Abstract

This paper reports an investigation into the role of motion verbs in representing emotional states by means of a cross-linguistic observation of English and Italian. The study selects the emotion HAPPINESS for observation and presents empirical data which reveals the metaphorical extension of movement constructions to conceptualize emotions. It posits a Conceptual Metaphor framework which can account for the use of verbs encoding manner of physical movement to conceptualize a cognitive/psychological state of emotion.

Key words: motion verbs, emotion, conceptual metaphor, cross-linguistic

1. Introduction

This paper reports an investigation into the role of motion verbs in representing emotional states by means of a cross-linguistic observation of English and Italian. In a previous pilot study conducted by means of a questionnaire consisting of 50 motion verbs in each language (Ponterotto 2012), a mapping emerged linking movements encoded in motion verbs and various emotional states. Moreover, the study pointed to a wide-range of lexical variation in the set of manner of motion verbs which speakers seem to access in order to express metaphorically the subtleties of those emotional states. Furthermore, the study revealed distinct similarities between the two languages for some aspects of an emotion but also significant differences in other aspects, and especially in range of specification, i.e. in the type and number of manner of motion senses associated with the emotional state. Given the explorative nature of this pilot study, it was decided to investigate the question further by using a much larger number of subjects and by focusing on only one emotion: HAPPINESS.
1.1. Aim

The aim of the study is to investigate the validity of Conceptual Metaphor Theory (CMT) for the description of: 1) the conceptualization of emotion through the metaphorical extension of motion verbs; 2) the specific link between conceptualization of the emotion HAPPINESS and manner of motion verbs; 3) the cross-linguistic aspects, i.e. the presence at the same time of both common metaphorical patterns and language-specific differences; 4) the potentiality of CMT as a viable inroad for the description of emotively-connotated manner of motion in verbal systems.

1.2. Rationale

This study is motivated by the need to understand the use of metaphorical extension of kinetic movements encoded in motion verbs for the representation of emotional states, with relation also to similarities/differences across languages, in this case, English and Italian. The hypothesis emerges from theoretical reflection and empirical verification found inter alia in Faber and Mairal Usón (1999), Kövecses (2002, 2003), Öçzalişkan (2003, 2005), Slobin (2004, 2006), Wierzbicka (2009).

1.2.1. Emotions: common conceptualizations and cross-cultural variations

Significant research on emotion has emphasized how difficult it is to understand and describe human emotions across languages and cultures. Wierzbicka (2009) for example highlights the cross-linguistic and cross-cultural specificity of emotion terms. Wierzbicka (2009) formulates a classification for the description of emotions on the basis of the theory of semantic primitives. However, Taylor and Mbense (1998) note that a cross-cultural investigation of emotions cannot rely exclusively on the semantics of emotion-naming, typical of lexical-semantic analyses. Referring to the fact, for example, that the emotion ANGER is not expressed only through emotion-naming words (anger, angrily, in an angry mood, etc.), but also through other expressions like: ‘My blood was boiling’ or ‘I was having kittens’, they claim that attention must be paid to conceptual categories like metaphors and metonymies. Many other scholars have also brought our attention to the fact that metaphors are especially suitable for conveying subtle nuances of emotional experiences (cf. Fainsilber and Ortony 1987, Gibbs et al 2002, Kövecses 2002, Ortony 1975).

Now as noted by Fussell (2002), the English language presents several options, both literal and figurative, for the verbal representation of emotional states. Taking again the example of ANGER we have literal options like angry, irked, furious, and figurative options like flip one’s lid, blow a gasket, hit the ceiling, fly off the handle, etc. Besides being similar to the claim made by Taylor and Mbense (1998), the examples of figurative options found in Fussell
(2002) and in Fussell & Moss (1998) also demonstrate the use of motion constructions to represent the emotion. In fact, very often in English, emotions are expressed as changes of state achieved through some kind of movement. Thus, a person who becomes angry flips his lid, a person who becomes depressed plunges into despair, a person who becomes happy jumps for joy. The verbs flip, plunge and jump belong to the class of motion verbs in the English system. In addition, if we note as an example the following utterances, it is obvious that the motion verb itself can carry emotional meaning:

(1) He floated across the room (which can evoke joy)
(2) He stomped across the room (which can evoke anger)
(3) He strutted across the room (which can evoke pride)

1.2.2 Motion verbs

Motion verbs have been investigated in many studies (cf. especially the work of Cardini 2008; Faber and Mairal Usón 1999; Korzen 2008; Özçalişkan, 2004; Slobin 1996, 1997, 2000, 2003, 2004, 2006; Talmy 1985, 1991, 2000) which have all suggested useful but different categorical taxonomies for their description. In his famous frog story experiments, performed with subjects from various languages, Slobin (2004) found that English speakers describe the manner sense of the movement with significant precision and detail. In Anglophone speakers, the description of manner of motion seems to be particularly salient. In this vein, Özçalişkan, (2003:223) also published a series of studies comparing structure and use of motion verbs in English and Turkish. She found that “for every target domain English makes finer lexical distinctions in the manner in which the metaphorical motion is carried out compared to Turkish”. Moreover, she adds:

This difference may lead English speakers to have a more elaborate representation of a metaphorical mapping than Turkish speakers, sharpening their ability to detect and report more fine-grained distinctions in their various target domains that are structured by motion in space” ( Özçalişkan, 2003:223-224).

1.3. Conceptual metaphor theory and emotion

Many scholars have also brought our attention to the fact that metaphors are especially suitable for conveying subtle nuances of emotional experiences (cf. Kövecses 1987, 2002; Fainsilber and Ortony 1987; Gibbs et al 2002, Ortony 1975). The conceptual metaphor inroad to understanding how emotions are understood and expressed across cultures has been studied extensively by Kövecses (1995, 2003, 2005). What can be definitely concluded on the basis of Kövecses’ wide-ranging and in-depth explorations is that linguistic modalities
for the expression of emotion do indeed demonstrate some common patterns but also vary significantly across cultures. Kövecses (2003:188) comments in this regard that “Emotion concepts are not monolithic but come in a variety of cultural models for each emotion.” Recently, in fact, this culturalist perspective on conceptual metaphor has emerged even more forcefully in cognitive linguistics (cf. Dirven, Wolf, and Polzenhagen 2010; Kövecses and Koller 2006, Kristiansen & Dirven 2008).

Following conventions in Conceptual Metaphor Theory, Özçalişkan (2003) notes that a metaphorical motion event involves: a source domain, a target domain and a conceptual mapping between the two domains. We could formulate an example of the relative mapping in the following way:

<table>
<thead>
<tr>
<th>utterance</th>
<th>He climbed out of his depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>target domain</td>
<td>emotion state (depression)</td>
</tr>
<tr>
<td>source domain</td>
<td>location</td>
</tr>
<tr>
<td>mapping</td>
<td>change of emotional state = change of location</td>
</tr>
<tr>
<td>conceptual metaphor (CM)</td>
<td>CHANGES ARE MOVEMENTS</td>
</tr>
</tbody>
</table>

Table 1. Example of a conceptual mapping of a metaphorical motion event

However we can also state that another metaphor is working here, a CONTAINER metaphor, THE BODY IS A CONTAINER FOR THE EMOTIONS, as discussed by Kövecses (2002); Özçalişkan (2003); Sandström (2006). Thus, emotional states are conceptualized as bounded regions where change from one location to another is understood as motion into or out of a bounded region. A person can move into or out of this bounded region (the body or parts of the body). Sometimes it is the emotion which moves - into and out of our bodies; for example: Happiness welled up inside him.

1.4. HAPPINESS

Kövecses(2003) suggests that there are specific source domains related to a given emotion; for example, trespassing is associated with ANGER while dancing seems to be linked to HAPPINESS. The explanation of this close connection between a source domain and a single emotion is to be found, he claims, in one of two factors: either the causes, or the effects of the emotion. Using the example of HAPPINESS, we can note his explanation:

Or, to take another example, dancing and jumping up and down (but not stomping your feet) is typically associated with joy/happiness and it is seen as
the result or effect of this emotion; hence the metaphor HAPPINESS IS BEING OFF THE GROUND (Kövecses, 2003:48).

