MEANING EXTRACTION OF SYNONYMS AMONG ADVANCED ARAB-ENGLISH TRANSLATORS: A PILOT STUDY

Hussein Abushaaban¹, Rashad Faleh Alhasan², Hamzeh Mohammad Al-Harbi³

¹School of Languages, Civilisation and Philosophy, Universiti Utara Malaysia, Malaysia
²Translation Department, Saif Bin Zayed Academy for Police Science and Security, UAE
³Part-time Lecturer, School of Foreign Languages, University of Jordan, Jordan

Abstract:
This pilot study examined the semantic extraction process of L2 English synonyms during the dictionary consultations and the associated challenges involved in the process among four Arabic-English translators, and whether such a process is influenced by the mother tongue. Participants were provided with dictionary definition excerpts of synonym pairs, one pair at a time, to examine and write down any differences in meaning, to report on any meaning extraction challenges, and to provide translation equivalents. The results indicated that participants did not demonstrate any distinctions between the target synonyms which suggests that dictionary definitions did not provide enough disambiguation criteria for synonyms and that is exactly what was expressed in the interview data. Finally, cross-linguistic effects were not found in the data. However, participants produced more accurate responses than the semantic English task which suggests that translators link L2 synonyms to their Arabic translations rather than their L2 definitions.

Keywords: lexicography, dictionary definitions, semantics, synonyms, lexicalization effects.

¹Correspondence: email husseinabushaaban@gmail.com, rfkh999@yahoo.com
1. Introduction

1.1 Background
Words of similar meanings, i.e., synonyms, have recently attracted attention among linguists, second language researchers, and lexicographers (Rundell, 1999; Thienthong, 2019). The new interest in synonyms is premised on the importance and the functions that they can contribute to communication competence in general and the accuracy of messages in particular for EFL/ESL learners. Current research emphasized the role synonyms can play in multiple aspects of language acquisition. Ding (2015) and Webb (2007) emphasized the importance of synonyms in lexical knowledge and lexical richness; whereas, Chon (2009) and Murphy (2013) stressed their importance in eliminating repetition and redundancy. Hatch and Brown (2000), Liu (2010, 2013), Li and Zhong (2014), and Murphy (2013), on the other hand, emphasized the significance of synonyms for refining and enhancing the quality of writing and achieving eloquent communication. Synonyms are also beneficial for paraphrasing academic texts and help learners to reformulate scholarly information in their own language (Du, 2013; Khrismawan & Widiati, 2013). Adamska-Salaciak (2013) highlights the artistic nature of the use of synonyms and the multiple purposes they can serve for stylistic and prosodic reasons. A writer or a speaker might resort to synonyms to ameliorate textual cohesion and eliminate diffusion; while, other writers or speakers, might use synonyms to enhance the rhythmic effects of a text. Another reason for synonyms might be the fulfillment of informational redundancy. Highlighting the ambiguity aspect of the language, synonyms can enhance the artistic picture of a text from multiple aspects and dimensions. Although the justifications for the use of synonyms remain almost the same among language users, a distinction has to be made between native English speakers and ESL/EFL learners. Whereas native speakers acquire synonyms in natural environments, ESL/EFL learners have to pay careful attention to acquire the subtleties of meaning in a learning setting. Nevertheless, the inappropriate use of synonyms among EFL/EFL learners had been theoretically discussed and started to receive empirical attention in the literature (Adamska-Salaciak, 2013; Bergenholtz & Gouws, 2012; Gouws 2013; Kim, 2017; Laufer, 1991; Liu, 2010, 2013; Liu & Zhong, 2014; Martin, 1984; Murphy, 2003).

2. Literature Review

2.1 Synonyms and Near-Synonyms
Synonyms are words of similar meaning which can represent either absolute or partial/sense synonymy relations (Cruse, 2006; Lyons, 1995; Murphy, 2003). Two lexical items are considered synonyms if they share relatively similar or exactly identical meanings of their senses in a particular context. Context is of particular significance in establishing synonymy because each word can assume specific denotation and connotation peculiarities, and represent polysemy. Murphy explains that the word ‘funny’ can be
substituted with ‘peculiar’ in the sentence ‘my tummy feels a bit funny/peculiar’ without any loss in denotation and connotation. Yet, ‘peculiar’ is not interchangeable with the word ‘funny’ in the sentence ‘Anna told a hilariously [peculiar] joke’ (2010, p. 110). On the other hand, absolute synonymy is achieved when all of the polysemous meanings of two lexical items are interchangeable in all possible contexts of every single word in the synonymous pair. This explicates the reason why the former example represents a case of sense/partial synonym. The basic condition for synonymy relation to be established between two lexical items is the substitutability test where these items must be substitutable in all possible contexts without exhibiting any differences in meaning (Cruse, 2006; Murphy, 2003, 2010). Maintaining the meaning of connotation and denotation of two lexical items identical in all possible contexts is a quite rare phenomenon which explains the reasons why synonyms are recommended to be called near-synonyms (Adamska-Sałaciak 2013; Cruse, 2006; Lyons, 1995; Murphy, 2003, 2010). Near-synonyms are words that share partial or sense meaning in only one or two contexts but not in all possible contexts. For example, the two lexical items, obtain and acquire, share the sense of ‘get’, and henceforth, they are interchangeable in this specific sense. However, the word ‘obtained’ cannot replace the word ‘acquired’ in the sentence ‘Ian obtained a British accent’ (Murphy, 2010, p. 111). While partial/sense synonyms, or near-synonyms, share a partial sense of a word in a few contexts; absolute synonyms share the same senses and therefore they are substitutable in all possible contexts.

