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Metaphor and emotion

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Emotion concepts are composed of a number of parts: metaphors, metonymies, “related concepts,” and cultural models (see, for example, Kövecses, 1986, 1988, 1990). Given these parts, a number of questions arise, including the following: (1) What are emotion metaphors, metonymies, related concepts, and how are they all related to each other? (2) Is there a “master metaphor” for the emotions? (3) Are emotion metaphors unique to the emotions? (4) How do emotion metaphors differ from metaphors for other related domains, such as human relationships? (5) What is the precise role of metaphors, metonymies, and related concepts in the cognitive construction of particular emotion concepts? (6) Are emotion metaphors universal?

In my view, the major finding that emerges from the study of metaphors characterizing the emotion domain is that, essentially, there are no emotion-specific metaphors. If this finding is correct and if it can be generalized to other domains, it will turn out that our metaphorical conceptual system is organized by a hierarchy of metaphors at different levels of specificity. This idea was first suggested by Kövecses (1995 and 2000a) in his study of friendship and the notion of the “scope of metaphor,” and it seems that the study of emotion metaphors provides further evidence for the feasibility of such a proposal.

(1) What are emotion metaphors, metonymies, and related concepts?

It is a well established feature of emotion language that it is highly figurative; that is, it is dominated by metaphorical and metonymic expressions. It is also well known that most of these expressions belong to a variety of conceptual metaphors and metonymies. Below is a selection of such conceptual metaphors and metonymies in two emotion concepts: anger and

love. Each conceptual metaphor and metonymy is illustrated by at least one linguistic example.

Metaphors:

ANGER:

ANGER IS HOT FLUID IN A CONTAINER: She is *boiling with* anger.

ANGER IS FIRE: He's doing a *slow burn*. His anger is *smoldering*.

ANGER IS INSANITY: The man was *insane with* rage.

ANGER IS AN OPPONENT IN A STRUGGLE: I was *struggling with* my anger.

ANGER IS A CAPTIVE ANIMAL: He *unleashed* his anger.

ANGER IS A BURDEN: He *carries* his anger *around* with him.

THE CAUSE OF ANGER IS TRESPASSING: Here I *draw the line*.

THE CAUSE OF ANGER IS PHYSICAL

ANNOYANCE: He's *a pain in the neck*.

ANGER IS A NATURAL FORCE: It was a *stormy* meeting.

ANGER IS A SOCIAL SUPERIOR: His actions were completely *governed* by anger.

LOVE:

LOVE IS A NUTRIENT: I am *starved for* love.

LOVE IS A JOURNEY: It's been *a long, bumpy road*.

LOVE IS A UNITY OF PARTS: We're *as one*. They're *breaking up*. We're *inseparable*.

We *fused together*.

LOVE IS A BOND: There is a close *tie* between them.

LOVE IS A FLUID IN A CONTAINER: She was *overflowing with* love.

LOVE IS FIRE: I am *burning* with love.

LOVE IS AN ECONOMIC EXCHANGE: I'm *putting more into* this than you are.

LOVE IS A NATURAL FORCE: She *swept* me *off my feet*.

LOVE IS A PHYSICAL FORCE: I was *magnetically drawn to* her.

LOVE IS AN OPPONENT: She tried to *fight* her feelings of love.

LOVE IS A CAPTIVE ANIMAL: She *let go of* her feelings.

LOVE IS WAR: She *conquered* him.

LOVE IS INSANITY: I am *crazy about* you.

LOVE IS A SOCIAL SUPERIOR: She is *completely ruled by* love.

LOVE IS RAPTURE / A HIGH: I have been *high on* love for weeks.

THE OBJECT OF LOVE IS A SMALL CHILD: Well, *baby*, what are we gonna do?

THE OBJECT OF LOVE IS A DEITY: Don't *put* her *on a pedestal*. He *worships* her.

In general, it can be suggested that a conceptual metaphor consists of a source and a target domain and that the source domain is, at least in the everyday cases, typically a better understood and more concrete domain than the target domain. Clearly, this generalization has certain limits, as, for instance, the conceptual metaphor THE OBJECT OF LOVE IS A DEITY indicates.

Metonymies:

Conceptual metonymies, unlike conceptual metaphors, involve a single domain, or concept. The purpose of metonymy is to provide mental access to a domain through a part of the same domain (or vice versa) or to a part of a domain through another part in

the same domain (for more explanation of the nature of metonymy, see Kövecses and Radden, 1998). Thus, metonymy, unlike metaphor, is a “stand-for” relation (i.e., a part stands for the whole or a part stands for another part) within a single domain. Some examples follow (taken from Kövecses, 2000):

LOVE:

INCREASE IN BODY HEAT STANDS FOR LOVE: *I felt hot all over* when I saw her.

INCREASE IN HEART RATE STANDS FOR LOVE: He’s a *heart-throb*.

BLUSHING STANDS FOR LOVE: She *blushed* when she saw him.

DIZZINESS STANDS FOR LOVE: She’s in a *daze* over him. I *feel dizzy* every time I see her.

SWEATY PALMS STAND FOR LOVE: *His palms became sweaty* when he looked at her.

INABILITY TO BREATHE STANDS FOR LOVE: You *take my breath away*.

INTERFERENCE WITH ACCURATE PERCEPTION STANDS FOR LOVE: He *saw nothing but her*.

INABILITY TO THINK STANDS FOR LOVE: He *can’t think straight* when around her.

PHYSICAL CLOSENESS STANDS FOR LOVE: They *are always together*.

INTIMATE SEXUAL BEHAVIOR STANDS FOR LOVE: She *showered him with kisses*. He *caressed* her gently.

SEX STANDS FOR LOVE: They *made love*.

LOVING VISUAL BEHAVIOR STANDS FOR LOVE: He *can’t take his eyes off of* her. She’s *starry-eyed*.

In other words, emotions metaphors and metonymies can be conceptual and linguistic in Lakoff and Johnson's (1980) sense. When I talk about emotion metaphors and metonymies, I will mean conceptual metaphors and conceptual metonymies of the kind indicated in small caps above.

