

When Motion Becomes Emotion

*A Study of Emotion Metaphors Derived
from Motion Verbs*

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L I M S

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ABSTRACT

The work presented in this D-extended essay has been carried out as part of the project “Linguistics in the Midnight Sun” at the Department of Languages and Culture, Luleå University of Technology. The aim of this essay was to investigate into the use of verbs of motion in emotion metaphors. The sixteen verbs studied are; *climb, crawl, dive, float, fly, go, hop, jump, leap, plunge, roll, run, stagger, swim, tiptoe* and *walk*. Verbs of motion are used because they are essential for the construal of the emotion following the human tradition of expressing the abstract, the emotion, in terms of the concrete, the motion. Furthermore, verbs of motion are often used because the behavioural response to emotional impact is used as source domain for the metaphor. *Climb, fly, go, hop, jump & run* are used in metaphors for ANGER/FURY. *Crawl, leap, run, stagger, tiptoe & walk* are used in metaphors for FEAR. *Float, jump, leap, roll & walk* are used for JOY/HAPPINESS and *go & walk* are used for SADNESS. The connections with specific emotions seem to arise out of the semantic parameters of each verb. The majority of the emotion metaphors in this study express basic negative emotions such as ANGER and FEAR. The human mind uses concrete experience to express the abstract. The human being visualizes the emotion as being inside a person, as surrounding the person or as making the person perform a movement. In this study, the majority of the studied verbs visualize a movement associated with an emotion. Understanding a metaphor is an advanced cognitive process based on pre-understanding, ability for abstract thinking and ability for sorting out one single cognitive model of the verb knowing that each verb has several possibilities, obviously the human mind is able to perform a very advanced process within a fraction of a second.

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Metaphors

I'm a riddle in nine syllables,
An elephant, a ponderous house,
A melon strolling on two tendrils.
O red fruit, ivory, fine timbers!
This loaf's big with its yeasty rising.
Money's new-minted in this fat purse.
I've eaten a bag of green apples,
Boarded the train there's no getting off.

Sylvia Plath, 20 March 1959

Typographical conventions

| | |
|----------------------------|--|
| Cognitive categories | Small capitals e.g. BIRD, VEHICLE |
| Metaphors/metonymies | + signs and small caps e.g. +ANGER IS HEAT+ |
| Frames (Fillmore) | Initial capitals in brackets e.g. [Motion] |
| Cognitive cases (Talmy) | Initial caps e.g. Figure |
| Schemata (Langacker) | Small caps in brackets e.g. [PROCESS] |

Abbreviations used

| | |
|------|--|
| BNC | <i>The British National Corpus</i> |
| CALD | <i>Cambridge Advanced Learner's Dictionary</i> |
| ICM | <i>Idealized Cognitive Model</i> |
| SIL | <i>SIL International</i> , formally known as the Summer Institute of Linguistics |
| WT | <i>Wilkinson's Thesaurus of Traditional English Metaphors</i> |

1. INTRODUCTION

1.1 Background

The work presented in this D-extended essay has been carried out as part of the project “Linguistics in the Midnight Sun” at the Department of Languages and Culture, Luleå University of Technology. This project is presently examining four central conceptual and semantic domains of which the research area for this essay, the function of verbs of motion in emotion metaphors, is subsumed into two of the project’s domains; Motion in Context (MOC) and Emotion in Context (EMOC).

Metaphors offer us means of enriching the language we use. Several metonymies and metaphors have developed to express emotions and some of them involve verbs of motion to visualize or convey the emotion, as for example: *He flew into a rage* and *She jumped for joy*. There are different kinds of motion verbs and for purposes of delimitation this essay will study verbs expressing full body movements over land, through and on water and through air and how these are used in metonymy and metaphor to express emotions. Motion and emotion merge in these metaphorical expressions and as Lakoff and Johnson explain; “[the metaphor] permits an understanding of one kind of experience in terms of another” (1980: 235). They further claim that; “Since much of our social reality is understood in metaphorical terms, and since our conception of the physical world is partly metaphorical, metaphor plays a very significant role in determining what is real for us” (1980: 146). Metaphors have become an ordinary way of expressing things as for example: *He fell in love*, *The anger welled up inside her*, *She is head of the department*. Some metaphors are indeed so common they are understood almost literally.

1.2 Aim

The aim of this essay is to investigate what the use of some verbs of motion in emotion metaphors reveals about the connections between something utterly concrete, such as motion, and something very abstract, such as emotion. Therefore the following subjects will be examined:

- Why are verbs of motion used in metaphors for emotion?
- Which verbs are connected to which emotions and why?
- Do metaphors containing verbs of motion express mainly basic or non-basic emotions, positive or negative emotions?
- What does all this reveal about the human mind?

1.3 Method and material

The concepts of motion, emotion and metaphor will be studied from a cognitive linguistic perspective. The verbs of motion will be picked on the basis of the extent to which they describe full body movement transportation through one or several spatial areas, i.e. verbs naming transportation and movement of the whole body through water, air and over land will be studied. The emotion metaphors will be retrieved from metaphor dictionaries and corpus data and analysed with respect to the use of the motion verb and the conveyed emotion. Only metonymy and metaphor that help conceptualize emotions will be studied.

2. METAPHOR & METONYMY

Defining *metaphor* is difficult: “The distinction between the notions of metonymy and metaphor is notoriously difficult, both as theoretical terms and in their application. Thus, it is often difficult to tell whether a given linguistic instance is metonymic or metaphoric” (Radden 2003: 93). Given this, it is impossible to explain *metaphor* without explaining *metonymy* and furthermore *simile* and *synecdoche* will also need mentioning since these two notions occur in the explanations of *metonymy* and *metaphor*: “There are many explanations of how metaphors work but a common idea is that metaphor is somewhat like **simile** (e.g. *Reading that essay was like wading through mud*) in that it involves the identification of resemblances, but that metaphor goes further by causing a transference, where properties are transferred from one concept to another” (Saeed 2003: 345-346). *Metaphor* is a reduced form of *simile*, which can be illustrated in a comparison between the *simile*: “Bill is like a pig” and the *metaphor*: “Bill is a pig” (Persson 1990: 165). A *synecdoche* is “a special case of metonymy [...] where the part stands for the whole” (Lakoff and Johnson 1980: 36). The obvious conclusion of this is that *metonymy*, *simile*, *synecdoche* and *metaphor* are overlapping notions and some researchers have in fact proposed putting them on a linear scale, going from the most prototypical metonymy to the most prototypical metaphor. On such a scale it is hard to distinguish whether the examples in the middle are to be considered as *metonymies* or *metaphors*. This continuum of metonymy and metaphor is here visualized graphically:

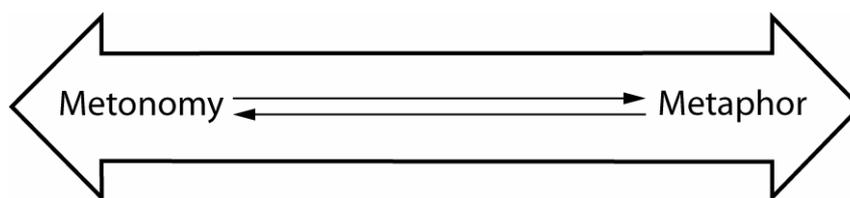


Figure 1 The continuum of metonymy and metaphor, adapted from Barcelona (2003: 195).

As Figure 1 shows, metonymy and metaphor are related and sometimes overlapping. However, the existing definitions of metonymy and metaphor are easily applicable to the extreme ends of the continuum. In accordance with the tradition in cognitive linguistics of recognizing prototypicality, it is perhaps appropriate to consider the definitions below as

definitions of prototypical metaphor and prototypical metonymy. The next section will discuss these.

2.1 Metonymy

When it comes to defining *metonymy*, cognitive linguists have yet not agreed on one definition in every detail but they have agreed so far that *metonymy* “consists of a mapping within the same experiential domain or conceptual structure” (Barcelona 2003: 32). The fact that it is difficult to define metonymy has already been mentioned, but besides the fuzziness of numerous metonymies as well as metaphors the main points of divergence concern what domains are plausible for metonymic mapping (Barcelona 2003: 32). The following definition of metonymy is as precise as it might get at the moment, considering that the subject is still under discussion: “Metonymy is the conceptual mapping of a cognitive domain onto another domain, both domains being included in the same domain or ICM, so that the source provides mental access to the target” (Barcelona 2003: 32-33). ICM¹ is Lakoff’s term (1987) for what Langacker and others call a cognitive domain and Fillmore calls a FRAME. Langacker (2002: 3) explains that a cognitive domain can be “any sort of conceptualization: a perceptual experience, a concept, a conceptual complex, an elaborate knowledge system, etc.” The following are examples of emotion metonymies using motion verbs:

- (1) *She is jumping for joy*
- (2) *He is jumping up and down in anger*
- (3) *He is climbing the walls.*

Evidently, *metonymy* and *metaphor* have many features in common, both of them:

- are conceptual processes
- may be conventionalized;
- are used to create new lexical resources in language
- show the same dependence on real-world knowledge or cognitive frames

What distinguishes them from each other is that metaphor is mapping across conceptual domains while the mapping of metonymy takes place within one single domain. (Saeed 2003:

¹ ICM = Idealized Cognitive Model

352). Various taxonomies of metonymic and metaphorical relations have been proposed and there exist several taxonomic systems though we seem not yet to have obtained one universal system. This will be discussed further. The effect of metonymy and metaphor on language and thinking will also be a recurrent theme throughout this essay. Its effect as a resource in the creating of new vocabulary is consequently a fundamental cognitive characteristic. As Lakoff expresses it, it is “extremely common for people to take one well-understood or easy-to-perceive aspect of something and use it to stand either for the thing as a whole or for some other aspect or part of it” (1987: 77). This summarizes what *metonymy* is. The next part will deal with the question of defining *metaphor*.

2.2 Metaphor

Traditionally, *metaphor* has been viewed as poetic or literary language. Nevertheless, the last few decades, cognitive linguists like for example Lakoff and Johnson have revealed that metaphors play an important part in colloquial language and everyday use. Metaphors are so much more than figurative language use. Lakoff and Johnson have found that “metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature” (1980: 3). Even though not all language is metaphorical, metaphors are indeed an important part of language. (Saeed 2003: 247).

So how do we define *metaphor*? A simplified definition is that metaphor is a “mapping of the structure of a source model onto a target model” (Ungerer and Schmid 1999: 120). As was mentioned above, the source and the target domain of a metaphor belong to two different cognitive domains. To complicate things these belong to different superordinate domains or ICMs, and it has not yet been stated precisely what a domain is, neither when one is different from another nor when exactly a domain is superordinate (Barcelona 2003: 32).

Indeed, there are several difficulties about giving metaphors a universal definition, however, applying the definition above on the metaphors of this study reveals one cognitive domain as EMOTION and the other as MOTION. The mapping which takes place in a metaphor starts within the source domain and its features are mapped onto the target domain (Saeed 2003: 346). Within this survey MOTION is the source domain and EMOTION the target domain. Take for example the metaphor: *She is floating on air*, where the floating movement

belongs to the source domain and the happy emotion belongs to the target domain. This is how metaphors “allow us to understand one domain of experience in terms of another.” (Saeed 2003: 347) In addition to the discussion above about superordinate experiential domains, the target domain EMOTION and the source domain MOTION must be considered as superordinate experiential domains. MOTION is a domain that is easily conceptualized considering that “there must be some grounding, some concepts that are not completely understood via metaphor to serve as source domains” (Lakoff and Johnson 1989: 135). Accordingly, the target domain EMOTION is understood via the metaphor whereas the source domain, in this case MOTION, is what Saeed calls a “non-metaphorical concept”, a domain which would not be able to act as target domain (2003: 347).

