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Folk and expert theories of emotion and the disappearance of psychology

Emotion theories are of two kinds: folk and expert theories. Folk theories of emotion can be reconstructed, for instance, on the basis of language used about the emotions. In this sense, folk theories of emotion are reconstructions of lay views that can be represented by folk, or cultural, models. Expert theories, on the other hand, are scientific constructions by experts, who describe (on the basis of some evidence available to them) what they take emotions to be.

As I have shown in several publications (e.g., Kovecses, 1986, 1990), many of our folk theories of emotion are based on certain biological-physiological processes. What this means is that the way we conceptualize the emotions is to some extent constrained by bodily processes. T'he general version of this claim in cognitive linguistics is that abstract concepts are in part based on concrete functions and processes of the human body and its interaction with other objects in physical and cultural space (Johnson, 1987).

What is the relationship between folk theories and expert theories of emotion? Indeed, we can ask whether the people who create our expert theories of emotion can free themselves from the folk theories that they obviously share with other members of their culture (in their "role" as lay people). I will argue that, at least in many cases, expert theories can be considered to be extensions of folk theories.

This argument raises an important issue in the philosophy of mind. The issue is whether expert, or scientific, psychology in general is a just a version of folk psychology. The argument that I will make concerning the emotions seems to support this claim. If many expert theories of emotion are mere extensions of folk theories of emotion that are based on bodily processes (including processes in the brain), then both folk theories of emotion and the expert theories deriving from them can be "eliminated". The scientific study of bodily and brain processes

will eliminate the need for both folk and expert theories of emotion, and thus, more generally, expert, or scientific, psychology (as well as linguistics) can, and will, "disappear" (see, P. S. Churchland, 1986).

After discussing some folk and expert theories of love and emotion in general in the body of the paper, I will return to this issue at the end. I will suggest that in some measure this is indeed the import of my argument, but I will also suggest that for the most part emotion experiences cannot be reduced to bodily and brain processes, and thus, neither folk nor some expert theories of emotion can be eliminated.

The language of love and scientific theories

Elsewhere (Kovecses, 1986, 1988, 1990) I suggested that that emotion concepts such as love are best viewed as being constituted by a large number of cognitive models centered around a small number of (or just one) prototypical model(s). The conceptual content of the various cognitive models, especially, that of the prototypie ones, arises, in the main, from three sources: metaphors, metonymies and what I call "related concepts". The metaphors, metonymies, and related concepts can be identified by an examination of the everyday words and phrases that native speakers of a language commonly use to talk about particular emotional experiences (like anger, fear, happiness, love, etc.).

Metaphors of love

The linguistic examination of the language of love reveals that the central metaphor for love is **unity of two complementary parts.** The metaphorical implications of this way of conceptualizing love are numerous (see Kovecses, 1988, 1991), and consequently, we find many unity-related linguistic expressions in love. An examination of the literature on love also shows that this way of conceptualizing love abounds in scholarly writings as well (see, for example, Hatfield, 1988; Solomon, 1981).

Where does this aspect of the folk theory and the expert theories based on it come from? In her discussion of marriage, Quinn (1991) makes some interesting observations about love that can shed some light on this issue. Her suggestion is that the concept of love emerges literally from certain basic experiences, and then these experiences will structure mamage. The particular basic experiences that Quinn suggests the American conception of love and marriage derives from involve early infantile experiences between baby and the first caretaker. Here is the relevant passage:

> I speculate that the motivational constellation that is part of our understanding of love and that provides mamage with its structure itself makes sense in psychoanalytic tenns. Psychoanalysts since Freud, who characterized adult love as a "re-finding" of infantile love for the first caretaker, have theorized about the relation between the two. My claim is that American's distinctive conception of marriage takes the particular shape it does and has the force it does for us because of the cultural model of love mapped onto marriage and, thus, indirectly because of an infantile experience that Americans have shared and that underpins our conception of adult love. (p. 67)

In this view, adult love is seen as deriving from the basic experience of "infantile love for the first caretaker". The close physical, biological, and psychological unity of the baby and the "first caretaker" serves as the bodily motivation for the unity metaphor, which, in turn, structures much of the folk theory of adult love (see Kovecses, 1988). In this case, then, the folk theory based on some (preconceptual) bodily experience gets extended and elaborated by experts, and it becomes an expert theory.