There is an important connection between emotion metaphors and metonymies; namely, that the metonymies can be said to motivate the metaphors. This motivation is not simply linguistic or conceptual but also physical, in the sense that the metonymies indicate certain physical aspects of the body involved in emotion. The physical aspect indicated by emotion metonymies can be factored into two types: behavioral and physiological. For example, INTIMATE SEXUAL BEHAVIOR and LOVING VISUAL BEHAVIOR are behavioral responses that metonymically indicate love, while AN INCREASE IN HEART RATE is a physiological one. Both types can be specific or generic. LOVING VISUAL BEHAVIOR is specific to love but AN INCREASE IN HEART RATE is general, in that it characterizes both love and anger, among other emotions. Another property of such behavior- and physiology-based metonymies is that, taken jointly, they provide a specific profile for basic-level emotion concepts, such as anger, fear, and love.

Related concepts:

A special case of emotion metonymies involves a situation in which an emotion concept B is part of another emotion concept A (see, for example, Kövecses 1986, 1990, 1991a, b). In cases like this, B can metonymically stand for A. This can explain why for instance

the word *girlfriend* can be used of one's partner in a love relationship. Since love (A), at least ideally, involves or assumes friendship (B) between the two lovers, the word *friend* (an instance of B) can be used to talk about an aspect of love (A).

There is a large range of emotion concepts that are related to love. The concepts express, and also define, the range of attitudes we have toward to beloved. We can call them “related concepts.” These concepts comprise literal general knowledge based on our various conception(s) of love (see Kövecses, 1988). Some of the most important related concepts for love include: liking, sexual desire, intimacy, longing, affection, caring, respect, and friendship. Related concepts can be placed along a gradient of their centrality in the definition of an emotion concept, such as love; some of them appear to be inherent parts of the conception of love (such as liking and affection), some of them are only loosely associated with it, in that they are a part of some idealized model of love (such as friendship or respect), and some fall in between (such as caring). (For the linguistic justification of these claims, see Kövecses, 1988, 1990, 1991a).

(2) Is there a “master metaphor” for emotion?

The examination of emotion metaphors, such as the ones above, raises the issue of whether the conceptual metaphors that characterize particular emotions are isolated and independent of each other, or alternatively, they form some kind of a general system in the sense that they are instantiations of a generic or high-level superordinate metaphor? To put the same question more simply, we can ask: Is there a “master metaphor” for emotion?

As can be seen from the examples above, anger and love are characterized by an overlapping set of metaphors, including FIRE, INSANITY, NATURAL FORCE, BURDEN, and others. If two very different emotions such as anger and love share so much metaphorical structure, then we can expect other emotions (at least the basic, or primary ones, like fear, joy, sadness, and lust) to share just as much or more. Indeed, the study of such emotion concepts shows that there is a great deal of overlap among the metaphors that characterize them (Kövecses, 2000). Given this, it might be the case that there exists a master metaphor for the emotions. But if it does exist, what could it be like? Len Talmy (1988) observed that many aspects of language can be profitably described and explained by what he called “force-dynamics” (Talmy, 1988). The description of an event in terms of force dynamics involves the following parts:

Force entities:	Resultant of the force interaction:
Agonist	action
Antagonist	rest (inaction)
Intrinsic force tendency:	Balance of strengths:
toward action	the stronger entity
toward rest (inaction)	the weaker entity

Let us now examine the most basic and skeletal emotion scenario in our folk theory of emotion. In this scenario, there is a cause that induces a person (self) to have an emotion, and the emotion causes the person to produce some response. In a schematic way, this can be given as:

(1) a cause leads to emotion and (2) emotion leads to some response.

Since we know from the Event Structure metaphor (Lakoff, 1990) that causes are conceptualized as forces (hence CAUSES ARE FORCES), we can regard “cause” in part one and “emotion” in part two as forces. This then allows us to apply force dynamics to the emotion domain.

Let us first look at the first part of the scenario. If we think of the agonist as an entity that has an intrinsic force tendency toward inaction, that is, to stay inactive or at rest, the corresponding entity will be the self in the emotion domain; and if we think of the antagonist as an entity that has an intrinsic force tendency toward action, that is, to overcome the inaction of the agonist, to cause it to act, the corresponding entity will be the cause of emotion in the emotion domain.

Consider now the second part of the scenario, using the same definition of agonist and antagonist as before. If we think of the agonist as an entity that has an intrinsic force tendency toward inaction, the corresponding entity will be the self again, who will produce some kind of response. And if we think of the antagonist as an entity that has an intrinsic force tendency toward action, the corresponding entity will be the emotion itself. In other words, in both cases the emotion agonist will be the self (in that it becomes emotional in part one, and it produces a response in part two) and the emotion antagonist will be the cause of emotion in the first part and the emotion itself in the second part of the scenario. These instantiations of the abstract force-dynamic schema will apply to the majority of emotion metaphors (though not to all). Source domains that tend to focus on

the first part of the basic emotion scenario are mostly PHYSICAL FORCES, either MECHANICAL or MAGNETIC. By contrast, source domains that tend to focus on the second part include OPPONENT, NATURAL FORCE, SOCIAL SUPERIOR, and the like. (For a more detailed discussion, see Kövecses, 2000, chapter 5.)

Now let us take some conceptual metaphors and see how force dynamics applies to them. We can begin with EMOTION IS AN OPPONENT (IN A STRUGGLE). Consider some examples for this metaphor:

EMOTION IS AN OPPONENT.

He was *seized by* emotion.

He was *struggling with* his emotions.

I was *gripped by* emotion.

She was *overcome by* emotion.

