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EFL learners' awareness of metonymy–metaphor continuum in figurative expressions

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Most studies about figurative language learning focus on metaphor rather than metonymy; however, the interactions of metonymy and metaphor are so intricate that the boundary forms not a dichotomy but a continuum. Such a continuum and its influences on figurative language learning have not been studied in depth. The present study investigates EFL (English as a Foreign Language) learners' responses to different metonymic and metaphoric expressions. Twenty-eight Taiwanese EFL learners participated in the study, which asked them to rate 40 sentences based on their certainty of figurative language use. The results show that EFL learners were capable of distinguishing between sentences with and without figurative expressions, and were more certain in judging metaphoric expressions than metonymic ones. Moreover, they found it easier to recognise expressions of the emotion *anger* than those of other topics. Their performances indicate that EFL learners are able to use their shared experiences to identify figurative language uses. This study suggests that it may be beneficial to integrate ideas of conceptual metonymy and metaphor to raise learners' awareness of abstract but universal concepts involved in figurative expressions.

Keywords: language awareness; cognitive comparison; EFL; figurative languague; Chinese; metaphor

Introduction

Figurative language is a language whose concept is partially structured by metaphor and can be extended in certain ways (Lakoff & Johnson, 1980). Cognitive linguists consider figurative language an ordinary language that manifests what people think in daily life. Since it is used commonly in everyday conversation, language learners should be able to acquire the ways in which it is used. Thus, how to teach and how to learn figurative language has been widely investigated by cognitive researchers. Their findings suggest many potential ways to raise language learners' awareness of figurative language, such as learning the etymology of expressions (Boers, 2001; Boers, Eyckmans, & Stengers, 2007; Dong, 2004), inferring metaphoric meanings in context (Boers, 2000a; Dong, 2004), studying the ethnography of metaphorical language (Dong, 2004), guessing the meanings of imaginable metaphorical expressions (Boers & Demecheleer, 2001), and leading explicit discussions and brainstorming associative characteristics of words used in figurative expressions (Deignan, Gabrys, & Solska, 1997; Dong, 2004).

In previous studies, however, the target figurative language was usually limited to *metaphor*, which is a conceptual mechanism 'by which we understand and structure one

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domain of experience in terms of another domain of a different kind' (Johnson, 1987, p. 15). Another common type of figurative language, *metonymy*, which is also a conceptual mechanism that uses one entity to refer to another related entity (Lakoff & Johnson, 1980), is seldom taken into consideration. Studies of metaphor and metonymy have found that the distinction between the notions of metaphor and those of metonymy is 'notoriously difficult' (Radden, 2003) because they sometimes motivate each other. Therefore, when talking about learning figurative language, both metaphor and metonymy should be targeted.

The present study aims to provide a more detailed analysis on both metaphor and metonymy, and to determine whether the subtle differences in various figurative language expressions could affect language learners' awareness. Regarding the target topic, the human emotion of *anger* was chosen to be the target domain of figurative expressions. Many researchers (Kövecses, 1986, 2000a; Lakoff & Kövecses, 1987) have investigated the use of anger in figurative expressions and provided detailed analyses on metaphoric and metonymic expressions of anger; however, the findings of a variety of figurative expressions have seldom been implemented in classroom settings. Thus, they lack empirical evidence of learners' responses (Kövecses, 2001). The present study, therefore, uses various figurative expressions of anger as the target in examining learning effects on learners. Anger is a common emotion felt by all people, and this commonality may reduce the possibility of biases caused by different cultural and native language backgrounds.

This study will first review relevant literature on the relationship between metaphor and metonymy, and on figurative expressions of anger in English, before turning to the focus of the present study. Then, the methodology and the results of the experiment will be reported and discussed. Finally, based on the findings of the study, pedagogical implications will be suggested and limitations of the study and suggested research will be presented.