However, there are not only theories about how to define *metaphor*, how metaphors are constructed and theories about terminology and taxonomy. There are also some common traits, some shared characteristics, of metaphors. Four “features of metaphors” can be distinguished: *conventionality*, *systematicity*, *asymmetry* and *abstraction* (Saeed 2003: 348-351). They will be explained below accompanied by examples from the British National Corpus:

1. Conventionality: The conventionality of metaphors varies from extremely conventionalized to unconventional metaphors. This has to do with the novelty of a metaphor, some are newly invented and others are so common that they are considered to be ‘dead’ metaphors, or ‘fossilized’ which means that they have passed into literal language (Saeed 2003: 348). On the other hand the notion of ‘dead’ metaphors is rejected by cognitive linguists like Lakoff, Johnson, Turner and Kövecses (Ungerer and Schmid 1999: 118). These linguists mean that so-called dead metaphors have the greatest influence on the human mind. The present writer agrees with this, however it is just a name and the notion ‘dead metaphor’ need not sound pejorative if we remember the influence they have on language. Metaphors may be placed on a scale running from ‘dead’ to ‘original’ where the most lexicalized metaphorical uses are on the left and the least lexicalized and most unconventional metaphorical uses of words are on the right. (Persson 1990: 171-172):

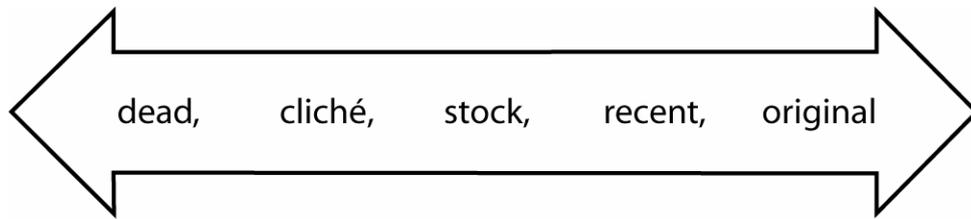


Figure 2 The conventionality scale of metaphors, this image is freely based on Persson (1990).

The importance of ‘dead’ metaphors is that they are so deeply imbedded in our consciousness that they influence our conception of reality. From a cognitive perspective the conclusion is “that the metaphors that have unconsciously been built into the language by long-established conventions are the most important ones.” (Ungerer and Schmid 1999: 119) Conventionalized metaphors will be of great importance to this study. ‘Dead’ metaphors, which we are hardly aware of as being metaphors, like, for example, *Her life is empty*, *His whole life revolves around her* and *She flew into a rage*, influence our construal of reality so completely that they are experienced as literal. These are examples from the British National Corpus (BNC):

(4) *Mr Kanemaru's reputation took a **dive** from which it has not recovered.*

(5) *Walkers would find themselves **diving out** of the way on paths, escaping from runaway mountain bikes careering towards them*

(6) *How time **flies**!*

2. Systematicity: systematicity implies that the mapping is extended to involve several points of comparison: “features of the source and the target domain are joined so that the metaphor may be extended, or have its own internal logic.” (Saeed 2003: 348) The metaphor category +LIFE IS A JOURNEY+ can illustrate how this systematicity works. It is a metaphor “which pervades our ordinary way of talking”: birth is often described as arrival and death is viewed as departure. We adapt the different stages of a journey to the different stages of life, thus providing the mapping with numerous points of comparison. “*The baby is due next week*, or *She has a baby on the way*”, “*She passed away this morning* or *He’s gone.*”, “*Giving the children a good start in life; They’re embarking on a new career; He’s gone off the rails; Are you at a cross-roads in your life?; I’m past it (= I’m too old); He’s getting on (= he’s ageing); etc.*” (Saeed 2003: 349) The +BODY AS A CONTAINER FILLED WITH EMOTIONS+ is another example of systematicity: *She was filled with love*, and *The anger welled up inside of him* are other examples of systematicity which simplifies our understanding of emotions.

The following examples of systematicity are taken from the BNC:

(7) *If I meet a new act, I always try and assess their maturity in order to judge whether they might **go off the deep end** as soon as they have success.*

(8) *I decided to **take the plunge**.*

These two are both examples of *career* seen as a journey along a tricky road, or an assault course. Another example of systematicity is found in metaphors where emotion is expressed by the effect it sometimes has on people:

(9) *who was also **hopping mad**.*

(10) *Oh no! he cried loudly **jumping up and down** in anger.*

(11) *He's probably **jumping up and down** with fury*

(12) ***jumping up and down** and shouting with glee.*

(13) *His disappointment had turned to joy and he **leapt in the air**, relieved*

(14) *A teller of tall tales has been brought in to help would-be vicars keep the congregation **rolling in the aisles**.*

(15) *I was **staggered** they managed to get such a large mouthful in a relatively small mouth!*

(16) *As war broke out, Turkey **tiptoed**. Was it going to war?*

These metaphors from the BNC are all affected by the systematicity of the superior category +EMOTION IS MOTION+.

3. Asymmetry: “Metaphors are not symmetrical, they do not set up a symmetrical comparison between two concepts, establishing points of similarity. Instead they provoke the listener to transfer features from the source to the target” (Saeed 2003: 350). The metaphor category +LIFE IS A JOURNEY+ is asymmetrical, which means that the mapping does not work the other way around at the same time. Life can be described as a journey but a journey cannot, or at least is not described as a life. An example from the BNC:

(17) *A period of almost literally **climbing the walls**.*

Boredom/anger/frustration can be described as climbing but climbing cannot be described as boredom.

4. Abstraction: In this respect abstraction is related to asymmetry though it is not a necessary feature of metaphor. The source and the target can be equally concrete or abstract but “a typical metaphor uses a more concrete source to describe a more abstract target”. (Saeed 2003: 351) Once more the +LIFE IS A JOURNEY+ metaphor can be used as illustration: Since

life is abstract, mysterious and difficult to understand it is mapped onto the common experience of a journey. Abstraction is also an essential feature of the emotion metaphors of this study. The human need for understanding the abstract in terms of the concrete is probably a clue to why motion verbs are used in emotion metaphors. The following examples from the BNC once more belong to an already mentioned category; +EMOTION IS MOTION+:

(18) *He was **staggered**. So was the press. Vindictive, more like it.*

(19) *He's probably **jumping up and down with fury**.*

The abstract emotion is expressed by a concrete motion in these metaphors.

The next important issue is the taxonomy of metaphors according to shared characteristics. SIL International, an American organization which “studies, documents and assists in developing the world’s lesser known languages” and which has also been granted consultative status by the UNESCO, provides an internet based linguistic dictionary based on the works of the most prominent contemporary linguistics. For this survey of categories the information used is taken principally from SIL’s recollection of Lakoff (1987), Johnson (1987), Kövecses (1986), and Lakoff and Johnson (1980). General editor and supervising SIL’s information on metaphors is Eugene L Loos.

Metaphors may be divided into three subgroups: *conventional metaphors*, *mixed metaphors* and *new metaphors*. Each of them consists in their turn of other subgroups. This study will concentrate on *conventional metaphors*, since their degree of conventionality makes them the most pervasive in the human mind. The subgroups of the *conventional metaphor* are: *ontological metaphors*, *orientational metaphors* and *structural metaphors* as seen in the figure below:

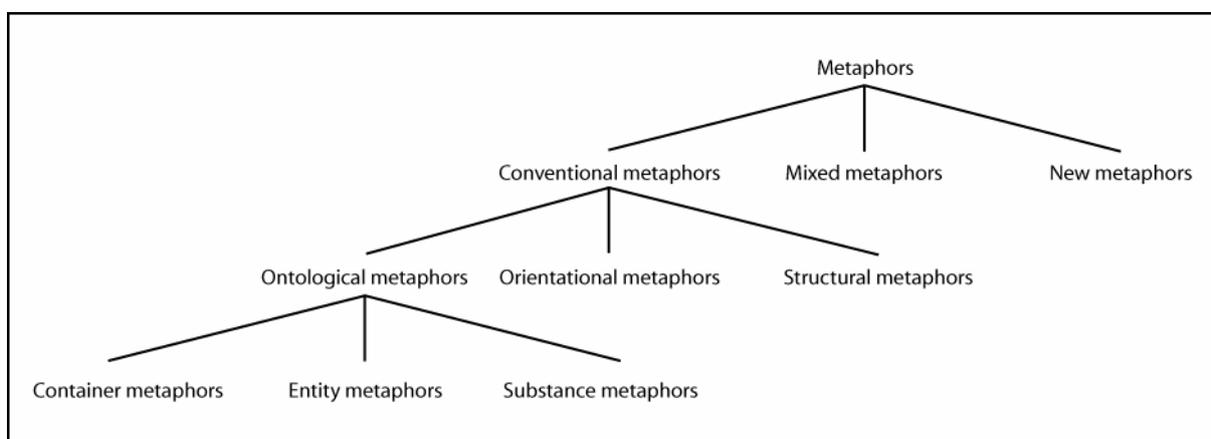


Figure 3 The 'family tree' of metaphors based on SIL International and Lakoff and Johnson (1980)

The following types of metaphorical mappings may be used to associate various source and target domains with each other.

1. The *ontological metaphor* is defined as: “a metaphor in which an abstraction, such as an activity, emotion, or idea, is represented as something concrete, such as an object, substance, container, or person.” (SIL) Its subgroups are:

- a. *Container metaphor* e.g. *The anger was welling up inside her.*
- b. *Entity metaphor* i.e. “a metaphor in which an abstraction is represented as a machine or a brittle object” (SIL) e.g. *Her ego is very fragile; My mind isn't operating today.*
- c. *Substance metaphor* i.e. “an abstraction, such as an event, activity, emotion, or idea, is represented as material” (SIL) e.g. *She had a lot of love in her heart.*

2. The *orientational metaphor* “is a metaphor in which concepts are spatially related to each other, as in the following ways: Up or down, In or out, Front or back, On or off, Deep or shallow, Central or peripheral” (SIL). e.g. +HAPPY AS UP+ and +SAD AS DOWN+ metaphors.

3. The *structural metaphor* “is a conventional metaphor in which one concept is understood and expressed in terms of another structured, sharply defined concept.” (SIL) e.g. +ARGUMENT AS WAR+ and +EMOTION IS MOTION+.

Metaphors, like metonymy (cf. p. 5), are an important cause of semantic change. (Haser 2003: 171-187) A typical example of this is the verb *see* which has two meanings in English: “the basic physical meaning of ‘perceiving with the eyes’ and the metaphorically extended meaning of ‘understanding’ as in *I see what you mean*” (Saeed 2003: 351) This *see* meaning *understand* belongs to the +MIND IS BODY+ metaphorical category and so does for example *hear* meaning *obey*. A similar process may be seen in the mapping of motion verbs onto emotions. Motion verbs are used as a source and emotions as a target in several conventionalized emotion metaphors. This process will probably lead us to recognize the motion verb as describing the emotion. Perhaps, the motion verbs occurring in emotion metaphors will finally convey an emotion on their own and thus become polysemous. *Stagger*, is one example with its metaphorical meaning of being shocked or surprised, e.g. from the BNC: *I was **staggered** they managed to get such a large mouthful in a relatively small mouth!*

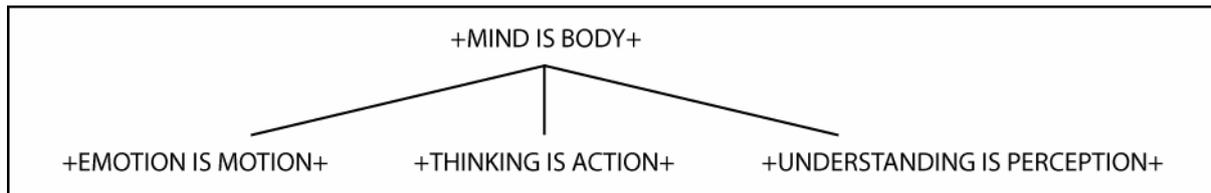


Figure 4 Subdivision of metaphorical categories belonging to the category +MIND IS BODY+.

