# The Potential Effect of Conceptual Maps on Developing Translation Students' Encyclopedic Knowledge

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#### **Abstract**:

This paper purports to give a special attention to teaching specialized translation in higher education. Thus, translation is by nature a problem solving activity and reposes on a complex set of skills, which creates a load on their short-term memory and prevents them from grasping information or remembering it later. Translators need not only linguistic competence, but encyclopedic knowledge as well. In specialized translation, they need to acquire a declarative competence about the specialized field with which they are dealing, and this is a problem that should not be reduced to knowledge of terminology. Students need to immerse themselves in the domain and acquire an aptitude to express themselves in the given field of specialty using a near-specialist discourse after acquiring the necessary encyclopedic knowledge. A constant contact with text translation in the domain does not guarantee the development of such competence, as students need more support in this respect. In this paper we suggest the use of concept maps prior to embarking in the translation activity per se as a means to enhance students' encyclopedic knowledge and hence translation competence.

**Key words**: Conceptual map; Encyclopedic knowledge; Specialized translation; Translation teaching; Learning.

### Introduction

There is a discrepancy among translation researchers and teachers about the nature of translation competence, its distinction from the linguistic competence per se and the way it is taught and enhanced. However, translation has recently imposed itself as an independent discipline and translation department flourished around the world bringing afore new problems pertaining to the specificity of the skill and requiring further pedagogical and educational dimensions

to draw clear lines between the two so-far confounding competences: linguistic and translational. As such, attempts at defining translation competence have proved to be of a paramount importance to researchers in the field who have been trying to dissect the entity and give it a partitioned analysis (see for example PACTE group's componential analysis of translation competence). One component revealed by most analyses of translation competence is the encyclopedic knowledge that almost all translators agree that it needs to be developed and cared for in any training dedicated to translators. This encyclopedic knowledge is indispensable not only for general translators, but also and more importantly for specialized translators. Thus, in specialized translation namely as regards scientific and technical translation, the stake is not only in how to find equivalents to newly invented concepts, but also in how to acquire enough knowledge in the domain of specialty that can help the translator build enough schemata necessary for the process of conceptualization which constitutes a prior step to assimilation. A specialized translator cannot decide on how to render a given concept unless he is equipped with the appropriate mental schemata to do that. Thus, a concept is not defined by itself, but through all the relations it holds with other concepts and means of expression within the system that constitutes the specialized context in which the translator is working. There are some eminent research who contributed a great deal in the field of specialized translation, namely Christine Durieux (1988) in her holistic approach to teaching technical translation, and Jean Delisle (1988) in his approach to teaching economic translation. Both researchers suggested detailed methodological procedures to cope with specialized discourse in the teaching programme. This paper is an attempt to contribute in the education of the specialized translator to help him control his cognitive overload and sustain his retention capacity, which is highly appreciated when developing encyclopedic competence. Thus, the paper unfolds on the different approaches underpinning translation education, which is an important step for teachers and researchers to understand the nature of the problem and situate their eventual contribution to the field.

Then a discussion of translation competence and its different sub-competences as discussed by different researchers, who seem to agree on the indispensable role played by encyclopedic knowledge, is presented. In a third part, concept map is defined and its relation to the development of encyclopedic knowledge is explained. An example of a scientific text analysed using a conceptual map is provided to explain its utility for students in overcoming translation and interference problems. Class observations are relied upon to enrich the discussion and illustrate actual translation problems the text presents.

# Traditional and contemporary approaches to translation education

Before translation was recognized as an independent discipline and was welcomed in universities over the world, it was believed to be inherent to language competence and tied to bilingualism, which is considered to be an innate aptitude that cannot be nurtured. However, this view has been long debated and questioned through different research works in this respect.

To summarize the historical development of translation education, Zou (2015) divides the development of translation competence models in the last four decades into four periods.