In fact there are many figurative expressions in both languages which would point to such a conceptualization. In English for example we find:

(4) in seventh heaven
(5) to be on cloud nine
(6) to jump for joy
(7) flying high
(8) walking /floating on air

In Italian, similarly, we find:

(9) essere al settimo cielo [to be in seventh heaven]
(10) salire alle stelle [to climb up to the stars]
(11) saltare dalla gioia [to jump for joy]
(12) toccare il cielo con un dito [to touch the sky with your finger]
(13) stare su [to be up (happy)]

2. **Hypothesis**

In fact, in our pilot study, the emotion HAPPINESS emerged frequently. When we considered the verbs associated by the English speaking subjects with this emotion, we found a systematic response linking a motion verb with this emotion (like bounce for example). Then when we looked at the descriptors of the movements given by the subjects, we noted that despite the presence of a wide variety of descriptors, most of the responses included terms like "jump", "up and down", "airy", and "lightly". A similar pattern emerged for the Italian language (like the terms "salti" [jumps], or "su" [up], or "su e giù" [up and down], or "staccandosi da terra" [lifting oneself off the ground]). Consequently, the hypothesis arose first of all that in both cultures specific motion verbs are used figuratively by speakers to express HAPPINESS-related emotional states, and secondly, that those figurative uses are motivated by an orientational metaphor HAPPINESS IS UP, i.e. with upward specification, and signalled by a specific set of motion verbs, encoding a jump-like movement, which thus yields the specific metaphor: HAPPINESS IS MOVING UP (JUMPING) INTO THE AIR.
3. Method

Each group of informants (Italian-speaking and English-speaking) included 35 subjects, male and female, between the ages of 18 and 35, making a total of 70 subjects.

For both the English language and the Italian language, a set of eight motion verbs were selected from the list used in the pilot study. The selection was based on the association made by the subjects of the pilot study with the emotion HAPPINESS. In other words from the list of 50 verbs for each language used in the first pilot study, those verbs which had been associated by the informants with the emotion HAPPINESS were extracted and used as stimuli for this investigation. For the English language, the verbs were: *bounce, breeze, dance, hop, leap, prance, skip, waltz*; for the Italian language, the verbs (indicated here with their dictionary equivalents in brackets) were: *ballare* [dance], *danzare* [dance], *piroettare* [pirouette], *saltellare* [skip, hop], *sgambettare* [kick], *trottare* [trot], *trotterellare* [to trot along], *volteggiare* [whirl].

The subjects were given an open-ended questionnaire and asked to 1. identify the specific movements they associated with the verb and 2. indicate whether the verb evoked an emotional state. The stimulus items (the motion verbs) were formulated in a sentence which indicated the same path (i.e. *across the room*), obliging the subject to identify the type of movement and type of emotional state potentially encoded in the verb. An example from the English questionnaire follows:

<table>
<thead>
<tr>
<th>Verb (e.g. <em>She went across the room</em>)</th>
<th>Type of movement (or movements)</th>
<th>Does the verb evoke an emotional state? If so, which one?</th>
</tr>
</thead>
<tbody>
<tr>
<td>... skipped ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...bounced ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Example of stimulus items in questionnaire submitted to English speaking subjects

The list of stimuli for both the Italian language and the English language contained 12 items. Along with the target items (the eight motion verbs which had been associated in the pilot study with the emotion HAPPINESS), we added four other randomly-chosen verbs as distractors.
4. Results

The results were quantified for the target items (the eight motion verbs); the four distractor items were not computed in the quantitative analysis. In other words, based on our hypothesis, for each subject, for each verb, we calculated: 1. presence in the response of an upward-oriented movement; 2. presence in the response of an indication of a happiness-related emotional state; 3. presence in the response of indications of both upward-oriented movement and happiness-related emotional state.

4.1. Quantitative results

4.1.1. English

The data emerging from the questionnaires were quantified according to totals and subsequently relative values of the target items: a) the percentage of informants associating an upward movement with the motion verb; b) the percentage of informants associating the emotion HAPPINESS with the motion verb; and c) the percentage of informants who assigned both an upward movement and the emotion HAPPINESS with the motion verb.