Metaphor and metonymy

Metaphor is considered a conceptual mechanism that uses one domain of experience to explain and to structure another domain of a different kind, and that maps thoughts across different conceptual domains. The idea of mappings across two subjects, or two domains, is further developed in the contemporary theory of metaphor, which considers metaphor as a cross-domain mapping in the conceptual system (Lakoff & Johnson, 1980). Each conceptual domain has its inherent structures called *image schema*, constructed from the cognitive typology of daily life experiences. A mapping relationship between the source domain and the target domain forms a *conceptual metaphor* that can be explained and comprehended by analysing the image schema of the two domains and matching corresponding traits.

Conversely, metonymy is defined as a cognitive process in which one conceptual entity provides mental access to another conceptual entity within the same idealised conceptual model (ICM) (Radden & Kövecses, 1999). Thus, using metonymy allows language users to use one entity in place of another in order to facilitate understanding. This definition of metonymy shows the major difference between metonymy and metaphor: metonymy involves the association of two entities within the same ICM, while metaphor involves a mapping between two separate domains. However, researchers find that the boundary between the notions of metaphor and those of metonymy does not create a dichotomy, since metaphor and metonymy interact with each other in intricate ways (Barnden, 2010; Goossens, 1990; Radden, 2003).

Many metaphors are motivated conceptually by a metonymy, which is closer to their experiential basis. Take the emotion anger, for example. The metonymies of anger conceptualise physiological effects of being angry: BODY HEAT, PRESSURE, and AGI-TATION. These effects motivate the related metaphors of anger: ANGER IS THE HEAT OF

Table 1.   Radden's (2003, p. 409) literalness–metonymy–metaphor continuum.

Literal		Metonymic	Metaphoric	
High tower	High tide	High temperature	High price	High quality

FLUID IN A CONTAINER, such as *I had reached the boiling point* or *I got all steamed up*. Alternatively, metonymy can be motivated by the metaphorical concept when a target domain of a metaphor carries out a metonymic mapping in which a specific attribute can stand for its entity. For example, in the sentence, *She caught his ear and persuaded him to accept the plan*, 'his ear' stands for this person's attention metaphorically, and at the same time, belongs to a conventional metonymy BODY PART FOR FUNCTION (Goossens, 1990).

Since metaphor and metonymy are conceptually associated and interactive, the relationship between these two figurative languages should be seen as a continuum rather than a dichotomy. The intermediacy and overlap of metaphor and metonymy, as Barnden (2010) claims, emphasise the fuzziness of the boundaries of the continuum. The example given by Radden (2003) gives an illustration of such a continuum in Table 1.

Expressions of the emotion of anger

Emotion is one subject that requires figurative language. When people experience a certain emotion, they have abstract feelings that are difficult to communicate or express. As soon as humans move away from concrete physical experiences and start talking about abstractions or emotions, they resort to figurative expressions for help (Ortony, 1975). By applying figurative language, people can describe the process of experiencing the emotion or demonstrate the intensity of it.

Human emotions are considered shared experiences of physiological reactions (Lakoff & Kövecses, 1987). With respect to descriptions concerning the emotion of anger, being angry causes increased body heat, internal pressure, and redness in the face or neck; the angry feeling would then result in agitation and interfere with accurate perception. These embodied experiences yield the principle of the metonymic expressions: THE PHYSIOLOGICAL EFFECTS OF AN EMOTION STAND FOR THE EMOTION (Kövecses, 1990). Example (1) lists sentences related to this concept:[1]

Example (1)
BODY HEAT:
   Don't get *hot under the collar*.
   Pickerage, already *flushed*, looked down at the sheets, *hot and bothered*. <BNC, H8Y 1856>
INTERNAL PRESSURE:
   When I found out, I almost *burst a blood vessel*.
REDNESS IN FACE AND NECK AREA:
   He *got red with anger*.
AGITATION:
   She was *shaking with anger*.
   I didn't *get worked up* about that – I'm always pretty calm. <BNC, AKE 691>
INTERFERENCE WITH ACCURATE PERCEPTION:
   She was *blind with rage*.
   She *saw red*, and her fist thudded against his chest. <BNC, JY8 2901>

The physiological effects of anger, especially the emphasis on body heat, form the basis of the most general metaphor for anger: ANGER IS HEAT, including the heat of fire and the heat of fluid (Kövecses, 1986; Lakoff & Kövecses, 1987). In addition to these two

source domains, further domains are added to the list of metaphorical source domains that characterise anger (Kövecses, 1990, 2000a), as shown by Example (2):