The first period starting in the 1970s is characterized by the works of Haris & Sherwood (1973, 1978), Toury (1974), Wilss (1976) who believed in the innateness of translation competence and whose works depicted unawareness about the distinction between translation competence and bilingualism (linguistic competence was believed to be at the core of translation competence).

The second period starting in the 1980s is a developmental period characterized by the works of Nida (1981), Robert (1984), Toury (1986), etc, opening on new ideas regarding the extensive dimension of translation competence going beyond the linguistic competence per se and touching upon world knowledge, instrumental competence, socialization, etc.

The third period starting in the 1990s is known as the enriching period which saw the emergence of functional theories and recognized the importance of contextual knowledge and the dynamic dimension of translation as revealed by the works of Nord (1991), Bell (1991), Kiraly (1995), Hatim & Mason (1997), etc.

The fourth period starting in 2000s, known as the blooming period, has been marked by the use of experimental methods in investigating translation competence and extending links with other disciplines such as psychology, sociology, intercultural studies, etc to give it a holistic treatment as required by the ever changing society with which we are forced to cope. This is mainly revealed in the works of Neubert (2000), Schaffner (2000), Fraser (2000), Pym (2003), Davies (2004), Kelly (2005), PACTE group (2000, 2003, 2005, 2009, 2011, 2014), etc. Now, almost all translators have ended to agree that translation competence reposes on different subcompetences, but they just differ in their order of priority.

## **Approaches to translation competence**

Despite the development of approaches to translation education and of research methods, translation teaching is still seen to be divided into two major trends. We have on the one hand proponents of innate competence, and on the other hand proponents of learned competence. Innate competence represents the trend of those who believe that translators are born with an innate predisposition to be translators and that a mastery of languages leads undoubtedly to a mastery of translation. Learned competence represents the trend of those who believe that translation is a skill that needs to be acquired and fostered in a learning environment. The interesting thing about learned translation which seems to explain teachers' intrinsic beliefs behind their translation teaching approaches is the three categories into which it unfolds. Thus, learned competence, according to Zou (2015: 787) is seen to be categorized into:

- 1- **Language-oriented models**: in such models, the focus is on the language component believing that furthering the learner's linguistic competence would further and foster his competence in translation.
- 2- **Transfer-oriented models**: these models are either static reflecting the transfer of languages as linguistic systems or dynamic reflecting the communicative empowering of translation acts.

3- Communication-oriented models: these models focuses not on language as a communicative means but on other agents outside language itself, such as the people involved in the communication and their surrounding situation. Such models involve strategic competence and its ensuing metacognitive aptitudes.

Thus, in a learned translation approach to translation teaching, linguistic competence is essential but is in no way the core component that commands the translator's specific competence.

What translation education prioritizes is to develop trainees' TC by assisting them develop conscious reflection on translation, get equipped with necessary declarative, procedural and conditional knowledge to tackle with problems encountered in translation, and help them become qualified and competent translators to fulfill the communicative functions effectively in the current context. (Zou, 2015: 787)

To achieve this aim, a teacher needs to develop a battery of activities to help him assist his students developing the required competence and all the supporting skills. In specialized translation, the necessary skills are further extended and the teacher requires further consideration of other imposing skills. He needs, for example, to help the students grasp the specialized discourse. Besides the holistic approach to the language of specialty espoused by Durieux and Delisle as hinted at above, a textual approach may also help sustain the students' acquisition process in this respect. Thus, concept mapping is deemed of essential utility to attain this objective.

# 4- What is concept mapping?

Davies (2011) draws a distinction between mind, concept and argument maps. He defines mind maps as visual association maps which represent ideas and clarify their relationships. Concept maps, for him, highlight the hierarchical ordering of ideas differentiating between primary and secondary ideas and their relations to each others. Arguments maps focus on the inferential structure of ideas and the relations between premises and conclusions.

Being visual, concept maps facilitate learning and transform it into a dynamic process. It is considered as "a brand new reading system, furnishing the reader with a rapid sense of the text in its entirety, obtaining a visual 'snapshot' of the semantic landscape surrounding the 'node' word" (Falco, 2015: 97).