2.2 Research on Synonyms and Dictionaries

Dictionary consultations can, in one sense, characterize the first steps in language learning, while, in another sense, can represent a window into the linking process of L2 items to their meanings or the mapping of L2 items to their L1 translation equivalents. During dictionary consultations, language users are actively involved in a meaning construction where they link L2 items to their L1 translation equivalents in the case of a bilingual dictionary or link L2 items to their meanings in the case of a monolingual dictionary. This process of meaning construction and mental linking during dictionary consultations is of paramount importance for EFL language users as well as for language researchers. In EFL situations where there is a lack of linguistic exposure and frequency of encounters (Martin, 1984), EFL language users as well as translators consider dictionaries as the primary teaching source and language arbitrator for solving decoding and encoding problems. Therefore, most of the meaning construction of decoding and encoding activities are done almost mainly exclusively during dictionary consultations. Nevertheless, research on the meaning-construction process of synonyms during dictionary consultations is relatively neglected and received little scholarly attention. Although direct research on dictionary consultation and synonyms are lacking, few introspective studies targeted dictionary consultations on the productive task of writing and correction (Chon, 2009; Harvey & Yuill, 1997; Kim, 2017) and on comprehension (Wingate, 2004). Harvey and Yuill (1997), for example, employed an introspective methodology to investigate the effects of dictionary consultations on production tasks.
and the results highlighted the importance of the definition and examples to promote the quality of language production. Moreover, Chon (2009) used Think-Aloud Protocol, TAP, to investigate the effects of dictionary consultations on the writing process among advanced Korean learners of English. Results revealed that dictionary definitions created more confusion and misunderstanding because they lacked the necessary dictionary skills to extract meanings properly and to distinguish words of similar meanings. Employing TAP, Wingate (2004) investigated the effects of dictionary strategies on comprehension among Chinese learners of German and found that learners, among other things, were facing difficulties understanding dictionary definitions. Paribakht (2005) investigated the effects of lexicalization patterns on comprehension and inferencing strategies among Farsi learners of English and found a positive effect of translation equivalents on comprehension and inferencing strategies. Furthermore, Kim (2017), on the other hand, employed the TAP methodology to investigate the dictionary consultation behaviors (before and after instruction) in correcting collocation errors. The results revealed that instruction changed the consultation behaviors and the participants’ revision improved. All of the above TAP studies investigated dictionary consultation behaviors mostly in productive mode; nonetheless, research on the receptive mode of dictionary consultation is lacking and yet to be discovered. Although these studies reported the difficulties of synonyms for learners during dictionary consultations, they were mainly concerned with writing or correction rather than synonyms. Synonyms, on the other hand, received little attention in the literature on dictionary consultations in the receptive mode where learners commit similar L2 meanings to their bilingual mental lexicons.

### 2.3 Translation Equivalence

Past research on vocabulary acquisition reported that the presence of translation equivalents across the source and the target languages supports language acquisition while the absence of equivalence is perceived to have negative effects (Irujo, 1986; Laufer, 2000; Laufer & Girsai, 2008; Paribakht, 2005; Zareva & Shehata, 2015; Wolter & Gyllstad, 2011). Employing experimental design to investigate the effects of translation equivalents of idioms across English and Spanish, Irujo (1986), found that full and partial equivalence relationships increased acquisition while non-lexicalized idiomatic expressions had caused comprehension and production problems among Spanish-English learners. Laufer (2000), on the other hand, found that the use of target L2 idioms is dependent on the presence or absence of translation equivalents, and learners avoid L2 idiomatic expressions that do not have translation equivalents in the source language. Investigating collocation among Arabic-English learners, Zareva and Shehata (2015) revealed that L2 collocations that have similar counterparts in Arabic can facilitate their comprehension and can be easily integrated into their speech. The same positive effects were found in comprehension and inferencing strategies (Paribakht, 2005). Using Think-Aloud Protocol, Paribakht provided her participants with a reading passage that included unknown words, some of them are lexicalized in Farsi while others are not, and were
asked to infer their meanings. Results indicated that English words that are lexicalized in Farsi were successfully inferred while those not-lexicalized were not, suggesting the lexicalization effects on comprehension and inferencing strategies. Employing experimental design, Chen and Truscott (2010) investigated the effects of L1 lexicalization on incidental vocabulary acquisition and found that L1 lexicalization has an important influence on multiple aspects of vocabulary knowledge. Moreover, Laufer and Girsai (2008) reported positive effects of the presence of translation equivalents of collocations on the target language items. Comparing three instructional methods, they concluded that explicit instruction and contrastive analysis of the similarities and differences across the source and target languages can enhance acquisition. Using Lexical Decision Task, Wolter and Gyllstad (2011) investigated translation equivalents effects of collocations among Swedish learners of English and found that the reaction time for lexicalized collocations was processed faster than non-lexicalized ones which indicated a positive influence for the L1 lexicalization patterns. They explained that “L1 provides more ready access to L2 collocations which have an equivalent form in the L1 than collocations which have no equivalent form (either through initial recognition or through online processing)” (Wolter & Gyllstad, 2011, p. 13).

3. Problem Statement

Smooth and intelligible communication is reliant on the understanding of L2 synonyms and the subtle nuances of the similarities and differences that exist in the target language (Baxter, 1980; Carter & McCarthy, 2002; Martin, 1984; Rundell, 1999). With the spread of English as a global language in almost all fields of knowledge, language accuracy has become of paramount importance for language learners. Passive knowledge of synonyms is not enough, language users are also required to sort out similar meanings in their speech to achieve ambiguity-free communication, clarity of messages, and effective self-expression (Bergenholtz & Gouws 2012; Fuertes-Olivera & Bergenholtz, 2018; Lew & Adamska-Sałaciak 2014). To achieve that goal of powerful communication, language learners need to have the ability to recognize L2 synonyms first and be attentive to the semantic nuances encoded in them at first, and then develop such sensitivity to deliver their messages accurately and precisely (Rundell, 1999). For the accurate use of synonyms to be achieved, the learning and processing difficulties underlying the acquisition of L2 English synonyms among Arab learners of English shall be adequately addressed to enable learners to improve their accuracy levels (Adamska-Sałaciak, 2013; Hatch & Brown, 2000; Martin, 1984; Rundell. 1999).