Example (2)
ANGER IS A HOT FLUID IN A CONTAINER:
  You make my *blood boil*.
  Kate felt fury *well up* in her. <BNC, HGM 490>
ANGER IS FIRE:
  He is doing *a slow burn*.
  'I can borrow it?' cried Dyson, *flaring up* at once. <BNC, G12 2935>
ANGER IS INSANITY:
  He was *insane with* rage.
ANGER IS AN OPPONENT IN A STRUGGLE:
  I'm *struggling with* my anger.
ANGER IS A CAPTIVE ANIMAL:
  He is *breathing fire*.
  She felt defensive *hackles rise* on the back of her neck. <BNC, CEB 1782>
ANGER IS A BURDEN:
  After I lost my temper, I felt *lighter*.
  The pain was insatiable, but it was the *weight of anger*, directed against this by now bloody stone
    which shook him. <BNC, BN1 2065>
ANGRY BEHAVIOUR IS AGGRESSIVE ANIMAL BEHAVIOUR:
  Don't *snap at* me.
THE CAUSE OF ANGER IS TRESPASSING:
  Don't *step on my toes*.
THE CAUSE OF ANGER IS PHYSICAL ANNOYANCE:
  He's *a pain in the neck*.
  Ronni felt herself *wince in the face* of his sudden anger. <BNC, JXT 3596>
ANGER IS A NATURAL FORCE:
  It was a *stormy* meeting.
  A great *flood of anger* washed through Ellwood. <BNC, FP7 3410>

In the case of the conceptual metaphor ANGER IS INSANITY, since *insane behaviour* can metonymically stand for *insanity*, and since *insanity* is metaphorically related to *anger*, *insane behaviour* can also indicate *angry behaviour*. Additionally, when people suffer serious anger and can neither control nor relieve it, they usually engage in *violent and frustrated behaviour*, which is also considered a form of *angry behaviour*. Thus, angry behaviour can stand for anger based on EFFECT FOR CAUSE metonymy. The type of metonymic expressions that are motivated by metaphoric concepts can be categorised as 'metaphoric metonymy', as Example (3) illustrates:

Example (3)
INSANE BEHAVIOUR STANDS FOR ANGER:
  Billy started *foaming at the mouth*.
  He 'lets go' in a frightening *tantrum* – banging his head, kicking, screaming and yelling – when
    he cannot get his own way. <BNC, B10 1056>
VIOLENT FRUSTRATED BAHAVIOR STANDS FOR ANGER:
  He's *tearing his hair out*.
  The anger remained in her, hoarded from the previous night when she had *slammed the door on*
    him. <BNC, AMU 2583>
AGGRESSIVE BEHAVIOUR STANDS FOR ANGER:
  She gave him a *tongue-lashing*.
  He swung round, *glowering at* her. <BNC, HHA 1893>

Table 2.   Metonymy–metaphor continuum.

Metonymy	Metaphoric metonymy	Metonymic metaphor	Metaphor
Based on metonymic principle	Based on the combination of metaphor and metonymy		Based on conceptual metaphor

Some figurative expressions contain body parts and organs, which can stand metonymically for a whole person; the PART FOR WHOLE metonymic principle shows that the bodily responses to *anger* can stand for a person's response to anger. For example, the sentence, *You make my blood boil*, contains the word *blood*, an important part of the human body. One can imagine the feeling of boiling blood flowing in vessels and can relate the feeling to the angry emotional response that one may make. Other sentences in Example (3) also contain body parts, including *head*, *hair*, *neck*, *mouth*, *tongue*, and *toe*. These figurative expressions are metaphors that can be understood metonymically, so they can be categorised as 'metonymic metaphors'.