In specialized translation where the focus is on the domain-specific knowledge, concept maps help draw a general landscape of the specialized text helping students grasp the entire network of relations surrounding scientific terms. Thus, providing students with lists of terms and their equivalents in the target language to learn by heart is futile and most certainly deemed to failure. Students are not going to remember the terms they came across in their translation, and would always feel the urge to return to their glossaries to retrieve the information they need. In this respect, concept maps would help them develop internal schema of the terms they learned for a better retrieval later on.

In a specialized translation class I taught to BA 2 students during the academic year (2018-2019), we came across the term "land reclamation" which means "استصلاح الأراضي". I remember students' reactions to the way they received the information. They were astonished why the term was not translated "land improvement" and spent few moments baffled and confused at the way terms are coined in languages. They repeated the term many times during the session and gave me the impression that because it carried such a special experience of discovery and surprise, it was going to be retained forever. However, on the day of exam, they were required to translate a text from Arabic into English in which the phrase "land reclamation" was needed. However, only one student could use the right term; the others used instead "land improvement"! To my surprise, the emotional experience they had while encountering the term for the first time did not help in long-term retention and the learned term fell into oblivion.

I noted the same thing with another expression, this time a lexical word, I encountered in three different texts at different interval of times and used with my students whom I provided with the right equivalent. The word is "to abound" corresponding to "تتوافر" or "تتوافر" or

(for example, the Arab region abounds with gypsum). Each time we met the word تزخر in similar contexts, I suggest to students to use the expression "abounds with" instead of the longer expression "the region is rich with". However, in the exam, most of the students failed to use this word that I thought was sufficiently repeated to be retained.

This experience incited me to think of the reasons behind the state of oblivion students continue to experience although their academic average overall was fairly developed. In reading about concept maps, I just felt it to be an efficient tool against rote learning and a more dynamic method for a better retention.

## Benefits of concept mapping in education

Concept Mapping was first developed by Novak in 1972 who was eager to renovate educational methods by suggesting novel ways of learning other than rote memorization inherited from behavioural and positivistic tradition. Relying on the works of Ausbel (1963) on cognitive theory of learning and of Kuhn (1962) on the structures of scientific revolutions, Novak led, with his team, his innovative research in education through a longitudinal study they carried out on students acquiring basic biological concepts. Novak 's students devised this technique of concept mapping to help them track learners' learning progress in terms of their acquisition of those scientific concepts. It is then that they discovered that concept mapping was a useful tool to use in instruction to help learner improve their retention capacity and build up their knowledge in a more logical and systematic way. Novak concluded that "Building Concept Maps is not only a powerful way to capture and organize knowledge, it is also a that encourages meaningful learning and a understanding of the nature of human learning." (in Novak & Cañas, 2011: 17). Concept Mapping is used in the workplace by different institutions and is computerized and conceptualized into software for more efficiency. In education, even if used in its most rudimentary form, it is seen to offer the following advantages, whether in the field of translation or other Knowledge-domains:

- Helps students brainstorm and generate new ideas.
- Encourages students to discover new concepts and draw the relations between them.

- Helps students communicate ideas more clearly.
- Helps students integrate new concepts with older concepts.
- Enables students to enhance their knowledge of any topic and evaluate new information.
- Helps students in long retention of information.
- Assists students in fighting fogginess and misconceptions.

Kennedy et al (2004: 31-32) in Falco (2015: 97) even highlight the contribution of concept mapping to long-term critical thinking: "[t]his role of concept mapping in the long-term construction, growth and retention of knowledge as well as its constructivist function are widely acknowledged, since concepts contribute to critical thinking, knowledge creativity and communication."

# Using concept maps before embarking in the translation activity

We must admit that there is more in a text to discuss than simply its grammatical structure and textual cohesion. Providing students with a scientific text to translate then discussing their translations to say which one was more accurate is not enough to develop their encyclopedic knowledge and to familiarize them with the domain in which they are translating. This method cannot even help them retain information and acquire new knowledge of either language or field.