Despite its importance for language accuracy, research on the acquisition of L2 English synonyms in the literature is relatively lacking, let alone the issue of meaning extraction processes of synonyms during dictionary consultations. Most research on dictionary consultations was primarily concerned with productive tasks and semantically-unrelated vocabulary items with some resulting implications on synonyms (Chon, 2009; Harvey & Yuill, 1997; Kim, 2017; Thienthong, 2019), rather than on
synonyms per se. For example, Chon (2009) and Kim (2017) used introspection to investigate the dictionary consultations on the productive tasks of writing and correction, and found that learners had serious problems with distinguishing synonyms. On the other hand, other research on dictionary skills reports on the poor skills of language users and their inability to distinguish between absolute and sense synonymy relations, the associated syntagmatic and paradigmatic relations involved, and the polysemous nature of words (Thienthong, 2019). Furthermore, Chan (2010, 2012a, 2012b, 2013, 2014) and Al-Ajmi (2002) report that learners lack the proper dictionary skills that are necessary for language comprehension and production. Miller and Gildea (1987) and Nesi and Meara (1994), on the other hand, report the case that learners employ ‘kidrule’ which simply says that learners extract incomplete information from dictionary definitions and employ them in production. Other research highlights the inadequacy of dictionary definitions of individual words (Al-Ajmi, 2002; Jain, 1981; Huang, 1985; MacFarquhar & Richards, 2009; McKeown, 1993; Rundell, 1999; Scholfield, 1982) and does not provide enough semantic distinctions for synonyms (Thienthong, 2019). Moreover, in two consecutive studies, Alanazi (2017a, 2017b) investigated the comprehension and production of synonyms among intermediate and advanced learners of English in Saudi Arabia and found that L1 Arabic influence, unawareness of L2 semantic distinctions, and lack of focus on vocabulary acquisition were the most important variables to affect the acquisition of English synonyms.

Therefore, it is not clear whether the learners’ dictionary skills, the usability of dictionary definitions, or the cross-linguistic influence that is responsible for the inappropriate usage of synonyms. Current cognitive research, on the other hand, highlights the L1 conceptual effects in the learning and acquisition processes in grammaticalized and lexicalized concepts. These conceptual effects of the L1-based lexicalization patterns of Arabic might be exerting an influential effect on the acquisition of the L2 English synonyms. The difficulty for Arab learners to properly learn and distinguish L2 synonyms (Alanazi, 2017a, 2017b) might be premised on conceptual grounds where the conceptual knowledge is more distinct and differentiated in L2 English than their L1 Arabic (Ameel, Storms, Malt, Sloman, 2005). The L2 English synonyms for Arab learners of English might operate in much the same way because the Arabic language might not be making the same distinctions as English does. These presumed conceptual effects might be carefully examined during the semantic extraction process during dictionary consultations where learners are presented with synonym pairs to distinguish, to report on the difficulty of the task, and to provide translation equivalents. These consecutive procedures can provide new insight into the learning process of synonyms and the difficulties involved, and test for the possibility of conceptual effects.

3.1 Research Questions
This study was directed by the following research questions:
1) Do dictionary definitions increase the translators’ ability to disambiguate the semantic differences between L2 English synonyms?

2) What are the challenges and difficulties that are associated with the semantic extraction process among Arab-English translators?

3) Do Arabic translation equivalents influence the meaning extraction process of the English synonym pairs?

4. Research Design

The study adopts a qualitative design where the researchers developed three tasks. The tasks are called the semantic distinction task, the interview task, and the translation task. The semantic distinction task is a test that elicits information on eight pairs of synonyms in the Oxford Advanced Learners’ Dictionary (Online). The respondents shall be presented with dictionary excerpts of eight pairs of synonyms of verbs, i.e., sixteen items, to study carefully for later examination of their differences. Right after the examination phase, the researcher takes out these excerpts and provides an answer sheet, and asks the participants to explain any detectable differences in the pair and write down what distinguishes each word from the other. The formulation of the question is designed to extract the definitional criteria that participants use to distinguish between synonym pairs during dictionary consultations which can replicate the actual use of the dictionary in real life. After every distinction task of the eight pairs, the interview question is followed to probe into the mental process and the associated problems that may have been involved in the process. Therefore, eight interviews will be conducted which can provide rich data as to what the challenges were for each pair of a synonym, providing a fuller picture of the problem of synonyms. The translation task asks for a translation equivalent for each pair in the synonym group, which will be conducted directly after the interviews, which can provide a window into the linking process of L2 meanings to their L1 equivalents and test if conceptual effects are taking place in the learning process.

4.1 Data Analysis

The qualitative data of the interview tasks will be analyzed by the emerging themes and categories. The qualitative data of translation tasks will be analyzed by comparing the linking patterns of target synonyms with their equivalents.

4.2 Materials of the Study

The selection of the monolingual English dictionary is because the target sample is presumed to be professional translators who have accumulated considerable knowledge in English and who had adequate dictionary skills that enable them to handle the dictionary very easily. The selection of Oxford Dictionary is because it is considered among the best dictionaries for advanced English learners (Dziemianko, 2017). Third, the selection of synonym items was partly based on the researchers’ experience and partly based on academic intuitions of potential areas of difficulty for Arab EFL learners.
Nonetheless, other test items were randomly chosen in order to avoid any preconceived assumptions. As a professor of the English language with twelve years of experience at the tertiary level, the second researcher had been involved in language assessments and evaluations for undergraduate students’ English examinations and term papers for three years. In evaluating these papers, the second researcher employed error analysis to understand the developmental and mental processes underlying learners’ errors and to improve their language acquisition. For example, in these papers, numerous errors in synonyms emerged and some of these synonymous errors kept changing for the same particular test-takers, implying the ability to recognize their own errors yet unable to amend them in a proper way. These errors were commonly-used words in daily conversations and are highly frequent like, beautiful and handsome, and strong and powerful. Other errors of synonyms are indicative of the cross-linguistic influence.