Many scholars see metonymy as a basis for metaphor. Several linguists claim that most metaphors are motivated by metonymy. When taking a closer look at emotion metonymies and comparing them to emotion metaphors² it becomes obvious that quite a few show resemblances. The “metonymic motivation for most metaphors for emotion (anger, happiness, sadness, love, pride, fear, etc.) on the basis of physiological or behavioural responses to emotions” has been established by Barcelona, Kövecses and Lakoff (Barcelona 2003: 33). The metonym “*His heart stopped when he saw her*” is based on the physiological response to love seen as heartbeat: “the heartbeat rate, which is believed to change as a result of a strong emotional impact, stands for the emotion.” (Barcelona 2003: 33) The motion of the body is equally a behavioural and physiological response to emotional impact and the verbs of motion may have metonymically represented this.

For a great deal of figurative use of language, it is, as we have seen, hard to decide whether it is to be classified as metonymic or metaphorical. Therefore, from here on, the term metaphor in the following text will cover the meaning of the continuum of notions from metonymy to metaphor. Before we continue, let us not forget that: “One of the major functions of metaphor is to express emotion” (Goatly 1997: 158).

² See the taxonomies in chapter 3 for comparison.

3. EMOTION

What are emotions? Finding an answer to this question is by no means an easy task. Definitions of emotion words in dictionaries are very often vague and circular. The word for one emotion is used in the definition of another one. Emotion terms can also be more or less prototypical. Philosophers and psychologists have tried to identify a limited number of basic emotions. These basic emotions are often used when explaining other more peripheral emotion terms which are quite numerous. In English they amount to almost 600 (Ungerer and Schmid 1999: 136-137). Admittedly, there are a huge number of emotions to be considered in this study of emotion metaphors. To simplify this task, a division into basic and non-basic terms of emotions is needed. The hypothesis of Johnson-Laird and Oatley, the pioneers of this area, is that “certain emotion terms are basic and unanalysable in the sense that they cannot be broken down into attributes or other even more basic emotions” (Ungerer and Schmid 1999: 137) Basic emotion categories are normally used to describe non-basic ones. Ungerer and Schmid propose five basic negative emotions and four basic positive emotions where “double labels like DISGUST/HATE indicate that basic emotions can be viewed as short-lived states (DISGUST) or dispositions (HATE)” (Ungerer and Schmid 1999: 137-138). Similarly, in the opinion of the present writer, FURY is a short-lived state and ANGER a more long-lived state of the same feeling. With this modification the picture turns out as follows:

| | | | | |
|----------------------|---------------------|--|---------------|----------------------|
| negative emotions | SADNESS | | | positive emotions |
| | ANGER/ <i>FURY*</i> | | JOY/HAPPINESS | |
| | DISGUST/HATE | | DESIRE/LOVE | |
| | | | | |
| | FEAR | | | |

Figure 5 Basic emotions based on Ungerer and Schmid (1999: 138) with a modification marked *.

Typical properties of basic emotions are in brief that:

- they are unanalysable
- they have a simple linguistic form
- they are the first names of emotions a child learns (Ungerer and Schmid 1999: 138)
- they are most easily accessed

Labelling an emotion to the metaphor *My heart is on fire* would probably result in LOVE as the first choice, not INFATUATION or WORSHIP even if we might on second thought choose one of them. Similarly the metaphor *My spirits rose* triggers HAPPINESS as its first choice, not BLISS or GLEE. Nevertheless it is essential to be aware of both basic and non-basic emotions when analysing emotion metaphors. The basic emotions may also be regarded as basic categories with EMOTION as their superordinate and the non-basic ones as subordinate categories. This generates the following figure:

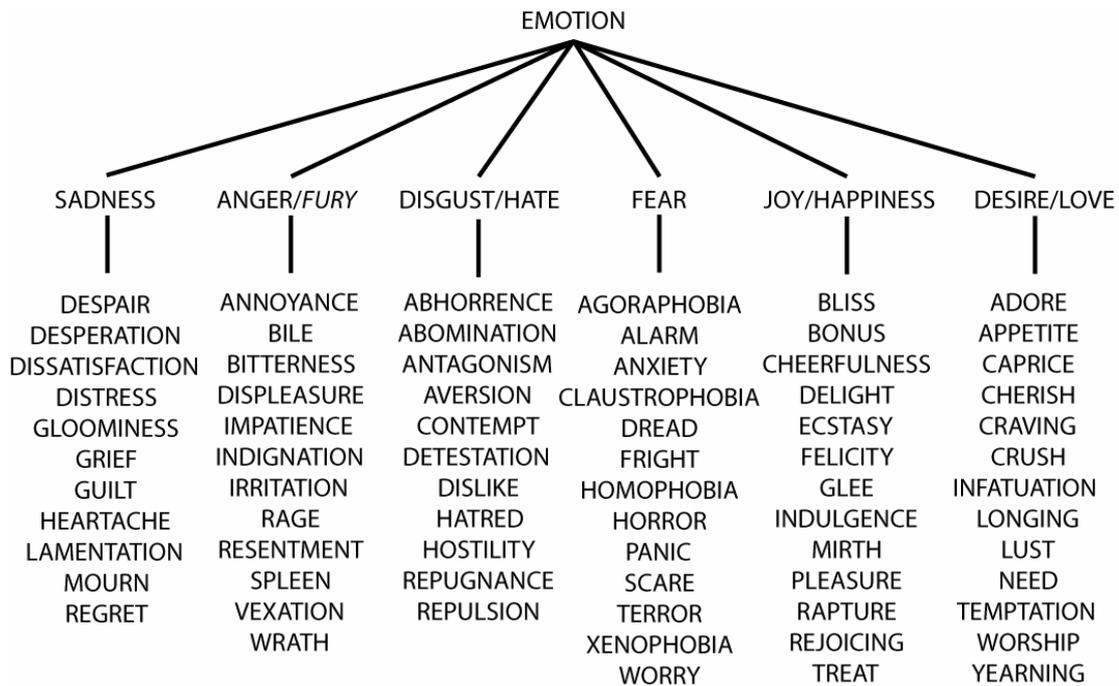


Figure 6 Superordinate, basic and subordinate levels of emotions.

3.1 Emotion metonymies

Comprehensive information about English metonymies based on Lakoff and Johnson (1980) is available through SIL International. The metonymies of this study are conventional metonymies, meaning that they are “commonly used in everyday language in a culture to give structure to some portion of that culture’s conceptual system” (SIL). A typical metonym is for example “*We need some new faces here*”³, which is understood as a need for new people, not just faces. In this case the face is the vehicle and the people the target within the same ICM. Based on SIL, this is the taxonomy for conventional metonymy:

| | | |
|-------------------------------------|---|---|
| +BEHAVIORAL-REACTIONS-FOR-EMOTION+ | +BEHAVIORAL METONYMY FOR ANGER+ | +AGGRESSIVE-VERBAL-BEHAVIOR-FOR-ANGER+ ex. I really chewed him out good! |
| | | +AGGRESSIVE-VISUAL-BEHAVIOR-FOR-ANGER+ ex. She was looking daggers at me. |
| | | +FRUSTRATED-BEHAVIOR-FOR-ANGER+ ex. The music next door has got him climbing the wall. |
| | | +INSANE-BEHAVIOR-FOR-ANGER+ ex. When my mother finds out, she’ll have a fit . |
| | | +BOASTING-FOR-PRIDE+ ex. He’s always singing his own praises. |
| | +BEHAVIORAL METONYMY FOR PRIDE+ | +CHEST-OUT-FOR-PRIDE+ ex. Why is he so puffed up . |
| | | +FORM-OF-WALKING-FOR-PRIDE+ ex. The manager strutted along the hall. |
| | | +HEAD-HELD-HIGH-FOR-PRIDE+ ex. She’s going around with her nose in the air . |
| | | +OSTENTATIOUS-BEHAVIOR-FOR-PRIDE+ ex. He’s just a show-off . |
| | | +THINKING-ONESELF-UNIQUE-FOR-PRIDE+ ex. He thinks he’s God’s gift to women . |
| | +PHYSICAL-CLOSENESS-FOR-LOVE+ ex. I want to be with you all my life. | |
| +PHYSIOLOGICAL-EFFECTS-FOR-EMOTION+ | +PHYSIOLOGICAL METONYMY FOR ANGER+ | +AGITATION-FOR-ANGER+ ex. She was shaking with anger. |
| | | +BODY-HEAT-FOR-ANGER+ ex. They were having a heated argument. |
| | | +IMPEDED-PERCEPTION-FOR-ANGER+ ex. I was beginning to see red . |
| | | +INTERNAL-PRESSURE-FOR-ANGER+ ex. When I found out, I almost burst a blood vessel . |
| | | +PHYSIOLOGICAL METONYMY FOR LOVE+ |
| | +PHYSIOLOGICAL METONYMY FOR PRIDE+ | +IMPEDED-PERCEPTION-FOR-LOVE+ ex. I only have eyes for her. |
| | | +INCREASED-HEART-RATE-FOR-LOVE+ ex. Her heart was throbbing with love. |
| | | +IMPEDED-MENTAL-FUNCTION-FOR-PRIDE+ ex. Success went to his head . |
| | | +IMPEDED-PERCEPTION-FOR-PRIDE+ ex. Winning the class election turned his head . |
| | | |

3.2 Emotion metaphors

Emotion metaphors form an extensive group in the taxonomy of metaphors. SIL International offers comprehensive information about English metaphors and their subcategorization based on Kövecses (1986). As one of several systems suggested by scholars, SIL’s information is summarized here to give an idea of what conventionalized emotion metaphors are. Besides showing examples of several close affinities between metaphor and metonymy, they also demonstrate that their conventionality often balances on the limit of turning them into so-called dead metaphors.