The **natural force** and **physical force** metaphors give rise to perhaps the most common belief about love: namely, that it is a force (either external or internal) that affects us and that we are passive in relation to it. The importance of our essential passivity in love according to our language-based model is reflected in the fact that several scientific theories define love in contradistinction to this property. In these views, love is not a force acting on us, but, at least in part, a rational judgment, a cognitive decision (see, for example, Solomon, 1981; Fromm, 1956; Sternberg, 1986). More generally, one could say that if there is a folk theory with a salient feature (such as passivity for love), experts will tend to create scientific theories in contradistinction to that feature.

Other force metaphors are also commonly used to conceptualize love. They include **magic, insanity,** and **rapture** (e.g., intoxication). When we are *spellbound, crazy,* or *drunk,* we are not in control. The implication for love is that, when in love, we lose our common sense and become a "different person". What the **rapture,** or **high,** metaphor adds to this is that love is also a pleasant state. The high metaphor may be regarded as the non-expert (i.e., language-based) counterpart of Peele's theory of certain forms of love as addiction (see Peele, 1975).

Metonymies of love

Love also abounds in metonymies, and these can be related to expert theories as well. (On metonymy, see Kovecses and Radden, 1998 and Radden and Kovecses, 1999) Linguistic expressions that describe physiological, expressive, and

behavioral responses of love can be regarded as metonymies, in that there is a "stand-for" relationship between these and the concept of love as a whole. If somebody is described by these expressions, we can legitimately infer that the person is in love. Given the following metonymies of love, mention of linguistic expressions that describe physiological, expressive, and behavioral responses of love may enable us to infer that the person of whom the statements are made is in love. This need not be a strong inference. The point is that it is possible to draw it.

Increase in body heat stands for love: *I felt hot all over when 1 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.

Physical weakness stands for love: She makes me *weak in the knees.*

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.

Preoccupation with another stands for love: He spent hours *mooning* over her.

Physical closeness stands for love: They *are always together.*

Intimate sexual behavior stands for love: She *shawered* 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.*

Joyful (visual) behavior stands for love: *Her eyes light up* when she sees him. He *smiled* at her and the world stood still.

When I list these metonymies, no claim is made that they all exclusively characterize romantic love alone. Some of them can occur with other emotions or states in general. For example, the phrase *"her eyes light up"* may characterize happiness (as a matter of fact, it is more common and natural with it). The point is that this and other phrases on the list can occur in love situations because they encode various responses typical of love (such as looking and behaving in a way suggesting happiness).

Researchers have often based their theories of love on physiological, expressive, and behavioral responses. Some focused on physiological arousal. For example, Walster (1971), following Schachter and Singer (1962), proposed that under the appropriate circumstances (as in the presence of an attractive confederate) people often interpret their intense physiological arousal (which may have nothing to do with those circumstances) as passionate love. The forms of physiological arousal they interpret include many of the responses given above: body heat, increase in heart rate, blushing, dizziness, etc.

Some other researchers concentrate on expressive and behavioral responses. For example, Rubin (1970) places emphasis on what has been called here "loving visual behavior". Of course, sex and sex-related behaviors are often regarded as criterial aspects of love by scholars.

Finally, many of the responses given above, like loving visual behavior, sexual intercourse, intimate sexual behavior, and physical closeness, would be considered by Buss (1988) as "love acts". In Buss's theory, the key aspect of love is that it "involves overt manifestations or actions that have tangible consequences" (Buss, 1988:100). In other words, this view of love is in large measure based on metonymy, i.e. on what have here been called expressive and behavioral responses (although the theory is not exhausted by these).

