



**Translation techniques of Bilingual and Trilingual EFL
Teachers and Students' Cognitive Retroactive Transfer CRT
strategies in Halayeb Schools**

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Abstract:

The research aimed to identify syntactic and semantic translation techniques followed by both bilingual and trilingual English Language teachers in Halayeb and Shalateen schools. It also aimed to identify their knowledge of the Cognitive Retroactive Transfer CRT-oriented translation strategies followed by their students. The research utilized two instruments: the first is the translation techniques questionnaire that aimed to identify the bilingual and trilingual teachers' translation techniques that they follow in their classes. The second is the CRT-oriented translation strategies questionnaire which identifies teachers' knowledge of CRT-oriented translation strategies followed by their students in Halayeb and Shalateen schools. The research followed the descriptive and the one-group quasi experimental designs. Participants (N.22) were both bilingual and trilingual English language teachers, Red Sea educational directorate. Results showed that there were no significant means differences between the participants in the translation techniques that they follow in the total scores dimension (sig .428) while there were significant means differences between them in the syntactic techniques dimension (.740) favoring the trilingual participants. Results also showed that there were no significant mean differences in participants' knowledge of CRT-oriented translation strategies followed by their students in the total score (.291) while there were significant means differences between them in the vocabulary dimension (.947). The research recommended integrating CRT-oriented translation techniques in both pre and in-service EFL teacher education programs. It also recommended running professional development programs for trilingual EFL teachers in Egypt focusing on both the translation techniques and strategies.

Key words : Translation – Bilingualism – Trilingualism – CRT

1. Introduction

English is the first foreign language in the Egyptian educational system while Arabic is its first and official language. Meanwhile, according to Baker et al. (2022), there are also other linguistic groups in Egypt who speak other native languages other than Arabic. For instance, the Beja of the southern section of the Eastern desert use an Afro-Asiatic language of the Cushitic branch known as to Bedawi. Speakers of Beja language mainly reside in Red Sea strip, mainly the cities of Shalateen, Halayeb and Abo Ramad. Therefore, Arabic, English and Beja contextualize this bilingual and trilingual setting. Teachers in these areas can be either bilingual (Arabic L1 and English as L2) or trilingual (Beja L1, Arabic L2 and English as L3). They tend to use translation in their class practices due to this language diversity in their multilingual classes. Moreover, Hoffmann and Stavans (2007) point out that most of the research on trilingualism focuses on individuals who acquire or learn a third language in a school context just like the case of this research where students are multilingual.

In this context, a distinction between multilingualism, translation, interpretation, borrowing and code switching should be made. Lanstyak and Heltain (2018, 6) stated that "translation and interpretation do not usually allow code switching: the texts produced are intended to be in one language only. The original source text is not available to the target language reader. Borrowing source language words does occur, however, it is an intentional standard translation procedure designed to provide additional contextual effects. The resemblance to bilingual code switching is striking". EFL teachers may use code switching during their class instructions, tasks and other teaching practices.

Within EFL practices, translation from and to English is a key language practice and a meaningful human communication between different cultures. The use of different languages together – translanguaging- is closely related to bilingualism and multilingualism. Translation has long been connected in EFL literature with multilingualism and learning. Studies that connected multilingualism and English as a Foreign Language Learning FLL highlighted the value of multilingualism in education and communication (e.g. May, 2014; Poza, 2017; and Basolos, 2021). Translation is valuable mediation tool in EFL leaning setting. According to Eser & Dikilitas (2017), teachers not only teach translation but also use it as a medium of instruction for foreign

language learning; it is rather a learning strategy. Jessner (2006, 2) indicated that “in a growing number of countries worldwide English is learnt and taught as a third language”. Thus, English is seen as a factor in the formation of trilingualism and the spread of English.

The replication of rules from the first language (L1) to the second language (L2) is known as *language transfer* while the opposite transfer is called *cognitive retroactive transfer*. Yu & Odlin (2015, 286) stated that "language transfer or cross-linguistic influence has been one of the hottest topics in the fields of second and third language acquisition, bilingualism, multilingualism, and the broader field of language learning and teaching research, receiving considerable critical attention from teachers and researchers in the past seven decades". They further discussed the role of language transfer in different areas and subsystems of language and language knowledge and/or skills as well as the field of translation. Similarly, Michie et al. (2008) stated that cognitive language transfer refers is a concept that refers to the phenomenon in which learners try to express their thoughts using their native language's pronunciation, semantic meaning, structures or cultural habits when they communicate in English. Transference is a psychological term originally and refers to the effect of learners' acquired knowledge or skills on the acquisition of new knowledge or skills in the course of learning.

