancing their translation techniques or skills," it makes them understand "the complexity and dynamism of the translation." All students in general are willing to make use of ParaConc to do contrastive analysis on their own.

Concluding Remarks

As languages consist of registers and the notion of register is part of the general linguistic system, the choice of language-specific characteristics can be traced back to the language system. A qualitative analysis on register in this pilot test gives an indication of which lexico-grammatical features are predominant in a text, and linguistic features that represent dimensions of functional variation are

then selected for analysis. The advantage of implementing computer-assisted register analysis in translator training is that registerial variation can be observed systematically at the level of lexico-grammatical forms and communicative effects. As ParaConc is able to bring translation near original and assists users in exploring a specially designed parallel corpus, it provides immediate access to each individual translator's rendering of the lexical, semantic, and syntactic relational levels of the source text. Moreover, the systematic procedure for the analysis of literary translation is practicable, objective and replicable. The use of machine-readable corpora of parallel texts in translator training not only enables micro-level textual study to be conducted, but also allows students to develop competence in contrastive analysis. With carefully thought-out uses of parallel corpus and bilingual concordancer and proper integration into translation courses, there can be significant benefits to translator trainees.

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