In order to translate this type of specialized language text, translators must go beyond correspondences at the level of individual terms, and be able to establish interlinguistic references to entire knowledge structures. Only then can they achieve the level of understanding necessary to create an equivalent text in the target language. (Faber, 2009: 108)

This interlinguistic reference Faber is referring to is, in fact, what encourages the recourse to mapping to draw the links between concepts and rebuild the conceptual framework of the text to discover its specificity and encyclopedic potential.

In what follows we are going to provide an excerpt from a scientific text with and without a corresponding conceptual map to highlight the different means of displaying the information and discuss the eventual facilities the conceptual map is likely to provide for learners.

#### The source text:

The passage used here is an excerpt from a full text entitled "Connection is a core Human Need, but we are terrible at it" written by Brianna Wiest (4 December 2018) in an electronic scientific magazine: http:// medium.com. The article is classified under the rubric relationship, which is in itself part of psychology. The text as a whole deals with the problem of connection and its effect on the individual's life and speaks about a scientific experience sustaining the author's arguments. The text in itself is rich of ideas and concepts belonging to a specialized domain and can provide an interesting experience for students to embark in. This magazine, besides other electronic magazines (http://curiosity.com: http://theoutline.com), offers many interesting scientific articles ranging from medicine, technology, biology, etc that are suggested by a Facebook group "al Jazair Tagra" (Algeria reads) to be translated by volunteer in the name of whom the translation might be eventually published. This is rather a philanthropist project meant for the divulgation of scientific knowledge in Arabic (for more detail on this project see http://notarjim.home.blog). The choice of fairly accessible domain of knowledge (psychology) rather than a more rigid technical domain (hard science) is justified by the fact that the students are getting their first contact with the specialized domain, and naturally it is not convenient to adapt the text to their stage of readiness.

Here is the text as it appears in the magazine:

# **Original text**

**In** his book *Lost Connections*, Johann Hari talks about his decades of work in the fields of trauma and mental health and why he believes that the root of almost everything we suffer through is a severed connection we never figured out how to repair.

At one point, Hari talks about an obesity clinic where patients who were overweight to the point of medical crisis were put on a supervised liquid diet in an effort to try to save their lives. The treatment worked, and many of the patients walked out of the clinic hundreds of pounds lighter and with a new lease on life—at first. What happened later was a side effect no doctor predicted. Some of the patients gained back all the weight and then some. Others endured psychotic breaks and one died by suicide.

After looking into why many of these patients had such adverse emotional reactions, the doctors discovered something important: The time when each patient began overeating usually correlated with a traumatic event they had no other coping mechanism for. Hari summed up the findings like this: "What we thought was the problem was very often a symptom of a problem that nobody knew anything about."

Connection is the experience of oneness. It's having shared experiences, relatable feelings, or similar ideas.

Of course, the implication is not that every single overweight person is suffering some kind of subconscious trauma. The point is that many of the ongoing problems we cannot resolve are, in fact, symptoms of deeper problems we may not be aware of. In fact, Hari analogizes this to the smoke of a burning house: You can keep waving away the clouds, but without putting out the fire, your efforts will be futile.

# Discussion of translation problems in the text

In this section, we are going to analyze some problems encountered by students during their translation of the passage to stress the importance of conceptual maps in helping students not only to grasp the meaning of the text, but also to decode some syntactic structure and vocabulary items they found difficult either to assimilate or to translate appropriately.

