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The EMOTION-IS-LIQUID Metaphor in English and Vietnamese: A Contrastive Analysis

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Abstract

Based on Lakoff's conceptual metaphor theory and Kovecses' basic emotion terms, this pilot research found that English and Vietnamese share the conceptual metaphor EMOTION IS LIQUID. For each basic emotion term, the proportion of the EMOTION IS LIQUID expressions to the total of emotion tokens was relatively small. The translation of one language to the other fell into the same conceptual metaphor. Examples were collected from the Corpus of Contemporary American English, the World Wide Web, and the VietnameseWaC corpus. An implication for English teaching is to categorize expressions into different conceptual metaphors to enhance learners' word choice.

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1. Introduction

Traditional scholars such as Aristotle and Michel Foucault considered metaphor as a rhetorical device to transcend the ordinary literal world. A more modern perspective undertaken by Lakoff and Johnson (1980), however, suggests that metaphor is a way people think every day, and it is popularized through increasing research in *conceptual metaphor*—the comprehension of a conceptual domain in terms of another, for example, of “time” in terms of “money” as in “I’ve *invested* a lot of time in her” and “You need to *budget* your time” (p.8).

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A conceptual metaphor is often structurally coherent: it comprises of subcategories of metaphors; each of these subcategories delineates an aspect or a characteristic of the main concept (Lakoff & Johnson, 1980). For instance, the conceptual metaphor TIME PASSES US includes two sub-cases, one in which the main concept, *time*, “is a moving object and moves toward us” (*The time for action has arrived*) and, in the other case, “time is stationary and we move through it in the direction of the future” (*We are approaching the end of the year*) (p.44). Lakoff and Johnson construct sub-cases with metaphorical entailments, as the following for AN ARGUMENT IS A JOURNEY:

AN ARGUMENT IS A JOURNEY (*We have set out to prove bats are birds*)

A JOURNEY DEFINES A PATH (*He strayed from the path*)

→ Therefore, AN ARGUMENT DEFINES A PATH (*He strayed from the line of argument*).

AN ARGUMENT IS A JOURNEY

THE PATH OF A JOURNEY IS A SURFACE (*He's on our trail*)

→ Therefore, THE PATH OF AN ARGUMENT IS A SURFACE (*We're well on our way to solving this problem*).

Lakoff and Johnson (1980) refer to such a set of entailments the evidence of the coherence of a single metaphor. In their subsequent discussion (1993), they expand on it as a way to lay out the source-to-target mappings to create what Kövecses (2005) calls a *complex metaphor*. In AN ARGUMENT IS A JOURNEY, the mappings from the source domain (*journey*) to the target domain (*argument*) have two correspondences: A JOURNEY DEFINES A PATH is similar to AN ARGUMENT DEFINES A PATH, and THE PATH OF A JOURNEY IS A SURFACE corresponds THE PATH OF AN ARGUMENT IS A SURFACE. Their idea is the principle for my preparation of the mappings for the EMOTION IS LIQUID metaphor.

Despite the overwhelming evidence of conceptual metaphors in language, McGlone (1996) casts down on Lakoff and Johnson's claim that people perceive metaphors via source-to-target mappings. In his study of thirty-two Princeton undergraduates, he found significant a result that people interpret a conceptual metaphor in a non-metaphorical way. For instance, most participants, when asked to paraphrase the sentence “Dr. Moreland's lecture was a three-course meal for the mind,” replied with “Dr. M's lecture touched on a variety of topics, but was well-integrated, thorough and intellectually stimulating” instead of “The lecture satisfied the mind's intellectual hunger thoroughly”—a reference to IDEAS ARE FOOD metaphor. McGlone insists the finding supports the *attributive categorization* theory, according to which the reader places the source (*a three-course meal*) and the target (*lecture*) domains into the same but unconventional (figurative) category (*well-prepared*) because literally, the two domains have nothing in common. When asked to generate other metaphors similar in meaning to the original one, the participants more likely provided expressions from the same *attributive* category of *a three-course meal* (e.g., “*Dr Moreland's lecture was a goldmine for the mind*”) than those related to the FOOD metaphor (e.g., “*Dr Moreland's lecture was bread for my starving mind*”). McGlone conducted two follow-up experiments to rule out alternative explanations for this result, such as the tasks itself being likely to encourage participants to provide a literal interpretation of the *three-course meal*. He concluded that people more often perceive higher similarity of or recall metaphors in the same *attributive* category of *a three-course meal* rather than those from the FOOD mappings model.