³ this is also a synecdoche

| | | |
|---------------------------------------|---|---|
| Metaphor for emotions | +HAPPY-AS-UP+ metaphor | ex. My spirits rose |
| Metaphor for aspects of anger | Metaphor for anger | +ANGER-AS-BURDEN+ ex. He carries his anger around with him. +ANGER-AS-DANGEROUS-ANIMAL+ ex. He unleashed his anger. +ANGER-AS-FIRE+ ex. What you said inflamed him. +ANGER-AS-HOT-CONTAINED-FLUID+ ex. You make my blood boil . +ANGER-AS-OPPONENT+ ex. I've been wrestling with my anger. +ANGER-AS-STORM+ ex. He thundered with rage. |
| | Metaphor for cause of anger | +CAUSE-OF ANGER-AS-PHYSICAL-ANNOYANCE+ ex. He's a pain in the neck . +CAUSING-ANGER-AS-TRESPASSING+ ex. Leave me alone! |
| Metaphor for aspects of romantic love | Metaphor for aspects of sexual desire | +LUST-AS-HEAT+ ex. She is an old flame . +LUST-AS-HUNGER+ ex. She is quite a dish . +LUST-AS-INSANITY+ ex. I'm crazy in love with her. +LUST-AS-WAR+ ex. He's known for his conquests . +LUSTFUL-PERSON-AS-ANIMAL+ ex. He's a real stud . +SEXUALITY-AS-A-PHYSICAL-FORCE+ ex. We were drawn to each other. |
| | Metaphor for love | +LOVE-AS-PATIENT+ ex. They have a strong, healthy marriage. +LOVE-AS-PHYSICAL-FORCE+ ex. His whole life revolves around her. +LOVE-AS-BOND+ ex. There is something between them. +LOVE-AS-CAPTIVE-ANIMAL+ ex. She let go of her feelings. +LOVE-AS-COMMODITY+ ex. I gave her all my love. +LOVE-AS-FIRE+ ex. My heart's on fire . +LOVE-AS-FLUID-IN-CONTAINER+ ex. She was filled with love . +LOVE-AS-HIDDEN-OBJECT+ ex. You're lucky to have found her. +LOVE-AS-INSANITY+ ex. I'm crazy about her. +LOVE-AS-JOURNEY+ ex. I don't think this relationship is going anywhere . +LOVE-AS-MAGIC+ ex. She is bewitching . +LOVE-AS-NATURAL-FORCE+ ex. She swept me off my feet. +LOVE-AS-NUTRIENT+ ex. She's starved for affection. +LOVE-AS-OPPONENT+ ex. She was overcome by love. +LOVE-AS-RAPTURE+ ex. I am giddy with love. +LOVE-AS-UNITY+ ex. We were made for each other . +LOVE-AS-WAR+ ex. He made an ally of her mother. |
| | Metaphor for lovers | +BELOVED-AS-APPETIZING-FOOD+ ex. Honey , you look great today! +BELOVED-AS-DEITY+ ex. He worships the ground she walks on . +BELOVED-AS-VALUABLE-OBJECT+ ex. We have to leave now, my dear . +LOVERS-AS-DOVES+ ex. It was all lovey-dovey . |
| Metaphor for emotion in general | +BODY-AS-CONTAINER-FOR-EMOTIONS+ ex. He was filled with anger. +EMOTIONAL-EFFECT-AS-PHYSICAL-CONTACT+ ex. I was struck by his sincerity. +EMOTION-AS-BOUNDED-SPACE+ ex. She flew into a rage. +EYES-AS-CONTAINERS-FOR-EMOTIONS+ ex. Love showed in her eyes. | |
| Metaphor for varieties of pride | +DIGNITY-AS-OBJECT+ ex. He preserved his dignity. | |
| | Metaphor for conceit | +CONCEIT-AS-OPPONENT+ ex. He was completely overcome by conceit. +CONCEITED-PERSON-AS-BIG+ ex. He's big as you please . +CONCEITED-PERSON-AS-HIGH+ ex. You don't have to be so stuck-up! |
| | Metaphor for pride | +PRIDE-AS-FLUID-IN-CONTAINER+ ex. Her pride rose as she watched her children perform. +PRIDE-AS-FLUID-IN-HEART+ ex. Her heart swelled with pride. +PRIDE-AS-OBJECT+ ex. He lost his pride and began to implore her. +PRIDE-AS-PERSON+ ex. His criticism hurt her pride. |
| | Metaphor for Vanity | +VANITY-AS-INFLATED-OBJECT+ ex. Her vanity has been punctured . +VANITY-AS-SENSUAL-PERSON+ ex. What you said wounded his vanity. +SELF-ESTEEM-AS-ECONOMIC-VALUE+ ex. She values herself highly. |
| +SAD-AS-DOWN+ Metaphor | | ex. He's really low these days. |

4. MOTION

What is motion? Conceptually motion is a process and linguistically this process is generally expressed by a motion verb. Langacker and Talmy are the frontal figures when dealing with motion verbs (Wildgen 2003:8). Langacker developed Cognitive Grammar and “proposed imagistic representations for verbs” and Talmy “introduced image-like representations for specific domains” of verbs of motion (Wildgen 2003:12). In this chapter Wildgen, Fillmore, Talmy, Langacker, and their cognitive models of motion will be presented. Wildgen (2003:13) describes motion with quite a few words:

If a person performs a locomotion which is composed of a number of separate limb motions, two levels can be distinguished:

- a. The rhythm of the composed movements, which is a code for the categorical perception of moving agents.
- b. The overall GESTALT of the movement. In the case of simple locomotion, there is an initial phase which starts the locomotion. It destabilizes the system in its position of rest and creates a steady evolution until the system is at rest again.

The coarse topology of locomotion has three phases:

- A. loss of position of rest, beginning of motion;
- B. steady motion;
- C. gain of a new position of rest, end of locomotion.

In cognitive linguistics, the term image schema is used for concepts which through experience we have acquired cognitive understanding of (Ungerer and Schmid 1999). Motion is one example of a basic image schema. We know the various meanings of *walk* or *swim* by habitual use and confrontation with these meanings, but how do we express this in a concise and compact way? Fillmore, Talmy and Langacker each have their particular ideas about how to give graphic representation to the cognitive concepts called image schemas. Fillmore’s system includes a description of verbs of motion even though his cognitive models are more context orientated in their construction than the pictorial models of Langacker and Talmy. Nevertheless, for the construal of verbs of motion they complement each other.

Fillmore’s system for cognitive models of semantic structure gives each word a belonging, what he calls a frame. These frames may be studied on FrameNet, an ongoing lexicographic work presented on the Internet by its inventor. The system is a classification of words,

consisting of more than six hundred different frames⁴. Fillmore's frame [Path] refers to along whom or along what the motion goes. In the sentence: "Jo moved past dad into the hall", *past dad* is the [Path]. Fillmore's frame [Source] is a location, and in the sentence: "The policeman moved away from the door", *away from the door* is the [Source]. Each frame may consist of so-called frame elements, i.e. other frames. These frame elements are more or less important in the word and are therefore of different core type. The frames interact and there are different frames for different kinds of motion. As a result, verbs of motion are sorted into several different frames.

Below are the frames containing verbs of motion belonging to this study; each frame includes "lexical units" where verbs of motion studied in this essay are marked in bold and the rest of the units are included simply for comparison. The definitions have been shortened, so that only the first and most essential part of each definition appears below. It must be mentioned that what we normally consider 'one verb' may be sorted into multiple frames as for example the verb *run* with eight frames to represent its eight various meanings: *run away* [Escaping], *run* [Cause_motion], *run* [Cause_impact], *run* [Fluidic_motion], *run* [Leadership], *run.v* [Self_motion], *run.v* [Impact], *run_through.v* [Practice]. The frame system emphasizes the fact that some words cover several semantic domains. *Run* belonging to the frame [Self_motion] is the only *run* of interest to this study. Similarly, all verbs of this study are only presented with their frames of interest to this essay.

Table 1 Fillmore's frames for the verbs of motion of this study.

| Frame | Definition | Lexical units |
|----------------------|--|---|
| [Motion] | "Some entity (Theme) starts out in one place (Source) and ends up in some other place (Goal), having covered some space between the two (Path)." | blow.v, coast.v, drift.v, float.v , fly.v , glide.v, go.v, move.v, roll.v , slide.v and soar.v |
| [Motion_directional] | "In this frame a Theme moves along a certain Path which is determined by gravity or other natural, physical forces. The theme is not a self-mover." | drop.v, fall.v, plummet.v, plunge.v , topple.v |
| [Self_motion] | "The Self_mover, a living being, moves under its own power in a directed fashion, i.e. along what could be described as a Path, with no separate vehicle." | amble.v, back.v, barge.v, bolt.v, bop.v, bound.v, burrow.v, bustle.v, canter.v, caper.v, clamber.v, climb.v , clomp.v, coast.v, crawl.n, crawl.v , creep.v, cruise.v, dance.v, dart.v, dash.n, dash.v, drive.v, flit.v, flounce.v, fly.v , frolic.v, gallivant.v, gambol.v, goose-step.v, hasten.v, head.v, hike.n, hike.v, hitchhike.v, hobble.v, hop.v , hurry.v, jaunt.n, jog.v, jump.v , leap.v , limp.v, lope.v, lumber.v, lunge.v, lurch.v, make a beeline.v, make.v, march.n, march.v, meander.v, mince.v, mosey.v, nance.v, pace.v, pad.v, parade.v, plod.v, pounce.v, prance.v, proceed.v, promenade.v, prowl.v, |

⁴ Fillmore's frames are written in square brackets.

| | | |
|-----------------|--|--|
| | | repair.v, roam.v, romp.v, run.v , rush.v , sail.v, sashay.v, saunter.v, scamper.v, scoot.v, scramble.n, scramble.v, scurry.v, scuttle.v, shoulder.v, shuffle.n, shuffle.v, sidle.v, skim.v, skip.v, skulk.v, slalom.v, sleepwalk.v, slink.v, slither.v, slog.n, slog.v, slop.v, slosh.v, sneak.v, spring.v, sprint.n, sprint.v, stagger.v , stalk.v, stamp.v, steal.v, step.n, step.v, stomp.v, storm.v, straggle.v, stride.v, stroll.n, stroll.v, strut.v, stumble.v, swagger.v, swim.n, swim.v , tack.v, taxi.v, tiptoe.v , toddle.v, totter.v, trapeze.v, tramp.v, tread.v, trek.v, trip.v, troop.v, trot.v, trudge.v, trundle.v, vault.v, venture.v, waddle.v, wade.v, walk.n, walk.v , waltz.v, wander.v, wriggle.v |
| [Path_shape] | “The words in this frame describe either the “fictive” motion of a stationary Road or the literal motion of a Theme.” | angle.v, ascend.v, ascent.n, bear.v, bend.v, crest.v, crisscross.v, cross.v, descend.v, descent.n, dip.v, dive.v , drop.v, edge.v, emerge.v, emergence.n, enter.v, exit.v, ford.v, leave.v, meander.v, mount.v, pass.v, plummet.v, reach.v, rise.v, round.v, skirt.v, slant.v, snake.v, swerve.v, swing.v, traverse.v, twisting.a, twisty.a, undulate.v, veer.v, weave.v, wind.v, winding.a, windy.a and zigzag.v. |
| [Body_movement] | “This frame contains words for motions or actions an Agent performs using some part of his/her body.” | arch.v, bat.v, bend.v, blink.v, bob.v, brandish.v, clap.v, close.v, cock.v, crane.v, crease.v, crinkle.v, cross.v, crumple.v, curtsy.n, curtsy.v, drop.v, duck.v, fidget.v, flap.v, flex.v, fling.v, flutter.v, gnash.v, grind.v, hang.v, jerk.v, jiggle.v, kneel.v, lift.v, nod.v, open.v, pout.v, pucker.v, purse.v, roll.v , scrunch.v, shake.v, shiver.v, shrug.v, shudder.v, shuffle.v, shut.v, smack.v, stamp.v, stretch.v, swing.v, throw.v, toss.v, twiddle.v, twitch.v, wag.v, waggle.v, wave.v, wiggle.v, wink.v, wriggle.v, wrinkle.v, writhe.v and yawn.v |
| [Attack] | “An Assailant physically attacks a Victim (which is usually but not always sentient), causing or intending to cause the Victim physical damage. A Weapon used by the Assailant may also be mentioned.” | ambush.n, ambush.v, assail.v, assault.n, assault.v, attack.n, attack.v, charge.n, charge.v, fall.v, incursion.n, invade.v, invasion.n, jump.v , lay_(into).v, offensive.n, onset.n, onslaught.n, raid.v, set.v, storm.v, strike.n and strike.v |

Fillmore’s system has been criticized by Talmy who claims that it lacks clarity, that there is for example nothing to show that Fillmore’s frames: [Source], [Goal], [Path], [Locative], [Patient] and [Instrument] all have a common “property of pertaining to objects moving or located with respect to one another – as distinguished, for example, from Agent” (2000:339-341). Furthermore Talmy considers the lack of a common property for defining [Source], [Goal], [Path] and [Locative] as functioning as reference points a disadvantage. It is necessary to understand that Talmy’s Path⁵ is different from Fillmore’s [Path]. Fillmore’s is a nominal that the moving entity progresses along, whereas Talmy’s consists of Vector, Conformation and Deictic, and pertains to all spatial directions. Talmy finds his own case system more efficient than Fillmore’s system and claims that Fillmore’s frames are constructed mainly on the basis of “spatiodirectional features” i.e. prepositions. The basic features of [Source], [Goal] and [Path] are for example *from*, *to* and *along*. Where Talmy includes several prepositions in his cases and have few cases, Fillmore has one frame for each preposition and subsequently several hundred frames (FrameNet). These frames are efficient for some sentences but insufficient for more complicated sentences. Talmy’s system has the ability to express very complicated structures with only a few components; mainly Figure, Ground and

⁵ In this essay Talmy’s cases are written without square brackets, to distinguish them from Fillmore’s frames.