Table 3 reports the relative values of responses of total number of English speaking subjects (35), associating motion verbs, upward movements and the emotion: HAPPINESS (ordered alphabetically).

<table>
<thead>
<tr>
<th>MOTION VERB</th>
<th>(a) Upward Movement (%)</th>
<th>(b) HAPPINESS (%)</th>
<th>(c) Upward Movement &amp; HAPPINESS (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bounce</td>
<td>62,85</td>
<td>100,00</td>
<td>62,85</td>
</tr>
<tr>
<td>breeze</td>
<td>54,28</td>
<td>54,28</td>
<td>25,71</td>
</tr>
<tr>
<td>dance</td>
<td>17,14</td>
<td>77,28</td>
<td>11,42</td>
</tr>
<tr>
<td>hop</td>
<td>74,28</td>
<td>60,00</td>
<td>48,57</td>
</tr>
<tr>
<td>leap</td>
<td>65,71</td>
<td>40,00</td>
<td>31,42</td>
</tr>
<tr>
<td>prance</td>
<td>54,28</td>
<td>40,00</td>
<td>31,42</td>
</tr>
<tr>
<td>skip</td>
<td>62,85</td>
<td>77,14</td>
<td>54,28</td>
</tr>
<tr>
<td>waltz</td>
<td>14,28</td>
<td>57,44</td>
<td>5,7</td>
</tr>
</tbody>
</table>

Table 3. English speaking subjects: % movement / emotion / movement + emotion, for each motion verb
In column (a) of the table above, we can see the extent to which the informants identified an upward movement in the meaning of the motion verb while in column (b) we find the extent to which the informants associated the emotional state of HAPPINESS with the motion verb.

The highest percentages for the movement category resulted to be hop (74.28%), followed by leap and skip, and then by bounce, breeze and prance. The verbs dance and waltz had low values.

The highest percentages in the emotion (HAPPINESS) category emerged for bounce (100%) but dance was also positioned high at (77, 28%), as was skip (77, 14%); hop, waltz and breeze followed and then finally leap and prance.

The third calculation, represented in column (c), regards subjects who explicitly assigned both an upward movement and the emotion HAPPINESS to a specific motion verb. Percentages near or over 50% are highlighted in the table. Here we find that the verb bounce received the highest percentage (71.42%), followed by skip and hop. Lower values emerged for leap, prance and breeze and a very low percentage was registered for waltz.

A Z-test for proportions-Dependent Groups was performed to determine if the proportion of Upward Movement and HAPPINESS (see Column 3) differed significantly among the verb set. A statistically significant difference of $p < .05$ emerged for the comparison of bounce with all verbs except for hop and skip; a value of $p < .001$ emerged for the comparison of bounce with all verbs except for dance and waltz. In other words for the combination of UPWARD MOVEMENT and HAPPINESS, the English verbs bounce, hop and skip received similar judgments and are significantly distanced from the other verbs. Similarity was also present to a lesser degree for leap, prance and breeze.

It would seem then that for these English speaking subjects, the motion verbs bounce, skip and hop are systematically associated with the UPWARD MOVEMENT and the emotion HAPPINESS. The same holds, but to a lesser extent, for leap, prance and breeze.

4.1.2. Italian

Table 4 reports the relative values for the responses of total number of Italian speaking subjects (35), associating motion verbs, upward movements and the emotion: HAPPINESS (ordered alphabetically).

Again, in column (a) of Table 4, we can see the extent to which the Italian informants identified an upward movement in the meaning of the motion verb
while in column (b) we find the extent to which the informants associated the emotional state of HAPPINESS with the motion verb.

The highest percentages for the movement category resulted to be *saltellare* [skip, hop] (97.14%), followed by *trotterellare* [to trot along] and *piroettare* [pirouette]. The verbs *sgambettare* [kick], *trottare* [trot] and *volteggiare* [whirl] had lower values and the lowest values resulted for *ballare* [dance], and *danzare* [dance].