Based on former research, the researcher developed eight pairs of synonyms, i.e., verbs, which are expected to pose serious challenges to Arab learners of English. The interview questions were developed with the intent to explore the difficulties and challenges of the semantic extraction process in more depth (Richards, 2009, pp. 182-185). In the designing of the translation task, however, the task was based on theoretical ground (Jarvis & Pavlenko, 2008; Pavlenko, 2009; 2011) and on empirical research (Ameel, et al., 2005; Malt, et al., 1999; Pavlenko, 2009, 2011; Pavlenko & Malt, 2010). In Pavlenko’s model of conceptual transfer, conceptual effects can occur when L2 makes more distinctions than L1 does, and L1 learners fail to recognize the obligatory conceptual distinctions that are associated with L2 items (Ameel, et al., 2005; Malt, et al., 1999).

4.3 Participants
The participants were six Arabic-English translators who were recruited from Abu Dhabi Police, Abu Dhabi. All the participants had at least three years of experience in translation from English to Arabic and vice versa. All of the participants had studied English literature or English translation as their field of study and they were from different Arab-Speaking countries. None of the participants had lived in a native-speaking country; however, some of them had close contact with native speakers as verbal translators.

4.4 Instrument
As noted earlier, semantic distinction, interviews, and translation tasks were developed to answer the research questions. For the first task, the researcher shall present the participants, one at a time, with a pair of synonyms with their respective definitions to extract their semantic differences and write down the definitional criteria they associate with each particular item to distinguish them. The question of the semantic task was designed to eliminate any test effects; therefore, the wording was ‘based on your previous dictionary look-up, can you describe the meaning difference that may exist between the following pairs of words?’ The question does not implicate any preexisting difference to make sure that the test items have no effects on the responses. For the interview task, the question was designed directly to probe into the challenges that may be involved in the
process of meaning extraction of synonyms. For the translation tasks, the wording of the question was 'based on your understanding of the previous dictionary look-up, what do you think were the Arabic translation equivalents for the following words?' The wording of the question was to elicit information on the process of linking L2 synonyms to their L1 equivalents to see if translators link the L2 synonyms to one concept in their language. The wording of the question was ‘based on your understanding of the previous dictionary look-up, what do you think were the Arabic translation equivalents for the following words?’ All of the instruments and the questions are included in the appendixes.

4.5 Procedure
The study took place at one of the translation offices at AD police. The second researcher asked co-worker translators to volunteer to study and four translators were recruited. The researcher made sure that no outside disruptions occur during the data collection. The second researcher conducted the data collection which took almost one hour for all three tasks. The three tasks were conducted in consecutive order and on individual bases. First, the participants were presented with Oxford Dictionary excerpts for one pair of synonyms (i.e., verbs) at a time and were asked to find out what distinguishes each item from the other and write it down. After the first item is completed, the interviews and the translation tasks were followed at the same time, and so on and so forth. This procedure of data collection continued till all data was collected for the respective verb items.

5. Results
This study had been motivated by three research questions. The first question investigated the effects of dictionary definitions on the translators’ abilities to disambiguate the semantic differences between L2 English synonyms after dictionary consultations. The second question examined the challenges and difficulties that are involved in the semantic extraction process among Arab-English translators. The third question tested for the effects of the presence or absence of translation equivalents on the meaning extraction process.