From my perspective, McGlone's argument has three major weaknesses. Firstly, he assumes *attributive categorization* and *conceptual metaphors* are mutually exclusive; that is, people comprehend metaphors via the first strategy or the second one but not both. I suspect the language people produce, such as in McGlone's experiments, is a product of a selection process in which they use both *attributive categorization* and *conceptual metaphors* to make sense of metaphorical expressions. If, for example, in subsequent research participants are required to provide metaphorical expressions in substitution for literal ones, they could employ different conceptual metaphors that share the same literal meaning (attributive category). Such a result only demonstrates the diversity of language choice but does not refute the possibility of source-to-target mappings process. In fact, in Feldman's neural theory of language to account for the comprehension of metaphors (2006), he consults evidence from brain-imaging experiments and asserts that metaphorical expressions, especially abstract concepts, are understood through mental simulation of events based on source (concrete)-to-target (abstract) mappings. Further research in cognitive psychology is necessary to elaborate on the issue.

Secondly, McGlone's choice of the *vehicle* (*a three-course meal*) to describe the *topic* (*Dr Moreland's lecture*) might elicit responses dependent on attributive categorization because, if readers are uninformed about how *Dr*

Moreland's lecture was, they can interpret a *three-course meal* in various ways, hence generating various attributive categories for both the *vehicle* and the *topic*. In contrast, metaphorical expressions such as *half-baked ideas* and *warmed-over proposals* suggest limited interpretation (i.e., not well thought out; derivative) because they are the common, specific language about a state or an aspect of food. Thus, I speculate that readers might resort to mappings as their primary strategy of comprehension. Subsequent research to demonstrate this point should be carried out.

Thirdly, McGlone's study includes only participants who are native speakers of English, and the metaphors used are less authentic because they are generated by the researcher and participants and serve the purpose of the research. Native speakers of other languages and large linguistic data should be taken into consideration for a more meaningful, reliable result.

I have established so far the role of source-to-target mappings, if not as a main strategy for comprehension of metaphors, at least a method to detect how metaphors are used coherently. My research's aim is to examine whether people from different cultures could use metaphor coherently in the same manner to create the same conceptual (complex) metaphor, as well as contribute to Kövecses's study of the universality and variation of conceptual metaphor across cultures (2005). Inspired by Kövecses's *Metaphor and Emotion* (2000), this pilot research investigated the emotion domain in Vietnamese and English as one example of contrastive analysis of conceptual metaphors across cultures.

Conceptual metaphor, or *ẩn dụ tri nhận* in Vietnamese, is still a promising field to cultivate. Nguyen (2009) discusses conceptual metaphors existing in lyrics written by renowned song-writer Trinh Cong Son. Phan and Nguyen (2010) study the conceptual metaphor of *life, death* and *time* in Vietnamese. Not many researchers survey conceptual metaphor within the Vietnamese language, or compare Vietnamese with another foreign language. An understanding of conceptual metaphor, however, may have several important implications to linguistics of the Vietnamese language, cognitive linguistics in general, and applied linguistics such as foreign language teaching. A foreign language teacher, for example, can utilize shared metaphorical concepts to teach English or Vietnamese. Because studying conceptual metaphors across languages is important, this qualitative and quantitative research attempts to investigate the emotional domain as an example. Emotion is a wild domain in both English and Vietnamese, which offers rich resources in both languages to compare.

The research question is whether English and Vietnamese share the conceptual metaphor EMOTION IS LIQUID. The study hypothesizes English and Vietnamese have the same conceptual metaphor EMOTION IS LIQUID. Emotion terms under investigation is limited to the four basic ones—anger, sadness, joy (happiness), and love—proposed by Kövecses in his *Metaphor and Emotion* (2000), in which he lists many conceptual metaphors of *anger* and *love* and hypothesizes the existence of a master metaphor of emotion. This research differs from many other studies, such as Li (2010), in its approach: more focus is on constructing the mapping model of emotions for the two languages. Li's study, on the other hand, diverts focus from the mapping to a variety of conceptual metaphors of an emotion.

