Classroom Methods for Enhancing Equivalence Retrieval for Translators

Nahla A. Surour,
Department of English, Linguistics and Translation Section,
Helwan University, Egypt.
Corresponding email: NAHLA_SOUROUR@arts.helwan.edu.eg

The problem of equivalence retrieval is one of the most challenging for trainee translators and interpreters. Numerous techniques have been proposed by translator trainers and theorists to help overcome memory-related issues (Gile 1995, Al-Hammadi 2012, Lörscher 2012, etc.). This paper proposed two teaching methods to be adopted by translator trainers with the aim of enhancing trainee proficiency, specifically concerning equivalence retrieval. The present article generally belongs to the cognitive paradigm. The proposed teaching methods, namely semantic breakdown and teaching-common-senses-first, take ‘meaning’ as their focus, basically drawing on ideas from schema theory, and relevance theory. A future empirical investigation of the two proposed teaching methods would help validate them.

1. Introduction

There is a “need to consider how best to present information and how to maximize opportunities to ensure meaningful links are made to aid later retrieval of information” (Al-Hammadi 2012, 84).

Translator trainers have always sought to teach their trainees how to remember the equivalent of terminology, acronyms, phrases, etc. through various techniques (and how to retrieve the equivalent quickly in interpretation courses). Numerous methods have been proposed, especially when it comes to interpretation training. Examples are the linking technique, mnemonics, categorization, etc. In this paper, I discuss two cognitive-based teaching methods that help trainees get a deeper understanding of words and thus have a firmer grip on their equivalents.

In more technical terms, this paper proposes two teaching strategies that can be incorporated by translator trainers to enhance trainees’ performance concerning the retrieval of translation equivalence. The two methods are actually implemented by myself in class. They are cognitive-based, as they draw on aspects related to schema theory, and relevance theory. In the sections below, I explore the relevant literature and explain the two methods in relation to the theories explained.

2. An overview

Understanding is the key to information retention (and later retrieval). Zhong confirms that “understanding is the first step in successful interpreting” (Zhong 2003, 4). In the same vein, Lin Yuru et al. say, ”memory in consecutive interpreting consists of nothing more than understanding the meaning, which is conveyed by the words” (Lin et al. 1999 in Zhong 2003).
Based on this contention, a translator trainer should focus on developing ways to ensure a clear and accurate comprehension of lexemes on the part of the trainees. This would improve retention of meaning (and equivalence by definition), facilitate retrieval and make election of the equivalent quicker, more accurate and confident.

Developing techniques that target the trainee’s comprehension must reasonably derive from a cognitive pool. Cognitive theories generally describe how individuals “think, perceive and remember information”, as well as illustrate “the manner in which individuals acquire and process information” (Sabet and Mohammadi 2013, 2141).

To lay down the theoretical framework, in the following lines I go over two cognitive fields that underlie my equivalence-retrieval enhancement strategies.

2.1. **Schema theory**

The term "schema" was first used in psychology by Barlett as "an active organization of past reactions or experiences" (1932, p.201). The main principle of schema theory is that text does not carry meaning by itself. Rather “a text only provides directions for listeners or readers as how they should retrieve or construct meaning of their own, namely acquired knowledge” (Yanxia shen December 2008, vol. 1 no. 2: An Exploration of Schema Theory in Intensive Reading). Schema – plural being schemata – is “an organized unit of knowledge for a subject or event. It is based on past experience and is accessed to guide current understanding or action” (Jeff Pankin, 2013). In other words, it is a mental representation that a person forms to organize (and thus perceive) information about a certain concept, experience, word, etc. “Schemata can represent knowledge at all levels-from ideologies and cultural truths to knowledge about the meaning of a particular word, to knowledge about what patterns of excitations are associated with what letters of the alphabet” (Takeda 2021, parag. 1).

As related to this study, schema theory supports the first suggested teaching method, namely Semantic Breakdown. In other words, the importance of schema theory to equivalence retention and retrieval lies in how the translator or interpreter is claimed to use schemata.

2.2. **Relevance theory**

Relevance theory was initiated by Grice (1989). However, it was famously detailed by Sperber and Wilson (1986) and later on revised by the same authors in Sperber and Wilson, 1995 and Wilson and Sperber, 2002.

Relevance theory raises “fundamental questions such as: How is the appropriate context selected? How is it that from the huge range of assumptions available at the time of utterance, hearers restrict themselves to the intended ones?” (Ifantidou 2001, 61).

