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Cognitive Theories of Emotion

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There is widespread agreement in philosophy that an adequate theory of emotion must be a cognitive theory. There is rather less agreement on the general form such a theory should take. Yet there is evidence of a growing consensus that a *purely* cognitive theory is inadequate, even when such a theory is broadly construed to include conative as well as cognitive conditions.¹ The chief objection to the Pure Cognitive Theory is that it fails to do justice to the *passive* aspect of emotion: the sense in which a person in an occurrent emotional state is upset, perturbed, agitated or moved.² William Alston put the point succinctly in a well-known article:

... we cannot identify emotions with evaluations alone, without completely losing contact with such phrases as "emotional reaction," "getting emotional over it," and "controlling one's emotions." An evaluation can be either emotional or unemotional. Two people can see a snake as equally dangerous, and yet one is gripped with fear while the other is calm (Alston 1967, p. 485).

On Alston's view, only a theory which is in part noncognitive—in short, a Hybrid Cognitive Theory—can account for the passivity of emotion. The difference between emotional and unemotional evaluations, he goes on to suggest, is that an emotional evaluation causes (in the evaluator) typical bodily disturbances and sensations. (Alston 1967, p. 486). To be emotionally upset or perturbed is, for example, to tremble or quiver or shudder with fear.

Proponents of the Pure Cognitive Theory go astray, according to William Lyons, because they ignore a rich tradition of physiological research:

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Excepting their denial that emotions are feelings, philosophers have had very little to say about the 'bodily motions' part of emotions, particularly in recent times, even though, somewhat ironically, it is this very aspect of emotions which distinguishes them from being just beliefs and desires of certain sorts.³

I think Alston and Lyons are right in demanding an account of the passivity of emotion. But we should be wary of accepting the 'bodily motions' thesis, despite the supporting empirical data. For that thesis rests on two assumptions, neither of which bears close scrutiny. The first assumption is that, since physiological changes (and sensations) accompany emotion, and since these changes clearly count as a way of being affected, then being emotionally upset (perturbed, agitated, moved) essentially consists in undergoing such changes. The second assumption is that the Pure Cognitive Theory, given the resources at its disposal, is incapable of providing an account of emotional affect. The first assumption, I shall argue, involves a fallacy; the second, a misconception.

I consider the first assumption in Section II. Alston and Lyons largely ignore the question of the significance of 'bodily motions,' and I show that an inquiry into the functional role of these phenomena does not reveal clear and important effects on intentional action (as opposed to mere behavior). I present my positive thesis in Section III in connection with the second assumption. The Hybrid Theory, I argue, underestimates the power of its rival; and I show how a version of the Pure Theory can offer a better account of the passivity of emotion. My thesis (in its unqualified form) is that what makes some evaluation/desire complex emotional is not its association with typical physiological changes, though such changes may accompany all or most emotions; it is rather the presence of a focussed attention of a particular sort on the object of emotion, resulting in the agent's overvaluation of that object (relative to his dispassionate evaluation of it). This cognitive account of passivity, I note, has considerable power: it can explain why emotional action is sometimes unreasonable, ill-advised or impetuous; and why controlling one's emotions is thought to be a worthwhile project, at least on some occasions.

I. COGNITIVE THEORIES: PURE AND HYBRID

What I call a Pure Cognitive Theory is one that analyzes an emotion solely in terms of beliefs, desires and other intentional states.⁴ Its chief contemporary proponent is Robert Solomon. In his book *The Passions* he claims that an emotion is an "evaluative (or normative) judgment, a judgment about my situation and/or about all

other people'' (Solomon, 1976, p. 187). However, Solomon's slogan, "emotions are judgments," is only a battle cry; his theory implicitly includes reference to an agent's desires and goals. My anger at John for stealing my car, he notes, is not identical with my judgment that John has wronged me; for I might make such a judgment in an impersonal and uninvolved way, without caring one way or the other. (Solomon, 1980, pp. 258, 276). What is distinctive about emotional judgments is that they are "self-involved and relatively intense evaluative judgments. . . . The judgments and objects that constitute our emotions are those which are especially important to us, meaningful to us, concerning matters in which we have invested our Selves'' (Solomon 1976, p. 188).

At first sight, Solomon appears to have a solution to the problem of distinguishing emotional from unemotional evaluations. But his answer, while suggestive, is unsatisfactory in two respects. First, it is an important fact about emotions that they are in some sense 'intense' experiences. But judgments—unlike desires and sensations—do not appear to be the sorts of things that admit of degrees of intensity. Beliefs admit of degrees of *certainly* (or confidence) of course, and perhaps that is what we have in mind when we say 'S has a passionate belief (believes passionately) in (that) *p*.' On the other hand, if 'passionate belief' is taken to indicate a disposition to emotion when, for example, the belief is contradicted, then 'passionate belief' must be analyzed in terms of emotion and not the other way round. Second, as one of Solomon's critics has pointed out, judgments which are especially meaningful to us are not *ipso facto* emotional: in a clear-sighted moment a woman may make the dispassionate judgment that her adored husband is a drunkard and a liar (Robinson 1983, p. 733).