There are two opponents in this struggle. As the first and third examples suggest, one opponent is inactive (the one that is seized and gripped all of a sudden). This is the agonist. The other, the one who seizes and grips, is active and attempts to cause opponent one to give in to his force. This is the antagonist. There is some struggle in which opponent one tries to resist opponent two's force and opponent two tries to make him give in to his force. There is the possibility of either opponent one winning or opponent two winning. Corresponding to opponent one in the source is the rational self in the target, while corresponding to opponent two in the source is the emotion in the target domain. Corresponding to opponent one's force tendency in the source is the rational

self's force tendency to try to maintain control over the emotion, and corresponding to opponent two's force tendency is the emotion's force tendency to cause the self to lose control. This force-dynamic interpretation can be represented in Table 1:

Source: OPPONENT IN A STRUGGLE

Target: EMOTION

Table 1: EMOTION IS AN OPPONENT

<i>Metaphorical mapping</i>	<i>Agonist's force tendency</i>	<i>Antagonist's force tendency</i>	<i>Resultant action</i>
<i>Source</i>	<u>Opponent1</u> opponent1's attempt to resist opponent2	<u>Opponent2</u> opponent2's attempt to cause opponent1 to give in to his force	either opponent2 wins or opponent1 wins
<i>Target</i>	<u>Rational self</u> self's attempt to try to maintain control	<u>Emotion</u> the emotion causing the self to lose control	self either loses or maintains control

Next let us take the NATURAL FORCE metaphor. When this is applied to emotion the underlying logic is that there is an extremely forceful entity (like wind, wave, storm, etc.) that affects a physical object and this object can't help but undergo its usually disastrous effects. When people say that they are *overwhelmed* by an emotion or that they are *swept*

off their feet, it is this kind of effect that they imagine. This metaphor encapsulates perhaps the most deeply seated belief about emotions; namely, that we are passive and helpless in relation to them, just as physical objects are passive and helpless in relation to powerful natural forces acting on them. Schematically again, Table 2 captures all this:

Source: NATURAL FORCE

Target: EMOTION

Table 2: EMOTION IS A NATURAL FORCE

<i>Metaphorical mapping</i>	<i>Agonist's force tendency</i>	<i>Antagonist's force tendency</i>	<i>Resultant action</i>
<i>Source</i>	<u>Physical object</u> to keep being the same	<u>Natural force</u> to cause an effect in physical object	physical object undergoes effect in a passive way
<i>Target</i>	<u>Rational self</u> to continue to behave as before the emotion	<u>Emotion</u> to cause the self to respond to emotion	self responds to the emotion in a passive way

The OPPONENT and NATURAL FORCE metaphors both focus on the second part of the skeletal emotion scenario—“emotion→response.”

The last metaphor of emotion that I use to demonstrate the workings of force dynamics in the conceptualization of emotions is the EMOTION IS A PHYSICAL FORCE metaphor. This metaphor tends to have its main focus on the first part of the emotion

scenario—“cause→emotion.” It comes in a variety of forms (MECHANICAL, ELECTRIC, GRAVITATIONAL, MAGNETIC), which are illustrated with some examples below:

EMOTION IS A PHYSICAL FORCE:

EMOTION IS A MECHANICAL FORCE; EMOTIONAL EFFECT IS PHYSICAL CONTACT

When I found out, it *hit me hard*.

That was a terrible *blow*.

She *knocked me off my feet*.

EMOTION IS A MAGNETIC FORCE

I was *magnetically drawn to her*.

I am *attracted to her*.

She found him *irresistible*.

That *repels* me.

In the source domain, there is a physical object with the force tendency toward inaction, that is, to continue to be as before. There is also another force-exerting entity here, a physical force that has the force tendency to produce some effect in the object.

Correspondingly, there is a rational self that has the force tendency to stay as before (that is, unemotional), and there is a cause (of emotion) that has the force tendency to cause the self to become emotional. This situation is depicted by such examples as “The news *hit me hard*” or “I was *attracted to her*,” where a cause of emotion acts on the rational self causing it to become emotional. Again, Table 3 presents this logic in diagrammatic form:

Source: PHYSICAL FORCE

Target: EMOTION

Table 3: EMOTION IS A PHYSICAL FORCE

<i>Metaphorical mapping</i>	<i>Agonist's force tendency</i>	<i>Antagonist's force tendency</i>	<i>Resultant action</i>
<i>Source</i>	<u>Physical object</u> to remain unaffected by force	<u>Physical force</u> to produce effect in object	object undergoes effect
<i>Target</i>	<u>Self</u> to remain unemotional	<u>Cause of emotion</u> to cause self to become emotional	self is emotional

We can represent this interplay of forces in emotion as a conceptually richer version of our initial skeletal emotion scenario:

- (1) cause of emotion—force tendency of the cause of emotion <--> rational self—
force tendency of self
- (2) self has emotion
- (3) self's force tendency <—> force tendency of emotion
- (4) self's emotional response

In this richer schema it becomes clear that the various components of the emotion domain are conceptualized as forces that interact with each other. The schema shows that there are two main points of tension in the experience of emotion: the first taking place between the cause of emotion and the rational self, resulting in the emergence of emotion, and the second between the self that has the emotion but who is still in control over it and the force of the emotion, resulting in the self losing control and producing an emotional response. Most (though not all) metaphors in the emotion domain can be characterized as an interaction of forces. This leads to the conclusion that there exists a single master metaphor for emotion: EMOTIONS ARE FORCES. A large number of emotion metaphors are specific-level instantiations of this superordinate-level metaphor, each playing a somewhat different role in conceptualizing the emotion domain.

(3) Are emotion metaphors unique to the emotions?

We have seen above that emotion metaphors are largely instances of a generic-level “master metaphor” EMOTION IS FORCE. However, it is another question whether the FORCE metaphor instantiated in a variety of ways is *specific to* the emotion domain. Theoretically, this possibility seems like a valid option. But to decide what is actually the case is an empirical question. We have to check whether the various FORCE metaphors identified for the emotion domain, such as PRESSURIZED CONTAINER, OPPONENT, NATURAL FORCE, BURDEN, and so on, are used in the conceptualization of domains other than the emotions.