Language transfer or linguistic interdependence hypothesis is an early claim by Cummins's (1979) that refers to linguistic skills involved in reading transfer between languages. He hypothesized that a learner who exhibits mastery and efficiency in linguistic skills in the first language (L1) develops literacy skills via these skills when acquiring the second language (L2). According to Feder and Abu-Rabia (2022, 2013) research literature presents extensive evidence for transfer of linguistic skills from the first language to the second and third languages. Transfer of linguistic skills in the opposite direction, from the second or foreign language to the first language, called cognitive retroactive transfer of linguistic skills, has only recently begun to be studied in the bilingual research literature (Abu-Rabia & Bluestien-Danon, 2012; Abu-Rabia et al., 2013). CRT hypothesis attributes similar occurrence of improvement in linguistic and meta-linguistic skills in the additional language to the first language. For instance, Laufer (2003, 332) mentions two effects of L2 on L1 stating that "The first situation is the proportion of infrequent words used in writing e.g. ‘asked’ instead of ‘inquiry’, for several

reasons; one of them is difficulty to access. The second situation is L1 collocation as correct or incorrect".

In translation studies, CRT adds to the strategies followed by both teachers and students in their language translation activities and courses. These strategies (Zahri, 1998) include lexical, semantic and lexicosemantic transfer. Zahri further states that "Lexical relations, Collocations and false friends constitute the most significant areas of negative language transfer in translation. These aspects of interlingual lexical contrast illustrate the considerable difficulties that foreign language students face when they translate forms and expressions from a source language into a target language." (p.1). In her study, Kharboush (2016) investigated probing some discrepancies in the Egyptian secondary stage students' proficiency in translation, attributed to lexical and semantic transfer types as reflected through a set of language tasks. The study concluded the effect of linguistic transfer on participants' translated tasks. In this research the type of linguistic transfer investigated is the retroactive from L2 and L3 to L1 translation tasks followed by students. Thus, the main research aims to identify the translation techniques followed by both bilingual trilingual teachers and to explore their knowledge about CRT-oriented translation strategies followed by their students.

2. Problem of the Research

EFL teachers in the Egyptian schools at Halayeb and Shalateen cities are both bilinguals (Arabic and English) and trilingual (Beja- Arabic-English) speakers. Bejawi teachers who are speak Beja as their mother language; other teachers who are originally from other Egyptian cities speak Arabic as their mother language. They follow different translation techniques in their EFL classes; they code switch between the different languages during translation activities and tasks. There is a need to identify the various syntactic and semantic techniques that they follow during translation and the aspects of linguistic transference they follow. There is also a need to identify their knowledge about the different cognitive retroactive transfer- oriented translation strategies followed by their students. The identification of their translation techniques and CRT- oriented strategies may help in designing proper programs for them in both pre and in-service settings as their students in these schools are both bilingual and trilingual.

3. Aim of the research

The aim of the research is two-fold. The first is to identify the translation techniques followed by bilingual and trilingual teachers in their EFL classes. The second is to identify the teachers' knowledge of CRT-oriented translation strategies followed by their students.

4. Significance of the research

The research is thought to be important for the following:

- 4.1. It highlights trilingualism and bilingualism within EFL context in the Egyptian educational system and its current foreign language learning practices.
- 4.2. It provides a framework for the translation techniques followed by bilingual and trilingual teachers in their EFL classes during tasks and translation activities.
- 4.3. It highlights the CRT-oriented translation strategies followed by both the bilingual and trilingual students in Egypt.
- 4.4. It adds to the theoretical literature of the two variables of CRT and translation studies.

5. Questions of the research:

- 5.1. What are the syntactic and semantic translation techniques followed by bilingual and trilingual teachers?
- 5.2. What are the differences between the bilingual and trilingual EFL teachers in the translation techniques they follow in translation classes?
- 5.3. What are the Cognitive Retroactive Transfer CRT-oriented translation techniques followed by their bilingual and trilingual students?
- 5.4. What are the differences between the bilingual and trilingual EFL teachers knowledge of CRT-oriented translation strategies followed by their bilingual and trilingual students?

6. Hypotheses of the research:

The research hypothesized the following:

- 6.1. There would be no statistically significant mean differences between both bilingual and trilingual teachers' syntactic and semantic translation techniques followed in their EFL classes.
- 6.2. There would be no statistically significant mean differences between both bilingual and trilingual teachers' knowledge about the Cognitive

Retroactive Transfer CRT-oriented translation strategies of their students.

7. Design

The research followed the descriptive analytical design that utilized two questionnaires to collect and analyze data driven from the participants. The two questionnaires (Translation techniques questionnaire and CRT-oriented translation strategies questionnaire) used closed-questions format. The obtained data were analyzed using SPSS and were discussed quantitatively and qualitatively. Participants of the research were (22) bilingual teachers and trilingual teachers who were purposefully selected according to spatial, language and specialization variables.