Since some expressions apply a conceptual metaphor on the basis of a metonymic principle, and since some are not only formed on the metaphoric basis but also apply a metonymic principle, figurative expressions of the emotion of anger can be seen as spreading over a continuum. While clearly aware of the slipperiness of boundaries between metaphor and metonymy, the present study distinguishes the figurative expressions of anger into four categories on the metaphor–metonymy continuum for the purpose of experiment. One end is metonymy and the other end is metaphor; in between are metaphoric metonymy and metonymic metaphor (see Table 2).

Learning figurative language

For EFL (English as a Foreign Language) learners, figurative expressions used to be considered equal to fixed expressions, such as idioms or proverbs, which are acquired mainly through rote learning and memorisation (Chen, 2010). However, cognitive linguistics provides a definition of figurative expressions from a different perspective, claiming that the expressions are motivated through connections between daily life experiences and cognitive concepts rather than arbitrary and rigid form-meaning connections (Lakoff, 1987). Accordingly, it is claimed that learners are supposed to be able to recognise figurative language uses as well as to distinguish expressions with figurative senses from those without. The assumption of whether EFL learners are capable of distinguishing between sentences with figurative expressions and sentences without figurative expressions is under investigation in the present study.

In addition, the issue of whether different types of figurative expressions – metonymies, metaphoric metonymies, metonymic metaphors, or metaphors – can affect learners' judgements is also under investigation. It is assumed that expressions that are based on physiological effects might be easier for learners to identify and comprehend because the bodily experiences of anger are universal. Conversely, expressions that are formed by mapping characteristics of the source domain anger to other distinct domains might be relatively harder for learners to recognise and understand because much more cognitive effort might be needed in order to relate corresponding traits and meanings. Finally, since physiological reactions of emotion might reinforce understanding, the issue of whether other targets that are not directly related to physical experience would be more difficult to recognise is also examined and discussed.

Methodology

Participants

Twenty-eight university students participated in the study. Among them, two were sopho-mores, 10 were juniors, and 16 were seniors. Six of the participants were from the College of Social Sciences, seven were from the College of Commerce, one was from the College of Communication, and the 14 remaining participants were from the College of Foreign Languages. They were Chinese native speakers and had spent at least seven years learning English in school. To determine their general English proficiency, they were given a TOEIC (Test of English for International Communication) full-length non-official simulated test at the beginning of the semester; the scores of the test indicated that their English proficiency was at the intermediate- to high-intermediate level.

Instruments

To measure the participants' ability to recognise figurative language uses, an awareness test was designed (Appendix). The test contained 40 English sentences collected from dictionaries, a corpus (British National Corpus), and the Internet. The sentences were modified to maintain an average sentence length of 10–15 words to ensure that the stimuli were similar and would not influence learners' judgements.

Among the 40 sentences, 20 contained figurative expressions, while the other 20 did not. Among the 20 sentences that included figurative expressions, 16 sentences contained figurative expressions related to the emotion of anger and four contained figurative expressions related to other target domains, such as *idea*, *love*, and *life*. The reason for involving expressions of different target domains is to examine whether expressions of motion, which rely mostly on physiological effects, could be identified more easily by language users.

In addition, the figurative expressions of anger were made to fit into the metonymy–metaphor continuum, and thus, could be categorised into four groups: metonymy, metaphoric metonymy, metonymic metaphor, and metaphor. Learners' responses to these four types of expressions is also investigated.

Key words or phrases were chosen from the 20 sentences with figurative expressions to create their counterparts, which had no figurative intentions or expressions. The 40 sentences were scrambled to prevent learners from discovering the patterns of the test items (see Table 3) from their listing orders.

All of the sentences were reviewed twice by a native English speaker, who has been teaching English in a university in Taiwan for 20 years, to ensure the validity of the test. The reviewer examined the grammar of the sentences and the meanings of the usages, and ensured that the sentences displayed natural language use.

The test was pilot-tested by another 20 students in the same university to examine its reliability. The overall reliability as estimated by Cronbach's alpha was .791 ($N = 40$). The

Table 3.   Test items of the awareness test.

| Test items | About the emotion of anger | | | | About others domains (C5) |
	Metonymy (C1)	Metaphoric metonymy (C2)	Metonymic metaphor (C3)	Metaphor (C4)	
Item no. ($N = 40$)	8	8	8	8	8

value of the Cronbach's alpha score overall confirms the high reliability level of the existing 40 items.