Path. Talmy's motion situation is defined as a situation where one object is moving or is located with respect to another object. Talmy (1975: 181):

Motion situation: figure + motion + path + ground
 $S_M : F + M + P + G$

The Figure of Talmy's motion situation is the object, which is considered as moving or located with respect to another object, and is expressed by means of a nominal. The Ground is the object with respect to which the Figure is considered as moving or located. The Ground is also a nominal. The Path is the respect in which one object is considered as moving or located in relation to another object. The path-specifying constituent is a prepositional. The Motion (of the motion situation), is the moving or located state that one object is considered to be in with respect to another object, the Motion is a verb or a verbal phrase. The verb can only dominate either of two particular verbs, which is represented as MOVE and BE_{LOC} (a mnemonic for 'be-located'):

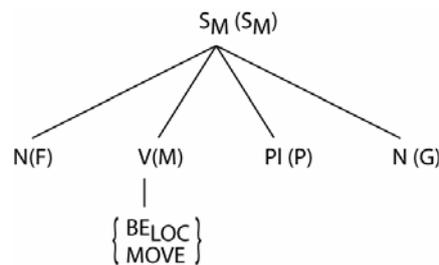


Figure 7 Talmy's motion structure (Talmy 1975, 2000).

Over the years Talmy has come to expand his formula for a motion event and his latest version shows a very concise description of motion (Talmy 2000:339-341):

[Figure Motion{MOVE/BE_{LOC}}Path(=Vector+Conformation+Deictic){path/site}Ground]_{Motion event}

In this formula there is Figure, Motion, Path and Ground once more. The Motion is something which is either being located or moving. The Path has its direction defined by a Vector (showing its direction) and a Conformation ("an additional geometric complex" (2000: 245)) and Deictic. Two verbs belonging to this study can be seen below in Talmy's own examples of application of his formula. The verbs are *walk* and *run*. Each example comes with a "derivational sketch", a "pictorial diagram" and "an illustrative sentence":

ALENGTH an BEXTENT_S that IS_{LOC} ON and COTERMINOUS-WITH [A BOUNDED PLANE] IN an BEXTENT_T
 ALENGTH ON [a BOUNDED PLANE] IN an BEXTENT_T across [a BOUNDED PLANE] IN an BEXTENT_T

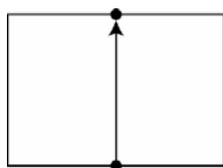


Figure 8 *I walked across the field (in 5 minutes).* (Talmy 2000: 247)

ALENGTH an BEXTENT_S that IS_{LOC} RADIALLY TO-ONE-SIDE-OF [a POINT] and COTERMINOUS-WITH ITSELF IN an BEXTENT_T
 ALENGTH RADIALLY TO-ONE-SIDE-OF [a POINT] IN an BEXTENT_T

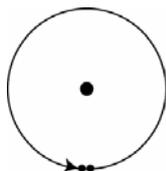


Figure 9 *I ran around the house (in 40 seconds).* (Talmy 2000: 252)

Talmy makes comparisons to Gruber's and Langacker's case systems as well as Fillmore's and sums up: "Langacker's [...] "trajectory" and "landmark" are highly comparable to our Figure and Ground and, specifically, his landmark has the same abstractive advantages that Ground does over the systems of Gruber and Fillmore" (Talmy 2000: 341).

Langacker innovated the theory of Cognitive Grammar with its "specific proposals concerning semantic structure" as an alternative to traditional grammar and thus points at weaknesses of traditional grammar (2002: 1&56-61). In CG he replaces the traditional definition of nouns and verbs, which he sees as symptomatic of the semantic value of the word class. Instead he provides "notional descriptions of basic grammatical categories" (2002: 56-61). According to Langacker the majority of nouns and verbs are "strictly definable in notional terms" even though he adds that not all grammatical classes are. Furthermore he favours "categorization by prototypes" to that of traditionally dominant categorization by criterial attributes. Langacker declares that categorization is "a matter of human judgment, and no attributes need be shared by all class members". Nevertheless, his model is a "synthesis of categorization by prototypes and by schemas". He explains his schemas as abstract templates (2002: 59-61). What is novel about Langacker's categorization in relation to the preceding ones is not the importance of prototypes in general but the claim of schematic semantic characterization of nouns and verbs (2002: 59-61). This claim includes all members of a word class so that for example all verbs elaborate an abstract verb schema called a

PROCESS (Langacker 2002: 23 & 78 – 81), see figure 11. Langacker’s verb schema has been applied by the present writer on the verb of motion *climb* in figure 12:

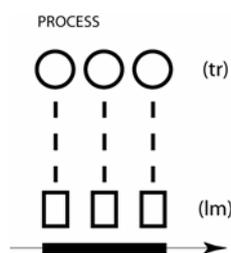


Figure 10 The verb, Langacker (2002: 23)

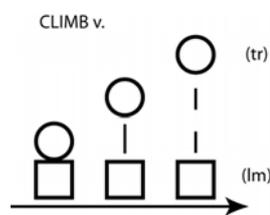


Figure 11 *She is climbing the north wall of the mountain.*

The circle represents a thing which is called trajector and the cube represents an entity called landmark. The time axis is horizontal going from left to right (Langacker 2002: 23). The trajector is the thing or person moving and the landmark is the entity which the trajector moves along, past or from (1987: 217 – 221). In Figure 12 the base schema for PROCESS is used as a basis for constructing a schema for the verb *climb* in the sense of ‘move upwards’. Langacker calls the repetition of the relation between trajector and landmark a sequential scanning. Scanning is his term for the conceptualization of how something moves; he uses summary scanning to represent a noun and sequential scanning for a verb (Langacker 1987: 248). “The distinction between sequential and summary scanning provides a natural basis for the contrast between processes and complex atemporal relations” (Langacker 2002: 80). This is apprehended in the comparison between the verb *run*, visualizing a person running and the noun *run*, visualizing the cognition of *a run*.

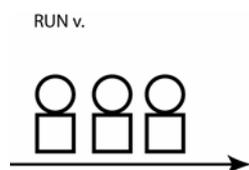


Figure 12 *She runs five kilometres every day.*

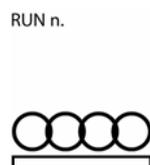


Figure 13 *She goes for a run every evening.*

Langacker’s models of cognitive processing can be used as a basis for visually explaining complex cognition of single words and whole sentences and they are especially helpful to ascertain the explicit sense of a concept. An application of Langacker’s picture of process to two meanings of the verb *dive* generates the following images:

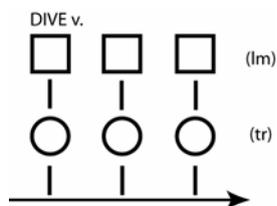


Figure 14 Dive: moving under water.

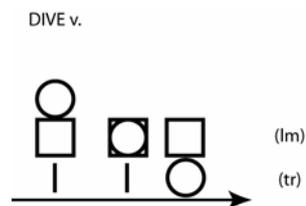


Figure 15 Dive: moving into water.

These are interpretations of Langacker's cognitive model of PROCESS applied to the two meanings *dive = swimming under water* and *dive = jumping from a trampoline into water*. The landmark is the surface of the water and the trajector is the person moving. Langacker's Cognitive Grammar covers immense fields of linguistic research and by trying briefly to summarize his development of imagistic representation for cognitive processes at least an understanding of its use for defining verbs of motion has hopefully been obtained. The advantage of a complex case system such as Talmy's or Langacker's is that it is precise and concise, however, Fillmore's system is more accessible as an introduction to establishing cognitive models of semantic structures and image schemas.

4.1 Verbs of motion

Having reached an understanding of what motion is and how it is construed in cognitive models, we will proceed to an analysis of verbs of motion. Levin (1993) is a comprehensive investigation of verb classes. According to her, verbs of motion can be subdivided into six main groups, two of which are relevant to the present survey, which includes sixteen verbs: *climb, crawl, dive, float, fly, go, hop, jump, leap, plunge, roll, run, stagger, swim, tiptoe, and walk*. All are labelled 'Verbs of Motion' by Levin except *dive*, which is reported as a 'Verb of Searching' and excludes the sense represented in Figures 14 and 15 above. Levin's classification of English verbs is based on their semantic characteristics. In Table 2, the first and essential part of her comments on each verb class is quoted as her definition (1993: 263-267), and all class members are shown for comparison, whereas the verbs studied in this paper are given in bold.

Table 2 Levin's Verbs of Motion arranged in a table.

| Verb Class | Definition | Class Members |
|-------------------------------------|--|---|
| Verbs of Inherently Directed Motion | The meaning of these verbs includes a specification of the direction of motion, even in the absence of an overt directional complement. For some verbs this specification is in deictic terms; for others it is in nondeictic terms. None of these verbs specify the manner of motion. | advance, arrive, ascent, climb , come, cross, depart, descend, enter, escape, exit, fall, flee, go , leave, plunge , recede, return, rise, tumble |
| Manner of Motion Verbs | These verbs describe motion that typically, though not necessarily, involves displacement, but none of them specifies an inherent direction as part of its meaning. All of these verbs have meanings that include a notion of manner or means of motion. They differ from each other in terms of the specific manner or means. | <i>Roll</i> Verbs: These verbs relate to manners of motion that are characteristic of inanimate entities (i.e., where there is not necessarily protagonist control on the part of the moving entity). In the absence of a prepositional phrase specifying direction, none of these verbs indicates the direction of motion. <i>Run</i> Verbs: Most of these verbs describe the manners in which animate entities can move, although some of them may be used to describe the movement of inanimate entities. Although these verbs describe the displacement of an object in a particular manner or by a particular means, no specific direction of motion is implied unless they occur with an explicit directional phrase. The <i>run</i> verbs probably need to be further subdivided. |
| | | bounce, drift, drop, float , glide, move, roll , slide, swing MOTION AROUND AN AXIS; coil, revolve, rotate, spin, turn, twirl, twist, whirl, wind amble, backpack, bolt, bounce, bound, bowl, canter, carom, cavort, charge, clamber, climb , clump, coast, crawl , creep, dart, dash, dodder, drift, file, flit, float , fly , frolic, gallop, gambol, glide, goosetep, hasten, hike, hobble, hop , hurry, hurtle, inch, jog, journey, jump , leap , limp, lollop, lope, lumber, lurch, march, meander, mince, mosey, nip, pad, parade, perambulate, plod, prance, promenade, prow, race, ramble, roam, roll, romp, rove, run , rush , sashay, saunter, scamper, scoot, scam, scramble, scud, scurry, scutter, scuttle, shamble, shuffle, sidle, skedaddle, skip, skitter, skulk, sleepwalk, slide, slink, slither, slog, slouch, sneak, somersault, speed, stagger , stomp, stray, streak, stride, stroll , strut, stumble, stump, swagger, sweep, swim , tack, tear, tiptoe , toddle, totter, traipse, tramp, travel, trek, troop, trot, trudge, trundle, vault, waddle, wade, walk , wander, whiz, zigzag, zoom |

Levin's remaining four groups of 'Verbs of Motion' are 'Leave Verbs', 'Verbs of Motion Using a Vehicle', 'Waltz Verbs' and 'Chase Verbs' (1993: 263-270). She does not count her classes 'Verbs of Body-Internal Motion' and 'Verbs of Assuming a Position' among the group of 'Verbs of Motion'.