7.1. Participants: two groups of bilingual and trilingual EFL teachers (N.22) from Red Sea Educational Directorate, Egypt who were adjusted according to language variable:

7.1.1. Bilingual teachers (L1 Arabic –L2 English)

7.1.2. Trilingual teachers (L1 Beja –L2 Arabic – L3 English)

7.2. Spatial delimits: Red Sea Governorate –Halayeb schools.

7.3. The language areas in the translation techniques questionnaire included 22 translation techniques (11 Syntactic and 10 semantic techniques). CRT translations strategies questionnaire included 24 CRT-oriented strategies (12 Grammar and 12 Vocabulary strategies).

8. Instruments

The research utilized two main instruments:

8.1. Translation techniques questionnaire. It aimed to identify the bilingual and trilingual teachers' syntactic and semantic translation techniques that they follow in their classes. The questionnaire reliability was statistically calculated and its content was validated through jury validation. Reliability value was (.652) which refers the consistency of its generated scores. The questionnaire included two parts about syntactic and semantic techniques followed by bilingual and trilingual teachers. The questionnaire in its final form included translation strategies such as addition, shifting, substitution, combining, division and compression. It also included translation techniques such as borrowing, adaptation, modulation, lateral translation, cultural translation, and discourse variation.

8.2. Cognitive Retroactive Transfer CRT-oriented translation strategies questionnaire. It aimed to identify the bilingual and trilingual teachers'

knowledge about the Cognitive Retroactive Transfer CRT translation strategies followed by their bilingual and trilingual students. The questionnaire was validated statistically in terms of validity and reliability ($r = .634$). Content validation was run through a jury of TEFL experts who recommended adapting and correcting some items to reach its final valid form. The questionnaire included two parts: the first part included 12 items about Grammar- oriented CRT translation strategies (e.g. patterns, structures, expressions, phrasal, and tenses transfer). The second part included 12 items about vocabulary- oriented CRT translation strategies (e.g. equivalents, expressions, terms, proper names and idioms).

9. Theoretical framework:

This review contextualizes bilingualism and trilingualism in the Egyptian educational system, translation process, and cognitive retroactive transfer-oriented strategies. It also aims to discuss the relation between CRT as a cognitive faculty and its relation to translation strategies in FLL context.

9.1. Contextualizing multilingualism in the Egyptian education.

Research in multilingualism is growing due to the developments of bilingual and multilingual studies. According to Forbes & Fisher (2018, 32), in an increasingly multilingual world, "empirical knowledge about the reciprocal influence between the mother tongue (L1) and a learner's acquisition of foreign languages (FL) is crucial yet remains surprisingly scarce". Anastassiou et al. (2017, 61) expressed the view that "since trilingualism is a rather recent field of research there are a lot of differentiations on its definitions. Most of them have been through bilingualism. Trilingualism has been seen as a branch of bilingualism or even as an extension of bilingualism". Trilingualism occurs in different contexts and settings where learners acquire three languages in different learning / teaching environments. In this view, Hoffman (2001, 3) distinguished between five different contexts of trilingualism. In the first trilingual setting, children adopt two home languages different from the one spoken in the community while the second setting children grow up in a bilingual community and their home language is different from the language of the community. In the third, bilinguals obtain third language in the context of school education. The fourth setting is bilingual learners who obtain a third language in educational context where in the last

setting individuals belong to trilingual communities. Surprisingly, participants in this research do not belong to any of these categories.

The scope of the research belongs differently to a sixth category to be added to Hoffman's. These Egyptian participants (teachers as well as student) speak a mother tongue "Beja" and they study the official language of the community "Arabic" while they learn "English" as a foreign language. Bilinguals first acquire L1 or their mother language, then they study English as L2; they study L2 as their second or state official language, while Beja speakers study English as L3. Cenoz (2003) states: "Third language acquisition presents more temporal diversity than second language acquisition" (p. 72). Similarly,, Cenoz (2000) describes at least four types of acquisition order: (i) Simultaneous acquisition of L1/L2/L3 (although this is rather rare) (ii) Consecutive acquisition of L1, L2 and L3, (iii) Simultaneous acquisition of L2/L3 after learning the L1, (iv) Simultaneous acquisition of L1/L2 before learning the L3. The fourth case describes the trilingual case of this research.

In his study, Moussa (2021, 3) expressed the view that "using local languages in English classes have yielded advantages in a functional language view for the language. They are often seen as communicative resources easily drawn upon by classroom participants to realize some purposes". Similarly, Tockie-Ofosu et al. (2015) investigated teachers' perceptions about the use of mother tongue and its use as a medium of instruction. Results showed the value of using mother tongue in both cultural and communicative purposes. Using Arabic as a first language was investigated in a study by Hussein (2013) in a study that aimed to identify the reasons, attitudes and purposes of using Arabic in teaching English as a foreign language. The study resulted that participants used Arabic in learning English for various reasons and that it helps them in their learning. Literature highlighted the use of local, foreign and second languages in cross-linguistic variations and mutual effectiveness (e.g Bunyi, 2005; Ogechi, 2003; and Tang, 2002).