Related concepts

There is an extensive range of emotion concepts that are related to love. The concepts I have in mind express, and also defme, the range of attitudes we have toward the beloved. I call these "related concepts". They comprise literal general knowledge based on our idealized conception(s) of love (see Kovecses, 1988). Some of the most important related concepts for love include: liking, sexual desire, intimacy, longing, affection, caring, respect, friendship, and the like. Another claim concerning related concepts is that they can be placed along a gradient of their centrality to love; some of them are inherent parts of the conception of love (such as liking and affection), some of them are only loosely associated with it (such as friendship or respect), and some fall in between (such as caring). (For the linguistic justification of these claims, see Kovecses, 1988, 1990, 1991).

What I call related concepts also show up in some expert theories of love. For example, related concepts seem to form the basis of Rubin's Love Scale (Rubin, 1970). The scale consists of items that have to do with three (in my terminology) related concepts and one response (eye contact). The three related concepts are care, need and trust, two of which (care and need, or longing) have been identified above.

Philosophers have also striven to defme love in terms of inherent concepts. Taylor (1979), for example, views love as being constituted by (mutual) sacrifice, affection, longing, and interest. Another philosopher, Newton-Smith (1973), suggests that the concept of love consists primarily of care, liking, respect, attraction, affection, and self sacrifice. As we have seen, most of these concepts have been identified above as a part of the language-based folk understanding of love.

Folk and expert theories of love

We are now in a position to ask: What is the relationship between the language- based folk, or naive, theory and scientific theories of love? This is a large and extremely complex issue. However, there are some simple observations that we can make in the light of the study of love-related language.

First, it seems that many scientific theories enhance and elaborate on just one or two aspects of the folk model. We have seen this, for instance, in the case ofphysiological arousal (e.g. Walster, 1971), behavioral responses (e.g. Buss, 1988), and attitudes (e.g. Rubin, 1970). The question that arises in this connection is this: Is the folk theory over-inclusive or is it these (and similar) scientific theories that are incomplete?

Second, there seems to be a positive correlation between the acceptance of scientific theories and the amount of overlap they have with the folk model(s). That is, my impression is that the more a scientific theory overlaps with a folk theory, the more popular or accepted it is within the scientific community. Thus, for example, the expert theories offered by Sternberg (1986), Hatfield (1988), and Shaver et al. (1988) appear to be more often referred to and used as a standard or reference point than theories that emphasize just one or two aspects of the language-based folk theory of love.

Third, scientific theories that attempt to provide explanations for love in terms of concepts largely or entirely missing from the folk theory, appear to look more scientific but less intuitively appealing. 'Thus, for example, Buss's (1988) evolutionary explanation (which is of course absent from the folk theory) "looks very good" as a scientific account, but is not as intuitively appealing as, say, Sternberg's (1986) (which "caters" more to the folk conception).

These observations naturally lead to the question: What is a scientific theory of love or what should it look like? Should it be one that provides a systematic but not obviously related explanation of an assumed folk theory or a part of it? One that provides a systematic description of all facets of an assumed folk theory? Or, one that provides an account in terms of a single (or some) aspect(s) of an assumed folk theory? It should be noticed that all of these possibilities assume the correctness of the entire folk theory or at least a part of it. However, it could also be suggested that a scientific theory of love is one that negates the entire folk theory. This possibility takes us to my fourth observation.

Fourth, it could be argued that a scientific theory is scientific because it rejects what ordinary people "merely believe" concerning a domain such as love. We know that many of our language-based beliefs about the physical world are mistaken. For example, we know that the sun does not really *come up* or *go*

down. Does the language of love, or that of the emotions in general, work like this example? Is there a larger scientific explanation behind our language-based beliefs about love and other emotions? If there is, what is its relationship to the folk model? We have seen some of the possibilities above.

