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Getting a grip on emotions: defining lexical items that denote emotions

ABSTRACT: The main purpose of this paper is (i) to explicate the way research on emotion concepts in the cognitive sciences can be used as a source for defining emotion words, and (ii) to indicate how knowledge structures for feelings feature in the presentation and interpretation of dictionary definitions of emotion words.

1. Introduction

It is a common fact of life that people "know" a lot about their own emotional experiences and those of others, and that they know what the meanings of emotion concepts like "love", "anger", "fear" and "joy" are¹, but that they do so only until asked to give a definition of them. And indeed, the difficulty for the ordinary native speaker as well as for the lexicographer of coming up with definitions of even the most common of word meanings, has been noted many times (cf., for example, Fodor 1981, Johnson-Laird 1987, Hanks 1990 and Taylor 1992).

The broader lexicographical issue that this difficulty highlights is, first of all, the lack of direct access to lexical meanings as mental entities and, secondly, the problematic nature and limitations to the sources and techniques available to the lexicographer to determine the meaning of lexical items (the so-called "elicitation problem").

Closely related to this is the difficulty for the lexicographer of coming up with adequate lexicographical definitions for various types of dictionaries. These aspects of the broader issue are, of course, intertwined, as the possibility of typifying, describing or explaining the meaning of any lexical item presupposes that one knows (at least more or less) what the meaning of such a lexical item is.

There is another facet to the success of any dictionary, and this has to do with the way in which the dictionary assists its users in making sense of the information presented by way of definitions. Trying to make sense of the information in a dictionary can often be a very taxing business. Consider for example the fact that most dictionaries illustrate that *feeling* is a highly polysemous word, with meanings equivalent to contextual synonyms like *touch*, *thoughts*, *belief/opinion*, *sensation*, etc.. In defining any specific emotion word as "a feeling that X" most dictionaries do, however, give no indication of what specific

subsense(s) of *feeling* should be evoked in the context of these definitions, or whether one should evoke the whole knowledge structure that a word like feeling denotes (and which is described by the whole set of subsenses given in the entry).

In various dictionaries feeling(s) are furthermore contrasted with thought (processes), for example in the following:

- (1) **feeling:** that part of a person's nature that feels, compared to that part that thinks (TELD)
- (2) **feeling:** *Psychology 9b* generic term comprising sensation, desire and emotion, but excluding perception and thought (OED)

But at the same time, *feeling* is defined as "excitement of mind" (TELD), as "a way of thinking and acting" (COBUILD) and as "an opinion or notion" (COD), and in COBUILD *fear* is defined in one of its senses as "a thought that something unpleasant might happen or might have happened".

These examples illustrate the need of the dictionary user for a framework within which he can make sense of the senses of a polysemous item, i.e. one that would enable him to make sense of the kind of apparent discrepancy between a view of feelings as being devoid of thought and at the same time as consisting of thought. On a more general level, this would require guidance to the user of how to interpret the relationships between various subsenses in an entry and of the way in which subsenses focus on or highlight aspects of the whole knowledge structure that is associated with or invoked by the definiendum.

A second example pertains to the correct interpretation of the qualifying adjectives or expressions that precede the generic term *feeling* in a number of definitions of specific emotional concepts. A number of such qualifying expressions are used. Compare the following examples:

- (3) a. **love:** tender and passionate affection (Webster's), a deep liking for something (COBUILD), warm interest and enjoyment (LDOCE)
- b. **joy:** a vivid emotion of pleasure, extreme gladness (COD);
- c. **anger:** a fierce feeling of displeasure (LDOCE), a strong emotion, Anger is keen or hot or sometimes smouldering displeasure; indignation is deep and intense, often generous anger (Webster's);
- d. **fear:** unpleasant feeling (COBUILD), painful emotion (Webster's)

As these examples illustrate, these qualifiers appear in dictionaries for native and non-native speakers. The problem is, of course, to work out precisely what aspects of a feeling these qualifiers refer to and how they refer to these aspects. Consider for example the metaphorical use of words like *warm*, *hot* and *smouldering*. They only make sense if one becomes aware of the fact that they all instantiate a specific metaphor in terms of which we conceptualize the intensity of an emotion, viz. EMOTION IS A FIRE.

In this paper, I would like to explore some of these aspects of the definition problem on the basis of a number of more or less non-controversial assumptions within the framework of cognitive semantics, using the definitions of the basic emotion words² *love*, *joy*, *anger*, *fear* and *sadness* in various dictionary types as a case study.