Data collection and analysis

The participants first received a three-paragraph introductory passage that explained what *figurative language* was and presented two example sentences. Then they were shown a passage instructing them to read the sentences that followed carefully and decide whether the sentences contained figurative expressions. They were then asked to rate the extent to which they were certain about their judgements on a scale of 1 to 5. The scale was adapted from Littlemore's (2001) study and was modified to fit the goal of the present study. All of the passages and instructions were written in the participants' native language, Chinese, and were read and explained to the participants to ensure that they were clear about the test.

The participants had 10 minutes to finish the test. The majority finished the test before the time limit and waited for the instructor to call the end of the test. The instructor collected all sheets at the end of the test. Answers from the test sheets were typed into a computer and calculated by SPSS 17 for quantitative analyses.

Results of the study

The study intended to examine EFL learners' awareness of figurative expressions. The first research question asks whether the participants were able to distinguish sentences with metaphorical expressions from sentences without them; in other words, whether the participants could detect mapping relationships between target subjects and actual words could determine their awareness of figurative language. Table 4 shows the results of participants' responses to both groups of sentences.

The total scores of sentences with figurative expressions was significantly higher ($t = 10.114$, $p < .001$) than the total scores of sentences without figurative expressions. The significant difference between the two groups of sentences suggests that the participants were able to make a clear distinction between figurative language and literal language.

To answer the research questions concerning the differences between categories of expressions, comparisons of the results of categories were made and are shown in Table 5. The one-way within-subject analysis of variance (ANOVA) shows that the results of the five categories exhibited significant differences ($p < .001$). Therefore, to determine further the differences between the groups, a post-hoc Scheffé test was conducted and the results are shown in Table 6.

The results ranking from the relative higher to the relative lower were C4, C3, C1, and finally, C2. According to the statistics, C1 and C2 were not significantly different, nor were C3 and C4. C4 was significantly higher than C1 and C2, but not C3; furthermore, C3 was

Table 4.   Comparison between sentences with and without figurative expressions.

Test items	N	Mean	Standard deviation	t
With figurative expressions	20	111.7000	18.46505	10.114***
Without figurative expressions	20	52.8500	18.33396	

*$p < .001$.

Table 5. Source table for the *F*-ratio.

	SS	df	*MS*	*F*
Between	1828.74	27	67.73	
Within	2470.8	112		
Category	526.83	4	131.71	7.32***
Error	1943.97	108	18.00	
Total	4299.54	139	287.73	

*$p < .001$.

significantly higher than C1 and C2. The statistical results suggest that it was easier for learners to judge metaphoric expressions than judge metonymic expressions.

Regarding the research question of whether expressions of emotion were easier to recognise than expressions of other target domains, Table 6 shows that all groups with figurative expressions of emotion scored significantly higher than the group relating to other target domains (C5), indicating that it is easier for learners to judge expressions of emotion than judge expressions of other domains.

Discussion

EFL learners were able to distinguish figurative language use from non-figurative language use

The significant points of difference between sentences with and without figurative expressions indicated that the participants were capable of distinguishing literal meanings from figurative meanings of words or phrases. They showed a strong tendency of choosing the two extreme ends (1 = definitely not a figurative use, 5 = definitely a figurative use) of a five-point Likert scale; however, some sentences averaged a score of 3, showing that the participants were hesitant in making definite decisions.

Among the sentences scoring 3, some sentences contained words that were unrecognisable to the learners, and thus resulted in uncertainty in terms of ratings. For instance, for the sentence, *He fell down bleeding as a victim to the dagger of the assassin*, eight

Table 6. Results of the post-hoc Scheffé test.