<table>
<thead>
<tr>
<th>MOTION VERB</th>
<th>(a) Upward Movement (%)</th>
<th>(b) HAPPINESS (%)</th>
<th>(c ) Upward movement and HAPPINESS (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballare [dance]</td>
<td>2.85</td>
<td>62.85</td>
<td>0</td>
</tr>
<tr>
<td>Danzare [dance]</td>
<td>5.71</td>
<td>11.42</td>
<td>0</td>
</tr>
<tr>
<td>Piroettare [pirouette]</td>
<td>37.14</td>
<td>31.42</td>
<td>25.71</td>
</tr>
<tr>
<td>Saltellare [skip, hop]</td>
<td>97.14</td>
<td>82.85</td>
<td>77.14</td>
</tr>
<tr>
<td>Sgambettare [kick]</td>
<td>20.00</td>
<td>11.42</td>
<td>5.71</td>
</tr>
<tr>
<td>Trottare [trot]</td>
<td>11.42</td>
<td>22.85</td>
<td>14.28</td>
</tr>
<tr>
<td>Trotterellare [trot along]</td>
<td>40.00</td>
<td>54.42</td>
<td>31.42</td>
</tr>
<tr>
<td>Volteggiare [twirl]</td>
<td>20.00</td>
<td>11.42</td>
<td>2.85</td>
</tr>
</tbody>
</table>

Table 4. Italian speaking subjects: % movement / emotion / movement + emotion, for each motion verb

The highest percentages in the emotion (HAPPINESS) category emerged again for *saltellare* [skip, hop] (82.85%), followed by *ballare* [dance] (62.85%), and *trotterellare* [to trot along] (54.42%). Lower percentages resulted for *piroettare* [pirouette], and *trottare* [trot] while *danzare* [dance], *sgambettare* [kick], and *volteggiare* [whirl] received the lowest percentages.

The third calculation, represented in column (c), regards subjects who explicitly assigned both an upward movement and the emotion HAPPINESS to a specific motion verb. Percentages near or over 50% are highlighted. Again we find that the verb *saltellare* [skip, hop] (77.14%) received the highest percentage, while *trotterellare* [to trot along], *piroettare* [pirouette], *trottare* [trot] and *volteggiare* [whirl], *sgambettare* [kick], received much lower values. For *ballare* [dance], and *danzare* [dance], we have 0% values.

A Z-test for proportions-Dependent Groups was performed on the third column (Upward Movement + HAPPINESS) in the Italian verb set in order to
determine if there were statistically significant differences among the verbs regarding the strength of association of Upward Movement and HAPPINESS. A statistical value of $p < .05$ emerged for *saltellare* [English gloss: skip, hop], indicating that the level of association of Upward Movement and HAPPINESS for this verb was significantly higher than all other verbs.

It would seem then that for the Italian informants, the motion verb *saltellare* [skip, hop], is systematically associated with the UPWARD MOVEMENT and the emotion HAPPINESS.

### 4.2. Comparisons

#### 4.2.1. Similarities

An analysis of the global results reveals that, in both language groups, the emotion HAPPINESS was associated with a motion verb encoding direction: **upward**, and manner: **jumping up and down**, to the extent of 62.85% for the verb *bounce* in the English speaking group, and 77.14% for the verb *saltellare* [skip, hop], in the Italian speaking group as in Figure 1.

HAPPINESS + UPWARD MOVEMENT (jumping)

![Comparison of motion verbs with highest relative values](image)

Fig. 1. Comparison of motion verbs with highest relative values (English *bounce* vs. Italian *saltellare* [skip, hop])

A Z-test for proportions-Independent Groups was then performed to determine if there exists a difference between the highest ranking verbs in the English group (*bounce*) and the highest ranking verb in the Italian group (*saltellare*). No significant difference emerged for the comparison between *bounce* in the English set of verbs and *saltellare* [skip, hop] in the Italian set. In other words for the combination of UPWARD MOVEMENT and HAPPINESS, the association for both groups is similar. The test also revealed an absence of significant differences both for the comparison English *hop* vs. Italian *saltellare* [skip, hop], and for the comparison English *skip* vs. Italian *saltellare* [skip, hop], again pointing to the similarity between the two groups for these verbs.
Thus for both groups, there is a statistically significant association between HAPPINESS and some verbs encoding UPWARD MOVEMENT (in the English speaking group, the verbs bounce, hop and skip; in the Italian speaking group, the verb saltellare [skip, hop]). Moreover, in the comparisons between the two groups for these verbs, no significant difference emerged, leading to a conclusion of similarity.