5.1 The Semantic Distinction Task
The first research question adopted a semantic distinction task where participants were given dictionary excerpts of eight synonymous verbs to study and was later examined on their comprehension of these items and their distinctions. The main assumption of analysis was based on the idea that correct distinctions between the eight pairs of synonyms would reflect the usability of dictionary definitions in distinguishing synonyms. Incorrect distinctions between L2 synonyms, on the other hand, would indicate the non-usability and non-effectiveness of the dictionary definitions. This assumption is based on past studies that dictionary definitions do not usually provide clear distinctions for synonyms (Dziemianko, 2010; Rundell, 1999). Because the
instruction in the semantic distinction task asked for the semantic distinctions between each of the synonymous verbs, the researcher needs to describe the scoring system. First, the dictionary definitions that are provided by the participants shall be correct in each of the synonymous pairs and according to the dictionary definitions provided. For example, if a participant provides one correct definition for a word and another incorrect one for the same pair, then the whole pair will be scored incorrectly. Second, if a participant provides correct definitions that accorded to the dictionary definitions without any distinctions, then we would conclude that the dictionary definitions themselves were not conducive to laying out the differences between L2 English synonyms. In this pilot study, there are four participants who completed eight synonymous pairs in the semantic distinction task which resulted in thirty-two answers. Data show that out of the thirty-two answers, only six answers were correct and accorded to the dictionary definitions that were earlier provided to the participants. This very low result demonstrates that dictionary definitions are designed in a way that does not take care of the synonymous verbs in the sense of distinctions (Benzehra & McCreary, 2010, p. 13; Chan, 2012a, p. 116; Chon, 2009, pp. 43-50; Rundell, 1999, p. 41). What is more interesting is the incorrect answers that were provided by the participants because they can shed light on the comprehension process of synonyms. The incorrect answers can be classified into three major categories: (1) semantic additions, (2) wrong senses, and (3) misunderstandings. Semantic additions, which we assume to be a comprehension strategy for understanding synonyms, refer to participants’ strategies of imposing their own understandings to define or distinguish target words that were not available in the original dictionary definitions that were given to them for consultations. For example, in distinguishing the synonymous pair ‘concoct and cook up’, one participant defined the verb ‘concoct’ as “devise or create a story for a bad purpose”. Eighteen semantic additions were recognized in the data which mount to almost half of the answers. For example, in distinguishing the synonymous pair ‘concoct and cook up’, one participant claimed that the main difference lies in “the formality/informality dimension”. Moreover, in distinguishing between the synonymous verbs ‘enrich and enhance’, another participant claimed the difference to be in “the comprehensiveness/efficacy dimension”. In these examples and all the remaining data of the semantic additions, participants invented their own distinctions of the target synonyms most probably because dictionary definitions did not lay out the differences in a clear-cut manner. The issue of the adequacy and sufficiency of dictionary definitions for distinguishing synonyms had been addressed in the lexicographic literature (Benzehra & McCreary, 2010; Bergenholtz & Gouws, 2012; Chan, 2012a; Chon, 2009; Dziemianko, 2010; Harvey & Yuill, 1997; Jain, 1981; Nesi & Meara, 1994; Rundell, 1999; Tarp & Gouws, 2020). Over forty years ago, Jain (1981) commented that the dictionary provision for synonyms without semantic differences in order to enable dictionary users to distinguish them. Jain (1981) stated that despite the usability of the dictionary, “the learner is not able to see the meaning differentiation sufficiently clearly for successful productive use” (p. 277). According to Nesi and Meara (1994), Jain (1981) believed “that other errors were caused because dictionaries did not provide an explanation of basic differences between often-
confused words”, i.e., words of similar meanings or partial synonymy (Nesi & Meara, 1994, p. 2). Similar views were voiced by Chon (2009), Harvey and Yuill (1997), and Rundell (1999) emphasized the importance of the inclusion of meaning differences between synonyms in order to let dictionary users understand differences in target synonyms. For example, Rundell (1999) highlighted that “true synonymy is extremely rare, and so undifferentiated lists of quasi-synonyms present users with choices which many of them are not competent to make” (p. 41), and dictionary users need to be provided with “information on the differences of the near synonymous words” (Chon, 2009, p. 50). In this pilot study, participants failed to distinguish between synonymous pairs because they were looking for semantic differences between similar items and they did not find them, and that is why they improvised their own distinctions that were probably based on logical reasoning (Kim, 2017, pp. 8-9). Therefore, researchers recommend that “if synonyms to be provided, lexicographers should consider the importance of…the differences, rather than the similarities between words” (Harvey & Yuill, 1997, p. 267). On the other hand, the second category of incorrect answers refers to the wrong senses of one or two words in the synonymous pair. Although all three categories are classified as misunderstanding of the synonymous pairs, this category refers to a specific category where the misunderstanding occurred because the comprehension of one of the pairs was based on the wrong sense or polysemy (Chan, 2012a; Bensoussan & Laufer, 1984; Durkin & Manning, 1989). Words of multiple senses, or polysemous words, are usually posing a challenge for language users due to a plethora of overlapping reasons (Chan, 2012a). Language users might be confused about words of polysemous words because some word’s meanings in a target word might be less salient than the dominant sense (Durkin and Manning 1989), or because they may fail to recognize the subtle meanings of their senses (Bensoussan & Laufer 1984). In line with this explanation, Chan (2012a) stated “They [language users] may have the assumptions that the familiar meaning is the only meaning of a polysemous word, so they are often unwilling to abandon the familiar meaning even though that particular meaning may not make sense in a certain context” (p. 117). According to the data, it appears that this is what had actually happened to our participants who had not been willing to abandon the most familiar or salient sense of the target word to a less salient one and ignored the target sense, even though it was defined to them earlier. In this type of misunderstanding, participants distinguish one or two words in the synonymous pair through the retrieval of meaning from memory rather than from paying attention to the dictionary definitions that were presented to them. Because words can have multiple senses that might differ in frequency, the participants automatically provided the definitions that were most common to them than paying attention to what the dictionary definition said (Chan, 2012a). Finally, the third category of incorrect answers refers to a misunderstanding of one word in the synonymous pair. Although all three categories are classified as a misunderstanding, this category is classified as a different group to distinguish it from the other two categories. This type of misunderstanding occurs when participants fail to comprehend the target definitions of one or two words of the target definitions completely and are unable to reconstruct their meanings in any correct fashion. In a
nutshell, the data from the semantic distinction task indicates that almost all the participants did not recognize the semantic differences between the target English synonyms after the dictionary consultations sessions. The results might be interpreted in terms of poor dictionary skills (Chan, 2010, 2012a, 2012b, 2013, 2014) and the inappropriacy of dictionary definitions in distinguishing synonyms (Benzehra & McCreary, 2010; Bergenholz & Gouws, 2012; Chon, 2009; Dziemianko, 2010; Harvey & Yuill, 1997; Jain, 1981; Nesi & Meara, 1994; Rundell, 1999; Tarp & Gouws, 2020). As noted by Chan (2012a), explained that “Although it is true that learner’s deficient dictionary skills … may be the major causes of some dictionary consultation problems, the usefulness and comprehensiveness of dictionary information may also be at issue” (p. 116). For such insufficiency and inappropriacy of dictionary definitions concerning synonymous distinctions, researchers call for better coverage of lexical and semantic information in dictionaries (Chan, 2012a; Chon, 2009; Harvey & Yuill, 1997; Rundell, 1999; Benzehra & McCreary, 2010). The large numbers of semantic additions and other mistakes indicate that the dictionary definitions had not provided enough criteria or distinctions as to how to disambiguate the target similar meanings. Moreover, even those who provided correct definitions that accorded with dictionary definitions were not able to describe the differences between synonymous pairs (Chan, 2012a; Chon, 2009; Harvey & Yuill, 1997; Rundell, 1999; Benzehra & McCreary, 2010). On the other hand, the inappropriacy of dictionary skills does not negate that the participants did not possess the necessary dictionary skills for the meaning extraction process for the target words as the other two categories demonstrate (Chan, 2012a). Basically, if the participants had been skilled dictionary users, they should have developed a sense of the inaccuracies of dictionary definitions (Chan, 2012a; Chon, 2009; Huang, 2012; McKowen, 1993) and the insufficient distinction criteria of target synonyms as indicated by many participants in other studies. Therefore, the results of the semantic distinction task indicate that the selected dictionary definitions did not contribute to the translators’ abilities to increase the disambiguation of target synonyms. The ineffectiveness of dictionary definitions in the disambiguation process was supplemented by the participants’ lack of basic dictionary skills, and both contributed to the large number of mistakes that were shown in the data.