In particular, I would like to explore how specialist knowledge can be used as a check on the meanings and definitions that lexicographers come up with. Secondly, I would like to show how some of the basic assumptions of cognitive semantics indeed provide a meaningful framework for the interpretation of the semantic information in dictionary entries.

2. Getting a grip on the definition problem

2.1. The elicitation problem

A common assumption of most cognitive semantic theories is that lexical meanings are highly abstract, complex, conventionalized mental knowledge structures, commonly referred to by terms such as *concepts*, *conceptualizations*, *idealized cognitive models*, *schemata*, *scripts*, *frames* and various others, each of which highlights a certain aspect of the nature of these knowledge structures that are associated with or activated by lexical forms.

The mental nature of lexical meaning has the direct consequence that one does not have any direct introspective access to the representations that underlie these meanings (cf. Johnson-Laird 1987:191). Lexicographers, therefore, commonly rely on three sources for the reconstruction of lexical meaning, viz. linguistic evidence in the form of citations from linguistic usage (citation files, computerized databases), native speakers' intuitions about the content of word meanings, and meaning descriptions in other sources, such as dictionaries, grammars or any other linguistic descriptions (cf. Hanks 1990, 34).

Eliciting the meaning of any lexical item from any one of these resources has difficulties and pitfalls of its own. Most lexicographers rely, therefore, on their citation files and on their own knowledge of the meanings of words as native speakers of a language. What is often not explicitly stated, though, is the fact that lexical meanings (as concepts or mental representations) are not directly given in such example sentences. Extracting the meanings of lexical items from corpus data is in essence a "hermeneutic exercise" (cf. Geeraerts 1989, 39-60) in which the content of such meanings has to be deduced or inferred from what we know about the things, events, situations, qualities, etc. that these examples of language use refer to.

Introspection itself has its pitfalls, mainly because of the status and validity of the meanings that one comes up with by means of introspective analyses³, but also because of one's own lack of knowledge of the aspects of the real or imagined worlds that lexical items in linguistic contexts, such as in citation material, refer to. We therefore need to build in various checks and balances in the elicitation process itself. This includes, of course, checking postulated meanings against extensive and representative corpuses of linguistic data (cf. Sinclair 1991), but, given one's own lack of knowledge of the real or imagined worlds that lexical items refer to, it is also common practice to check these postulated meanings against whatever specialist or non-specialist sources of so-called "encyclopedic" knowledge are at hand, including the existing theories about such knowledge and the empirical data that such theories are based on.

Such sources have, of course, to be handled with care as it is the assumed task of the lexicographer to define the *conventionalized stereotypical linguistic* meanings of items, and

not the specialist knowledge structures that lexical items are used to denote in their uses as terms.⁴

2.2 A cognitive view

But given this assumption, the results of a sizeable amount of research in various of the cognitive sciences become relevant for the lexicographer in as much as they represent an attempt at reconstructing the knowledge structures of the non-specialist by analysis of the language that (s)he uses to talk about such knowledge. The results of these projects become even more significant if the analytical framework used for analyzing the linguistic data is a coherent linguistic semantic theory.

The available research on the content and structure of emotion concepts is such a case in point, and, therefore, an indispensable tool for the lexicographer faced with the task of defining the usually extensive emotion lexicon of any language and for checking the adequacy of the lexicographic definitions (s)he finally comes up with.

Some of the findings of the research of Shaver et al (1987) and Kövecses (1990, 1991) on emotion concepts are in this respect of prime lexicographical importance. These two researchers approach the problem of the content and structure of emotion concepts from two complementary perspectives: the former from the field of social cognition and the latter from cognitive linguistics. They do, however, share a number of research aims and analytical approaches, especially the aim to reconstruct the stereotypical knowledge people have of emotions with the aid of a theory of cognitive semantics. Both use the technique of deriving the content and structure of emotion concepts from language, i.e. from the way people verbalize their emotional experiences. Shaver et al (1987) extract the content and structure of emotion concepts from storytelling data (informant's accounts of their own experience of an emotion and accounts of typical experiences of an emotion), while Kövecses (1990, 1991) analyses the metaphors, metonymies, idioms, proverbs, etc., i.e. the common, conventionalized linguistic expressions, and the related concepts that we use to talk about emotions and which in the final instance are co-determinants of our understanding of these emotions.