Another comprehensive analysis of English verbs, finally, is Faber and Mairal Usón (1999), in which the meaning components of the verbs *steal*, *take*, *embezzle* and *rob* etc are sorted in order to emphasize both the common core and the differences between the verbs (1999). Their matrix for the mentioned verbs is equally suitable for distinguishing verbs of motion from each other, exemplified in Table 3 by the comparison of some meanings of the verbs *climb*, *crawl* and *dive*:

Table 3 Application of Faber and Mairal Usón's matrix (1999: 96) for distinguishing features of verbs of motion.

Climb: to use your legs, or your legs and hands, to go up or onto the top of something. (CALD)

| | |
|------------------------------|------------------------------|
| Nuclear Meaning | <i>rise</i> |
| Manner | Moving upwards |
| Agent | Somebody |
| Goal | Going up or going down |
| Source | From below |
| Pragmatic information | Using legs and perhaps hands |

Climb: to move into or out of a small space awkwardly or with difficulty or effort. (CALD)

| | |
|------------------------------|----------------------------|
| Nuclear Meaning | <i>move</i> |
| Manner (A) | Moving into or out of |
| Agent (B) | Somebody |
| Goal (C) | Going in or out |
| Source | From somewhere |
| Pragmatic information | With difficulty or effort. |

Crawl: to move slowly or with difficulty, especially (of a person) with the body stretched out along the ground or on hands and knees (CALD)

| | |
|------------------------------|---|
| Nuclear Meaning | <i>move</i> |
| Manner | Moving on your hands and legs or on your stomach |
| Agent | Somebody |
| Goal | Going forward |
| Source | From at level |
| Pragmatic information | Slowly or with difficulty, the body stretched along the ground. |

Dive: 1. to jump into water, especially with your head and arms going in first, or to move down under the water 2. to swim under water, usually with breathing equipment 3. to go down very quickly (CALD)

| | |
|------------------------------|-------------------------|
| Nuclear Meaning | <i>move</i> |
| Manner | Move downwards or level |
| Agent | Somebody |
| Goal | Going down |
| Source | From above or at level |
| Pragmatic information | In water or air |

The common core in the examples is 'move', while the verbs differ as to manner, goal and source. Note that there are additional meanings to *crawl* and *dive* as well⁶.

The templates of Faber and Mairal Usón are equally accessible and a simple method for establishing a picture of the core meaning of a verb. In conclusion, the sum of the knowledge of cognitive models and different systems of organizing verbs for semantically defining them compose a useful basis for analysing the verbs of motion and understanding what they actually provide the emotion metaphors with.

⁶ NOTE: *climb* also has the meanings "to grow upwards", the Core is then *grow*. *Crawl* has the second meaning of "to be completely filled with", i.e. the core is *fill* and the third meaning "to try hard to please in order to get an advantage", the core is *try to please*.

5. VERBS OF MOTION IN EMOTION METAPHORS

Why do we use verbs of motion to express emotions metaphorically? One explanation is this: “The only tangible foothold they [psychologists] were able to find in empirical research was the impact emotions have on the body” (Ungerer and Schmid 1999: 131). Another explanation is Niemeier’s (2003: 210) conclusion: “emotions are one of the earliest embodied experiences of human beings and therefore an intrinsic part of our lives.” She continues: “generally we have a very good idea what we are talking about. We therefore do not have to focus on the whole domain of a particular emotion, but it is economical and rational to use a metonymic expression, which in time may lose the obvious connection to its metonymic basis and be considered to be a metaphor at a later state”. This seems actually to be the case in quite a few emotion metaphors.

A conclusion from studying the emotion metonymies and emotion metaphors in chapter 3.1 is that +BEHAVIOURAL REACTIONS FOR EMOTION+ leads to +BEHAVIOURAL METONYMIES FOR EMOTION+. This opens up for a creation of metaphors for emotions based on pre-existing metonymies. For example, the metonymic category +AGGRESSIVE BEHAVIOUR FOR ANGER+ must have introduced the use of the metaphorical categories +ANGER AS DANGEROUS ANIMAL+ and +ANGER AS STORM+. Aggressive behaviour is a typical characteristic for both a dangerous animal and a storm. An example of an +AGGRESSIVE BEHAVIOUR FOR ANGER+ metonymy is *She was looking daggers at me*. The metaphors *He unleashed his anger* of the category +ANGER AS DANGEROUS ANIMAL+ and *He thundered with rage* of the category +ANGER AS STORM+ are similar except for the fact that the use of a second domain has entered into the figurative language and the expression has become a little more abstract. To sum up, the impact of the emotion on the body is conveyed through verbs of motion primarily in metonymies which through time develop into metaphors.

Basic emotion metaphors, such as +ANGER IS HEAT+ and +ANGER IS FIRE+ are “triggered off” by physiological metonymies. They may be further specified as +ANGER IS THE HEAT OF A FLUID IN A CONTAINER+ which, in combination with +THE BODY IS A CONTAINER FOR EMOTIONS+, finally results in emotions being linked up with the very basic and vital category BODY (Ungerer and Schmid 1999: 133). This is important, since it gives the mind access to the connections between body and emotion and creates the ground for constructing emotion

metaphors using body related words, such as motion verbs. Now we know that we may use verbs of motion to express emotions and why we do so. The next question to be answered is: How do we construct these metaphors?

The metonymic schema +THE BEHAVIOURAL EFFECTS OF AN EMOTION STAND FOR THE EMOTION+ generates a possible subgroup +MOTION STANDS FOR EMOTION+ because motion is one possible behavioural effect of emotion. This fact plus the already mentioned fact that metaphors often have a metonymic basis, provide double links between verbs of motion and emotion metaphors through the combination of the mentioned schemata with the metaphorical schema: +THE BODY IS A CONTAINER FOR EMOTIONS+. Similarly, metonymic and metaphorical expressions for basic emotions are “linked with vital bodily functions by way of metonymy” and additionally linked with “other basic experiences by way of metaphor”. This means that numerous bodily experiences, basic level categories and image schemas are mapped onto basic emotion categories (Ungerer and Schmid 1999: 137-138).

Niemeier (Barcelona ed. 2003: 196) observes that “New creative metaphors ultimately rely also on conceptual metaphors because they make use of the schemata underlying the latter and extend them in an innovative way by the full lexical or syntactic exploitation of the same principles triggering everyday metaphors.” Obviously metonymic and metaphorical expressions are not static, but constantly changing. Niemeier (Barcelona ed. 2003: 210) explains: “The bodily sensations can be used metonymically to refer to the feelings as such and these metonymies may then be used as source domains for either new metonymies or for metaphors.” This is how the metonymic and metaphorical expressions using verbs of motion to express emotions are constructed.

An emotion is often associated with a certain motion and this motion is expressed by a verb of motion. The following table of “semantic and perceptual parameters in manner-of-walking verbs” (Faber and Mairal Usón 1999: 113) exemplifies how the choice of verb transmits knowledge of either a particular emotion felt by the agent or of the agent being in a particular state.

Table 4 States and feelings of the agent revealed through the choice of verb (Faber and Mairal Usón 1999: 113).

| Feeling/state attributed to the agent | Deviation from the norm | Motion perceived |
|---------------------------------------|-------------------------|------------------|
| annoyance | excessive loudness | <i>stamp</i> |
| anger | excessive loudness | <i>stomp</i> |
| tired | excessive slowness | <i>plod</i> |
| tired/unhappiness | excessive slowness | <i>trudge</i> |
| boastfulness | excessive body movement | <i>swagger</i> |
| pride | excessive body movement | <i>strut</i> |
| arrogance | excessive body movement | <i>prance</i> |
| weakness/drunkenness | lack of uprightness | <i>stagger</i> |
| weakness/drunkenness | lack of uprightness | <i>totter</i> |

Most verbs of motion may similarly be associated with a feeling or state in the agent. The choice of verb in emotion metaphors depends on this connotation carried by the verb. For example; the verb *strut* is attributed *pride* which implies that it can be used metaphorically; the sentence *He strutted along* would easily be interpreted by most readers/hearers as *he was proud*.

In this chapter the questions *Why do we use motion verbs in emotion metaphors?* and *How do we construct them?* have been discussed and answered. We use them because our emotional state is revealed through our body and we construct metonymies and thereafter metaphors from this basic experience. People have different ways of categorizing in different cultures and languages but the fact still remains that people always categorize, because it helps us understand new experiences on the basis of earlier experiences (Lakoff 1987). Therefore it would be appropriate at this stage to establish categories that are applicable to the next part of this study; a metonymic schema: +MOTION STANDS FOR EMOTION+ and a metaphorical schema: +EMOTION IS MOTION+.

5.1 +MOTION STANDS FOR EMOTION+ and +EMOTION IS MOTION+

The sixteen verbs of motion chosen for this essay are: *climb, crawl, dive, float, fly, go, hop, jump, leap, plunge, roll, run, stagger, swim, tiptoe* and *walk*. As already seen, there exist innumerable verbs of motion, which necessitated a delimitation of the data. These verbs were chosen because they all, in their chosen senses, express full body movement. Levin's classification of verbs of motion in combination with Fillmore's lexical entries and division into frames was the basis of the criteria for the verbs of full body movement chosen for this study. The verbs can also be divided according to their spatial areas. As we shall see some of them differ in sense depending on in which spatial area the motion is situated and some of them express a similar movement in different spatial areas.

| Sorting of verbs according to their spatial areas: |
|--|
| Moving on land: <i>climb, crawl, hop, jump, leap, roll, run, stagger, tiptoe, walk</i> . |
| Moving through air: <i>dive, float, fly, roll</i> . |
| Moving through water: <i>dive, float, plunge, swim</i> . |

| Sorting of verbs according to their spatial directions: |
|---|
| Up: <i>climb, fly, hop, jump, leap</i> . |
| Down: <i>dive, plunge</i> . |
| Forward at level: <i>crawl, dive, hop, leap, roll, run, stagger, swim, tiptoe, walk</i> . |
| Backwards: none. |

| Sorting of verbs according to Fillmore's frames: |
|---|
| Motion: <i>float, fly, go, roll</i> . |
| Motion_directional: <i>plunge</i> . |
| Path_shape: <i>dive</i> . |
| Self_motion: <i>climb, crawl, hop, jump, leap, run, stagger, swim, tiptoe, walk</i> . |

The verbs, their lexical definitions and relevant emotion metaphors are sorted in table 5 below:

Table 5 The chosen verbs of motion with definitions and examples of metaphors.