5.2 The Interview Task
In the interview task, participants were asked to comment on their experiences concerning the challenges and difficulties in distinguishing between eight pairs of L2 English synonyms. In the task, after the presentation of the dictionary definition of each synonymous pair, participants were directly asked to provide their experience of the difficulties encountered and that generated thirty-two responses of qualitative nature. After making sense of the interview data, two major themes emerged that can capture the participants’ experiences towards the disambiguation process of similar verbs. Two major themes emerged from the qualitative data. We called the first theme ‘no acknowledgment of difficulty’ and we called the second theme ‘acknowledgment of
difficulty’. As the names indicate, the themes come in line with the participants’ perspectives on the difficulties involved in the process of disambiguating L2 English synonyms. In the first theme, 13 responses out of the 32 questions demonstrated that the participants did not acknowledge facing any difficulties in distinguishing synonyms probably because they thought they had provided the correct responses. However, if we compare these 13 responses with their respective responses in the semantic task, we find that all of the responses provided were wrong and fell into different categories of misunderstandings. Such discrepancies in the actual responses and the attitudes towards the problem of synonyms are moving in opposite directions; that is, while all of the responses were wrong, the participants did not even acknowledge that there is a problem at all. On the other hand, if we look at the types of problems in these 13 responses in the semantic task, we can have an understanding of why such a discrepancy between the actual responses and their attitudes towards the issue of synonyms had occurred in the first place. Almost half of the responses in the first theme, i.e., 7 responses out of 13, were semantic additions where the participants invented their own personal criteria of synonymous distinctions and were quite assured that these semantic differences were representative of the actual differences of the respective synonymous pairs. Therefore, the semantic additions they have imposed on the target words to disambiguate their differences can explain the non-acknowledgment stance. Since participants thought they had provided the correct responses, it would naturally mean that they had faced no difficulties in distinguishing the respective items. Similarly, 4 responses out of the 13 were provisions of wrong senses where participants defined the target words with the wrong senses (Chan, 2012a) which can explain why they claimed to have faced no difficulties in the respective tasks. The other two responses were classified as general misunderstandings. The results in the first theme indicate that the qualitative data corroborate the data from the semantic task and support them. Participants did not acknowledge the difficulty of distinguishing synonyms because they thought they provided the correct answers to the respective questions and were hundred percent sure that their answers can represent the actual semantic differences between synonyms. This basically means that participants were not fully aware of what synonyms mean in the first place (Huang, 2012) let alone how can be differentiated (Chon, 2009). Moreover, participants seem to be poor dictionary users and fail to extract meanings from dictionary definitions since half of the responses, i.e., 6 out of 13, in this theme were classified as wrong senses and misunderstandings (Chan, 2010, 2012a, 2012b, 2013, 2014; Chon, 2009). The second theme that emerged from the data is called the ‘acknowledgement of difficulty’. As the name indicates, this theme represents the attitudes and experiences of the participants during the disambiguation process of synonyms where participants acknowledge the challenges and difficulties of synonyms. This theme is classified into two sub-categories. The first sub-category refers to the direct insufficiency of dictionary definitions and the second sub-category refers to the indirect insufficiency of dictionary definitions. In the category of direct insufficiency of dictionary definitions, i.e., 14 responses, participants directly attribute the difficulties and challenges in the
disambiguation process to the inadequacies and inappropriacy of dictionary definitions and explain that these dictionary definitions were not clear enough to let the participants extract any semantic differences between the synonymous pairs. In the category of indirect insufficiency of dictionary definitions, i.e., 5 responses, on the other hand, participants report on their experiences with the difficulties and challenges with the respective synonymous pairs without mentioning any possible reasons or providing any subjective explanations or evaluations. Nevertheless, both categories demonstrate that participants were dissatisfied with the dictionary definitions. However, in responses in the first category, participants extend their discussions by attributing them to the inadequacies of the dictionary definitions in terms of the disambiguation criteria of synonyms and substantiating their arguments with examples of the dictionary definitions. On the other hand, in the second category, participants only report their difficulties and challenges with the dictionary definitions without any further discussions. In the first category of the second theme, participants explicitly expressed their dissatisfaction with the dictionary definitions and questioned their potential to lay out any clear differences for the respective synonymous pairs.