2.2.1. Theoretical assumptions

Theoretically, the analytical framework these researchers employ crucially depends on the concepts "prototype category/concept" and "script category/concept".

(a) Prototype categories

Both of them show that the concept "emotion/feeling" itself and the concepts referred to by emotion words like *love*, *anger* and *joy* are essentially fuzzy and open-ended concepts, i.e. that they overlap at their boundaries, and that concepts are internally structured in terms of a prototype⁵ and relationships of family resemblance between individual members and the prototype – facts that make it in principle impossible to define most emotion words in terms of sets of necessary and sufficient attributes (cf. Shafer et al 1987, 1062).

From this it follows that the word *emotion/feeling* and each emotion word is a label for a fuzzy set, defined as a class without sharp boundaries, in which there is a gradual but

specifiable transition from membership to non-membership. All instances of anger, for example, bear a family resemblance to each other, the instances themselves being distinguishable as to their distance from the prototype in terms of, for example, a parameter such as the intensity of the emotion (e.g. contentment vs. ecstasy, jubilation vs. satisfaction, rage vs. grouchiness).

Prototypicality also manifests itself in the way the word *emotion/feeling* or specific emotion words denote a set of models or coherent conceptualizations which are prototypically structured with respect to each other. For example, various models of feelings exist, such as specialist models (of which there are a number) and a folk model of emotion. *Love*, for example, denotes not one, but various models of love, such as romantic love, love between members of a family, the love between friends, the love of God towards men, etc., of which one is considered to be the prototype of the category in terms of which the others are specifiable as different but related models (cf. especially Kövecses 1990, 1991).

The prototype more often than not designates a generic, core, or non-specialized form of the emotion in question. For example, within the love category, the affection subcategory seems to designate the generic form of love which some have found to apply to friendship and family relationships, whereas the lust or passion subcategory refers only to romantic or sexual love. (Shaver et al 1987, 1068).

The fuzziness of emotion categories is also attested by the existence of emotion words that denote emotional blends which are related to more than one prototype. Shaver et al (1987, 1082) give the following examples: *Hurt* is a blend of sadness and anger: A person feels hurt when he or she has been wronged in a way that warrants anger (i.e. in a way that is unfair and inappropriate given agreed-upon roles or rules) but believes that the offender does not care enough to rectify matters, even if a reasonable objection were to be raised. *Longing* and *sympathy* are mixtures of sadness and love – in one case a painful feeling related to separation from a loved one; in the other a feeling of sadness for a person we care about.

(b) Script-like categories; antecedents and responses

Both Shaver et al (1987) and Kövecses (1990) show that, although emotions are often thought of as things, they are inherently structured as temporally organized sequence of events, i.e. as scripts or as prototype scenarios consisting of a number of stages. Using fear as an example, Fehr and Russel (cf. Shafer et al 1987, 1063) note that

“Although we often speak of fear as a thing, a more apt description may be a sequence of events ... To know the meaning of the word *fear* is to know such a sequence. It is to know a script that includes prototypical causes, beliefs, physiological reactions, feelings, facial expressions, actions and consequences.”

Shaver et al (1987) therefore see an emotion concept as a script consisting of antecedents and responses. The category of antecedents in such a script-like representation contains all conceptualizations of events or beliefs that elicit the relevant emotion, i.e. emotions are conceptualized as beginning with appraisals of the way in which circumstances or events bear on a person's motives, goals, values, or desires. Fear, for example, begins with an interpretation or appraisal of events as potentially dangerous or threatening to the self (anticipation of physical harm, loss, rejection or failure). It also includes a set of

situational factors (unfamiliar situation, being in the dark, being alone) that probably increase a person's perceived vulnerability to such threats and impede his/her chances of coping effectively.

The combination of appraisals then determines which set of basic emotion responses is elicited (although it is unknown precisely in what way appraisals physically elicit emotional responses). The category of responses includes a diverse array of experiential, physiological, cognitive, expressive and behavioral responses and other emotions associated with the generic emotion. Fear, for example, activates the autonomic nervous system in preparation for flight. Typical responses are those of feeling jittery or jumpy, perspiring, trembling, etc. Common behavioral responses include screaming, yelling or crying and pleading for help, and attempts to cope (by fleeing, hiding from the threat, being quiet, freezing, etc.). All this is coupled with internal reactions such as picturing disaster and becoming cognitively impaired or disorientated.