				95% confidence interval	
Intercept	Mean	Standard error	*t*	Lower bound	Upper bound
C1–C2	1.2857	1.480	.869	−1.751	4.322
C1–C3	−3.1429	.912	−3.444**	−5.015	−1.271
C1–C4	−3.2857	1.230	−2.671*	−5.809	−.762
C1–C5	5.0357	.978	5.149***	3.029	7.042
C2–C3	−4.4286	1.305	−3.394**	−7.106	−1.752
C2–C4	−4.5714	1.110	−4.120***	−6.848	−2.295
C2–C5	3.7500	1.023	3.666**	1.651	5.849
C3–C4	−.1429	1.013	−.141	−2.221	1.935
C3–C5	8.1786	.987	8.288***	6.154	10.203
C4–C5	8.3214	1.000	8.321***	6.269	10.373

*$p < .05$, **$p < .01$, ***$p < .001$.
Note: The rank of the five categories from the highest mean to the lowest one: C4 > C3 > C1 > C2 > C5.

(29%) of the 28 participants chose 0, meaning that there were words they could not understand. According to the English reference word list for the college entrance examination of Taiwan announced by the Ministry of Education (2002), the word *dagger* is not included in this 7000-word list; the word *assassin* does not appear either, although its verb form *assassinate* is included. It was found that EFL learners' awareness of figurative expressions is constrained by the vocabulary size they possess.

Some sentences contained one-word figurative expressions, such as *contain* in the sentence, *I couldn't contain my excitement after reading the teacher's comments*, and *carry* in the sentence, *Pictures of war can carry more moral meaning than thousands of words*. For EFL learners who were taught a new word by introducing its corresponding meaning in the native language, a word with more than one connotation is considered a polysemy rather than a word with figurative meaning. Thus, when encountering a single-word usage, most EFL learners tend to interpret it as a purely literal use rather than a figurative one.

EFL learners found it easier to recognise metaphoric expressions than metonymic expressions

Total scores of the five categories proved to be significantly different, while the metaphor category (C4) and the metonymic metaphor category (C3) were significantly higher than the metonymy category (C1) and the metaphoric metonymy category (C2). The results fail to support the hypothesis that expressions that are formed by mapping characteristics across domains might be relatively harder for learners to recognise and understand.

The findings imply that metonymy is not as simple as merely demonstrating similarities between subjects (Barnden, 2010). On the contrary, metonymy involves not only domain highlighting but also further cognitive operation (Ruiz de Mendoza Ibañez & Díez, 2003). An example given by Ruiz de Mendoza Ibañez and Díez (2003) shows the complex interaction patterns of metonymy: the term *Wall Street* in the sentence, *Wall Street is in panic*, refers metonymically to the financial institution of the US, with the metonymic principle PLACE FOR INSTITUTION; then, the term again metonymically stands for the people who work in the institution. The domain-expanding process of *double metonymy* demonstrates the complexity of metonymy formation. As a result, the participants' unsatisfactory performances in terms of recognising metonymic expressions could be attributed to the hidden intricacy of metonymy.

Another reason might be attributed to a common confusion of figurative expressions and idioms, and to the traditional EFL teaching method regarding idioms and collocations. An idiom is used to refer to a multi-word unit whose overall meaning cannot be derived from the sum of the constituent words' literal meanings, but instead, from their extended figurative meanings inclusive of metaphoric and metonymic senses (Langlotz, 2006). Because of the arbitrariness of meaning composition, idioms have long been taught to and have been learned by L2 (second language) learners through rote learning, which focuses mainly on memorisation. Hence, when learners were asked to judge whether a word or a phrase was *Pi-yu yong-fa* ('figurative language use'), they may have tended to look for idioms first, and then became more alert when encountering terms that looked like fixed usages. The expressions used in C4 and C3, such as *do a slow burn*, *blow off steam*, *a pain in the neck*, and *a chip on the shoulder*, are phrases whose syntactic structure is fixed and unable to change. Therefore, learners paid more attention to those expressions and were more assertive about their choices.

When comparing the scores of the two categories located near the two ends of the continuum, the findings are contrary to the predicted rank of the difficulty level, graduating

from C4, the hardest, to C1, the easiest. The metaphor category (C4) received relatively higher scores than the metonymic metaphor category (C3); however, the result may not lead to an absolute conclusion that metaphoric expressions are easier to recognise than metonymic metaphoric ones since the difference between C4 and C3 did not reach the statistical significance level. On the other hand, the results showed that the total score of metonymy (C1) was relatively higher than the score of metaphoric metonymy (C2); yet, the differences were not significant.