Emotion concepts as cognitive models

The particular metaphors, metonymies, and related concepts that we discussed in connection with love do not represent the concept of love in its entirety. More generally, the metaphors, metonymies, and related concepts taken individually do not amount to what we would normally take emotion concepts to be like (for instance, the metaphor **anger is fire** does not exhaust what our conception of anger involves). However, it can be claimed that they jointly produce them. They produce them in the sense that the ingredients of emotion concepts (i.e., the metaphors, metonymies, etc.) converge on a certain prototypical scenario or cognitive model. What this means is that the metaphors, metonymies, and related concepts either map a great deal of conceptual content and structure onto previously existing parts of these models or they, in large measure, create, or bring about the existence of, these parts. This process of mapping conceptual material from one domain of experience onto another will give us the fourth ingredient of emotion concepts: prototypical cognitive models.

Emotion is largely conceptualized in terms of a variety of metaphors. It is mostly the conceptual material mapped from the various source domains of the metaphors to the target domain of emotion that constitutes our commonsense understanding of what we mean by the concept of emotion. As a result of these mappings, we have a rich and complex understanding of emotion (Kovecses, 1990):

> Self (S) is emotionally calm, but then an external event happens suddenly that involves S as a patient and that disturbs S. The event exerts a sudden and strong impact on S. Emotion (E) comes into existence, and S is passive with regard to this. E is a separate entity from S and it exists independently of S. S becomes agitated, his heart rate increases, there is an increase in body temperature, the skin color on the face changes, and respiration becomes more intense. E is intense. S's experiences of E are primarily of physical sensations inside the body. S shows his emotion through a variety of expressive acts, such as crying or visual behavior, and S may also be in an energized state. Involved in E is a desire (D), and D forces S to perform an action (A) that can satisfy this desire. S knows that A is dangerous and/or unacceptable to do. It can cause physical or psychological harm to himself and/or others. S knows that he is under obligation not to perform A required by E's D. He

applies some counterforce to prevent A from happening. It requires a great deal of effort for S to counteract the force of the emotion. However, S is now (i.e. in the emotional state) nonrational, and the strength of the force quickly increases beyond the point that S can counteract. The force becomes much greater than the counterforce. As a result, S cannot perceive the world as it is, is unable to breathe normally, and engages in extremely agitated behavior. S is now irrational. S ceases to resist the force affecting him. S performs A, but he is not responsible for A, since he only obeys a force larger than himself. E's D is now appeased and S no longer feels emotional. E ceases to exist and S is calm.

Needless to say, this is just one of the many commonsense models of emotion that people have. What gives it privileged status is the fact that it is a central one from which all kinds of deviations are possible. These "deviations" represent further, less prototypical cases of emotion. Less prototypical cases include situations where, in "weaker" emotions, the issue of control does not even arise or where, at the end of an intense emotional episode, the self does not calm down but remains "emotional". There are many such additional nonprototypical cases.

What emerges from this description of emotion is that the prototype of the concept has at least the following aspects: it has a cause, the cause produces the emotion, the emotion forces us to respond, we try to control the emotion but usually fail to do so, and there is a response. This characterization suggests a sequentially arranged five-stage model for the concept. Thus there is a temporal sequence in which the events above unfold: the cause of the emotion precedes the existence of the emotion, which in turn precedes the attempt at control, which in turn precedes the loss of control, and which in turn precedes the action. This is the skeletal schema in which the stages are not simply temporally but also causally connected:

(1) cause of emotion —> (2) emotion —> (3) attempt at control —> (4) loss of control —> (5) response

The causality is due to the large variety of **emotion is force** specific-level metaphors (see Kovecses, 2000) that produce this conceptually richer prototypical cognitive model for the concept. The description of the superordinate-level concept of emotion given above can thus be taken to be an elaboration on the skeletal schema.

Thus I take the concept of emotion and other emotion concepts to be defined and represented by prototypical cognitive models of this kind. An obvious question that arises is whether this is indeed how the concept is conceived by speakers of English. Parrott's socio-psychological studies indicate that this is pretty much what people have in mind in connection with the term *emotion*

(Parrott, 1995). 'The prototypical models of intense individual emotions are also expected to bear a great deal of resemblance to the model of emotion above. Rippere's (1994; in Siegfried, 1994) study of depression shows that the prototypical schema of depression shares many of the components of the model outlined above.