Therefore, Beja as a mother language spoken by some Egyptian students and teachers in Red Sea area adds to multilingualism in Egypt. This study investigates and compares between bilingual and trilingual teachers in translation aspects.

9.2. Translation

Teaching translation aims to foster the aim of human communication between two or more different texts. This aim (Ali, 2013, 139) derives from the nature of translation itself as "a type of bilingual interaction or communication of the meaning of a source-language text by means of an equivalent target-language text". Teaching translation for effective communication in EFL context as the case in Egypt may face different challenges. For instance, Gabr (2002) investigated the challenges faced by Egyptian pre-service teachers and concluded that these difficulties include the courses, teaching methods, bylaws and the methods of instruction. These challenges were supported by the different studies in the Egyptian context

As to translation techniques, although literature distinguished between strategy and technique as the latter is smaller in range but most of translation studies did not distinguish between them. For instance, according to Baker (2005, 88), translation technique or strategy is "a procedure for solving a problem encountered in translating a text or a segment of it". These strategies can deal with different text types and are called general strategies or can deal with a certain type of text and are called specific strategies.

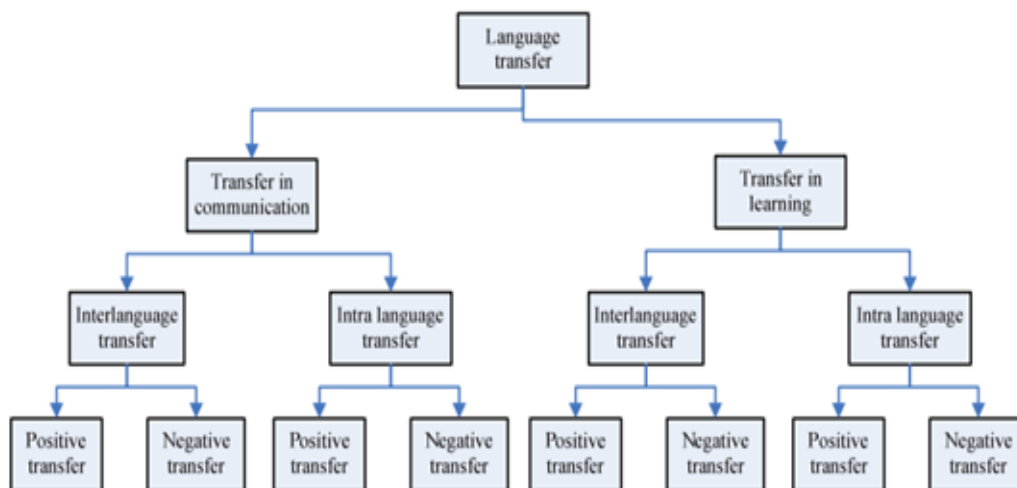
The process of language translation is meaning and culture-based rather than structure conversion from one language to the other. Amant (2013, 4) expressed the view that "Translation is not a simple process of converting individual words from one language to another. That is, it is not a process that anyone can do, with the aid of a bilingual dictionary and enough time. Rather, translation is a specialized skill for which the translator must know two things". He further expressed two requirements in the process of translation: 1. what wording to use to convey the same idea correctly and effectively in another language. 2. The rhetorical expectations of both cultures. In his study, Lauffer (2022, 65) summarized the translation process in three overlapping stages stating that "the translation process can be broken down into three general strategies: understanding and reasoning; searching; and revising". These strategies include syntactic and semantic translation techniques.

9.2. CRT-oriented translation strategies

Transference of linguistic features such as grammar or vocabulary from the foreign language to language 1 is called Retroactive Transference (Feder & Abu-Rabia, 2022). This transfer happens when the students communicate, read, and translate texts as well. According to Havlaskova (2010) language transfer is a phenomenon that may occur at the level of a word, a phrase, an idiom, a metaphor or a term of a whole syntactic structure. This is processed when translators transfer some source texts into target texts influenced by different aspects of the source language.

Language transfer is divided into inter-language transfer and intra-language transfer. Inter-language transfer means that learners are not familiar with the rules of English, but transfer the grammar rules of other acquired language to their native language. Intra-linguistic transfer is a phenomenon of negative transfer within the English language, and refers to that learners widely use some rules of the English language in a wrong way, which leads to over-generalization. Since the over-generalization is not appropriate, there will be errors (Wang, 2018). The following figure illustrates the classification of language transfer.

Figure (1) Classification of Language transfer



The figure shows the two types of language transfer in both communication and learning settings. This linguistic transfer, that is recognized in translation as well, can be either positive or negative. Positive transfer facilitates learning, while negative transfer impedes learning. In this

view, Diao (2015) believes that interference errors of mother tongue account for a very small proportion of language errors made by learners.