2. Procedure

2.1. Method

The research applied Conceptual Metaphor Theory suggested by Lakoff and Johnson (1980) and the source-to-target mappings by Kövecses (2005) to establish the mapping model of the conceptual metaphor EMOTION IS LIQUID. In the mapping, relations between the source domain LIQUID and the target domain EMOTION was constructed by the following set of correspondences:

LIQUID	→ EMOTION
The Consumer/Container Of The Liquid	→ The Consumer/Container Of The Emotion
The Act To Take The Liquid Into The Body	→ The Act To Take The Emotion Into The Body
Feeling The Need Of The Liquid	→ Feeling The Need Of The Emotion
Physical State Of Liquid	→ Physical State Of Emotion
The Change of Physical State Of Liquid	→ The Change of Physical State Of Emotion

The Act To Put Someone In The Condition Of Being In Liquid, or To Fill Something With Liquid → The Act To Put Someone In The Condition Of Being In Emotion, or To Fill Something With Emotion

The Amount Of Liquid → The Amount Of Emotion

The Motion Of Liquid → The Motion Of Emotion

The Condition Of Being In Liquid → The Condition Of Being In Emotion

2.2. Instrumentation

Data in English and Vietnamese were collected from Corpus of Contemporary American English (COCA), the Google search engine, and Sketch Engines (Kilgariff et al., 2004). A corpus is a collection of spoken or written texts of different types (Deignan, 2005). The Corpus of Contemporary American English (COCA) contains more than 385 million American English words from 1990-2008+, balanced between spoken, fiction, popular magazines, newspapers, and academic journals (Davies, 2009). The Google search engine provides a way to retrieve information on the World Wide Web (WWW), which Volk believes to be “the largest corpus ever with more than one billion documents” (p.1, 2002). Sketch Engine is a corpus query system designed by Adam Kilgariff that allows access to the VietnameseWaC corpus of 106,464,835 words.

To find English expressions in COCA that fit into the mapping model, I put emotion words in the *search word(s)* box, filled in the *collocate* box with an asterisk, and adjusted the number of hits to display in the result set to 200. In the result set of collocates, words that can be used in *liquid* expressions (e.g., *drink*), together with their examples, were selected and categorized according to the mapping model.

To find Vietnamese expressions in Sketch Engines, I used equivalent terms in Vietnamese of those words and my cultural knowledge to determine possible *liquid* terms that can collocate with each emotion word. Those *liquid* terms were entered in the *lemma* box and *emotion* term into the *simple query* box to check for concordances. The concordances were selected as examples in Vietnamese for the mapping model.

Finally, the Google search engine was used to check for further instances of the conceptual metaphor in both languages.

2.3. Validity

The use of COCA and VietnameseWaC corpora was also to make sure data came from different sources and a large database. Using the corpora reduced the possibility of irrelevant and repetitive results. I also utilized the World Wide Web because it is the largest and up-to-date reservoir of language in order to complement the other two corpora. According to Fletcher (p. 275, 2004), “...new documents appear on the Web daily, so up-to-date content and usage tend to be well represented online. In addition, even a very large corpus might include few examples of infrequent expression or constructions that can be found in abundance on the web.” Data obtained from web search, however, contained unfiltered results and, thus, they are less reliable than those from the other corpora. Web search only conveys a general idea about the use of terms under investigation.

3. Result and discussion

The data confirmed the hypothesis that English and Vietnamese share the EMOTION IS LIQUID metaphor. For each mapping below, frequency of the *liquid* words, examples in both languages, and explanation of their use in discourse are provided whenever possible

3.1. Mapping 1: The Physical State Of Liquid Is The Physical State Of Emotion, And The Change Of Physical State Of Liquid Is The Change Of Physical State Of Emotion.

For this mapping, *liquid* words collocate with *anger* emotion in both languages. For example, in COCA *simmering* occurs 33 times (2.85% of the total occurrences of *simmering*), followed by *boiled* (29 times, 1.19% of the total occurrences of *boiled*) and *boiling* (21 times, 0.45% of the total *boiling*). *Steaming* was not found in COCA but in Oxford Online Dictionary through Google search as a British (not American) informal way of saying *angry*.