Studies have shown that the human mind attends to only that information that is relevant to it (see for example Broadbent’s model of selective attention, 1958). And that for information to be relevant, it has to (1) logically fill a gap in the mind’s information bank and (2) be causing the least effort to be done by the brain. So, from among the many possibilities of meanings posed by an utterance, the human mind will choose to adopt that meaning that is most relevant. That is, the meaning which makes more difference to what it already holds, and that is least in the effort it causes the mind to exert for comprehension. This relevant information is by and large the intended one.

Relevance theory is, therefore, underpinned by the inference-context pair (see for example Schaffnner, 1988, and Paul and Schaffner, 2002). Inferencing is an operation that “involves supplying reasonable concepts and relations to fill in a GAP or DISCONTINUITY in a textual world” (De Beaugrande and Dressler 1981, 101). In fact, it is a cognitive activity central to any act of communication, including translation (Gutt 1991).
3. The teaching methods

“Understanding is the first step in successful interpreting” (Zhong 2003, 4). Taking this as a belief, I set up two teaching methods based on meaning.

3.1. Semantic breakdown

“We do not usually realize how semantically complex a word is until we have to translate it into a language which does not have an equivalent for it” (Baker, 1992).

The first method of equivalence-retrieval enhancement is specially developed for abstract, problematic words – the word problematic in translation studies usually denotes words that (for various reasons) have no corresponding single word in the target language acting as an equivalent, and that involve some sense-complexity. For these, I propose reducing the lexeme into a number of primary lexemes. That is, breaking down a relatively semantically-complicated lexeme into a set of semantically-simpler ones.

Example 1: “Access”

The semantic meaning of the noun access could be illustrated to trainees in the following simple manner:

\[ \text{Access} = \text{ability to} + \text{reach} \]

A hypothesized effect of introducing the word access to trainees in such a manner is as follows: drawing on a pre-established mental semantic breakdown of the word access (which has no direct equivalent word in Arabic), trainees could easily (and maybe unconsciously – in automated situations) elect it as a short yet perfect equivalent for the sense القدرة على الوصول (the ability to reach), even when stated in a nonlinear, or intermittent, manner. Take as an example the following sentence:

القدرة على الوصول إلى القدرة على الوصول إلى الغذاء (Source: إعادة التفكير في الجوع, إعاده التفكير في الجوع, November 5, 2014: a translation of Rethinking Hunger, November 3, 2014)

In this sentence, the semantic components of the lexeme access are not adjacent, as can be observed (from the underlined parts). The semantic component ability to is separated from the other one (reach). However, drawing on the semantic breakdown that has been supposedly established in their minds, trainees would be able to easily recognize the ‘scattered’ semantic components of the word access in the ST (قدرة... على الوصول إلى القدرة... على الوصول إلى الغذاء) and efficiently ‘assemble’ them under the rendering access in the TT, providing an accurate, natural equivalent: effective efforts to reduce undernourishment must ensure that people have access to enough of the right types of food. (Source: Rethinking Hunger, November 3, 2014)

Example 2: “Elaborate”

The meaning of the word elaborate, as an adjective, is relatively complex as it stresses the state of details having been carefully handled, while, at the same time, it holds a flavor of perfectness or neatness being a result of this care. This blend of sense flavors is characteristic of a lot of adjectives. For pedagogical purposes, the word can be visually broken down into two semantic components as follows elaborate = detailed + perfect/neat. Such anatomy is indeed reflected in the renderings of professional translators, translating into Arabic, as they sometimes translate the word by its first sense (مفصل), other times by its second sense (متقن), and still other times by a blend of the two senses (مفصل و متقن), or, further, any expression involving these two senses. As obvious from the above examples, one of the merits of this method is that it works not only on the micro-level but involves the macro-level, functional, non-linear translation units. A functional unit is “the sum of text elements or features that are intended (or interpreted as being intended) to serve the same communicative function or sub-function” (Nord 1997, 70).
The breaking down of the more complicated and problematic lexemes in such a way is deemed to consolidate the retention of the new lexemes into the schemata of the trainee, and by definition enhance the retrieval capacity. As obvious from the above account, the process of breaking down the semantic sense of an abstract complicated word could be explained as the reduction of a dictionary definition into not more than three simple lexemes, playing down the complexities of a word temporarily – this does not rule out encouraging trainees to refer to the dictionary definitions of the lexemes in question.