Thus, for both English and Italian, there seems to be a link between an UPWARD MOVEMENT and the emotional state of HAPPINESS.

4.2.2. Differences

What follows is a comparison of percentages of responses of total number of subjects associating upward movement of a motion verb with the emotion HAPPINESS represented for single motion verbs. Figure 2 reports the percentages in descending order for the English subjects, while Figure 3 reports the percentages in descending order for the Italian subjects.

As can be seen in Figures 2 and 3, both groups associated an upward (jumping up and down) movement with the emotion HAPPINESS, since in the English group, we find the verb bounce in the highest position, while in the Italian group, we find the verb saltellare [skip, hop]. However, since a statistical value of $p < .05$ emerged, along with bounce, also for the English verbs, skip and hop, we can state that in the link with the emotion HAPPINESS, the English data yields a set of verbs (bounce, skip and hop) which all encode the manner trait of “jumping up and down”. In the Italian data, only the verb saltellare [skip, hop] seems to be salient in this sense.
Fig. 3. Relative values for association by Italian speaking subjects of upward movement of a motion verb with the emotion HAPPINESS for each motion verb.

However, perhaps here we should make some lexicographical remarks. The verb *saltellare* is defined in major Italian dictionaries as "avanzare a salti piccoli frequenti" [to move forward with small and frequent jumps], or "fare salti uno dopo l’altro" [to make jumps one after another], or "procedere a piccoli salti, fare piccoli e continui salti" [proceed with small jumps, make small, repeated jumps]. In most Italian-English dictionaries, although the first equivalent given for the Italian verb *saltellare* is usually "skip" or "hop", (which is therefore the gloss used in the tables of this study), other equivalents are commonly cited such as "bounce, jump, caper, frisk, trip, gambol, prance". Thus, although only one motion verb emerged saliently in the Italian data as associated with the emotion HAPPINESS, this verb seems to include the manner of movement senses evoked by the set of English verbs (bounce, hop, skip, but also leap and prance). Moreover, this Italian verb registered the highest percentage of all verbs in the datasets, which suggests therefore a strong conceptual link.

4.3. Qualitative analysis

On the basis of the theoretical literature on this topic and the results of a pilot investigation, this study explored the hypothesis that some motion verbs encoding an upward orientation and a jump-like manner of movement sense can undergo metaphorical extension to represent the emotional state of HAPPINESS.
What seems to emerge from this analysis is a partial similarity between English subjects and Italian subjects along with distinct differences. In both languages, some motion verbs potentially encode a happiness-related emotional state. For the motion verbs investigated in this study, when they do so, the direction of motion is upward and the manner is a jumping or jumping-up movement. However, whereas the English speaking subjects associated several motion verbs with the emotional state, the Italian speaking subjects associated only one. Significantly however, this Italian verb (saltellare [skip, hop]) includes senses encoded by the set of English verbs in this study (bounce, skip, hop) and registered moreover the highest percentage, suggesting an equally strong association.

We can conclude therefore that in both languages, albeit to varying degrees, speakers may use one or more motion verbs encoding jumping or jump-like movements to express happiness-like emotional states. Can we suggest on this basis that the two languages share a common conceptual metaphor (CM) formulated as HAPPINESS IS MOVING (JUMPING) UP? Perhaps what we can safely say is the following.

A CM emerges from a mapping between a source domain and a target domain. Despite the difference between the two languages in number and precise senses of the verbs associated with the emotion as target, they both shared some similar aspects of the source domain which in this case can be considered part of the semantic scope of the motion verbs: path (upward) and manner (jump-like).