(1) “My neighbors are **steaming about** the noisy late-night flights.” Vietnamese people rarely use “steaming” when they mean *angry*, but when they do, *steaming* usually collocates with *my head, his head, her head, or their head*: “đầu tôi đang **bốc khói** đây!” (“my head is **steaming** right now!”)

(2) “Now, more than six weeks later, Qazwini’s **anger** at the backlash against Arab-Americans is still **simmering**.” The Vietnamese do not use “simmering,” which refers to a state of emotion held up and built up inside, to talk or write about “anger”.

(3) “**Frustration and anger** among Catholics **boiled over**.” The Vietnamese translation of this sentence could be “Sự **giận dữ (anger)** của những tín đồ đạo Chúa **trào sôi (boiled over)**.” To sound more natural, the Vietnamese would say, “The Catholics were **boiling**”, which means “Những tín đồ đạo Chúa **tức giận sôi sục**”.

(4) **Anger** was **boiling** up inside me.

“Sự **giận dữ** đang **sôi sục** trong tôi.” To sound more natural, the Vietnamese would say, “I was **boiling**”, which means “Tôi **giận sôi người**.”

(5) “...because he is outwardly well presented and benign yet at the same time frequently **boiling with rage**.” *Rage* is a related term to *anger*. “...**boiling with rage**” in this sentence does not connote the same meaning as “**tức giận sôi sục**”; instead, it should be “**nổi cáu**”, which has the same meaning as “getting angry.”

In the VietnameseWaC corpus, the number of hits of the *anger* conceptual metaphor is as followed: *giận sôi* (29 hits), *giận trào* (6 hits), *hơi giận* as in *hơi giận bốc lên* (1 hit). The Vietnamese equivalents to *boil* also only co-occur with “anger” and can be found in both writing and speaking.

3.2. Mapping 2: The Consumer/Container Of The Liquid Is The Consumer/Container Of The Emotion, And The Act To Take The Liquid Into The Body Is The Act To Take The Emotion Into The Body.

Only *anger* and *sadness* qualify this mapping. COCA showed 25 hits of *consumed* collocate with *anger* (or 0.48% of the total occurrence of *consumed*) and 4 hits with *sadness* (0.08% of the total occurrence of *consumed*). *Contain* *anger* is more frequent than *consume*, which has 42 hits in COCA (0.31% of the total occurrence of *consume*). *Swallow*, a possible *liquid* word, has no hit in COCA but exists with about 10,000 results in Google search.

(7) “My father, unable to reprimand us in front of his guest, **consumed** his **anger** in a silence nobody dared break.” The equivalent term of *consumed anger* in Vietnamese is *nuốt giận*. VietnameseWaC shows one instance of “consumed anger”: “Nghe như thế, tôi bèn nén giận, dẫn xuống, và **nuốt** vào bên trong.” The more native-like translation is *nén giận* (suppress anger), with 45 hits (0.3 per million words).

(8) “She is every mother who ever watched a grown-up child stumble through life, **swallowed** her **sadness** and disapproval and did what she could to help.” *Swallowed sadness* can be rendered as *nuốt buồn*, but this Vietnamese translation would be frowned upon.

3.3. Mapping 3: The Condition Of Being In Liquid Is The Condition Of Being In Emotion.

For this mapping, only Google search yielded hits. More Vietnamese expressions fit into this mapping than English ones.

(9) “And I’m **soaked** in your **love**.” This sentence can be rendered as “Và em **chìm đắm (soaked)** trong **tình yêu (love)** của anh”. In Vietnamese, *chìm đắm* co-occurs 1,650,000 times with *tình yêu* (love), 940,000 times with *nỗi buồn* (sadness) and 19,000 times with *u sầu* (sadness); for example, “**chìm đắm** trong **nỗi buồn**,” “**chìm đắm** trong **tình yêu**,” “**chìm đắm** trong **u sầu**.” These phrases occur in newspapers, blogs, songs, and literature.

(10) “...As I said in my previous post, that almost everyone in love simply loves rain. So what are you waiting for go get **drenched** in **love** and rain...” “Get drenched” is rarely used to talk about “love” in both English and Vietnamese language.