It is claimed that trainees exposed extensively to the proposed semantic-breakdown method are expected to have increased retention and retrieval proficiency, in terms of both quality and speed due to reducing the mental load (see Gile’s effort models, 1992 and 1995). In other words, it enhances their ability to retain as well as retrieve or elect a suitable equivalent rapidly. Provided such an analytical approach towards more complicated abstract vocabulary is provided on a regular basis, the mental capacity of students is expected to increase, expanding their mental schemata pertaining to senses and propositions. As Barlett puts it, “the organised mass results of past changes of position and posture are actively doing something all the time; are, so to speak, carried along with us, complete, though developing, from moment to moment” (Barlett 1932, 200 – 201).

**In consecutive and simultaneous interpretation settings:**

It is believed, following Zhong, 2003, that “understanding is the first step in successful interpreting” (Zhong 2003, 4). It follows from this that this method readily serves consecutive translation and interpretation, as, drawing on a clearly defined ‘semantic’ schema pertaining to a certain lexeme, a trainee could ultimately form a sharp propositional image of the parts of the text, which would lead to adequate comprehension. Moreover, as consecutive and simultaneous interpretation allow for more reformulation and information relocation (Seleskovitch, 1978) and give the interpreter an increased leeway for discretionary acts such as reorganization or reformulation of the text – especially within the former mode of interpretation (Shlesinger 1988, 150), such semantic simplification of lexis proves worthwhile as adequate comprehension provides solid ground for reformulation. By reformulation it is meant a reconstruction of the lexico-grammatical content, ensuring a communicative translation, without overlooking basic semantic concepts (except if deliberately for translational reasons, see for example Nord 1997, Chesterman 1997, Shlesinger 1988).

Over time, the simplified images gradually become more sophisticated, and the trainee develops into a professional translator or competent interpreter using automated translation strategies, characterized by being more proficient and speedier (for the concept of automation in translation, see Jääskeläinen and Trikkonen-Condit 1988, 89-109). “Schemata become theories about reality. These theories not only affect the way information is interpreted, thus affecting comprehension, but also continue to change as new information is received” (Takeda 2021, Parag. 1). In other words, as Al-Hammadi puts it, learners “actively build schema and revise them in light of new information” (Al-Hammadi, 2012, 84). Schemata “are not viewed as static but rather as active, developing, and ever changing. As readers transact with text they are changed or transformed, as is the text (Takeda 2021, Parag. 2).

### 3.2. Teaching common senses first

Relevance theory claims that the human mind tends to attend to this information that is more relevant to it (selectivity)\(^1\). A relevant piece of information is that which has a positive cognitive effect (is more worthwhile for one’s information) as well as that which makes the mind exert the least mental effort (Sperber & Wilson, 1986). Moreover, according to image schema theory, the less frequently used senses of a word are generally understood in relation to its most common sense, which facilitates the grasping and retrieval of other peripheral senses (Lui & Tsai, 2021). Yu further emphasizes that “if learners can grasp the core
schemas, the peripheral senses can be acquired more naturally and effectively” (Yu, 2022). Interestingly, it seems that such mental tendency regarding information and vocabulary has to do with similar claims related to equivalence retrieval: “Even if the most frequent equivalents in texts are not in each and every case the best candidates … they are by and large the most serious candidates to consider” (Lew, 2013);
The “art of smooth interpretation is based on the art of smooth coordination” (Kriston 2012, 81).
In line with the above contentions, as well as with the principles of relevance theory explained in section 2.2, it is suggested that the translator trainer initially introduces no more than 3 common senses for novel polysemous words, including the sense encountered in the text being translated by the students (even given the existence of more infrequent senses). Following the principles of relevance theory, the 2 or 3 common senses, otherwise called “core” senses are to be discussed in terms of usage, providing examples of the word appearing in different sentences reflecting the senses in question. This teaching strategy, however, does not entail that the trainee should not be encouraged to make his/her own extended research on the lexeme in question later on. It is just a process of playing down the complexities of a word temporarily. It plays on the advantage that the core senses provide an initial general idea about the word’s feel and paves the way for grasping the other senses gradually, given that a core sense “illuminates the meaning of other senses” (Howard 2002, 92).
Such a method is claimed to inculcate the common senses (and their textual equivalents) in the mind of the trainee. Technically speaking, the core senses would be added as ‘immediate’ meanings to the inner dictionary of the trainee, speeding up the retrieval process. In their primary stages of new word assimilation, trainees would have no more than 2 or 3 immediate senses ready in their minds for processing during their equivalence retrieval and election process (drawing on contextual clues for election).
It is contended that reducing the elements to be selected from is better for the primary stages. Such reduced schemata are expected to naturally expand with experience to reach more sophisticated levels: “Each new experience incorporates more information into one's schema […] which continue to change as new information is received”. (Takeda 2021, Parag. 1). In other words, learners “actively build schema and revise them in light of new information” (Al-Hammadi 2012, 84).
The core meanings of a polysemous word, as stated above, are the basic more common senses, which constitute the core (and illuminate the understanding of) the other more infrequent meanings. This raises the question of how a trainer is supposed to decide which senses constitute the core meanings of a word. There are two ways: the first is that the trainer would exercise their own informed judgment, deciding on which of the multiple senses of a word constitute the most general and most widely used ones in current usage; the second is by consulting dictionaries and corpora, bearing in mind that dictionaries vary in the way they organize senses. Thus, a trainer looking for the core meanings should consult dictionaries having a core-meaning approach to organizing the meanings of words, drawing, simultaneously, on his expertise in the field of translation.