• Lexical problems: some of the lexical problems at which students stumbled is the phrase "at one point" with which the text opens. This kind of discourse marker often causes a problem in translation especially when students resort to a literal decoding such as "في نقطة ". However, when translating a text into a picture, the student will

be forced to recreate the discourse marker accordingly producing something like "... يتحدث الكاتب في موضع ما من الكتاب عن "

Another lexical problem deemed difficult to overcome for students is « with a new lease of life ». This is rendered with the help of a dictionary as "فرصة جديدة للحياة". However, in its actual context of use it proves inadequate and too literal for such a rather scientific discourse. A better rendition with the help of deverbalisation (through the use of the map) would yield something like "يحذوهم الأمل في غذ أفضل"

• **Syntactic problems**: syntactic problems may be due to the length of the sentence which makes it hard for the students to link between its principal parts and to discard non essential elements (or extra details) as is the case of the following sentence:

"Hari talks about the obesity clinic where patient who were overweight to the point of medical crisis were put on a supervised diet in an effort to try to save their lives."

Some students translated this sentence literally and failed to link between its major parts producing something like:

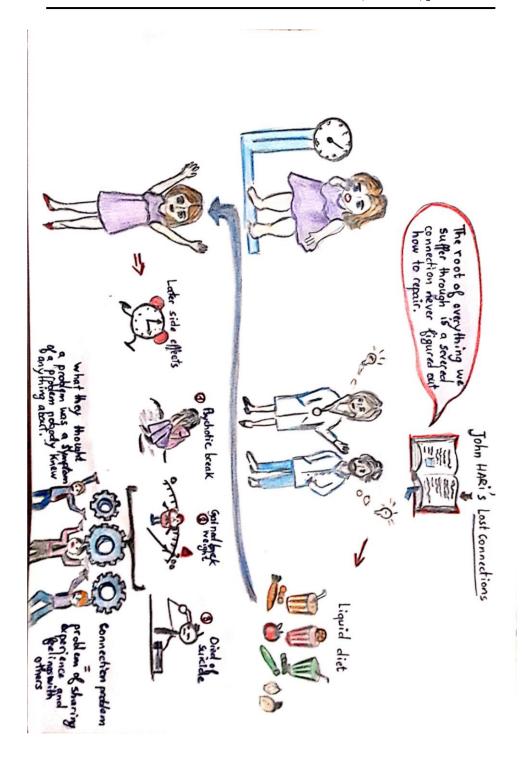
To solve this syntactic problem, students need to cut down this sentence into its major parts starting by sorting out its nucleus without the extra details, building thus sub sentences as follows: "Hari talks about an obesity clinic. In this clinic patient were overweight to the point of (suffering) a medical crisis. As a solution, they were put on a supervised diet (in an effort) to try to save their lives." The elements between brackets are deemed redundant (e.g. 'effort' and 'try'). This segmentation is easier with the help of the map.

• **Comprehension problems**: this is probably the most serious obstacle in translation. If the students fail to understand some key elements in the text, they obviously cannot provide a faithful and accurate translation. An example of this kind of problem revealed by

this text is the word "oneness." This word in isolation may suggest the idea of "isolation" or "loneliness", but in its context of use in the present text it means something else and it summarizes the key idea of the whole text, suggesting rather the idea of "communication" and "togetherness." Thus, the expression "experience of oneness" as it appears in the text is translated by students as "تجربة الوحدة" instead of "تجربة الوحدة" or "الشعور بالتواصل مع الغير" which is more appropriate and accurate in view of the context "connection is the experience of oneness. It's having shared experiences, relatable feelings, or similar ideas."

## Drawing a conceptual map of the text

In what follows a representation of the passage above into a conceptual map. Of course students are encouraged to draw their own conceptual maps under the supervision of the teacher. Conceptual maps are effective only when they are initiated freely by the individual who attempts to use them. As a second step, the best conceptual map is adopted in the classroom as model to work on. Then discussion of ideas displayed by the map ensues. Students are invited to rely on the adopted map to summarize the passage and express ideas in the source language. "In case of terms hard to digest, the author of the map may introduce other nodes that explain them." (Falco, 2015: 102) (for example, "and the some" may be considered a hard to digest term and for this need to be explained through a derived node). While engaging students in a discussion about the text, you will not fail to note that they are more fluent using this message than when relying on the text alone. This is in itself a good indication that they are being immersed in the language of specialty. "The map may also include formulaic expressions, which can easily be retrieved by students and re-used for translational purposes." (Falco, 2015: 102). The map is also used to make syntactic ties more explicit by using the ties that were otherwise dropped out for syntactic purposes. The teacher, relying on Power Point slides, may also resort to the use of pictures to make students visualize the concepts more clearly and encourage them to activate mental visualization when preparing their own conceptual maps for other texts.