Given the slipperiness of the notions of metaphor and metonymy (Barnden, 2010), the insignificance of differences between categories seems to prove the fuzziness of the boundaries of the continuum. As previously mentioned, at the conceptual level, metaphor and metonymy can motivate each other (Barcelona, 2000) and interact from several aspects, such as domains and frames (Barnden, 2010). Though the expressions were categorised into four groups for the purpose of experiment, they were not clearly cut as separate ones; instead, they were scattering in a spectrum where contiguity as well as similarity are all operable on both metaphor and metonymy.

Expressions of emotion are easier to recognise than other figurative expressions

The four categories related to the expressions of the emotion anger were significantly higher than the category related to other target domains (C5). It is reasonable to claim that expressions of emotion are easier for learners to recognise than other figurative expressions. One reason expressions of emotion are more recognisable might be that they are mostly formed based on physiological reactions, which are universal to all human beings. Moreover, emotions are subjects that are commonly discussed in daily life; as a result, learners might be more aware of their expressions. In comparison, C5 comprises different target domains, such as THEORIES ARE BUILDING, IDEAS ARE FOOD, and LOVE IS A PHYSICAL FORCE. These target domains might not appear in daily conversations as often as emotions. Thus, the score of C5 was lower than that for other categories. This finding also suggests that among universal ideas, some might be relatively more common than others.

Pedagogical implications

The findings of the study support the importance of learners' awareness as claimed by L2 acquisition theories (Ammar, Lightbown, & Spada, 2010; N. Ellis, 2006; R. Ellis, 2002; O'Malley & Chamot, 1990). The results indicate that EFL learners are capable of distinguishing literal from figurative language uses; however, they seem to consider figurative language as mainly fixed terms, such as idioms. This concept of figurative language might hinder their comprehension and learning efforts in acquiring figurative expressions. Thus, language teachers should explain the definition of figurative language to students clearly and carefully, showing them that figurative language is more than a fixed phrase used only in poetic work. Explicit instructions (N. Ellis, 2006; Littlemore, 2009) as well as metalingual strategies (O'Malley & Chamot, 1990) can facilitate learners' awareness in learning figurative language.

In the case of learning figurative expressions of emotions, Boers (2000b) suggests that understanding metaphoric themes by referring to their correlates in physical experiences may improve learners' in-depth comprehension. The embodied experiences of anger are in some ways universal for language users (Kövecses, 2000b) and thus may facilitate comprehension of the expressions. Kövecses (2001) also proposes a way to teach figurative expressions, especially in the context of foreign language teaching, to show and explain

the mapping relationships between target and source domains. If two languages have the same conceptual metaphor but different linguistic instantiations, *ontological mappings* that characterise the correspondences between basic constituent elements in the source domain and in the target domain may help learners to create links between distinct linguistic expressions of the two languages. If two languages have different conceptual metaphors, or if one has a conceptual metaphor that does not exist in the other*, epistemic mappings* can carry over knowledge about elements in the source domain onto elements in the target domain, helping learners to relate their knowledge of the used and abstract half to the unused and concrete half. In sum, EFL teachers should not rely on only traditional rote learning and memorisation; instead, they should try to enhance learners' awareness of figurative language.

In addition, the idea of a literal–metonymy–metaphor continuum can be implemented in polysemous expressions learning. Language teachers could adopt the idea of the continuum (Barnden, 2010; Radden, 2003) and introduce words or phrases with polysemous meanings to students. For example, the previously mentioned example *high* (Table 1) (Radden, 2003) was introduced as a word with four different meanings in the dictionaries; however, by showing the relationship between its literal and metaphoric meaning, learners could extend one meaning to another, rather than having to memorise all different meanings. Learners could thus better understand ways of using the target terms in various contexts. Moreover, when encountering metonymic or metaphoric expressions, language teachers could replace the traditional method of rote learning with the new method of domain mapping. Leading learners to recognise corresponding traits between the subjects described and the subjects compared might help them understand expressions better and hence retain those learned longer (Boers, 2000b).