Finally, let us ask whether the folk theory of emotion given above is motivated by the body and physiological processes going on in the body. It can be suggested that much of this view of emotion is based on what can be called the **pressurized container** metaphor, which, in turn, is based on the literal conception of the body as a physical container in which certain forceful processes (such as increase in temperature, muscular tension, and blood pressure) are at work. This was shown convincingly by Ekman and Levenson and their associates in a number of physiological studies bearing on the emotions (Ekman, et al. 1983; Levenson, et al. 1992?). Given these observations, it seems natural, then, to consider Freud's famous "hydraulic model" of emotion to be a scientific extension of a motivated folk theory.

Emotion concepts and expert theories of emotion

Let us now cast our net wider and see whether and how the diverse expert emotion theories are related to the everyday notion of emotion. Let us begin with a brief look at the relationship between the prototypical cognitive model of emotion and the corresponding expert theories. In this connection, we find a valuable source of information in Alston (1967). Alston provides the following as typical features of emotion:

1. A cognition of something as in some way desirable or undesirable.
2. Feelings of certain kinds.
3. Marked bodily sensations of certain kinds.
4. Involuntary bodily processes and overt expressions of certain kinds.
5. Tendencies to act in certain ways.
6. An upset or disturbed condition of mind or body. (p. 480).

Alston arrived at these typical features of emotion through an examination of the scholarly literature on emotion. He writes: "There are a number of typical features of emotional states which most thinkers agree are connected with emotion in one way or another" (p. 480). What is most remarkable about these features in the present context is that each of them finds its counterpart in the prototypical folk model as outlined abave. (1) corresponds to the cause of emotion; (2) corresponds to the general experience of some emotions as given in stage two, given above; (3) corresponds to the physical sensations in stage two; (4) corresponds to the physiological and behavioral responses in stage two; (5)

corresponds to certain actions associated with emotion, given as stage five; and (6) corresponds to emotional disturbance and bodily agitation in stage two. Thus the typical features of emotion as provided by expert theories can be accommodated in three stages of the folk model: stage one, stage two, and stage five. It seems then that the folk model recoverable from English is a fairly rich and comprehensive model of emotion, which contains most, if not all, of the features found important for the characterization of emotion by experts.

It is also remarkable what the expert theories typically leave out of consideration. It seems that the aspect of "control," so clearly present in the folk theory, does not find its natural place in most expert theories of emotion. We may speculate that the reason is that expert theories aim at universality, but perhaps the least universal aspect of the folk theory is its "control" aspect (i.e., "attempt at control" and "loss of control"). Cultures may vary widely in the kind and amount of control that they "prescribe".

Finally, as we saw above, expert theories may define themselves in opposition to the prototypical folk theory above. As has been pointed out, the commonsense folk model of emotion involves the basic schema "cause —> emotion —> (control —>) response". (This schema is likely to be universal. See Heider, 1991: 6ff.) There is one well known expert theory of emotion that suggests the reverse of this flow of emotion: "perception of cause —> bodily changes (response) —> emotion" (James-Lange view). In the section on love, I have already mentioned the possible effect of such a change in an expert theory on either its lay or scientific acceptability; it is not well tolerated. Interestingly, James was fully aware of this potential negative influence on his own views. He remarked that such a "hypothesis is pretty sure to meet with disbelief' (James, 1890/1950:450). The reason is that there is no folk theory corresponding to the Jamesian view of emotion. As Radden (1998) observed in his study of English prepositions related to the emotions, while several theories of emotion have counterparts in folk models of emotion (as expressed by various prepositions, namely, *in, with, for* and *out off),* the theory espoused by James does not have such a counterpart. Radden's subtle point demonstrates how fine-grained linguistic analysis can reveal the nature of our folk models (of emotion) and thus provide insight into the question of why some expert theories (of emotion) are more accepted than others.