Let us begin with the PRESSURIZED CONTAINER metaphor. It is clear that it has uses outside the emotion domain, such as when we talk about “trouble *brewing*” or a “situation being *explosive*.”

OPPONENT metaphors are not limited to the emotions either. In addition to “*struggling with my emotions*,” I may be “*struggling with differential equations*.” And the same goes for NATURAL FORCE, BURDEN, and all the other FORCE metaphors discussed above. This situation suggests a somewhat surprising conclusion; namely, that there seem to be no emotion-specific conceptual metaphors. The various FORCE metaphors we have looked at all appear to have applications outside the emotion domain, and in this sense cannot be regarded as emotion-specific.

More generally, it could perhaps be argued that our metaphorical conceptual system does not consist of domain-specific sets of metaphors. Instead, it seems to be structured by more extensive and inclusive metaphorical source domains, such as FORCE. Elsewhere, I point out that the FORCE metaphor characterizes not only the emotion domain but also morality and rational thought (see Kövecses, 2000).

By claiming that the source domain of FORCE functions as a master metaphor for emotion and that its application extends beyond the emotions, I do not claim that some *other* metaphors of emotion cannot be emotion-specific. They can be. There are some source domains that seem to be both specific to a particular emotion and limited to the emotion domain. These include TRESPASSING, PHYSICAL ANNOYANCE for ANGER; HIDDEN ENEMY, SUPERNATURAL BEING for FEAR; BEING OFF THE GROUND, AN ANIMAL THAT LIVES WELL, PLEASURABLE PHYSICAL SENSATION for HAPPINESS; HAVING NO CLOTHES ON, DECREASE IN SIZE, BLOCKING OUT THE WORLD for SHAME. For example, trespassing leads to anger, dancing about (in being off the ground) indicates happiness, and decrease in size shows that the person is ashamed or embarrassed. How can we account for the emotion-specificity of these source domains?

I'd like to suggest that the specificity of the source domains derives from two factors. Some of them have to do with causes of emotion, whereas some of them have to do with effects of emotion. Both the causes and the effects in question appear to be unique to a given emotion. Thus, for example, it can be suggested that given the metaphor SHAME IS HAVING NO CLOTHES ON, having no clothes on is a potential cause for shame and it is typically associated with shame. Or, to take another example, dancing and jumping up and down (but not stomping your feet) is typically associated with joy/happiness and it is seen as a result or effect of this emotion; hence the metaphor HAPPINESS IS BEING OFF THE GROUND (which, unlike the "UP" metaphor, is not an evaluative "orientational metaphor" in the Lakoff-Johnson sense).

More generally, we can say that emotions can be, and are, comprehended via both their assumed typical causes and their assumed typical effects. When this happens, we can get emotion-specific metaphorical source domains. Here are some of the emotion-specific metaphors deriving from assumed typical causes and effects of particular emotions:

EMOTION IS A CAUSE OF THAT EMOTION:

ANGER IS TRESPASSING

ANGER IS PHYSICAL ANNOYANCE

FEAR IS A HIDDEN ENEMY

FEAR IS A SUPERNATURAL BEING

A HAPPY PERSON IS AN ANIMAL THAT LIVES WELL

HAPPINESS IS A PLEASURABLE PHYSICAL SENSATION

SHAME IS HAVING NO CLOTHES ON

EMOTION IS AN EFFECT OF THAT EMOTION:

HAPPINESS IS BEING OFF THE GROUND

SHAME IS A DECREASE IN SIZE

TO BE ASHAMED IS TO BLOCK OUT THE WORLD

Although the particular source domains are unique to particular emotion concepts, the cognitive mechanism of understanding a state-event (in this case an emotion state-event) in terms of its cause or effect is fairly general (see Kövecses, 1991b and 1994). The nature of this process is essentially metonymic (see Kövecses and Radden, 1998).

In sum, it appears that the major emotion metaphors, i.e., which have some kind of FORCE as their source, apply outside the emotion domain and thus in this sense they are not emotion-specific. At the same time, there are some minor metaphors that appear to be emotion-specific. The justification for the distinction between major and minor metaphors is based on the constitutive role that the “major” metaphors play in the construction of emotion concepts (see below).

(4) How do emotion metaphors differ from metaphors for relationships?

If emotion concepts are characterized by the EMOTIONS ARE FORCES superordinate metaphor, we can ask which metaphor characterizes neighboring domains. A domain that is conceptually close to that of emotion is human relationships, including love, friendship, and marriage. Kövecses (1995) looked at the American conception of friendship on the basis of

a number of interviews conducted with several Americans. The linguistic data provided by the interviews indicate that there are a large number of conceptual metaphors (such as FRIENDSHIP IS A BUILDING) that apply to the American conception of friendship. The analysis of these metaphors also showed that they come from a small number of metaphorical systems: metaphors for Communication (e.g., COMMUNICATION IN FRIENDSHIP IS SHARING OBJECTS), for Emotion (e.g., EMOTIONAL INTENSITY IS TEMPERATURE, EMOTIONAL CLOSENESS IS PHYSICAL CLOSENESS), for States and Relationships (e.g., STATES ARE OBJECTS, RELATIONSHIPS ARE BONDS, INTERACTIVE RELATIONSHIPS ARE ECONOMIC EXCHANGES), for Complex Systems (e.g., ABSTRACT COMPLEX SYSTEMS ARE BUILDINGS/ MACHINES, etc.), for Events (e.g., LIFE IS A JOURNEY), and for Positive/Negative Evaluation (e.g., DESIRABLE ENTITIES ARE VALUABLE THINGS). Moreover, it was shown that these metaphors also apply to the conceptualization of other human relationships, in particular, to love and marriage. Love is a special case here because it functions both as an emotion and a relationship.

In each of these systems, we have a complex abstract concept as target domain and a simpler, nonabstract concept as a source domain. Communication is understood as the sharing of physical objects; emotions as physical phenomena (e.g., properties of physical objects); states as physical objects and relationships as bonds; complex abstract systems as complex physical objects; events as physical motion; and the property of being positive or negative as value or lack of value.