Example: “Settle”
The verb settle has multiple meanings, which are summed up under 7 main senses by Cambridge Dictionary, and under 8 senses, as a transitive verb, and 6, as an intransitive verb, by Merriam-Webster.
As a start for introducing this word, a trainer is advised to select the following three senses as the core ones, under which almost all other senses could be categorized as ‘subsenses, or as related senses:

Displaying the senses in a diagram, while providing a small phrase for usage, as shown above, is expected to help memory. More elaborate examples of usage in complete sentences with and without accompanying prepositions should also be provided and discussed. Trainees should then be encouraged to determine the equivalent for each sense in the target language. After the trainees have made their successful and/or unsuccessful attempts of matching the senses with their counterparts in the target language, the trainer would write on the board a range of relevant equivalents for the trainees to select from – including equivalents of some closely related senses and subsenses that have not been discussed. Simultaneously the trainer should stress the fact that sometimes a source language word and a target language word are established as two counterparts, despite the fact that they are not actually identical due to discrepancies in terms of range of senses, shades of meaning, collocation, usage, context, etc. In case of Arabic being the target language, the range of equivalents to select from for the verb *settle* would be:

The last two Arabic equivalents provided (َبَلَدْتَ ٍوَبَلَدْتُ َنَٰحَةً and ٍأَدُّهُ ٍوَأَدُّهُ ٍبَلَدْتُ َنَٰحَةً) are counterparts of senses other than the three core senses provided at the beginning (though they are obviously related). They provide translations for *settle* in sentences like *tea settled my nerves* and *the wind settled*, respectively. The first equivalent (ِبَلَدْتُ ٍوَبَلَدْتُ َنَٰحَةً) could serve as the counterpart of senses 1 and 2 in the diagram, yet could also be equivalent to another unmentioned (yet related) sense, as found in the sentence *sand particles settled at the bottom of the glass*.

Such examples demonstrate for trainees how polysemy is not identical across languages: there is a disparity in the matching between words across languages; different shades of meaning could be lumped under one word in a language while imparted by separate words in another, due to the different cultural ‘eye’.

The three core senses having been grasped, and their usage mastered, the other senses of the word *settle* are expected to be incorporated in the trainer’s schema over time, much easily and more elaborately.

### 4. Conclusion

The problem of memory training in the translation classroom has been approached by trainers and translation scholars. Varying strategies have been developed and implemented in class for this purpose. In this paper two translator-training methods for enhancing equivalence retrieval are recommended, backed by relevant theory, namely *schema theory* and *relevance theory*. The two methods depend on meaning as a basis for memory training. The first method suggests breaking down problematic abstract vocabulary into a couple of simplified lexemes (Semantic Breakdown), and the second proposes highlighting for the trainees, in a ‘primary phase’, only the common senses of polysemous words (the teaching-common-senses-first method). The two methods are actually applied in class by myself, and are believed to be of value if adopted in translator-training classes. The article starts...
by reviewing the basic cognitive theoretical frameworks underlying the teaching methods, then the two teaching methods are explained and illustrated by examples of my own attempts at teaching equivalence in class. From the illustrated examples, we can theoretically expect how the two methods could yield fruitful results, enhancing the speed and quality of equivalence retrieval for trainees. It is, therefore, advised that further empirical investigations of the two methods would be carried out in class in order to validate them.

Notes:

1. The notion of selectivity refers to “the reader's ability to attend selectively to only that information requiring processing” (Takeda 2021, Parag. 1).
2. A core sense is that one which is “most common in current usage” (Howard 2002, 92). Ghazala calls it “common” meaning (Ghazalla 2008, 9).

Determining the core sense on the part of the trainer or the trainees could be achieved by checking modern monolingual/bilingual dictionaries, or parallel corpora.
References