Once elicited, the characteristic action tendencies, cognitive biases and physiological patterns of an emotion arise automatically unless they are countered by self-control efforts.

Although emotion concepts have parallel internal structures, they differ as to content and finer grades of structure. Sadness, for example, is evoked by an undesirable outcome (something that has already taken place; for example the loss of a loved one) or by the discovery that one is helpless or powerless to change the unhappy circumstances. Their most distinguishing characteristics are, however, the set of appraisals, as similar responses can be aroused by different emotions; for example, increase in heart rate, crying and perspiration can be indicative of love as well as of fear and anger.

(c) The function of metaphors, metonymies and idioms

Kövecses (1990, 1991) has shown that various of the metaphors, metonymies and idioms that we use to talk about emotion concepts and emotional experiences directly reflect on various aspects of the above gross structure of an emotion concept, or, as in the case of metaphors, constitute the conceptual content we have of a specific aspect of an emotion.

Metaphors focus on different, sometimes overlapping, aspects of a concept, or add to a clearer understanding of the nature (ontology) of the emotion. The metaphor LOVE IS A NUTRIENT, for example, is instantiated by such linguistic expressions as *hunger for love* and *be love-starved*, that highlight our conception of love as something that everyone needs to be able to exist. Two very common metaphors that operate in this way are that emotion is fluid in a container, and that emotion is a fire, both of which encapsulate our conceptualization of the various intensities that emotions can take on (cf. expressions like the following: *be brimming with rage*, *make somebody's blood boil*, *reach boiling point*, *keep your cool*, *blow your top*, *blow off steam*, *hit the ceiling*, *go through the roof*). Control of emotions is highlighted by the metaphor that control is tantamount to keeping the pieces of an object together (cf. expressions like *going to pieces*, *to be collected*, *pull yourself together*).

Metonymies are used in a similar way to refer to aspects of our emotions. Within the domain of emotions the appraisals/antecedents and the physiological, behavioral and expressive responses are typically used to indicate or imply the presence of an emotion, i.e. they are used metonymically to stand for the emotion itself. For example, expressions like the following all refer to some of the physiological responses people have when

experiencing love, in which case the described physiological response *stands* for the emotion: *having the hots for someone, he's a heart-throb, she is in a daze over him*. These metonymies highlight aspects of our emotion model, such as scales of intensity, physiological reactions and control.

(d) The folk model of emotions

As will be shown in section 3, the gross model sketched above is the prototypical one assumed for defining individual emotion words in dictionaries. This model, though, stands in contrast to our folk model of emotions. As Kövecses (1990, 184 ff.) illustrates, the folk model is identical to the above one in its script-like nature. In fact it can be broken down into a five-stage scenario, starting off as and returning to a "neutral" state of calm. Some of our major folk beliefs are indicated in brackets.

FOLK MODEL OF EMOTION/FEELINGS

0. State of emotional calm
1. Cause of emotion (Speaker is passive with regard to the coming into existence of emotion)
2. Emotion exists (Emotion involves a desire which forces Speaker to perform an action X)
3. Attempts at control.
4. Loss of control (Emotion forces Speaker to perform X)
5. Action (Speaker is not responsible for performing X since (s)he only obeys a force larger than herself/himself. Performing X appeases Emotion and Speaker ceases to be emotional).
- 0 Emotional calmness.

One of the important ways in which the folk model differs from the one outlined above, is that it encompasses the belief (i) that emotions have no cognitive or intellectual content (i.e. that emotions are in the heart, not in the head), and (ii) that one does not have methods to control "falling into" some emotion. Another model encompasses thought as an aspect of emotions, but then as non-rational or instinctive evaluation (cf. Kövecses 1990, 177). The automaticity of emotions is expressed by the common opinion that emotions "overtake," "grab," or "hit" us, even though they are consequences of our own appraisals of situations.

Although separately distinguishable, the various models we have of emotion constitute an integrated knowledge structure in which each model or node in this interlinked structure provides a separate "window" on an aspect of this knowledge structure (cf. Rudzka-Ostyn 1989, 615).