Now we are in position to attempt to answer the question how the metaphorical conceptualization of emotion differs from that of human relationships, like friendship, love, and marriage. The specific-level source domains that can be found in the conceptualization of most human relationships include the following:

SHARING (EXPERIENCE) OBJECTS	IMPLEMENT
DISTANCE (CLOSE/DISTANT)	MACHINE
WARMTH	PLANT
BOND	JOURNEY
ECONOMIC EXCHANGE	VALUABLE COMMODITY
BUILDING	

This list and the list of emotion metaphors do not provide a complete set of specific source domains for either human relationships or emotions; nevertheless, taking the lists above as a representative set of source domains for emotions and relationships, we can make some interesting observations.

There seems to be only a minimal overlap between the two sets. Human relationships share CLOSENESS and WARMTH with emotions. BURDEN from the emotion set may perhaps also apply to relationships since it has the general meaning of indicating any difficulty or stress. When characteristic emotion metaphors, that is, the FORCE-related ones, apply to human relationships, they usually have to do with love only--a human relationship that is also an emotion. This explains why there are only marginal cases of FORCE metaphors for friendship, which is, as studies show, regarded as a poor case of emotion. (It may be that some of the debate concerning whether love is or is not an emotion, or whether it is a basic emotion, is also attributable to this "double-nature" of love.) In her study of love, Baxter (1992) found that FORCE metaphors form the third largest group of metaphors for love, following metaphors related to WORK and JOURNEY. In our terms, it is the COMPLEX SYSTEMS

metaphor that involves all the work-related aspects of friendship and relationships in general.

But the really important point is that, as we saw in the previous section, the emotion metaphors are predominantly “force-related” ones organized into a coherent system by the underlying master metaphor EMOTION IS FORCE. What is obvious at first glance is that the typical relationship metaphors are *not* FORCE metaphors (with the exception of love, as we noted). The question is: Is there a master metaphor underlying the various specific-level non-force metaphors for human relationships? JOURNEY seems to be a crucially important metaphor in the conceptualization of love and marriage, as the studies by Baxter (1992) and Quinn (1991) indicate. However, it appears to play only a marginal role in the comprehension of friendship.

The source domains for friendship on the list above that belong to robust metaphorical systems in our conception of relationships are SHARING (EXPERIENCE) OBJECTS, BONDS, and ECONOMIC EXCHANGE characterizing INTERACTIVE RELATIONSHIPS, on the one hand, and BUILDING, IMPLEMENT, MACHINE, and PLANT, on the other, characterizing COMPLEX ABSTRACT SYSTEMS. The category of INTERACTIVE RELATIONSHIPS is a conflation of what I called the “communication system” and the “state” system, respectively. The “state” system, as characterized above, includes states, relationships, and interactions. The metaphors for communication as analyzed above indicate that communication is viewed as a form of interaction, and as such it fits the INTERACTIVE RELATIONSHIP group naturally. The rest of the metaphorical source domains, such as BUILDING, MACHINE, IMPLEMENT, PLANT, etc., form the COMPLEX ABSTRACT SYSTEMS group (for details see Kövecses, 1995 and

2000). In other words, these are the two metaphor systems that stand out in the materials that have been examined.

The available evidence concerning human relationships points to the conclusion that it is these two large systems that organize most of our everyday understanding of what human relationships are. The bulk of the data presented in the studies mentioned above shows that much of the content and structure of our knowledge about relationships derives from the rich set of mappings that characterize the two systems. In this sense, we seem to have two underlying generic-level metaphors for human relationships: INTERACTIVE RELATIONSHIPS ARE ECONOMIC EXCHANGES and COMPLEX ABSTRACT SYSTEMS ARE COMPLEX PHYSICAL OBJECTS. Of the two, the latter appears to be the more pervasive and dominant one in the data, and thus, again in this sense, it can be regarded as the “master metaphor” for human relationships. However, it has to be noted that, unlike emotions, human relationships do not seem to be characterized by a single and clear-cut overarching master metaphor.

(5) What is the role of metaphors in the cognitive construction of particular emotion concepts?

In order to answer the question in the title of this subsection, we have to look at some of the details of the relationship between “dominant,” or “central,” metaphors for emotion concepts, on the one hand, and the cultural models, on the other, that characterize these emotion concepts. I will take the emotion concept of ANGER as an example.

Lakoff and Kövecses (1987) characterized the naive, or folk, understanding of anger in English as a prototypical cognitive, or cultural, model. They suggested the following model based on linguistic evidence in American English:

1. Offending event

Wrongdoer offends self.

Wrongdoer is at fault.

The offending event displeases self.

The intensity of the offense outweighs the intensity of the retribution (which equals zero at this point), thus creating an imbalance.

The offense causes anger to come into existence.

2. Anger

Anger exists.

Self experiences physiological effects (heat, pressure, agitation).

Anger exerts force on the self to attempt an act of retribution.

3. Attempt to control anger

Self exerts a counterforce in an attempt to control anger.

4. Loss of control

The intensity of anger goes above the limit.

Anger takes control of self.

S exhibits angry behavior (loss of judgment, aggressive actions).

There is damage to self.

There is danger to the target of anger, in this case, the wrongdoer.

5. Retribution

Self performs retributive act against wrongdoer (this is usually angry behavior).

The intensity of retribution balances the intensity of offense.

The intensity of anger drops to zero.

Anger ceases to exist.

The main idea here was that the metaphors and metonymies associated with anger converge on and constitute the model, with the different metaphors and metonymies mapping onto different parts of the model.