For example, in distinguishing between the enrich/enhance pair, one comment reads: “These two verbs seem the same to me. The definitions refer to the improvement of quality and nothing in there makes them different.” In this commentary, the participant acknowledges the difficulty of distinguishing the pair from each other because they have similar meanings and argues that the dictionary definitions that were provided to him earlier did not provide any distinctions to lay out any observable differences. Another commentary reads: “I did not get any difference in meaning between the two words” in response to the semantic distinction task for the pair of light up/illuminate. Similar to the earlier commentary, it seems that participants face great difficulties in distinguishing similar meanings if they are presented together, and automatically look for any clear-cut distinctions in terms of any semantic differences that may exist between the synonymous pair to enable them to distinguish them. “The words are very similar. The definitions are also the same. For example, be a symbol of and be a sign of, are the same. The dictionary uses different words to refer to the same meaning. I cannot understand the difference.” In another commentary for the symbolize/denote pair, one comment reads as follows: In this commentary, the participant expresses his confusion over the clarity of definitions of the respective pair where he reproduces the definitions that were presented to him earlier and argues they are essentially the same. Again, dictionary users seem to be looking for any semantic differences between similar meanings in the meaning extraction process. In this commentary, the participant explicitly attributes his inability to distinguish synonyms to the inadequacies of dictionary definitions and argues these definitions only use different languages with almost the same meaning, implying no serious attention to distinctions was ever contemplated. Another commentary resonates with this point of view. In commenting on the light up/illuminate pair, one comment reads “Both mean to bright light to something. I understand each definition separately. However, I cannot understand them when they are together. I do not know what are the differences even after reading the definitions.” This
commentary is very interesting because the participant stated that the definitions are easy 
to understand on the condition that they are presented individually or in separation. 
However, these types of definitions lose their usability for comprehension if the 
participant has to differentiate one word from another because dictionary users need to 
know the dimensions of differences in order to disambiguate their semantic differences 
which were not available in the definitions provided. Similarly, another commentary for 
the extend/stretch pair, one comment reads: “The words are too confusing. I feel there is a 
difference but I cannot recognize it. Even after reading the definitions, I still cannot understand 
the difference. Both are defined as making thing larger or longer. They seem to mean the same thing”. This comment suggests that although the participants were quite sure that the two 
verbs have very similar meanings, they argued that definitions did not lay out any 
distinctive differences as the definitions provided for each word in the pair are defined 
with the same terms. In another commentary on the same previous pair, one comment 
reads: “Again, the verbs mean the same action to me. Definitions say to make something longer 
or larger so they have the same meaning. I cannot see any difference based on the definitions 
provided. For example, the definition for stretch adds to make larger by pulling. However, making 
things larger is also included in the definition of extend. So, I think definitions are the same”. This 
commentary is very interesting because it is characterized by deeper mental processing 
of the target definitions to seek any differences. In analyzing these definitions, the 
participant concludes the distinction criterion of ‘making larger by pulling’ for the word 
‘stretch’ is not only included in the verb ‘stretch’ but also included in the verb ‘extend’. 
This participant did not think that the distinction criteria are clear or usable enough to 
enable participants to have a clear footing in disambiguating similar meanings, and 
perhaps he might be hoping for more information to be included in dictionary definitions 
to emphasize more dimensions of differences for better comprehension of synonym 
distinctions (Chan, 2012a; Chon, 2009; Huang, 2012). These qualitative commentaries on 
the previous semantic distinction tasks indicate that participants were not satisfied with 
the adequacy of dictionary definitions in providing disambiguation criteria for 
synonyms. Words of similar meanings are reported to have great challenges for 
participants because dictionary definitions do not provide explicit distinctions or the 
distinctions themselves are confusing or presented in a careless or contradictory of some 
sort (Chon, 2009). During dictionary consultations of similar pairs, participants stated 
that they explicitly stated that they understood the definitions for individual words but 
when it comes to disambiguating the differences between similar items at the same time, 
they fail to do so because at that point they are looking for semantic distinctions rather 
than mere definitions of individual words (Harvey & Yuill, 1997; Rundell, 1999; Benzehra 
& McCreary, 2010; Tarp & Gouws, 2020). In the semantic distinction tasks, on the other 
hand, participants provided their own semantic additions that they felt they would fill in 
the gaps of distinctions in the dictionary definitions. If we compare the 14 responses in 
the direct category of insufficiency of dictionary definitions with their respective 
responses in the semantic task, we find that 11 responses provided were semantic 
additions that the participants on the actual definitions. The semantic additions and their
respective qualitative data confirm that dictionary users are more likely to get confused over words of similar meanings, and during dictionary consultations, they are more likely to look for easy-to-understand distinctions in the form of semantic differences in a non-ambiguous manner (Harvey & Yuill, 1997; Huang, 2012; Tarp and Gouws, 2020). Furthermore, if we compare the 5 responses in the indirect category of insufficiency of dictionary definitions with their respective responses in the semantic task, we also find that 4 responses were semantic additions that were invented to compensate for the missing distinction information in the dictionary definitions. Overall, the results in this section indicate that dictionary users do not find that dictionary definitions provide enough information for disambiguating synonyms which must come in a clear-cut and explicit manner.

5.3 The Translation Task
This research question investigated the effects of cross-linguistic influence in terms of the linking between L2 English synonyms and their Arabic translation equivalents. It was hypothesized that if the participants provide one Arabic translation equivalent for the same synonymous pair, researchers would conclude that there are cross-linguistic effects in terms of semantic transfer that occur at the level of mapping L2 words with their translation equivalents. On the other hand, if participants provide two different translation equivalents for the synonymous pair, there would be no cross-linguistic effects. No single response confirmed the semantic transfer effects and participants never used a single Arabic translation equivalent to describe the synonymous pair. Therefore, one can conclude that the hypothetical assumption of cross-linguistic effects is not supported.