| VERBS | DEFINITIONS | | METAPHORS |
|-------|--|--|--|
| | CALD | FILLMORE | |
| Climb | 1. (RISE) to use your legs, or your legs and hands, to go up or onto the top of something. 2. (MOVE) to move into or out of a small space awkwardly or with difficulty or effort. | [Self_motion] To move vertically usually upwards, usually with effort (Here the kind of climb which moves on level is missing). | CALD: Be climbing the walls : to suffer unpleasant feelings, such as anxiety, in an extreme way: to be climbing the walls with boredom/anger/frustration . WT: none BNC: "A period of almost literally climbing the walls " 1 |
| Crawl | (MOVE) to move slowly or with difficulty, especially (of a person) with the body stretched out along the ground or on hands and knees. | [Self_motion] Move forwards on the hands and knees or by dragging the body close to the ground. | CALD: Make your flesh crawl/creep : to make someone very anxious or frightened: <i>I don't mind spiders but worms make my flesh crawl</i> . FRIGHT WT: Only used to describe an abject manner which is not an emotion. BNC: None. |
| Dive | (MOVE DOWN) 1. to jump into water, especially with your head and arms going in first, or to move down under the water 2. to swim under water, usually with breathing equipment 3. to go down very quickly. | [Path_shape] Plunge steeply downwards through the air (no entry on diving in water, i.e. swimming under water.) | CALD: none WT: none BNC: none |
| Float | (MOVE) 1. to (cause to) move easily through, or along the surface of a liquid, or to (cause to) move easily through air. | [Motion] Move slowly or hover in a liquid or the air. | CALD: Be floating on air : be very happy HAPPINESS WT: Floating on clouds : Deluded, through trusting in mere hopes and dreams. DELUDED/HAPPINESS BNC: " floating on air ", only literal examples. |
| Fly | 1.(TRAVEL) When a bird, insect or aircraft flies, it moves through the air 2. (MOVE QUICKLY) Fly =to move or go quickly. | 1.[Motion] Move or be hurled quickly through the air 2. [Self_motion] (of a winged creature or aircraft) Move through the air under control. | CALD: Fly into a rage , Fly into a temper , Fly into a fury : to suddenly become very angry. Fly off the handle : to react in a very angry way to something that someone says or does. ANGER WT: none BNC: "Paul flies into a spasm of terror"1 "s/he flew into a rage" 2 "Some of these escapades upset Mrs Cohen, who was given to flying off the handle " 1 Harry Potter 5 (p.296): "well...now, don't fly off the handle again, Harry" ANGER |
| Go | (MOVE/TRAVEL) 1. to travel or move to another place 2. to be in the process of moving 3. to move or travel somewhere in order to do something. | [Motion] Move from one place to another, travel. | CALD: Go off the deep end : to get very angry about something or lose control of yourself ANGER Go/fall to pieces : If someone goes/falls to pieces, they become unable to think clearly and control their emotions because of something unpleasant or difficult that they have experienced: <i>She just goes (all) to pieces in exams</i> . WT: Go (in) off the deep end : Get |

| | | | |
|--------|--|---|---|
| | | | unnecessarily excited or agitated; lose your temper; have an irregular love affair. (Possibly from the reaction of someone who did not intend to go in thus.)” ANGER, EXCITEMENT, RISK, FEAR BNC: “I always try and assess their maturity in order to judge whether they might go off the deep end as soon as they have success” 1 “You could go mad there”, “Our Mam’ll go mad ” 15 “The place would go crazy ”, “Have you gone crazy or something?” 8 “After losing his wife he had nearly gone to pieces ”, “When the glider is desperately low the pilot’s handling often goes to pieces ” 5 |
| Hop | To jump on one foot or move about in this way. | [Self_motion] No definition yet on FrameNet. | CALD: hopping mad : OLD-FASHIONED very angry. ANGER WT: none BNC: “who was also hopping mad ” 1 |
| Jump | (IN THE AIR) To push yourself suddenly off the ground and into the air using your legs. (MOVE/ACT SUDDENLY) 1. To move or act suddenly or quickly. 2. If a noise or action causes you to jump, your body makes a sudden sharp movement because of surprise or fear. (ATTACK) To attack someone suddenly. | 1. [Self_motion] Push oneself off the ground using the muscles in one’s legs and feet 2. [Attack] Attack suddenly and unexpectedly. | CALD: Be jumping up and down : to be angry or annoyed. ANGER Jump for joy : to be extremely happy. JOY Jump down sb’s throat : to react angrily to something someone says or does. ANGER WT: Jump all over : Rebuke, berate vigorously. ANGER BNC: “Oh, no, he cried loudly jumping up and down in anger” “He’s probably jumping up and down with fury” 2 “Rushdie’s minders jump for joy ” 2 |
| Leap | (MOVEMENT) To make a large jump or sudden movement, usually from one place to another. | [Self_motion] Jump or spring a long way. | CALD: Jump/leap out of your skin : to be extremely surprised by something: <i>The loud noise made me jump out of my skin.</i> SURPRISE WT: Fit to leap out of her skin : Transported with joy.” JOY BNC: “His disappointment had turned to joy and he leapt in the air , relieved the Bookman had escaped.” 1 |
| Plunge | To (cause someone or sth to) move or fall suddenly and often a long way forward, down or into sth. | [Motion_directional] fall or move suddenly and uncontrollably. | CALD: none. WT: none BNC: none |
| Roll | To (cause to) move somewhere by turning over and over or from side to side. | 1. [Motion] Move by turning over and over on an axis 2. [Body_movement] def. move a body part on an axis, rotate | CALD: Rolling in the aisles : laughing uncontrollably. JOY WT: Rolling in the aisles Helpless with mirth (as if incapable of sitting on their seats). JOY BNC: “A teller of tall tales has been brought in to help would-be vicars keep the congregation rolling in the aisles . 1. Harry Potter V (p.404): “Ron [...] went into a raucous peal of laughter [...] Harry [...] watched Ron rolling around on the hearthrug.” |
| Run | (GO QUICKLY) 1. (of people | [Self_motion] Move at a | CALD: Make your blood run cold : A |

| | | | |
|---------|--|---|---|
| | and some animals) to move along, faster than walking, by taking quick steps in which each foot is lifted before the next foot touches the ground. 2. to go quickly or in a hurry. | speed faster than a walk, never having both feet on the ground at the same time. | sound, sight or thought that makes your blood run cold frightens you very much: I heard a tapping on the window which made my blood run cold. FEAR WT: Run around like a cut cat : be and behave in a temper. ANGER BNC: none |
| Stagger | 1. (MOVE) To walk or move with a lack of balance as if you are going to fall. 2. (SHOCK) to cause someone to feel shocked or surprised because of something unexpected or very unusual happening. | [Self_motion] Walk or move unsteadily, as if about to fall. | CALD: Staggered : very shocked or surprised. Staggering : very shocking or surprising. <i>He staggered all his colleagues by suddenly announcing that he was leaving the company at the end of the month.</i> SHOCK WT: Stagger [cause to totter, reel] Bewilder, render helpless with the shock of amazement.” SHOCKED. BNC: “I am staggered that Frances Bissell should have chosen to praise” 10 “A staggering total of” 10 |
| Swim | 1. (MOVE IN WATER) To move through water by moving the body or parts of the body. 2. (SEEM TO MOVE) <i>Getting up too suddenly made the room swim before her eyes. & After the second or third drink my head began to swim.</i> | [Self_motion] Propel oneself through water by bodily movement. | CALD: none WT: none BNC: none |
| Tiptoe | Moving gently on foot. | [Self_motion] Walk quietly and carefully with one’s heels raised and one’s weight on the balls of the feet. | CALD: Tiptoe round/around sb/sth phrasal verb : To avoid dealing with a difficult subject, problem or person. ANXIETY WT: none BNC: “As war broke out, Turkey tiptoed . Was it going to war?” 2 |
| Walk | To move along by putting one foot in front of the other, allowing each foot to touch the ground before lifting the next. | [Self_motion] Moving at a regular and fairly slow pace by lifting and setting down each foot in turn. | CALD: Walk on air : to feel extremely excited or happy: <i>After the delivery of her baby, she was walking on air.</i> JOY Walk on eggs/eggshells : If you are walking on eggs/eggshells, you are being very careful not to offend someone or do anything wrong: <i>When my mother is staying at our house, I feel like I'm walking on eggshells.</i> Cautious. ANXIETY WT: Tread/Walk on air Be elated, jubilant.” JOY/HAPPINESS Tread/Walk among/on eggs/eggshells : Deal with a delicate subject; attempt an impossibly precarious task; be neurotically cautious or circumspect; be excessively nervous about the possible effect of your actions.” ANXIETY Walk over a cliff : Come to sudden grief. SADNESS (LIFE-IS-A-PATH METAPHOR) BNC: none |

The metaphorical category +EMOTION IS MOTION+ can be distinguished from the examples of emotion metaphors in table 5 above, furthermore it has three subcategories. The first category is: +EMOTION AS MOVEMENT BY THE BODY+ as in *dive, float, fly, go off, hop, jump, leap, roll, stagger, swim, tiptoe* and *walk*. The second is: +EMOTION AS MOVEMENT ON THE BODY+ as *crawl* and +EMOTION AS MOVEMENT IN THE BODY+ as *run*. The metonymic schema +MOTION STANDS FOR EMOTION+ is for example applicable on *climb, be climbing the walls* is in fact a metonymy as it is subordinated the +BEHAVIOURAL REACTION FOR EMOTION+ category of emotion metonymies. There are semantic similarities between *hop, jump* and *leap* and also similarities in the construction of emotion metaphors containing these verbs, nevertheless *hop* represents ANGER, *jump* represents both ANGER and JOY and *leap* represents JOY.

| Sorting of verbs according to their expressed emotions: | |
|--|--|
| ANGER/FURY: | <i>climb, fly (4), go off, go mad, go crazy, hop, jump (3) & run</i> |
| DESIRE/LOVE: | |
| DISGUST/HATE: | |
| FEAR: | <i>crawl, leap, run, stagger, tiptoe & walk on eggshells</i> |
| JOY/HAPPINESS: | <i>float(2), jump, leap, roll & walk on air</i> |
| SADNESS: | <i>go to pieces & walk over a cliff</i> |

Dive and *plunge* exist in metaphors but not in any conventionalized emotion metaphors.

In table 5 above, there are twenty-seven (27) emotion metaphors, twenty-two (23) of these metaphors express basic emotions and four (4) express subordinate emotions.⁷

| VERB | NUMBER OF METAPHORS | METAPHORICALLY EXPRESSED EMOTION (S) |
|-------------|----------------------------|---|
| Climb | 1 | ANGER/FRUSTRATION |
| Crawl | 1 | 1 FEAR/FRIGHT |
| Dive | 0 | - |
| Float | 2 | 2 HAPPINESS |
| Fly | 4 | 4 ANGER |
| Go | 3 | 3 ANGER/FEAR - 1 SADNESS/GRIEF |
| Hop | 1 | 1 ANGER |
| Jump | 4 | 1 JOY - 3 ANGER |
| Leap | 2 | 1 SURPRISE - 1 JOY |
| Plunge | 0 | - |
| Roll | 1 | 1 JOY |
| Run | 2 | 1 FEAR - 1 ANGER |
| Stagger | 1 | 1 SHOCK/FRIGHT |
| Swim | 0 | - |
| Tiptoe | 1 | 1 ANXIETY/CAUTIOUS |
| Walk | 3 | 1 JOY - 1 ANXIETY - 1 SADNESS |

⁷ C.f. figure 6 Superordinate, basic and subordinate emotions, page 13.

Verbs of motion operate in three ways in the emotion metaphors above. Naturally some verbs combine one or two functions. The verb of motion can have the function of:

- a. Placing an emotion inside a subject, e.g. *Make your **blood run** cold.*
- b. Placing the subject inside an emotion, e.g. *She **flew into** a rage.*
- c. Visualizing a movement associated with a certain emotion, e.g. *He was **jumping** for joy.*

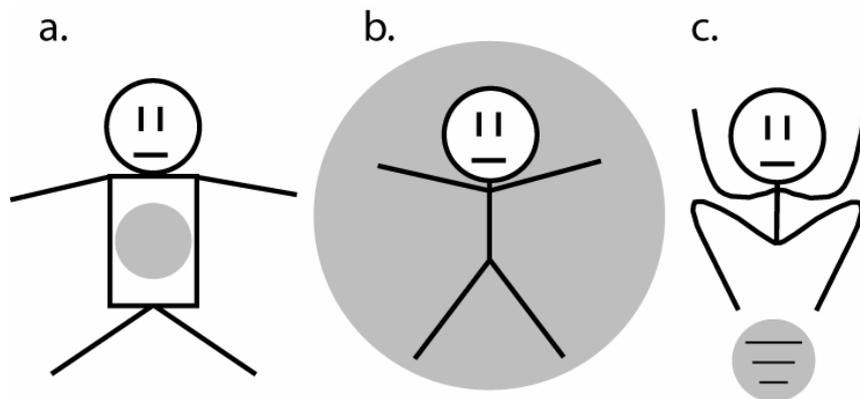


Figure 16 a. Emotion inside Subject. b. Subject inside Emotion. c. Emotion making Subject perform Motion.

In figure 20 a grey circle symbolizes where the emotion is located. In a. the emotion is located inside the person, in b. the person is located inside the emotion and in c. the emotion is located inside the movement which the person is performing.