Translation at both word and sentence levels relates to language transfer in EFL classes as students tend to use, misplace, reverse or overlap concepts. For instance the study by Isurin and McDonald (2019, 312) highlighted the relation between translation and language overlapping. They further stated that "First language vocabulary is vulnerable to forgetting after massive exposure to a second language. Two possible factors responsible for the forgetting are degree of semantic overlap between concepts in the two languages and amount of second language exposure". They further explained that this field of study is labeled as first language forgetting, first language loss, or first language attrition. Early cognitive research (e.g. Baddely and Dale 1966) assures the high impact of semantic similarity in memory. Thus, semantic oriented translation techniques which entail vocabulary transference are key translation techniques.

Semantic transfer and structural language transfer (Vannestal, 2009; Galvao, 2009) are crucial language features in translation classes and practices. This claim was supported by a study that was carried out in the Egyptian context (Kharboush, 2016) which investigated the interference of the native language, Arabic, in the English translation of the Egyptian students. Results of the study showed that the problems that arise from interference are mainly lexical and semantic, and might be attributed to the participants' lack of knowledge and awareness of the source language as well as the target one. Furthermore, the study concluded that "sometimes translations from Arabic into English and vice versa tend to lose original meanings or be misinterpreted compared to the source text because of linguistic transfer. It suggested that raising awareness of linguistic transfer through focused attention on transfer errors alongside with systematic instruction and practice on translation might be valued by the students and seemed essential for them to achieve productive proficiency" (p. 543). Teachers have to be aware of the linguistic aspects of transfer in their EFL classes in general and in translation in particular due to the nature of translation as a bilingual process.

Another different transfer in intra-linguistic studies is the phonological transfer. It is a key aspect of English language skills transfer to Arabic and Beja languages translation skills in this study. According to Quinoa et al. (2002), Phonological awareness is a major language aspect which anticipates reading in L1 and L2, regardless of the mother tongue "Beja for trilingual teachers and Arabic for bilingual teachers in this research". This transfer was

examined in Arabic and English (see Abu-Rabia & Siegel, 2002, 2003) but may not be studies in Beja language studies. Similarly, other language aspects include morphological awareness, syntactic awareness, and reading fluency, reading comprehension, spelling, semantic knowledge and orthographic knowledge (Feder & Abu-Rabia, 2022). Phonological aspects are also part of interpretation, which should be developed during translation classes and tasks in both bilingual and trilingual settings.

CRT-oriented transfer can be grouped into grammar or vocabulary related transfer. Considering the nature of retroactive transfer (transfer from foreign language(s) to first language); this means the type of CRT-oriented translation strategies are either grammar or vocabulary oriented. The question of the L2 effect on the L1 arose out of the notion of multi-competence, knowledge of two or more languages in one mind. AlKhateeb (2018, 331) further "categorizes the effects of L2 on L1 in into three venues: First, a positive effect such as her hook statements that she applies it in her Arabic writing unknowingly. For instance, she commences one of the Arabic texts with "كثير ما يتردد علي هذا السؤال من هو قدوتك في الحياة؟" asking question as a 'hook' strategy that she transfers from her knowledge of English writing skills. The second venue is a negative effect as in sentence-connecting, punctuation marks, and oddly repeating first person singular pronoun 'أنا' 'I'. And finally, a neutral effect such as repeating "أيضا" which means 'also'. This transfer (positive-neutral or negative) can happen in grammar or vocabulary and in a word, sentence or text levels.

In the Egyptian context, there are various studies that discussed the strategies related to linguistic transfer followed by EFL students (e.g. Darwish, 2018; Kharboush, 2016; Yousef, 1983). For instance, over a sample of 35 Egyptian secondary school students, Kharboush (2016) aimed at probing some discrepancies in the Egyptian secondary stage students' proficiency in translation, attributed to lexical and semantic transfer from Arabic to English, reflected through a set of language tasks. Through analyzing participants; errors, the study assured that most problems that arise from interference are mainly lexical and semantic, and might be attributed to the participants' lack of knowledge and awareness of the source language as well as the target language. It also concluded that sometimes translations from Arabic into English and vice versa tend to lose original meanings or be misinterpreted compared to the source text because of linguistic transfer.

Another study by Yousef (1983) aimed to identify the role of transfer in second language acquisition. A sample of written production of English relative clauses by 102 Arab ESL learners is analyzed. The results of this

study indicate that language transfer is a significant factor in second language acquisition. A distinction between differencing and non-inferencing transfer is possible. He further explained that in addition to the strategies already known in the field such as transfer, simplification, and overgeneralization, Arab ESL learners seem to employ various perceptual and production strategies. In the light of the above review, the research investigates the translation techniques (syntactic and semantic) followed by both bilingual and trilingual teachers and their knowledge of the CRT-oriented translation strategies followed by bilingual and trilingual EFL students.