Native speakers of Hungarian seem to have the same cultural model of anger (*düh*). The *but*-test that Lakoff and Kövecses (1987) used to ascertain the validity of the model for English yields the same results for speakers of Hungarian as it does for speakers of English. For example, the sentence “He was angry, but he didn’t lose control” and its Hungarian equivalent sound more natural than the sentence “He was very angry, but he lost control” in both languages. This is because the conjunction “*but*” is used to counter expectations. In this case, the expectation dictated by the prototypical model would be that once we’re very angry (stage 2), we tend to lose control (stage 4). In other words, the applicability of the *but*-test indicates deviation from the prototypical cultural model. Since it indicates the same kinds of deviations in the two languages, it also shows that the underlying prototypical cultural models have a similar overall structure.

In the characterization of Japanese *ikari* (and, less typically, also *hara*), Matsuki (1995) notes in connection with the model found in American English: "The scenario applies to Japanese

anger, although Stage 3 is more elaborate than in English" (p. 145). In the Japanese conception, the control aspect of *ikari* is more elaborate because anger first appears in *hara*, then it goes up to *mune*, and finally to *atama*. As Matsuki points out, *hara* is a container (the stomach/bowels area) and, metonymically (CONTAINER FOR CONTENT), can also be the emotion itself. *Mune* is the chest and *atama* is the head. If anger reaches *atama*, the angry person is unable to control anger.

King (1989) suggests that there are two prototypical cognitive models operating in Chinese:

1. Offending Event

Wrongdoer offends self.

The offending event displeases self.

The offense causes an imbalance in the body.

2. Anger

Anger exists.

Self experiences physiological effects (heat, pressure, agitation).

3. Attempt to control anger

Self exerts a counterforce in an attempt to control anger.

4. Release of anger

Self releases anger by exhibiting angry behavior.

5. Restoration of equilibrium

The amount of discharged anger balances the excess in the body.

The imbalance disappears and equilibrium is restored.

The other model differs from the one above in stages 4 and 5:

4. Diversion

The force of anger is diverted to various parts of the body.

Self exhibits somatic effects (headaches, stomachaches, etc.)

5. Compensating event

The compensating event pleases the self (this is usually sympathetic behavior directed at self).

The intensity of compensation balances the intensity of the offense.

The somatic effects of anger disappear.

Anger ceases to exist.

In addition to the several differences, we find several things in common to these models. They all seem to be composed of several successive stages and they all seem to have an ontological, a causal, and an expressive aspect. Based on the characterizations given above, the following general structure of the respective emotion concepts (*anger*, *düh*, *ikari/hara*, and *nu*) can be identified.

The prototypical cognitive models have an *ontological* part that gives us an idea of the ontological status and nature of anger, that is, the kind of thing/event it is: in all four languages anger, or its counterpart, is a force inside the person that can exert pressure on him or her. The ontological part also includes some physiological processes associated with the respective emotion. It is the ontological part of the model that constitutes the second stage of the cognitive model or scenario as a whole.

The first stage in the model corresponds to the *causal* part. This presents anger and its counterparts as an emotion that is caused, or produced, by a certain situation.

Still another part of the model is concerned with the *expressive* component; that is, the ways in which anger, or its counterpart is expressed in the different cultures. The cognitive models tell us that all four cultures conceive of anger as something that is somehow expressed.

Finally, the expressive component is preceded by a *control* component that is manifested as two separate stages of the model: attempt at controlling expression and loss of control over expression.

Thus, the resulting five-stage model for the four cultures seems to be the following:

(1) cause → (2) existence of anger, or its counterpart (in the form of a force) → (3) attempt at control → (4) loss of control → (5) expression

(Here, the arrow → indicates temporal succession and causal sequence). Since expression and control are closely linked with each other (i.e., at issue is the control of expression), it is possible to conceive of the two as a single aspect and refer to them as the expression part of the model, yielding the highly schematic model:

cause → existence of emotion (as forceful entity) → expression.

This then seems to be the *most basic structure* that all four cultures share in their folk understanding. This is the generalized model of emotions that we saw in a previous section.

But how can metaphors create such a model? My suggestion is that this happens by means of the set of mappings that characterize conceptual metaphors. Some metaphors play a central role in defining a particular model for a concept. In the case of anger, the central metaphor that “lends” structure to the model of anger in a variety of cultures is that of THE ANGRY PERSON IS A PRESSURIZED CONTAINER. The particular structure that anger and other emotion concepts share is the ‘cause-existence of emotion-expression’ schema. This is defined, in large part, by the PRESSURIZED CONTAINER metaphor that is characterized by the following mappings. (Unlike above, here the arrow → indicates simultaneous activation of elements in the source and the target, but, in a historical perspective, I would claim that the relationship between the simultaneously activated elements was also temporal and causal):

the container with the substance (fluid or gas) → the person who is angry

the heat or pressure of the substance → the intensity of anger

the forceful substance in the container → the anger

trying to keep the forceful substance inside the container → trying to control the anger

the substance going out of the container → the involuntary expression of the anger

I believe that these are the mappings that play a constitutive role in the construction of the basic structure of the folk understandings of anger and its counterparts in different cultures. Without these mappings (i.e., imposing the schematic structure of how the force of a fluid or gas behaves in a container onto anger), it is difficult to see how anger and its counterparts could have acquired the structure they seem to possess: a situation producing a force inside a person, and then the force

causing the person to act in certain ways that should be suppressed. The 'cause-emotion force-involuntary expression' structure remains a mystery and a completely random occurrence without evoking the PRESSURIZED CONTAINER metaphor. Through its detailed mappings, the metaphor provides a coherent structure for the concepts.