## Retranslating the map into a source-language text

Retranslating the map into a text in the language of the source material help students acquire new vocabulary and structures to use them in their future productions. As we are dealing with translation from English into Arabic and vice versa, they need to develop their textual competence in both languages especially when dealing with scientific genres.

An attempt to retranslate the map into a (source) text yields something like:

In his book: Lost Connections, Johan Hari explains that the root of everything we suffer through is a severed connection we never figured out how to repair. Hari reports an experiment undertaken by some physicians to help overweight people lose weight by adopting a treatment based on a liquid diet. After a given period, most patients succeeded to lose hundreds of pounds, but later some side effects appeared. Some of these patients went through psychotic breaks, others gained back all the weight and the some, still other died of suicide. This led the author to conclude that what the physician thought was a problem was very often a symptom of a problem nobody knew anything about. This is what is known as a connection problem.

# Translating from the conceptual map:

Students may be encouraged to first improvise their (target) translation directly from the map they drew. In this case, they are guided in the process of deverbalisation, which is considered an important step towards effective and interference-free translation.

Here is an example of this improvised detached translation:

في كتابه Lost Connections أراد الكاتب أن يشرح الأسباب الحقيقية التي تحدث أزمات نفسية لدى المرء والتي تختفي خلف أعراض توهم الطبيب بأنها السبب في معاناة مريضه. فمثلا في تجربة قام بها مجموعة من الأطباء لمساعدة مرضاهم على إنقاص الوزن اعتمادا على حمية غذائية تعتمد على السوائل، استطاع المرضى، بعد فترة، الإنقاص من وزنهم وغادروا المشفى فرحين ولكن لم يمر وقت طويل حتى ظهرت عليهم آثارا جانبية. فبعضهم استرجع وزنه

السابق وبزيادة وأصيب البعض منهم بالاكتئاب ومنهم حتى من انتحر. وبالتالي استنتج هاري أن السمنة لم تكن السبب الحقيقي وراء معاناة هؤلاء وإنما اختفت الأسباب الحقيقية وراء هذه العوارض. فالسبب الحقيقي لمعاناة المرء هي انفصاله عن محيطه و عدم قدرته على تلبية حاجته في التواصل مع الغير وربط علاقة معهم، فعندما لا ينجح في ذلك يلجأ إلى الإفراط في الأكل ما يؤدي به إلى السمنة ولن يستطيع أن يتخلص من السمنة عن طريق الحمية وحدها، بل لابد عليه أن يرجع إلى جذور المشكلة لديه.

## **Textual translation (translating directly from the text)**

في كتابه " Lost Connections"، يتحدث يوهان هاري عن تجربته الطويلة في مجال الصدمات والصحة العقلية ولماذا يعتقد أن مرد أي معاناة نشعر بها هو بتر في اتصال لم نتوصل أبدا إلى كيفية إصلاحه.

يتحدث هاري، في مرحلة ما، عن عيادة لمعالجة السمنة تستقبل مرضى يعانون معاناة مفرطة من السمنة تصل بهم إلى حد الأزمة النفسية. وضع هؤلاء المرضى تحت العلاج المتمثل في نظام غذائي خاضع للإشراف يعتمد على تناول سوائل في محاولة لإنقاذ حياتهم. نجح العلاج، وغادر العديد من المرضى العيادة وهم أخف وزنا يحدوهم الأمل في حياة أفضل. ولكن هذا كان في البداية فقط، لأنه بعدها حدثت مضاعفات جانبية لم تكن في الحسبان، حيث استرجع بعض المرضى كل الوزن المفقود وحتى بعض الأرطال الإضافية، كما عانى البعض منهم نوبات من الذهان وتوفي أحدهم منتحرا.