10. Results

The research utilized two instruments to identify the translation techniques followed by the bilingual and trilingual EFL teachers and their knowledge of Cognitive Retroactive Transfer CRT-oriented strategies followed by students in Egyptian Halayeb and Shalateen schools. The first instrument is a translation techniques questionnaire while the second questionnaire is a cognitive retroactive transfer techniques questionnaire. Using SPSS, reliability of the two instruments was calculated using Cronbach's Alpha as the following table shows;

Table 1
Reliability of Translation Techniques Questionnaire

Reliability Statistics	
N of Items	Cronbach's Alpha
21	.652

The above table shows that $r = .652$ which is an accepted reliability value which indicates that the instrument is reliable and can be used for its purpose. A similar procedure was run over the second instrument as the following table 2 shows.

Table 2
Reliability of CRT Questionnaire

Reliability Statistics	
N of Items	Cronbach's Alpha
24	.643

The obtained r value (.643) is an acceptable reliability value for the instrument. This value means that the instrument can be used for its purpose and is reliable. Content validation was calculated by the square root of the reliability value and was (.807) for the first questionnaire and

(.801) for the second questionnaire. Following this validation measurement, the two instruments were used to answer the questions of the research. Each instrument included two parts and total value for the two parts (part1, part 2 and total score). Non-parametric test procedure was run (due to small sample size) over the responses of the participants (22) to identify the means differences between them in both the translation techniques and CRT as the following table shows.

Table 3
Descriptive Statistics NPR Tests

Parts	N	Maximum	Minimum	Std. Deviation	Mean
part one trans.	22	31.00	19.00	2.79300	26.09
part two trans.	22	27.00	17.00	3.32640	22.72
Sum Translation	22	57.00	37.00	5.27019	48.81
part one CRT	22	32.00	19.00	4.05829	25.77
Part two CRT	22	31.00	20.00	3.19090	25.09
Sum CRT	22	62.00	39.00	5.76769	50.86
Participants	22	2.00	1.00	.51177	1.50

The table shows the different parts of the two questionnaires; Part one and part two as well as the total score of the translation techniques and CRT strategies questionnaires. It also shows the number of participants 22 (11 bilinguals and 11 Trilinguals). It also shows the maximum, minimum and means of the participants in each section and the total mark. Means of the participants in questionnaire one was (48.81) while in the CRT questionnaire was (50.86). The following table 4 compares between the means of the participants (bilinguals – Trilinguals) in the sub-sections and total score over the two questionnaires.

Table 4
Mann-Whitney Test – Ranks

Sections	Sample	N	Mean Rank	Sum of Ranks
Part One Syntactic Techniques	Bilingual	11	11.05	121.50
	Trilingual	11	11.95	131.50
	Total	22		
Part two semantic	Bilingual	11	12.50	137.50

techniques	Trilingual	11	10.50	115.50
	Total	22		
Total translation score	Bilingual	11	12.59	138.50
	Trilingual	11	10.41	114.50
	Total	22		
CRT part one Grammar	Bilingual	11	12.82	141.00
	Trilingual	11	10.18	112.00
	Total	22		
CRT part two Vocabulary	Bilingual	11	11.59	127.50
	Trilingual	11	11.41	125.50
	Total	22		
CRT total score	Bilingual	11	12.95	142.50
	Trilingual	11	10.05	110.50
	Total	22		

The above table 4 shows the cores of the participants in the translation questionnaire; means of the bilingual teachers in the two sections (syntactic techniques and semantic techniques), and total score were (11.05, 12.50, and 12.59 respectively). Scores of the trilingual teachers were 11.95 for the first part, 10.50 for the second and 10.41 in the total score. This shows the close similarity of participants' responses over the instrument. Results obtained from bilingual teachers' responses over the second instrument CRT were (11.82) for part one "grammar", (11.59) for part two "vocabulary" and (10.05) for the "total score". Means of the trilingual teachers were (10.18) for part one, (11.41) for part two and 10.05 for the total score. These obtained results are statistically similar and this leads to the following statistical procedure that investigates the statistical significance of these means in the light of the two hypotheses of the research.

Hypothesis 1: There would be no statistically significant mean differences between both bilingual and trilingual teachers' translation techniques followed in their EFL classes.

The following table (3) compares between the means of both bilingual and trilingual teachers' groups of participants over the translation techniques questionnaire. It shows the scores of the participants in part one "syntactic techniques" and part two "semantic techniques" as well as their total scores.

Table 4
Test statistics- Translation techniques

statistic	Part one Syntactic techniques.	part two Semantic Techniques	Total Translation skills
Mann-Whitney U	55.500	49.500	48.500
Wilcoxon W	121.500	115.500	114.500
Z	-.332	-.727	-.792
Asymp. Sig. (2-tailed)	.740	.467	.428

Table (3) shows Z value and its significance as obtained by both the bilingual and trilingual teachers over the translation techniques questionnaire. Part one value was (-.332), while part two value was (-.727) and the total score value (-.792). These values indicate that although there is a difference between bilingual and trilingual teachers' responses over the syntactic techniques part (.740) but there were no significant differences between them in the second part (.467) and the total score (.428). This result accepts the null hypothesis and rejects the alternative one.