(11) “Our hopes **dissolve in sadness**.” Google showed 691 hits of *dissolve in sadness*, many are from literature. Some instances, such as the following sentence, are found in interviews: “When a wife gets cheated on, survival mode kicks in. She may have decided that it’s better to be brave than dissolve in sadness and fear.” The Vietnamese

translation of “Our hopes *dissolve in sadness*” is “Niềm hi vọng của chúng tôi *tan* trong *nỗi buồn*” and is uncommon in Vietnamese.

3.4. Mapping 4: Feeling The Need Of The Liquid Is Feeling The Need Of The Emotion

Examples for this mapping in both languages are rare.

(12) “She is *thirsty* for *love*” is equivalent to “Cô ấy khát tình yêu.” Sketch Engine yielded 3 hits in the VietnameseWaC corpus. Typically, Vietnamese people do not say “khát”, but they use “khát khao,” which means “desire”, not “be thirsty.”

3.5. Mapping 5: The Amount Of Liquid Is The Amount Of Emotion

For this mapping, only Google search yielded hits.

(13) “*One drop of love* will make the world alright” can be translated as “*Một giọt yêu thương* làm thế giới hạnh phúc.” *One drop of love*, although uncommon in English, can be found in lyrics and poems. In Vietnamese, Google showed 21 hits for *một giọt yêu thương* and 286,000 hits for *giọt sầu* (a drop of sadness), which are also mostly found in lyrics and poems.

3.6. Mapping 6: The Amount Of Liquid Is The Amount Of Emotion, And The Motion Of Liquid Is The Motion Of Emotion

(14) “As I’m crying with *overflowing joy*...”

(15) “When I think of home, I think of a place where there’s *love overflowing*” can be rendered as “Khi tôi nghĩ về nhà/gia đình, tôi nghĩ về một nơi mà có *tình yêu tràn ngập*.”

(16) Alas, that endless and unconditional *flow of love* doesn’t always feel possible to fallible parents. *Flow of love* means *dòng chảy yêu thương*. The Vietnamese phrase sounds literary.

(17) “It was like the *wave* of God’s *love* just *flowed* over me” can be translated to “Điều đó giống như *ngọn sóng yêu thương* của Chúa *chảy tràn* qua tôi.”

(18) “When your whole being was *overflowing* with *hate* there was no room for fear” can be rendered as “Khi trong bạn *ngập tràn hận thù*, bạn không còn biết sợ nữa.” Such use of “overflowing” is often seen in Vietnamese newspapers, literary works, and academic writing, but it is not common in conversation.

(19) “Sam felt *anger* and adrenaline *surge* through her” is equivalent to “Sam cảm thấy nỗi *tức giận dâng tràn* trong cô ấy.” Both sentences sound literary.

(20) Medvedev's remarks had the effect of highlighting the prime minister's traditional responsibility for the economy even as the Kremlin braces for a *surge* in public *anger* caused by the nation's worst recession in a decade and the end of the long oil boom that has sustained Putin's rule. *A surge in public anger* means *làn sóng giận dữ của công chúng*. *Làn sóng* is a Vietnamese equivalent term of *wave* or *surge*. Such a phrase can be found in newspapers.

(21) “Instead he felt little *spurts* of *joy* that *spilled* from the overload of exhilaration” can be translated as “Thay vào đó, anh ta cảm nhận những *nguồn vui* (*spurts/sources of joy*) nhỏ nhỏ *đổ tràn* (*spilled*) từ niềm phấn khích tột độ.” Typically, Vietnamese people do not use “spurts of joy,” but they may use “joy spilled” in literary writing.

(22) He stood there while the *anger drained* out of him.

“Anh ta đứng đó trong khi *con giận cạn dần/rút đi dần*.” Vietnamese people do not use “drain” this way. They would say, “...the anger cooled down.”

For mapping 6, *liquid* terms were found co-occurring with all four basic emotions, as demonstrate in the examples above. In COCA, *surge* collocates 17 times with *joy* (0.27% of the total *surge*), and 48 times with *anger* (0.77% of the total *surge*); *overflowing* collocates 9 times with *joy* (0.72% of the total *overflowing*); *outpouring* goes with *love* 39 times (4.8% of the total *outpouring*); *wave* and *washed* collocates 16 times (0.08% of the total *wave*) and 10 times (0.14% of the total *washed*) with *sadness* respectively. Negative emotions seem to occur more often with *surge*, and *wash*. In Google, there were only 48,400 instances of *surge of happiness* and 280,000 of *surge of joy*, as compared to 840,000 instances of *surge of anger*.