Limitations of the study and suggested research

The number of participants in this study is one limitation to its findings. Because of the limited subjects and backgrounds, the findings of whether they could be generalised to other EFL settings might be in doubt. In addition, since figurative language is considered a cognitive language process, participants' individual differences regarding cognitive styles might have influenced their performances and awareness. Other variables relating to the participants, such as their personality types or learning history, may also have affected their choices. These moderator variables were not taken into consideration in the present study, so their possible impacts on the participants' performances were not measured. In future studies, individual differences could also be taken into consideration in order to determine their effects on learners' awareness of figurative expressions.

In addition, the present study includes only a few expressions (target topics) that are not related to emotions. These target topics, including THEORIES, IDEAS, and LOVE, might cause biases about topic familiarity due to different life experiences of the individual participants. Expressions of emotion, however, are believed to be universal because of same anger-related body reactions in all humans. To investigate whether physiologically embodied reactions are universal and play crucial roles in learners' awareness and understanding, future studies should integrate more diverse topics, especially those that are related to more abstract source domains.

Finally, the present study focuses on EFL learners' awareness of figurative language use. However, being aware of figurative expressions does not guarantee comprehension. Future studies could investigate EFL learners' abilities to comprehend and interpret expressions. To comprehend expressions requires not only vocabulary knowledge but also knowledge of

the cultural background of the target language. Thus, the relationship between awareness and comprehension should be explored in depth.

Note

1. Data cited herein has been extracted from the British National Corpus Online Service, managed by Oxford University Computing Services on behalf of the BNC Consortium. All rights in the texts cited are reserved. Coded numbers after commas stand for the getheads which specify text id and offset of desired information.

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Appendix. Test items of the awareness test

1. People used to tuck ties under the collar when dressing formally.
2. The dog lashed its tongue and craved for water on a hot summer day.
3. He had a fit of coughing because he got a serious cold.
4. Listening to that guy playing his drums is a pain in the neck for me.
5. Her own particular chip on the shoulder was her poor background.
6. People get hot under the collar when others cut in a line suddenly.
7. This book contains all the information you are looking for.
8. As he heard more about their wicked plan, he started doing a slow burn.
9. When I found out she lied to me, I almost burst a blood vessel.
10. His harsh criticisms were enough to make anyone see red.
11. The white explosion of a bomb was followed by a glow of blue smoke.
12. She clasped her hands until the fingertips turned red.
13. Several frogs were hopping about on the lawn after a heavy rain.
14. Your mother would have a fit if she knew that you skipped the class.
15. He fell down bleeding as a victim to the dagger of the assassin.
16. You need to calm down. Don't let your anger get out of hand.
17. The baby is too small to digest food like meat.
18. The patient was foaming at the mouth when being sent to the emergency room.
19. The great cliff stands on a huge rock, towering over the city.
20. The boss flew into a towering rage and fired all the employees offending him.
21. I could barely contain my excitement after reading the teacher's comments.

22. That fat guy went blue in the face while running for the bus.
23. Going into the warm room steamed my eye glasses up.
24. The fish slipped out of my hand and jumped back into the lake.
25. David walked into the room, carrying his suitcases, looking tired.
26. You can cross a river on a tree-trunk, but not on a chip of wood.
27. His brother got a neck pain because of bad sitting postures.
28. She was just blowing off steam because she was under great pressure.
29. The boss is hopping mad about employees' repeated lateness.
30. He died three days ago of the burns he received in the fire.
31. You'll burst a blood vessel if you keep drinking alcohol.
32. Pictures of war can carry more moral meaning than thousands of words.
33. It took them two years to construct the bridge across the river.
34. It took me some time to digest what I had heard.
35. She looked daggers at Tom when he complained of the food she made.
36. We need to construct a strong argument in order to win the debate.
37. I was attracted to that girl; I could feel the strong electricity between us.
38. When the judge threw him out of the game, Billy started foaming at the mouth.
39. Harry's mother gave him a tongue-lashing for telling family secrets.
40. The electricity went off while I was cooking supper, and the kitchen became dark.