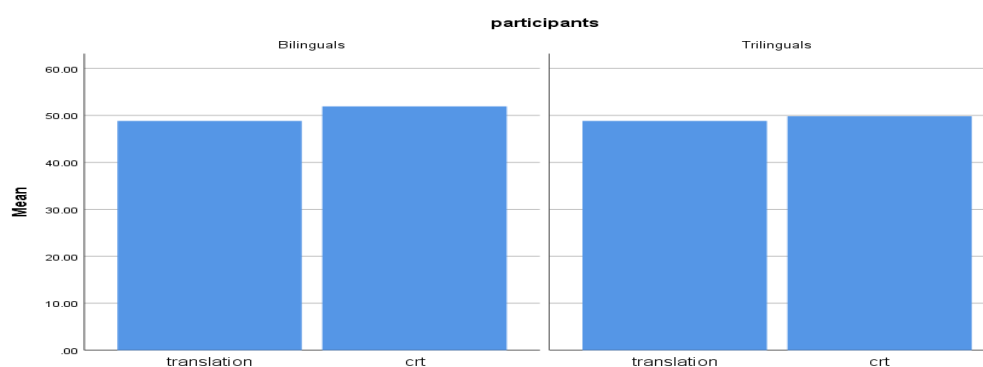
Hypothesis 2: There would be no statistically significant mean differences between both bilingual and trilingual teachers' knowledge about the Cognitive Retroactive Transfer CRT-oriented translation strategies of their students. The following table (5) shows the scores of the two groups over the Cognitive Retroactive Transfer CRT strategies' questionnaire.

Table 5
Test Statistics CRT

Statistic	CRT part one Grammar	CRT part two Vocabulary	CRT Total Score
Mann-Whitney U	46.000	59.500	44.500
Wilcoxon W	112.000	125.500	110.500
Z	-.955	-.066	-1.056
Asymp. Sig. (2-tailed)	.339	.947	.291

The table shows that the Z-value of the total score is (-1.056) which is not significant (.291) while part two "vocabulary" was significant (.947) but part one "grammar" was (.339) which is not as significant value. These results mean that there are no significant mean differences between the two groups in their knowledge of CRT-oriented translation strategies followed by their students. The following figure (1) visualizes the differences between the two groups of participants (Bilinguals – Trilinguals) in both the translation techniques and CRT strategies.

Figure 1
Bilingual and Trilingual Means over the two questionnaires



The above figure clearly shows the similarity in participants' means in both the translation techniques that they follow in their classes as well as their knowledge of their students' CRT oriented translation strategies. This indicates the similarity between the two groups in their translation techniques and CRT knowledge. The following section discusses these results within literature and pertinent studies.

11. Discussion

The research concluded two main results: the first is that both bilingual and trilingual teachers follow similar translation skills which are not affected by their linguistic competences. The second is that there are no differences between bilingual and trilingual teachers in their cognitive retroactive transfer oriented translation strategies. These obtained results have been subject for debate and discussion in EFL literature. Following is a discussion of the pertinent literature that agrees and contradicts these results.

Literature early distinguished between multilingualism and translation. For instance, Grutman (2009, 182) there is a distinction between multilingualism and translation "multilingualism and translation are rarely considered in connection with each other". Similarly, Lanstyak and Heltain (2018, 2) expressed the view that "each discipline has its own approach, so that the connections between cross- linguistic influences in language learning, bilingual language use and translation remain somewhat fuzzy". They further expressed the similarities and differences between bilingualism and translation showing that they are similar in the use of two languages by two bilingual individuals but they are different in the descriptive an interpretive use. Thus, being bilingual does not entail being a competent translator due to the distinctive nature of translation skills. The obtained results agree with the above approach of distinction between translation and bilingualism since the translation techniques followed by teachers are almost similar.

The results also agree with the distinction by bilingual or trilingual communication "code switching" in translation classes. For instance, Poplack (2001, 1) defines code switching as "Code-switching. It refers to the mixing, by bilinguals (or multilinguals), of two or more languages in discourse, often with no change of interlocutor or topic". It is a verbal skill rather than a written competence and this makes the distinction between code switching and translation as a cross-linguistic competence. Results highlight the difference between code switching and borrowing as a translation competence. Borrowing refers to " the integration of an expression from L2 into L1 (or the other way) and the use of an integrated element. In this case the bilingual believes that a L1 word or structure is a L2 word or structure or vice versa" (Grosjean, 2010, 69). The obtained results also showed that both bilinguals and trilingual teachers use borrowing strategies equally.