(e) Domain-specific definitions

A third highly relevant assumption of cognitive semantics that only features implicitly in the research of these authors, is that the content of concepts can only be defined with respect to some domain, where any knowledge structure, regardless of its size and scope, is capable of serving as such a domain (cf. Rudzka-Ostyn 1989, 614-615). Specific emotion concepts, like "anger", "love" or "fear" are, for example, typically defined as a feeling/emotion of X, which indicates that specific emotions are defined relative to the whole knowledge base we have of emotions or feelings; in actual fact the knowledge we have of the meanings of specific emotion words are structured by the models we have of emotions or feelings themselves.

3. Mapping emotion knowledge onto lexicographic definitions

As I will show in this section, (i) dictionaries do indeed follow suit in the way they map the prototypical and essentially script-like nature of emotion concepts on the list of neatly separated, consecutively numbered senses in dictionary entries, and (ii) that the cognitive framework gives one a tool to make sense of the, often scant, information provided in dictionary definitions.

Most dictionaries seem to revert in their definitions of emotion words to the opening line X is a feeling of Y (where X and Y mostly denote synonymous emotion concepts), as for example in the following:

- (4) **love**: an intense feeling of deep affection or fondness (COD)

This opening line makes the statement that the meaning of the definiendum should be interpreted against the knowledge structure we have of the concept "feeling".

If one looks at the way dictionaries then indeed define the word *feeling(s)* or its synonym *emotion(s)*, their essentially prototypical and script-like nature is clearly indicated. Consider the following:

(a) Open-ended sets and the extensional definition

The fact that the words *emotion* and *feeling(s)* denote open-ended sets of which the members cannot be defined in terms of a single set of distinguishing attributes, is typically mapped by the kind of extensional definitions in the following, in which common examples of the category are simply listed:

- (5) **emotion...emotions: 1.** An **emotion** is a feeling such as fear, love, hate, anger or jealousy (COBUILD)
- (6) **emotion 4b.** *Psychology.* A mental 'feeling' or 'affection' (e.g. of pleasure or pain, desire or aversion, surprise, hope or fear, etc.) (OED)

(b) Prototypical clustering of senses and the hierarchical structure of the entry

Most dictionaries furthermore show that the word *feeling* is highly polysemous, indicating as subsenses meanings like "sense of touch" (COD), "appreciative recognition of

something" (Webster's), "an opinion of belief," and "emotion", which indicates in fact that **feeling** is a concept which is the result of all our cognitive capabilities, including touch and thought.

The essentially prototypical structure of the concept itself is, however, indicated in larger dictionaries such as Webster's and OED, but also in COBUILD, by imposing a hierarchical structure (based on similarity relations between senses rather than on essentialist identity) on the semantic material by indicating higher-level groupings according to the core meanings mentioned above, and by specifying various subsenses that minimally differ from these core senses (cf. in this regard Geeraerts 1990). For example, Webster's gives as one of the core meanings of *feeling* the sense "3 A sensation, a complex of sensations, or a perception pertaining to the more general forms of sensibility; as: ", and then goes on to list four separate senses under this core meaning that instantiate it or that are minimally deviant of it, viz. "a. Bodily consciousness; organic sensation. b. A sensation which may involve touch, temperature, etc., or physical pain and pleasure. c. A sensation of touch. d. Appreciative recognition; sense; as, a *feeling* of safety."

Most dictionaries also make a distinction between, or allude to the distinction between, the "specialist" and the "folk" models we have of feelings or emotions. Consider by way of example the following contrasts that are set up by various sense distinctions between feelings/emotions as the result of what we think (thus of an appraisal), of feeling as something that is based on irrational thought and of feeling as something essentially devoid of thought.

- (7) **3 Feeling** is a way of thinking and reacting to things which is emotional and spontaneous rather than logical and rational... 9 A **feeling** is also the way you see and think about yourself or the situation you are in (COBUILD)
- (8) **feeling: 2** a belief or opinion, not based on reason (LDOCE)
- (9) **feeling:** that part of a person's nature that feels, compared to that part that thinks (TELD)
- (10) **feeling: Psychology 9b** generic term comprising sensation, desire and emotion, but excluding perception and thought (OED)

The conceptualization of a feeling as essentially an event, but with no further reference to the fact that appraisals as such lead to the feeling (cf. the folk model), is given in Webster's second meaning distinction:

- (11) **emotion:** Any such departure from the usual calm state of the organism as includes strong feeling, an impulse to overt action, and internal body changes in respiration, circulation, glandular action, etc.

while the OED gives a sense distinction in which our appraisals metonymically stand for the whole concept of feeling:

- (12) **feeling: 6.** Pleasurable or painful consciousness, emotional appreciation or sense (of one's own condition or some external fact)

(c) Feelings as scripts

The script-like conception of the individual emotions/feelings are typically mapped onto definitions of the basic emotion words by way of a definition format that usually follows the first descriptive phrase a feeling of Y, viz.