In the view presented here, the conceptual metaphors and metonymies contribute actively to the structure and content of the prototypical cultural models. To illustrate this with another example, consider Zulu. In Zulu, the chief conceptual metaphor that does the job of providing the skeletal structure for anger is a version of the PRESSURIZED CONTAINER metaphor: ANGER IS IN THE HEART (Taylor and Mbense, 1998; Kövecses, 2000). However, just like in English, additional metaphors focus on particular aspects of this generic structure. In the case of Zulu anger, two metaphors are especially important for the “expression” part of the basic model, which specifies the nature and intensity of angry behavior. Speakers of Zulu elaborate on two metaphors that speakers of English do not (or do to a much smaller degree): ANGER (DESIRE) IS HUNGER and ANGER IS A NATURAL FORCE (Taylor and Mbense, 1998). If the metaphor DESIRE IS HUNGER is elaborated as voracious appetite that devours everything indiscriminately and NATURAL FORCE as a force that destroys everything, as is the case in Zulu, then this will probably influence the cultural model of anger, as is indeed the case according to Taylor and Mbense. Instead of venting their anger on a specific target (in English, the person who offended you), Zulu people appear to respond in a less clearly directed way and behave aggressively toward everyone indiscriminately. This is not to say that English cannot have this response or that Zulu cannot have the directed response; rather, the two languages seem to differ in what they consider the prototypical cultural model for the concept.

The major claim I am making here is this: Systematic links take us from (possibly universal) actual physiology of anger through conceptualized metonymy and metaphor to cultural models. In the process, the broader cultural contexts also play a crucial role, in that they fill out the details left open in the schematic basic structure. In other words, I believe that we can offer a satisfactory explanation of the emergence of cultural models of emotions if we take into account the possibly universal experiential basis of our emotion concepts, the conceptualization of this experiential basis by means of conceptual metonymies, the conceptual metaphors that often derive from these metonymies, and the broader cultural context. The central conceptual metaphor in the case of anger is the PRESSURIZED CONTAINER metaphor (and the generic FORCE metaphor for the emotions in general; see Kövecses, 2000), but other domains, such as human relationships, would be structured by other central or “master” metaphors.

We should of course not imagine the process of the emergence of cultural models in sequential steps, going from experiential basis to cultural model. A probably more adequate way of thinking about it would be to say that the components I outlined here are all at work at the same time, mutually influencing each other. In the course of this joint evolution, the conceptualized experiential basis (often appearing as conceptual metonymies) and the emerging conceptual metaphors contribute to the basic schematic structure of the cultural model, while the simultaneously present cultural context fleshes out the details of the schema.

(6) Are emotion concepts and emotion metaphors universal?

It might seem in light of what was said in the previous section that I am suggesting that emotion concepts and metaphors are in general universal. Although we find a great deal of commonality

in emotion concepts and metaphors both across languages/cultures and through time (see Kövecses, 2005), we can see a great deal of variation as well. The interesting question is: How does this variation come about if emotion concepts and metaphors are embodied in universal human experience? I will discuss three possible reasons for this (based on Kövecses, 2005).

Variation as a result of differential framing

Let us take lust, or sexual desire, as an example. In English the concept is commonly conceptualized as heat (of fire) (Lakoff, 1987; Kövecses, 1988). This gives rise to such conventionalized expressions as the following:

She's *burning with* desire.

I've got the *hots* for her.

He's *on fire* for her.

The linguistic examples of the LUST IS HEAT metaphor are based on the mappings below:

The thing that is hot (from fire) → the lustful person

The heat → the lust

The degree of the heat → the intensity of the lustful feeling

These are the main mappings that characterize the metaphor as it is used in English. In the metaphor, both the lust of the lustful person and that of the person who is lusted after can be

viewed as *hot*. The degree of the heat indicates the intensity of the sexual desire on the part of either person.

In contrast, in Chagga, an African language spoken in Tanzania, the LUST IS HEAT metaphor is understood differently (Emanatian, 1995). Consider the following examples taken from Emanatian:

Nkeóka

“She roasts.”

Nékeha

“She burns.”

As can be seen, all three examples are about women. The meaning of the expressions is given by Emanatian as ‘She is sexually desirable.’ This contrasts markedly with English where a similar expression involving intense heat would mean something like ‘She has intense feelings of lust.’ The next Chagga example does not indicate intense sexual desire either, as a corresponding English expression would, but again sexually desirable qualities:

Náworé ’úshangu lo móro

“She has a ’heaven’ of fire.”

She has desirable sexual attributes (skills, natural endowments, interests)

The lack of these qualities is expressed by the notion of coldness:

Kyamúya rikó lilya

She's cold."

She lacks desirable sexual attributes.

What is particularly interesting about these examples is that the SEX IS HEAT metaphor, though it employs the same source domain as the corresponding English metaphor, provides a differential perspective on sexuality in comparison to English: The target domain to which it applies is slightly changed (it involves male sexuality only) *and* the source domain is employed differently in Chagga than in English. In other words, the domain of sexuality is framed differentially in the two languages despite the same source domain that is employed. To see the exact details of this, here are the mappings of the Chagga SEX IS HEAT metaphor:

the thing/substance burning → the woman with the desirable sexual qualities

warmth or heat of the thing/substance → desirable sexual qualities of a person

the person who observes the burning thing → the man who finds a woman sexually desirable

Thus, we find that differences in the English and Chagga mappings for roughly corresponding metaphors (SEXUAL DESIRE IS HEAT and SEX IS HEAT) result from differential framings in both the source and the target domains. This is remarkable because the same universal physiology seems to support roughly the same metaphor in two cultures with the source and target being framed differently in the two languages.

Variation as a result of differential experiential focus

The notion of “experiential focus” is intended to be a general explanation of why even highly embodied metaphors may vary across languages and time (Kövecses, 2005). The basic idea is this: Embodiment may consist of a variety of aspects, or components, and any of these may become the preferred one in a given culture and at a given time. Which aspect(s), or component(s), of (otherwise) universal embodiment receive(s) more attention from speakers of a language largely depends on the broader cultural context.

A case in point is the conceptualization of anger in English and Chinese. As studies of the physiology of anger across several unrelated cultures show, increase in skin temperature and blood pressure are universal physiological correlates of anger. This accounts for the ANGER IS HEAT metaphor in English and in many other languages. However, King’s (1989) and Yu’s (1995, 1998) work suggest that the conceptualization of anger in terms of heat is much less prevalent in Chinese than it is in English. In Chinese, the major metaphors of anger seem to be based on pressure, not on pressure *and* heat. This indicates that speakers of Chinese have relied on a different aspect of their physiology in the metaphorical conceptualization of anger than speakers of English. The major point is that in many cases the universality of experiential basis does not necessarily lead to universally equivalent conceptualization—at least not at the specific level of hot fluids, in the case of anger.