بعد النظر في سبب ردود الفعل العاطفية السلبية لدى العديد من هؤلاء المرضى، اكتشف الأطباء شيئًا مهمًا: غالبا ما ارتبط الوقت الذي بدأ فيه كل مريض بالإفراط في تناول الطعام بحدث مؤلم في حياته لم تكن لديه أية آلية أخرى للتعامل معه. ولخص هاري هذه النتائج كالتالي: "ما اعتقدناه مشكلة في كثير من الأحيان لم يكن سوى عرضا من الأعراض التي لم يكن أحد يعرف عنها شيئًا."

الاتصال هو شعور وحدوي، يشارك فيه المرء غيره في التجارب والأحاسيس والأفكار.

بالطبع، لا يعني هذا أن أي شخص يعاني من السمنة يعاني نوعا من الصدمة اللاشعورية.ما نقصده هو أن العديد من المشاكل التي لا يمكننا حلها هي، في الواقع، أعراضا

لمشاكل أعمق قد لا ندركها. في الواقع، يقارن هاري هذا الأمر بدخان ينبعث من بيت يحترق، حيث يمكن للمرء أن يستمر في درء السحاب المتراكم حوله دون أن يتمكن من إخماد النار التي انبعث منها، بمعنى أن جهودك ستذهب هباء منثورا.

### Discussion

A traditional straightforward translation would lead students to instantly look for their dictionaries and try to find the most suitable words they fit in the contexts of their use. If you try at the end of the session to discuss the text with the students, you would certainly realize that their retention is at its minimum level, if you bring the text to discussion few weeks later, you would be surprised to discover that the text is hardly remembered in its details and very little information is retained. Continuous classroom observations helped see these results although resorting to drawing does not prove practical sometimes because of the time it takes and because of students limited ability or readiness in this respect. However, drawing a conceptual map of the text before embarking in the translation can help students assimilate better the information the text is displaying and can even help them be more alert to translation problems they probably would not notice otherwise. For example, the expression "experience of oneness" poses a problem for the students, as the bilingual dictionary gives something like " وحدة, but this meaning does not hold here as it suggests isolation and discarding oneself from the others or staying away from them, which is the opposite of the meaning intended by the author. Thus, establishing a conceptual map helps students to fight against foggy misconceptions as explained above. "In this sense, merely knowing terminological correspondences is hardly sufficient since such units, when inserted in an appropriate (or inappropriate) context, create ripples that affect the text at all levels." (Faber, 2009: 108).

The students who use conceptual maps are found to be more able to discuss and speak fluently about the topic under discussion and are more likely to assimilate and retain newly learned words and expressions not in isolation but in their context of use. Students' experience with translation using conceptual maps is more fun and profitable than with the straightforward translation that they report all the time to be strenuous and boring.

A constant exposure to methods using conceptual maps of the specialized texts suggested for translation is liable to develop students' discourse and communicative competence in the domain of specialty and is likely to equip the students with the necessary strategies (strategic competence) needed to cope with problems in the specific domain they are dealing with.

### Conclusion

A learned approach to teaching translation requires more efforts on devising activities likely to help students acquire skills and aptitudes tapping on the cognitive systems to activate the transfer and ease any load on the memory and the translation process overall. In specialized translation, exposure to the language of specialty is needed for students to develop discourse competence and place themselves within the context of use to act as experts and adopt the appropriate linguistic behavior. Specialized translation is more about special aptitudes than about the rote learning of special terms. Conceptual maps help build a specialized competence in a given domain by systematically nurturing a cognitive schemata of the language of specialty drawing links between different concepts and activating specific nodes to ensure communication in the domain of specialty.

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