(13) CAUSED BY THE BELIEF THAT Z

In this definitional matrix CAUSED BY refers to the assumption that a feeling has as an antecedent or cause a certain appraisal of events, situations, people, etc. Compare, for example, the following definitions:

(14) **joy**: A vivid emotion of pleasure ARISING FROM A SENSE OF WELL-BEING OR SATISFACTION (OED)

(15) **anger**: **Anger** is the strong emotion that you feel ABOUT AN ACTION OR SITUATION WHICH YOU CONSIDER UNACCEPTABLE, UNFAIR, CRUEL OR INSULTING AND ABOUT THE PERSON RESPONSIBLE FOR IT (COBUILD)

The predicate CAUSED BY is lexicalized by a number of items that relate to the concept of "cause" in a more-or-less fashion. A few typical examples are the following:

(16) (emotion word) is a feeling of Y INDUCED, EXCITED, CAUSED BY, BECAUSE, WHEN, ARISING FROM, PROMPTED BY, ARISING FROM, MARKED BY the belief that Z.

BELIEF is often itself lexicalized by the lexical item **belief**, but also by a number of items denoting related concepts or synonyms, for example, "when you think that" (COBUILD), "arising from the recognition of" (OED), and "prompted by a sense of" (OED).

Most dictionaries for both native and non-native speakers revert to the above definitional format, even though references to the explicit causal links or to the status of the cause as an appraisal may sometimes be left out; for example,

(17) **love**: men's adoration of God IN gratitude or devotion (Webster's)

Typical responses of an emotion/feeling or the aspect of self-control are hardly used as definitional traits, although it is not always easy to determine whether a specific sense distinction denotes an antecedent of a feeling or one of its typical responses, as typical responses or typical antecedents can both metonymically stand for the emotion in question. This fact is highlighted, for example, in the second part of the COBUILD definition of **love**:

(18) **love**: 3.2 the feeling that a person's happiness is important to you, AND THE WAY YOU SHOW THIS FEELING IN YOUR BEHAVIOR TOWARDS THEM

Webster's also gives the following as a secondary sense distinction of **love**:

(19) **love**: 1b the principle or quality of which this feeling is a manifestation.

In a number of dictionaries the various polysemous senses of an emotion word in actual fact define specific models of the emotion in question. If one accepts that the primary sense distinction of an entry describes what the lexicographer sees as the prototypical model of the emotion category, then the other senses have as their reference other spe-

cialized models which diverge in various ways from the prototypical model. In defining **love**, for example, most dictionaries distinguish between love of persons, things and God, and various models of love between persons are mentioned or alluded to, in most cases simply by describing or alluding to the characteristic(s) that differentiate the model as such from other models. Compare by way of an example, the highly condensed definition of **love** in COD:

- (20) **love**: 1 an intense feeling of deep affection or fondness for a person (MODEL 1) or thing (MODEL 2); great liking. (INTENSITY QUALIFIER) 2. sexual passion (PASSIONATE LOVE, A SPECIALIZED FORM OF MODEL 1; DIFFERENTIATING CHARACTERISTIC) 3. sexual relations (DIFFERENTIATING RESPONSE OF THE MODEL OF ROMANTIC LOVE OF WHICH PASSIONATE LOVE IS A SUBCATEGORY)

Dictionaries often differ in what they take to be the most prototypical model of the emotion in question, in as much as they differ in the type of model referred to by the primary sense in an entry. COBUILD, for example, takes romantic love as the prototypical model, while the OED takes as prototypical model all models of the love between persons, devoid of sexual desire or sexual relations.