Another example of how different cultures utilize a presumably universal bodily basis in anger is offered by Michelle Rosaldo in her description of Ilongot anger (Rosaldo, 1980). The Ilongot are a former headhunting tribe living in Northern Luzon, Philippines. For young Ilongot men, anger, *liget*, is a highly energized state that they need in order to successfully accomplish

their headhunting raids. In Rosaldo's words: "The *liget* that Ilongots associate with youthful prowess and, for them, with the universal agitation that makes young men want to kill, takes on reality and significance because it is bound up not in mystery or cosmology, but in three forms of relation central to Ilongot social life" (Rosaldo, 1980: 138). Indeed, Rosaldo glosses the Ilongot term for anger as 'energy/anger.' This suggests that for the Ilongot anger (*liget*) figures as a generalized state of arousal that can sufficiently motivate their actions. They think of their anger also as hot but, most importantly, as an agitated and energized state that makes them want to go out and take heads. Clearly, this is, for us, a surprisingly different way of building on our presumably universal bodily experience in conceptualizing anger.

Finally, there may be cultures where people clearly have a universal physiological component, and yet the conceptualization of anger or other emotion concepts is only marginally based on metaphors or metonymies. One such language is Tsou (an Austronesian language spoken in parts of Taiwan), where the emotions are primarily expressed linguistically through an elaborate prefix system attached to emotion *verbs* (not nouns). But as Shuanfan Huang (2002), the linguist who studied the language, tells us even in this language there exists the conceptual metaphor ANGER IS EXCESS AIR OR FIRE IN A CONTAINER.

Variation as a result of differential experiential focus through time

Let us now consider how historical change may influence which metaphors are used in a particular language. We can start the discussion of this issue with the following question: Do cognitive linguists suggest that universal embodiment necessarily leads to the same application of a source domain to a particular target through time? Work by Caroline Gevaert (2001)

demonstrates that the conceptualization of anger changed considerably from the Old English to the Middle English period. On the basis of a variety of corpora, she showed that heat-related words account for only 1.59% per cent of all the words describing anger before 850. The number of heat-related words for anger dramatically increases in the period between 850 and 950. Then the number of these words decreases between 950 and 1050 to 6.22% and then to 1.71% by around 1200, and then to 0.27% by around 1300. After 1300 the number starts growing again, and after 1400 it becomes dominant in texts that describe anger. As has been noticed in previous work (see, e.g., Kövecses, 1986; Lakoff and Kövecses, 1987; Lakoff, 1987), heat-related words account for a large portion of all the expressions that are used to talk about anger in present-day English.

What do Gevaert's findings tell us then? Her findings indicate that the conceptualization of anger in terms of heat is not a permanent feature of the concept of anger in English, but that it can, and does, fluctuate in the course of the development of English. This is an extremely important finding because it bears directly on the issue of universality of metaphorical conceptualization across time. If the conceptualization of anger in terms of heat is a mechanical or automatic consequence of our real physiology in anger, this fluctuation should not occur. It cannot be the case that people's physiology changes in anger every one or two hundred years or so. How can we account for this fluctuation then? Is there an answer that is consistent both with the cognitive linguistic view of embodiment and with the obvious changes in conceptualization of anger through time?

I believe the answer is that universal physiology provides only a *potential* basis for metaphorical conceptualization—without mechanically constraining what the specific metaphors for anger will be. Heat was a major component in the concept of anger between 850 and 950, and

then after a long decline it began to play a key role again at around 1400—possibly as a result of the emergence of the humoral view of emotions in Europe (see Gevaert, 2001; Geeraerts and Grondelaers, 1995). We can notice the same kind of fluctuation in the use of the domain of “swell,” which I take to be akin to what we call the “pressure” component in the conceptualization of anger today. Pressure was a major part of the conceptualization of anger until around 1300, but then it began to decline, only to emerge strongly again, together with heat, in the form of the HOT FLUID IN A CONTAINER metaphor centuries later. The point is that we should not expect any of the *conceptualized* responses associated with anger to remain constant in conceptualizing anger (and the emotions in general) throughout the ages. Experiential focus may change across time even within the same language.

More generally, what I would like to emphasize here is that universal embodiment associated with a target domain may consist of several distinct components, or aspects. The conceptual metaphors that emerge may be based on one component, or aspect, at a certain point of time and on another at another point of time. Which one is chosen depends on a variety of factors in the surrounding cultural context. Moreover, the conceptual metaphors may be based on one component, or aspect, in one culture, while on another component, or aspect, in another culture.

Conclusions

There are two conclusions I wish to highlight. First, emotion metaphors largely fall under the generic-level metaphor: CAUSES ARE FORCES. The still generic-level instance of this metaphor is EMOTIONS ARE FORCES. Such generic force metaphors can be described by means of Talmy’s

force dynamics and apply to many domains outside emotion. In this sense, there are no emotion-specific metaphors that are of major significance in the conceptualization of emotions. The specific source domains of OPPONENT, NATURAL FORCE, CAPTIVE ANIMAL, HEAT etc. apply to a much wider range of target concepts in the conceptual system. This suggests a hierarchical organization for how we make use of metaphorical conceptualization. Such an organization can take the form of either generic to specific within a single hierarchy (which seems to be the case for emotion) or generic to specific in a number of different hierarchies (which seems to be the case for friendship). Second, I suggest that despite the universality of bodily experience on which many of our more specific emotion metaphors (such as LUST IS HEAT and THE ANGRY PERSON IS A PRESSURIZED CONTAINER) are based, we get a large amount of nonuniversality in the metaphorical conceptualization of emotion. This is because either the framing or the experiential focus of the source domains may vary from culture to culture.

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