Google search showed, *overflowing* collocates with *love* 39,000 times, mostly in poems, lyrics and religious texts. In Vietnamese, positive emotions such as love and joy more often collocate with *ngập tràn* (*overflowing/overflow*) and *dòng chảy* (*the flow of*) than negative emotions. There were 367,000 hits for *tình yêu ngập tràn* (*love overflowing*), 27,500 hits for *dòng chảy yêu thương* (*the flow of love*), 4,560,000 hits for *ngập tràn hạnh phúc* (*overflowing joy/happiness*), and 10,400 hits for *ngập tràn hận thù* (*overflowing with hate*). “Overflow” does not collocate with “anger.” The lower number of hits of negative emotions terms might be attributed to the overall lower frequency of those negative emotions. Regarding contexts, *dòng chảy yêu thương* (*the flow of love*) often appears in texts about charity, hospital, and religion while *tình yêu/yêu thương ngập tràn* (*love overflowing*) appears in lyrics and articles about love, valentine, and Womens’ day.

Làn sóng giận dữ, the Vietnamese translation of *surge of anger*, appeared 526,000 times in Google search results, mostly from articles about economics, politics, sports, and fan reaction toward a singer.

3.7. Mapping 7: The Act To Put Someone In The Condition Of Being In Liquid, Or To Fill Something With Liquid Is The Act To Put Someone In The Condition Of Being In Emotion, Or To Fill Something With Emotion.

A possible *liquid* word for this mapping is *pour*. COCA yielded no hits while Google search showed examples of *pour scorn* used by the British. Thus, I decided to check the terms in the British National Corpus. Among 316 British tokens containing the word “scorn”, 54 tokens contain the phrase “pour scorn.”

(23) The Prime Minister took the rare step of issuing a brief statement, obviously aimed to ***pour scorn*** on those who say his days as Chancellor are numbered.

Pour can also collocate with *love*, as in (24) How much ***love*** can you ***pour*** into your life?

The Vietnamese do not use any Vietnamese expressions equivalent to “pour scorn” or “pour love”. Instead they may use expressions equivalent to “pour anger,” such as *trút giận*. Sketch Engine identified 88 occurrences of *trút giận* (0.7 per million words) in VietnameseWaC corpus.

According to the COCA corpus, the proportion of the EMOTION IS LIQUID expressions to the total of emotion tokens was relatively small. For example, among 19208 American tokens containing the word “anger”, only 183 of them contained “surge of anger/anger surged”, or “anger simmering”, “anger boiling/boiled”, “anger drains/drain”, and “consumed anger”, which made up of 0.95%. However, as compared to other words, such as *expressing* and *expressed* (261 hits in total, or 1.35% of the total *anger* terms), that collocate with *anger*, the ratio of ANGER IS LIQUID expressions to *expressing/expressed* terms is not low. The low percentage of ANGER IS LIQUID expressions might be attributed to the low frequencies of each collocate word. For example, only 1157 tokens or 6% of the total *anger* terms contain *simmering* while 2231 tokens or 11.6% of the total *anger* terms contain *suppressed*, which is not a term that fits into the EMOTION IS LIQUID conceptual metaphor. However, 2.85% of occurrences of *simmering* are collocates with *anger* while 2.42% occurrences of *suppressed* are collocates with *anger*. Such comparison between the EMOTION IS LIQUID terms and other terms implies the EMOTION IS LIQUID metaphor may not be an unusual linguistic phenomenon in English.

Further investigation for all emotional terms in COCA and the VietnameseWaC corpus should be conducted to clarify how common the conceptual metaphor the EMOTION IS LIQUID is, as compared to many other expressions containing emotion words. This task is outside the scope of this current study. Within my study, English examples collected for each mapping were compared to Vietnamese equivalents, which also fell into the same conceptual metaphor. Likewise, Vietnamese examples confirmed the existence of the conceptual metaphor, and could be translated into English equivalents sharing the same conceptual metaphor. Thus, suffice it to say that the result confirmed the research hypothesis.