<table>
<thead>
<tr>
<th>motion verbs</th>
<th>English: bounce, skip, hop and Italian saltellare [skip, hop]</th>
</tr>
</thead>
<tbody>
<tr>
<td>target domain</td>
<td>emotion state (HAPPINESS)</td>
</tr>
<tr>
<td>source domain</td>
<td>Location</td>
</tr>
<tr>
<td>mapping 1</td>
<td>change of emotional state = change of location</td>
</tr>
<tr>
<td>CM - 1</td>
<td>EMOTIONS ARE MOVEMENTS</td>
</tr>
<tr>
<td>mapping 2</td>
<td>Change to the emotional state of Happiness = change of location by movement upward</td>
</tr>
<tr>
<td>CM - 2</td>
<td>HAPPINESS IS UP</td>
</tr>
<tr>
<td>mapping 3</td>
<td>Change to the emotional state of Happiness = change of location upward by means of a jumping movement</td>
</tr>
<tr>
<td>CM - 3</td>
<td>HAPPINESS IS MOVING (JUMPING) UP IN THE AIR</td>
</tr>
</tbody>
</table>

Table 5. Conceptual mapping for the metaphorical extension of some motion verbs in English and Italian

It would seem then that the empirical data supports insights advanced by Kövecses (2003) on one of the metaphorical representations of the emotion
HAPPINESS as “being off the ground”. In our data, as suggested by Kövecses, both “dancing” and “jumping up and down” were at times associated by subjects with this emotional state. However, the highest percentages in both groups regarded the association of HAPPINESS with a motion verb denoting a jumping-up movement. This result warrants the postulation of a Conceptual Metaphor (CM) framework which can account for the metaphorical extension of some motion verbs into the domain of the emotions. As far as the emotion HAPPINESS is concerned, this framework envisages a basic CM metaphor formulated as EMOTIONS ARE CHANGES and relative entailments, which include the potential conceptualization: HAPPINESS IS MOVING (JUMPING) UP IN THE AIR, as shown in Table 5.

As illustrated in Table 5, the emotion HAPPINESS is often conceptualized as a change of location and, more specifically, as a change of location by means of a jumping movement upward into the air. This would be the conceptual metaphorical motivation for the use of motion verbs with a “jumping” manner sense to represent the emotional state of happiness.

5. Limitations of this study and future directions

The study may have been limited by the choice of motion verbs used for the Italian and English language. However, as explained above, the verbs were not chosen a priori but extracted from the results of the pilot study which indicated a link between specific motion verbs and evocation of emotional state. A second problem regards the translation equivalents given in the glosses for the Italian data, necessary for the argumentation. Again, as explained in note 1, a translation equivalent rarely harnesses the range of senses which a lexical item may encode and thus renders comparison difficult. In fact, when asked to describe the movement or movements evoked by the verb, the informants produced very detailed descriptions of the movement involved. Then, there is a related question which is indeed very thorny, and this regards the labels given to emotional states. Wierzbicka (2009) has emphasized the difficulty of understanding and describing human emotions across languages and cultures. Among the examples she gives, we can select the fact that, for example, Russian does not have an exact equivalent of the English word "sad", although it has two words usually translated into English as "sad", each with a somewhat different meaning. As regards the emotion investigated in this cross-cultural study, HAPPINESS, she notes that many languages do not have a word matching in meaning the English word "happy". Skeptical of a bias that can hinder cross-cultural research on the emotions, she states:

Contemporary psychology, like present-day science in general, is dominated by English, and it is common practice for scholars to write about human emotions using English emotion terms, as if these English words could give us an accurate, objective and culture-independent perspective on human emotional experience in general. [...] in reality, any discussion of human emotions which
relies on English emotion terms is necessarily Anglocentric (Wierzbicka, 2009:4).

In fact, in our data, when indicating a happiness-related emotional state, the English subjects produced the word "happiness" and only sometimes one or more of its synonyms (e.g. "joy"). In the Italian speaking group, however, the responses were distributed over a range of synonyms, like "allegria", "contentezza", "felicità", "gioia", all expressing in Italian a different nuance or intensity of a positive emotional state, comparable to the English concept of HAPPINESS. Considered "happiness-related", all the synonyms were included in the tabulation. However, this difference in labeling the emotional state also conditions the way we understand the similarities/differences between Italian and English in metaphorical conceptualization. What can perhaps be safely suggested so far is that in the metaphorical extension of motion verbs to express HAPPINESS, there seems to be a partial coincidence between the two languages/cultures both in the source domain and the target domain. Similarity is present but regards only some senses from the source domain of jumping up and down and some aspects of the target domain: the emotional state of HAPPINESS.