Conclusions

As was described above, the conceptualization and experience of emotional feelings is structured by folk, or cultural models. The folk models are both generic and specific-level structures. At least in the case of the basic emotions, the generic- level schema involves "cause-force-response". In the light of the evidence we

have, this schema seems to be universal. Most of the richness of human emotional experience is, however, given by the specific-level cultural models. These appear to encapsulate a rich variety of culturally-determined experiences and vary cross- culturally.

It can be suggested that a variety of relationships exist between metaphor, metonymy, inherent concepts, and prototypical cognitive models on the one hand, and expert theories, on the other. It may well be that several other such relationships could be isolated. Maybe the task of finding out the exact number and the precise types of these relationships awaits historians of culture and science. Clearly, this is an extremely important task if we wish to understand more thoroughly the nature and history of either our scientific or commonsense views of emotion. I think a major attraction of the approach that I present here is that it enables us to identify in a precise and systematic way the constructs that play a decisive role in this process; namely, prototypical cognitive models, conceptual metaphors, conceptual metonymies, related concepts, and their linguistic manifestations.

These points lead to a further issue - the issue whether the expert, or scientific, psychology of emotions is merely a more structured version of the folk understandings of emotion. I have shown in this paper that many expert theories of emotion can be regarded as extensions of (bodily motivated) folk theories of emotion. It would follow from this conclusion that I view expert emotion theories in general as merely "dressed up" variants of folk, or cultural, models. Clearly, this would be a radical step, and I am hesitant to take it for several reasons. First, not all expert psychological theories of emotion can be regarded as variants of folk models. For example, several scientific theories, such as Oatley and Johnson-Laird, 1987 and Leventhal and Sherer, 1987, cannot be viewed as extensions of folk models of emotion. Second, as briefly indicated in the previous passage, historical studies of the emotions would be needed with this particular question in mind to track the precise development and recycling of both expert and folk models of emotion. However, this work is only beginning. (See, for instance, Geeraerts and Grondalears, 1995; Bumyeat, to n.d.; Padel, 1992, the latter two with a critical edge of the metaphor approach).

The idea that expert theories of emotion can be viewed as mere extensions of folk models of emotion gains additional significance in the light of the controversy in the philosophy of mind concerning the relationship between folk psychology and scientific psychology. The debate centers around the issue whether all scientific psychology is merely an organized and structured form of folk psychology. Some neuroscientists, such as the Churchlands (see, for example, Patricia S. Churchland, 1986), argue that by finding in the brain all the material processes that underlie the phenomena that are of interest to both folk and scientific psychology (such as the emotions), it will be possible to explain the

"really important" aspects of these phenomena. If this can be done, the argument goes, they will prove wrong not only folk psychology but also scientific psychology. Thus, together with folk psychology, scientific psychology can be eliminated. How does this kind of neural and bodily reductionism fit into the spirit of my argument? It would seem that the kind of work that I have been engaged in for years would support the views of the eliminativists. After all, it could be argued, if the body plays such an important role as I attribute to it in shaping folk models of emotion and if expert theories of emotion are mere extensions of the folk models, then my findings support these reductionist views. The most important "things" happen in the physical brain and body and by finding out about these in detail, we can explain emotion (and other psychological phenomena). This is true to some extent. But the crucial question is exactly how big is the role I attribute to the body in shaping the conceptualization and experience of human emotion. As I indicated above, I view it as playing an important but limited role in this; namely, that the embodiment of the folk models constrains to some extent the way we conceptualize emotions. That is, by finding out about bodily and brain processes, we can see why we have the folk theories (and in many cases, the expert ones as well) that we do. But finding out about what motivates a folk theory is just a part of the story of emotion, and in this sense, it plays a limited role. It is limited because the bulk of our emotional experience is constituted by conscious feelings that derive from a wide variety of social, cognitive, bodily, and discourse-pragmatic factors (see, Kovecses, 2000). As the folk theory of love (see Kovecses, 1988) and that of emotion given above shows, emotion cannot be reduced to bodily (and possibly neither to brain) processes, although they are a significant part of it. In this sense, then, I disagree with this reductionist tendency and claim that neither scientific psychology nor scientific linguistics studying emotion can and will be "eliminated".

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