On the other hand, one interesting finding in the translation task was the large number of correct answers mounted up to 16 correct answers out of the 32 questions as compared to the semantic distinction task that required the participants to provide the answers in English. While correct answers in the semantic distinction task were only 6, participants provided 16 correct in the Arabic task. The finding in this task is very interesting because it shows that the accurate reconstruction of text depends on the directionality of translation. In the English-to-Arabic reconstruction, i.e., the translation task, participants produced three times more accurate responses than in the English-to-English task, i.e., the semantic distinction task. This result comes in line with the Revised Hierarchical Model which assumes that the translation from the L2 to L1 is faster than the translations from the L1 to L2 because “it reflects a more direct processing route” (Kroll & Sunderman, 2003, pp. 114-115) as learners at early-stage link L2 items to their L1 equivalents rather than the reverse route (Bogaards, 2010, p. 106). Although this model concerns the reaction time of translation, it conforms with the idea that more accurate translations would occur from the L2 to L1 route rather than L1 to the L2, and this is what exactly occurred in our data. In this pilot study, participants even after reading dictionary definitions were not able to reconstruct what they have already read and failed to come up with the correct definitions; nevertheless, the same participants were able to produce
more accurate responses for the translation task without any external aids. This confirms that the L2-L1 associations are stronger than the L2 words and their L2 definitions even during the dictionary consultations. These stronger associations in L2-L1 translations indicate that the concept of translation equivalent plays a central role in vocabulary acquisition (Augustyn, 2013) since bilingual speakers are always seeking to link L2 words to their L1 equivalents for the sake of meaning confirmation which gives them higher levels of assurance linking them to their L2 definitions (Laufer, 2000; Laufer & Hadar, 1997; Laufer & Girsai, 2008; Lew & Adamska, 2014; Wolter & Gyllstad, 2011). For example, Wolter (2006) concludes that “it seems highly unlikely that they [bilingual users] begin structuring L2 lexical knowledge from scratch when presented with new L2 lexical items” (p.741), and these users are constantly involved in a process to link L2 word with already-established first language equivalents (Chen & Truscott, 2010; Jiang, 2000; Murphy & Larios, 2010; Wolter, 2006; Wolter & Gyllstad, 2011). Moreover, this linking preference is not limited to individual words but it is extended to L2 collocations. For example, Wolter and Gyllstad (2011) explained that “L1 provides more ready access to L2 collocations which have an equivalent form in the L1 than collocations which have no equivalent form (either through initial recognition or through online processing)” (Wolter & Gyllstad, 2011, p. 13).

6. Conclusion

This pilot study investigated whether dictionary definitions increase the translators’ abilities to distinguish the semantic differences of selected L2 English synonymous verbs, what the challenges involved are, and whether Arabic equivalents affect the meaning extraction process. Results from the semantic distinction task showed that the participants were not able to distinguish L2 synonyms which means that dictionary definitions did not increase their comprehension to disambiguate similar words of common knowledge. The direct implication of this task suggests that the L2 dictionary definitions provided were not beneficial or useful in a sense that lays the semantic differences that are needed to disambiguate synonymous pairs. On the other hand, the interview task conforms with the result of the semantic task. Interview data demonstrated that there was a great deal of dissatisfaction over the dictionary definition in the sense that they did not provide clear differences between the synonymous pairs and many comments explained that the dictionary definitions were more or less the same or express the same idea with different words. In the translation task, no cross-linguistic influence was found as participants did not link synonymous pairs with single equivalents in Arabic. Nonetheless, it was found that half of the responses were correct as compared to only six responses that were correct in English in the semantic distinction task. This result confirms that language users tend to depend on L2-L1 equivalents rather than the L2 words and their L2 definitions which indicates that the actual proficiency level is pre-advanced or they are still in a developmental stage. Or perhaps, because they are involved in English-Arabic translations, they have developed stronger links between L2 words to their L1 equivalents rather than to their L2 definitions which emphasized
one direction over the other. In addition to these major conclusions, one can also conclude that the participants lacked proper dictionary skills (Chan, 2010, 2012a, 2012b, 2013, 2014) because many responses were either reflecting wrong senses or misunderstandings (Nesi, 2002; Nesi & Meara, 1994). Moreover, some other responses demonstrated that the participants used their commonsense and intuitions to differentiate between similar target items rather than close attention to dictionary definitions (Kim, 2017). In conclusion, participants lack the basic dictionary skills to understand individual words and fail to pay attention to the dictionary definitions in relation to the target context. On the other hand, dictionary definitions need to take more attention to the definitions of synonymous words and lay out their semantic differences in a clearer manner to enable users to capture the differences easily, and if possible, effortlessly.

7. Limitations and Recommendations

Although this study has generated some insights into the process of meaning extractions among translators, there are some limitations that need to be tackled in future research. The participants of this pilot study were only four participants and the results can never be taken to represent the bigger picture of the meaning extraction process. Therefore, it is recommended that a larger sample of participants shall be conducted in the future to understand how translators are approaching dictionary definitions for extracting synonymous meanings. Apart from a larger sample, some methodological issues shall be revised. For example, completely unknown synonymous pairs could be used to actively involve the participants in the extraction process of dictionary definitions rather than letting them retrieve the wrong senses from their bilingual memories. Moreover, clearer test instructions with examples shall be used to familiarize participants with dictionary skills before the actual test begins. Finally, cross-linguistic effects could better be detected if more controlled words were used, i.e., words with one sense in both languages.

Conflict of Interest Statement
The author(s) declare no conflicts of interest regarding this article.

About the Authors
Hussein Abushaaban, School of Languages, Civilisation and Philosophy, Universiti Utara Malaysia. Email: husseinabushaaban@gmail.com; orcid.org/0000-0001-5245-9639
Rashad Faleh Alhasan, Translation Department, Saif Bin Zayed Academy for Police Science and Security, UAE. Email: rfh999@yahoo.com; orcid.org/0000-0001-9774-6084.
Hamzeh Mohammad Al-Harbi, Part-time Lecturer (School of Foreign Languages). Email: hamzehalharbi@yahoo.com orcid.org/0000-0003-0320-3906.
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Hussein Abushaaban, Rashad Faleh Alhasan, Hamzeh Mohammad Al-Harbi
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