Results also agree with Pokorn's (2005) claim that although most translators work directly into L1 but they exert effort into L2 "the second language" or L3 "the foreign language" mastery. The obtained results support the view which asserts that being born in a bilingual family or brought up in a bilingual environment "Beja and Arabic in this case" helps acquiring the SL either as a native language, a second native language or a second language. Interacting with L2 speakers in public and private domains or being grown up in a monolingual L1 environment and acquire their L2 at school, as a foreign language or being followed by a prolonged stay in the L2 country "(p.7). These

contexts form the background of their multilingualism. Similarly, Whyatt (2012) regarded translation as a professional activity rather than a multilingual competence. He further assured that translation requires linguistic knowledge and cognitive resources which can be formed in different contexts.

Results of the research showed that bilingual teachers are better than trilingual teachers in their vocabulary-oriented CRT strategies. This highlights the value of bilingualism in vocabulary learning and teaching in EFL literature. This also agrees with the study by Zarghami and Bagheri (2014) who discussed the view that "The results of various studies show that bilingualism has a more positive effect on third language's vocabulary achievement when the first two languages are taught formally. Consequently, the bilinguals who learn their L1 only orally in a natural setting are not more successful". Similarly, the obtained results agree with a study by Zare & Mobarakeh (2013) that examined the effect of bilingualism on vocabulary use. The results highlighted the positive value of bilingualism on vocabulary aspects. The researcher claims that bilingual knowledge of vocabulary is an easy indicator to translation competence than the trilingual knowledge of three language types of vocabulary. Further, the bilingual teachers could outperform the trilingual teachers on the vocabulary-oriented translation strategies due to the knowledge of only two languages more than three languages.

The results add to the studies in foreign language teacher identity (e.g. Li, 2009; Ma, 2005 & Wu, 2012), which assure that teacher identity – being bilingual or trilingual- may affect the teaching practices. These studies also highlighted the value of professional development and its effect on teacher identity and their teaching practice. The results also support the claim that language transfer - as observed in their observed in participants' behavior- is not affected by specific languages, demonstrating its ability in cross-lingual syntax transfer (Guarasci, 2021). The results also assure the need for professional development programs for the multilingual teachers to develop their teaching skills and to raise their awareness of language learning strategies such as Cognitive Retroactive Transfer.

Results of the research disagree with relevant studies that highlighted the use of mother tongue or local language in foreign language learning and teaching (e.g. Hoffmann, 2001; Cenoz, 2003 and Safont, 2003). For instance, a study by Tockie-Ofosu et al. (2015)

highlighted the high perceptions of the teachers in using mother or local language in FL instruction. The study claimed that using the local language as a medium of instruction may have positive culture and communicative impacts. Differently, the variations between the bilingual and trilingual participants are not significant to attribute any differences in either their translation techniques or their knowledge of CRT-oriented translation strategies followed by their students.

Similarly, these results disagree with the study by Wang (2018) which examined the differences between the deep meaning of the native language and the target language on language transfer in the cognitive process of English understanding from the aspects of behavior and cranial nerves. The results show that besides the approximations in linguistic typology, the deep meaning relationship between the native language and the target language is also an important factor affecting language transfer. These studies assured the connection between L1 and other learned languages in terms of key language aspects such as meaning and structure. Summing up, the results of this research generally agree with literature in multilingualism and translation contexts. They also fit into research in CRT-oriented translation strategies and its relevance to FL instruction.

12. Recommendations of the research

In the light of the obtained results, it is recommended to design professional development programs for both bilingual and trilingual EFL teachers in remote multilingual contexts. Due to the rare range of studies in trilingualism in the Egyptian and Arab context, more studies should be conducted on trilingualism in Egyptian context to promote the theory and practice of FLL in Egypt. To highlight the interdisciplinary research between cognitive psychologists and Methodology disciplines. The paper recommends conducting researches that identify the types of mental processes that lead to selecting certain CRT strategy during learning other areas or skills apart from translation such as speaking and reading. It also recommends exploring and revising the challenges of the study administration. These challenges include the areas of culture-based challenges and administrative constraints regarding course planning and instruction approaches in the teacher's guide.

13. Implications of the research

These results can be useful for students in developing their translation skills related to their CRT strategies. The results can be useful for course designers to design appropriate translation courses for both pre and in-service EFL teachers. These results can be useful for the national Professional Academy for Teachers PAT to design professional development courses related to multilingualism and foreign language learning and teaching. Another implication is to utilize the results of this study in identifying the challenges that face EFL students in trilingual educational contexts in Egypt.

14. Conclusion

The research investigated the syntactic and semantic translation techniques of both bilingual and trilingual English Language teachers at Halayeb schools in Egypt. It aimed to identify their knowledge of the Cognitive Retroactive Transfer CRT-oriented translation strategies followed by their students. Results of the research assured that there were no significant mean differences between bilingual and trilingual teachers in their translation techniques and their knowledge of CRT-oriented translation strategies. Results also showed the similarity between both bilingual and trilingual teachers' translation techniques and their knowledge of CRT strategies followed by their students.

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