Future directions in this line of research, therefore, require attention to a myriad of scientific questions related to both motion constructions and emotion, like language typology, cross-linguistic equivalence, cross-cultural differences in emotion perception and expression, etc.

6. Concluding remarks

This paper reported an empirical study of the role of motion verbs in representing emotional states by means of a cross-linguistic observation of the representation of the emotion HAPPINESS in two languages: English and Italian. On the basis of the results we can easily see that languages have the resources to foreground aspects of the complexity of emotional states and one of those resources is the range of manner senses encoded in motion verbs. Subjects in both cultures easily produced numerous descriptors for the movements encoded in the motion verbs and indicated the emotional state that in their opinion the verbs evoked. The subjects linked the emotion HAPPINESS to the target items (the motion verbs for each language) to varying degrees. The English-speaking subjects tended to associate several verbs with the emotion (bounce, skip and hop). The Italian-speaking subjects did so for only one verb (saltellare [skip, hop]), a verb which in Italian however includes the same manner-of-motion senses encoded by the English verbs bounce, skip and hop. Thus, we can hypothesize that in both languages when some motion verbs encode a jump-like manner of movement, they can undergo metaphorical extension for the representation of the emotional state of HAPPINESS.
Following Conceptual Metaphor Theory (CMT), this study also proposes a description of the conceptual mapping which can account for the use of verbs encoding manner of physical movement to conceptualize a cognitive/psychological state of emotion, a description which can serve as a hypothetical framework for similar future investigations. The study also points to the contribution that CMT may make in understanding both the motion/emotion relationship in human conceptualization and the cross-linguistic descriptions of manner-of-motion representations in verbal systems.

Notes

1 I would like to thank an anonymous reviewer for calling my attention to the problem inherent in the choice of verbs. The decision was made to choose those verbs which had emerged in both languages in a first empirical investigation; in other words, to use those verbs which the trial subjects had already associated with both the type of movement and type of emotional state under investigation. To have decided a priori, with no empirical support, which verbs to submit to the subjects seemed equally problematic, since it would have meant using dictionary definitions for one language and their translations in the other and rarely are lexical items equivalent in all aspects. Moreover, the manner connotations of apparently equivalent verbs may differ substantially from one language to another or at least have different levels of saliency (cf. Slobin 2006). In fact, it is to be noted that in the pilot study, both the English speakers and the Italian speakers produced a wide range of movement descriptions for each verb, a fact which seems to point to the complexity of the sense of manner encoded by motion verbs in both languages. For example, in the pilot study, one subject produced for an Italian verb sobbalzare “Fare un salto improvviso all’indietro provocato da uno spavento (un rumore improvviso, un contatto inaspettato)” [English gloss: make a sudden jump backwards provoked by a fright (a sudden noise, an unexpected encounter)]; for the English verb reel, a subject answered "Shocked, spasmodic movement". Thus, for the purposes of this study, we were skeptical of the use of translation equivalents as a starting point. Instead, for the list of stimuli in this second investigation, it was decided to extract from the first study those verbs which had resulted positively for the combination of upward movement and emotional state of happiness.

2 I would like to thank my former student Elisa Meco for her help in conducting the interviews. The Italian subjects were chosen from Elisa’s classmates and friends; the English speaking subjects were recruited in popular tourist areas of Rome.


7 As definitions of the Italian word "saltellare" in bilingual dictionaries, we can note that Wordreference.com gives "hop, skip"; Collins gives "skip, hop; dictionary.reference.com gives "bounce"; dictionary.com gives "skip, hop, caper, frisk, trip, gambol, prance"; Il Ragazzini: Dizionario Inglese-italiano, italiano-inglese gives "skip, trip, hop, dance about, frisk, caper, prance".
References