(d) Qualifying adjectives and synonyms

Emotions/feelings or the various submodels of them are commonly differentiated according to more general and higher-level characteristics of positive and negative feelings, or according to a degree of intensity. Differences of intensity are mostly alluded to in the opening format

- (21) qualifying adjective + feeling/passion/emotion + of + noun (denoting a synonymous emotion concept)

as for example in the following:

- (22) **love**: a strong feeling of fondness (TELD)

or

- (23) **anger**: 2 A strong passion or emotion of displeasure (Webster's)

In cases like these, the definiendum is defined as expressing a greater degree/intensity than the synonym in the definiens, i.e. graded sets like

- (24) happiness – joy; fondness/affection – love; displeasure – anger

are set up. Intensity itself, though, is only one of the (higher-level) differentiating characteristics according to which synonymous emotion words can be differentiated. Other characteristics are aspects of the appraisal or of the responses of the emotion category that synonyms share. Webster's, for example, states in its notes on the synonyms of **anger**, viz indignation, **wrath**, **rage**, and **fury**, that they have in common that they all denote in varying degrees feelings of strong displeasure or antagonism directed against causes of an assumed wrong or injury, but that they differ according to such traits as the specific appraisals they are based on, the responses they typically elicit or aspects of control of the emotion. The synonyms of **anger**, therefore, highlight (and accordingly differ with respect to) specific aspects of the general model of emotion. **Rage** and **fury**,

for example, highlight aspects of control (loss of control, loss of control that approaches madness), which are absent, for example, in **indignation**. The general point, though, is that our prototypical model(s) of emotion serves as a general frame of reference in terms of which these synonymous expressions can be, and are indeed, differentiated.

4. Conclusion

From the preceding discussion it is possible to draw a number of important conclusions. The first of these is the fact that dictionaries of various types do indeed seem to map a considerable amount of what cognitive research reveals about the content and structure of emotion concepts onto dictionary definitions. This not only makes the results of cognitive research (but then of the type specified in section 2) an important resource for the lexicographer to get to the meanings of lexical items, but it also underlines its importance as a tool for checking one's definitions and for structuring the senses in an entry.

As indicated by the discussion in section 3, the primary sense(s) of an emotion word could ideally be formulated according to a general definitional format of the type

(25) QUALIFYING ADJECTIVE + FEELING/PASSION/EMOTION + OF + NOUN (DENOTING A SYNONYMOUS EMOTION CONCEPT) CAUSED BY THE BELIEF THAT Z

Most dictionaries do in fact revert to this definitional format, but cognitive research on emotions gives an explanation for the fact that beliefs, as opposed to responses, are best suited as differentiating characteristics, and it explains, by distinguishing between specialist models and folk models, why this model is best suited for dictionaries.

The second of these is the fact that the theoretical tools of cognitive semantics give one an instrument to make sense of the intricate relationships between the various senses in an entry. The fact that different senses, for example, allude to different models or prototypes, or to what is considered to be the most distinguishing characteristic of such a model within a framework of models/prototypes, gives one an explanation of what could otherwise appear to be contradictions within an entry (cf. the example in section 1 of this paper). Concepts such as "prototype category" and "script category" are indispensable tools for the correct interpretation of the semantic information in a dictionary, and as such they should become part of the concepts used and explained in any guide to the use of a specific dictionary. The current structuralist assumptions about meaning and lexical polysemy dismally fail to explicate how users make sense of semantic information in dictionaries. For this one needs an analytical framework like cognitive semantics and the empirical results of research conducted within this framework.

Endnotes

1. It is the kind of knowledge people draw on for effective social interaction – which requires the ability to interpret one's own and other people's emotional reactions, to predict emotional responses from antecedent events and to influence others' emotions (cf. Shafer et al 1987, 1062).
2. The term *basic word* is used here as defined in prototype theory. Vertically, members of a prototype concept are organized in hierarchical relations comprising three levels of major inclu-

- siveness: the superordinate (e.g. furniture), the basic (e.g. chair) and the subordinate (e.g. kitchen chair).
- 3 Problems regarding the status of these meanings/definitions relate to whether they can be considered to be representative of the meanings a whole community associates with a specific lexical item and/or the way they reflect idiolectal traits. They also relate to the fact that one has to ascertain whether they reflect the meanings actually implied in language use and in what respect they are representative of the whole complex of senses of individual lexical items; cf. Geeraerts (1989, 45 ff.)
 - 4 Alternatively, it is the task of the lexicographer to clearly distinguish between the senses of lemmata according to whether they in fact give a description of the stereotypical knowledge of the layman or those of the specialist.
 - 5 The prototype of a category is defined extensionally as the best example(s) of a category and intentionally as that member which shares a maximum number of attributes with other members and a minimum of attributes with members of contrasting categories.

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