This is how the sixteen motion verbs of this study interact in the conventionalized emotion metaphors shown in table 5 above:

- a. The following verbs place an emotion inside a subject: **run** – *make your blood run cold.*
- b. The following verbs of this study place a subject inside an emotion: **fly** – *fly into a rage*; **walk** – *walk over a cliff.*
- c. The following verbs visualize a movement associated with a certain emotion: **climb** – *climb the walls*; **crawl** – *make your flesh crawl*; **float** – *be floating on air*; **go** – *go off the deep end*; **hop** – *hopping mad*; **jump** – *be jumping up and down*; **leap** – *leap out of your skin*; **roll** – *rolling in the aisles*; **stagger** – *be staggered*; **tiptoe** – *tiptoe around something*; **walk** – *walk on air / walk on eggshells.*

The verbs of motion visualizing a movement associated with a certain emotion describe a movement we sometimes perform when experiencing this emotion. We can say that they express the symptom of the emotional state which is a movement. This movement has then come to represent the emotion so that the metaphor is used whether or not the person literally performed this movement. Some of these movements may not be performed in reality, like for example *floating on air*, but may nevertheless be imagined. Traces of a former metonymy shines through an emotion metaphor like *floating on air*, it was probably once *floating on air with happiness*. Moreover, emotion metaphors are often retelling something for someone who cannot actually see the subject other than through the metaphor, and this is why the metaphor is needed, to stress something that for the moment can only be experienced in words.

Exactly how common these metaphors in table 5 are in the corpus data is quite irrelevant to the study, since it is obvious that they are conventionalized by the fact that they exist in dictionaries and thesauruses of metaphors. Yet, it is important that they are found in the corpus to assure that they are still influencing our thinking. This fact imposes the questioning of why some of them were not found. Was it because of the search method? Was it because of the selection of texts in the corpus or are they after all not that commonly used? There might be new metaphors containing these verbs of motion, and new metaphors are hard to identify just because they are new. Nevertheless, only the conventionalized metaphors are able to work subconsciously, since only conventionalized metaphors have reached the state where the target domains are understood in a literal sense as for example: *He was filled with hate for his ex-wife* or *His life was empty of love*.

When studying the metaphors in table 5 we realize that they are not conventionalized to the same extent (see figure 2) and that they are also in different stages of the continuum of metonymy and metaphor (figure 1). As an example of this there is *go mad* and *go crazy* which both appear to have a very idiomatic nature in several of the examples from the BNC, e.g. *You could go mad there, nuclear submarines went crazy*. The conventionality of metaphors⁸ can be graded from original to dead where the so called dead metaphors are the most deeply imbedded in our consciousness. The examples of *go crazy*, *go mad* from the BNC imply that metaphors pass on to another dimension beyond being dead. At that state their metaphorical status is weakened and they become idiomatic expressions. Perhaps this is the reason why go

⁸ See figure 2, page 7.

crazy and go mad are found in neither the dictionary nor the thesaurus of metaphors. Moreover, several of the examples from the BNC are literal examples as for example *Have you gone crazy?* These expressions can act literally, metaphorically and idiomatically depending on the situation. There are also examples of intermediate states of the abovementioned expressions as for example *Go crazy with worry* which has a similar construction as *Jump for joy*. The above is evidence for the continuously changing modes of metaphors and metonymies.

5.2 Motion with no physical occurrence

Some metaphors are so conventionalized that it takes us a while to understand that they are metaphors. The sentence “*This fence goes from the plateau to the valley*” seems at first to be literal but it is not. Together with the sentence: “*The scenery rushed past us as we drove along*” these are examples of what Talmy (2000: 99) describes as “sentences that depict motion with no physical occurrence” which most definitely are examples of metaphorical use of verbs of motion. The fence does not *go* and neither does the scenery *rush*. Wilkinson’s thesaurus of English metaphors (1993) provides an example of this as metaphorical use of run: “a fence runs around the garden”. Considering Talmy’s examples, it is appropriate to analyse several emotion metaphors containing a verb of motion as examples of “sentences that depict motion with no physical occurrence”. For example, the metaphor: *He walked over a cliff*, expresses how sudden grief can be experienced. The emotion is here obtained by fictive motion, nobody walked over a cliff in a literal sense but the experience of the emotion came as abruptly as walking over a cliff does.

The phenomenon of depicting what Talmy calls “motion with no physical occurrence” leads to the three alternative functions of the motion verb in emotion metaphors as shown in figure 20 above. Firstly there is emotion being located on the inside by applying the +CONTAINER METAPHOR+. Something is welling up, stirring or changing on the inside. Secondly there is somebody moving into an emotional state as “walk over a cliff” or “fly off” as in the metaphors *He walked over a cliff*, for sudden GRIEF/SADNESS and *He flies off the handle at the slightest thing*, for sudden ANGER. Thirdly, in some metaphors, e.g. “*jump down somebody’s throat*”, meaning attacking somebody in anger, the metaphor lies within the semantic parameters of the verbal construction. This might be a literal fact and if so it is not a

metaphor, but if someone is only acting angrily it is. The metaphorical uses of *jump* and *fly* show further examples of “motion with no physical occurrence”, but, in doing so they are tightly related to an existing motion with physical occurrence. The metaphor *she was floating on air* on the other hand lacks physical occurrence, however, we can imagine what it would feel like and this human imagination is the link to understanding the metaphor. The foundation for these metaphorical constructions lies in our primitive human experience and this experience forms image schemas and they “provide a link between bodily experience and higher cognitive domains such as language” (Saeed 2003: 353).

Considering what we know about verbs and the multiple image schemas they invoke in us we have to realize that for a metaphor to make an impact, the right image schema has to be alerted. The choice of verb is then important so as not to make an ambiguous impact. When there is a physical occurrence of motion this motion reveals what kind of emotion the person is experiencing as for example: “*Bunker had received the message from a convener at one of the Midlands plants, who was also hopping mad. And so, he said, were all the shop stewards at his plant,*” (BNC). Now this certainly does not mean that they are all hopping around even though once in a while someone really hops when being angry. Thus, one sub structure for emotion metaphors is + AN EMOTION IS A MOVEMENT INSIDE+ (“something happens on the inside”). Another sub structure is + AN EMOTION IS A MOVEMENT FROM ONE PLACE TO ANOTHER+. The third sub structure is developed into +EMOTION IS MOTION+ from the metonymic sub structure +MOTION STANDS FOR EMOTION+. In his cognitive grammar, Langacker (1991: 511) describes language as “a psychological entity residing in the minds of individual speakers”. This integrates the metaphorical schemata above since cognition is not collective but individual, though the symptom of emotion is learned collectively which entails the metaphorical use.

The continuation of this essay would be to examine more verbs of motion and define them in terms of Talmy’s and Langacker’s imagistic cognitive models and thereafter study what importance the choice of verb has for the emotion metaphor. Verbs of motion with manner semantically attached to them, e.g. *crawl*, *jump*, *stagger* and *tiptoe* seem to have a greater potential for expressing an emotion all by themselves whereas verbs without manner semantically attached to them, e.g. *go* and *walk*, seem to be used differently in emotion metaphors. Verbs that work metonymically as +MOTION STANDS FOR EMOTION+ e.g. *fly* in *fly into a rage* or *jump* in *jump for joy*, may be sorted into different groups depending on their qualities. In particular, verbs of motion fitting the schema +EMOTION IS MOTION+ e.g. *tiptoe*,

as in *He's tiptoeing round the problem*, and especially *stagger* as in *He was staggered by the news* without doubt contain semantic parameters which people attach to certain emotions through experience.

Admittedly, metaphors with verbs of motion help human beings express and describe emotions more realistically than by just naming the emotions. Verbs of motion are conceptualized concretely by us, human beings, and when using them in metaphors we are able to describe or picture something that is basically abstract and difficult to explain, i.e. the motion verb facilitates the embodiment of the emotion. Eventually, some metaphors stop being understood as figurative use of language and become so conventionalized that we no longer realize they are metaphors.

6. CONCLUSION

This essay has studied emotion metaphors containing verbs of motion and has come to the conclusion that these verbs of motion are essential for the construal of the emotion. One of the major functions of metaphors is to express abstract concepts, for instance emotions. Following the human tradition of expressing the abstract in terms of the concrete, verbs of motion become a tool for understanding emotions. One explanation for using these verbs of motion in emotion metaphors is found in the tradition of constructing emotion metaphors by letting the behavioural response to emotional impact be the source model from which the structure is mapped onto the target model of emotion. There are several kinds of verbs of motion and they can be sorted according to their semantic features. Only those verbs of motion representing a movement which transports the subject to another place, with no other help than her/his own body, have been chosen for this study.

The sixteen verbs studied in this essay are; *climb, crawl, dive, float, fly, go, hop, jump, leap, plunge, roll, run, stagger, swim, tiptoe* and *walk*. Three verbs, *dive, plunge* and *swim* do not appear in emotion metaphors which have been conventionalized. Six verbs: *climb, fly, go, hop, jump & run* appear in metaphors for ANGER/FURY. Six verbs: *crawl, leap, run, stagger, tiptoe & walk* appear in metaphors for FEAR. Five verbs: *float(2), jump, leap, roll & walk on air* appear in metaphors for JOY/HAPPINESS. Finally, two verbs: *go & walk* appear in metaphors for SADNESS and no verbs appear in metaphors for DESIRE/LOVE or DISGUST/HATE. Five verbs: *go, leap, jump, run* and *walk* appear in metaphors for more than one emotion. However, the majority of these verbs only represent one emotion and their connections with specific emotions seem to arise out of the semantic parameters of each verb.

The emotions expressed in the emotion metaphors found in this study are most often easily interpreted as basic emotions. Only in five out of twenty-six emotion metaphors is the emotion a subordinate emotion and only six emotion metaphors out of twenty-six are metaphors for positive feelings, i.e. the majority of the emotions expressed by the motion verbs of this study are basic negative emotions.

The verb of motion in an emotion metaphor may place the subject inside an emotion, place an emotion inside a subject or visualize a movement associated with a certain emotion. In this

study, the majority of the studied verbs visualize a movement associated to an emotion. Only two verbs place the subject inside an emotion and only one place an emotion inside a subject.

The delimitation of this study needs consideration; the above is the case for the verbs of motion included in this study, but we know that there are also other categories of verbs of motion which appear in emotion metaphors, e.g. *fall* as in *fall in love*. If all verbs of motion could be examined we would be able to learn more about the relation between MOTION and EMOTION.

Mankind has a long tradition of expressing the abstract in terms of the concrete. The essential thing when studying the verbs of motion is to realize their role for the construal of the emotion metaphor. Firstly, the verb has to be recognized and singled out from among the multiple choices of meaning that many verbs carry. Secondly, its cognitive meaning has to be clarified. Lastly, the function of the verb in the metaphor must be distinguished. All these operations have not been thoroughly carried out in this essay, as it would require more extensive research to perform this scientifically. However, creating cognitive models, as for example Langacker's schemata, for each verb would help clarify the indication of this study that no emotion metaphor works for the entire semantic scope of a verb. Each metaphor only works for one specific meaning of the verb.

What we must realize then, is the fact that we perform these quite complicated processes of recognition and singling out instinctively when understanding a metaphor. Considering what it would take to construct a cognitive model for each verb in each of the emotion metaphors collected above in table 5 possibly makes us realize the advanced cognitive process which takes place in the human brain. Every time a human being understands a metaphor it requires some pre-understanding. It also requires the capability of thinking in abstract terms and the ability to make the right choice for the meaning of each word in the metaphor to make the puzzle come together. This means that the human mind is able to perform complicated processes in a few seconds based on experience, intelligence and language understanding, processes which would take several weeks to explain with scientific methods. In sum, the human brain, with all its skills, is as we all know a master piece.

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