4. Conclusion

In this paper, I set out to explore whether English and Vietnamese share the conceptual metaphor EMOTION IS LIQUID. The data I collected based on my source-to-target mappings confirmed the existence of the metaphor in both languages because they fit the mapping model. In addition, the translation of one language into the other falls

into the same conceptual metaphor. By assembling evidence for the mapping, I also demonstrated the conceptual metaphor in both languages share the same type of coherence, and this coherence is shaped by the mapping model. Its correspondences are individual conceptual metaphors that cohere to form the master, complex conceptual metaphor EMOTION IS LIQUID. The finding has several implications for English teaching and future research.

4.1. *Implication for English teaching*

One potential implication is for devising a teaching method to help Vietnamese students convey their ideas in English concisely and artistically through their writing, and foreigners to acquire the Vietnamese language. Language teachers should not avoid teaching metaphors in fear of students' misuse or overuse but instead categorize them into conceptual metaphors, so learners learn how to use metaphors not only as a specialized tool for creative writing, but also an effective tool to communicate with English (or Vietnamese) speakers in daily lives. For example, English teachers should categorize metaphorical expressions into different conceptual metaphors, so learners can systematically memorize English metaphors and compare them to their Vietnamese equivalents. Teachers may introduce how to translate those metaphorical English expressions into Vietnamese, and vice versa. Within one conceptual metaphor such as EMOTION IS LIQUID, learners would be able to recognize equivalent metaphorical expressions in the two languages (e.g., "anger is boiling" and "giận sôi sục"). They may gradually acquire the intuition to identify when their translation of a metaphorical Vietnamese expression into English sound native-like. They would no longer fear their metaphorical sentences which they write in English do not sound right for native speakers, or do not convey their exact ideas.

A combination of conceptual metaphors and attributive categorization as a teaching strategy may allow learners to relate different conceptual metaphors according to their shared meaning. For example, the teacher could present learners the metaphors HAPPINESS IS LIQUID IN MOTION and HAPPINESS IS FEELING LIGHT. They are in the same attributive category: both refer to a heightened state of happiness. The teacher could then provide a series of expressions that match each conceptual metaphor. Such expressions as *I'm crying with overflowing joy* and *the surge of joy* belong to the HAPPINESS IS LIQUID IN MOTION metaphor. For HAPPINESS IS FEELING LIGHT there are common sayings such as *We were floating on air at the news*, *Lighten up*, *I'm over the moon*, *I am on cloud nine*, and *Nothing can bring me down today*. This method would expand learners' vocabulary and reinforce their memory of new expressions.

4.2. *Limitation of the research and suggestion for subsequent studies*

The research proves the existence of the EMOTION IS LIQUID metaphor, but it does not specify how common the conceptual metaphor is used in different registers in both languages. Another weakness is that it does not account for why some LIQUID terms do not collocate with certain emotions. Further research may need to focus on one set of synonyms for an emotion to clarify these unsolved matters, and devise a strategy to filter "noises" from Web search results. One issue with information on the Web is the inflation of results caused by translation. Some metaphorical expressions in English are translated word-by-word into Vietnamese, hence the existence of the same type of metaphor in Vietnamese. To what extent these translations distort the results or can be considered evidence of influence among languages should be investigated further.

Although I suggest utilizing conceptual metaphors in foreign language teaching, subsequent research should be conducted to evaluate how effective this strategy is and examine how language learners comprehend metaphors not only in their native language but also in the target language. Ferreira (2008) addresses this issue in her survey of 221 Brazilian undergraduate students and 16 American undergraduate students at University of California, Santa Cruz. She infers from the finding conceptual metaphors associated with bodily experiences, namely, those that can be perceived by our senses, such as the feeling of anger, may facilitate learners' comprehension. Even without a context, learners can easily understand metaphorical expressions derived from these conceptual metaphors. Examining whether Vietnamese learners of English or English learners of Vietnamese share similar experience would instruct language teaching methodology, for instance, what conceptual metaphors teachers should select for learners, and in what way teachers should present metaphors to optimize learning.

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