Another move open to Solomon (which he doesn't explore) is to characterize the intensity of an emotion in terms of strength of desire. But this too is problematic. It is not just that one would then face the difficult task of specifying the threshold that a desire must exceed in order for some evaluation/desire complex to count as emotional. A more serious objection is that there are (or could be) strong desires which are not part of, or connected to, an emotion. An agent may want something very badly—say, to visit Paris this summer—yet his desire may not be an emotional one. That is, he may have this desire yet have no tendency to feel joy if his desire is satisfied and disappointment if it is not. His visiting Paris this summer simply figures high on his list of preferences, and receives due consideration in his future planning.

Perhaps this sounds strange, even pathological. What sort of

desire must this be if its satisfaction or frustration is not the occasion for emotions like joy or disappointment? Such a desire, I concede, is unlike the strong desires of typical humans, which do lead to emotion in relevant circumstances. My point here is that *the concept* of a desire (or a strong desire) does not *entail* a disposition to emotion, given relevant beliefs. It is not implausible to suppose that there could be intelligent beings, more or less like us, who lacked emotion altogether. I see no reason to think that, in virtue of their tepid temperaments, such beings must lack strong desires as well. A phlegmatic agent need not be an apathetic one.

Emotional states thus appear to involve more than evaluative judgments and desires, however strong. The Hybrid Cognitive Theory promises to supply the additional conditions. Its starting point is the language we use to describe occurrent emotions, language which is clearly inappropriate in connection with dispassionate states of mind. Consider Alston's example of fear. Though two agents evaluate a snake as dangerous, want to avoid harm, and take steps to avoid the danger, one is gripped with fear while the other remains calm. The frightened man, we say, is upset or disturbed; he is distracted or perturbed. We say he trembles or quivers or shudders with fear. The linguistic data do not, of course, present us with a ready-made theory. Exactly what these expressions refer to—and whether they refer to the same phenomena—is an open question. The Hybrid Theory, as I understand it, takes some of these descriptions as fundamental and analyzes the others in terms of them.

The fundamental descriptions refer to bodily disturbances: trembling, blushing, perspiring, and so on. There is a corresponding set of descriptions from the first-person point of view: emotional subjects undergoing such disturbances report experiencing pangs, throbs, tingles, burnings and other sensations. The exact nature of these bodily disturbances is a subject for empirical investigation. Experimental psychologists have identified a number of peripheral effects of neurological changes like adrenaline secretion; these effects include increases in heart and respiratory rates, alterations in blood flow to various parts of the body, and changes in blood pressure and digestive processes. These effects, it appears, regularly accompany emotional behavior in higher mammals; that is, behavior like flight, attack, foraging, distress vocalization, and so on. Similar effects are noticed in humans in connection with a much wider but roughly analogous range of behavior (see, e.g., Panksepp 1982). The fact that experimental psychologists have intensively studied these phenomena is taken by the Hybrid Theory as a definite point

in its favor. It suggests, if not confirms, the hypothesis that, to be emotionally upset or perturbed, is to be affected by peripheral bodily disturbances.⁵

Insofar as the Hybrid Theory focuses on these phenomena it can be seen as a descendant of William James's theory of emotion (James, 1892): But where James *identified* an emotion like fear with a certain pattern of physiological changes and bodily sensations, the Hybrid Theory regards these phenomena as only a component—albeit an essential component—of an emotion. Where James was committed to the claim that each of the different emotion-types—fear, anger, jealousy, grief, etc.—is distinguished by a unique pattern of bodily disturbances and feelings, the Hybrid Theory follows the Pure Theory in individuating the various emotions according to types of judgments or beliefs. What makes a certain psychological state anger, for example, is that an appropriate causal chain of mental and bodily states begins with: (a) the evaluation that someone has been treated unjustly; and (b) the desire that people (or at least some people, namely, this one) not be treated unjustly. These states then give rise to: (c) some distinctive sort of bodily disturbance, the exact nature of which is to be determined by scientific investigation; (d) certain sensations which are the subjective experience of some or all of the bodily disturbances; and (e) a desire to act in some characteristic way (e.g., rectify the injustice, seek revenge). Now it could turn out that each emotion-type has, as James thought, a unique pattern of physiological changes and sensations associated with it. But thus far neither introspection nor experimental psychology has tended to confirm James's view. It may be instead that there are only a few different types of bodily disturbance (and sensation) associated with emotion, such that several emotion-types—say, shame and embarrassment or disappointment and depression—have as a component the same sort of bodily disturbance. Or it could be that the bodily disturbances associated with some emotions also occur in the absence of emotion; say, as a result of illness or drugs. The Hybrid Theory hedges its bets by individuating the various emotion-types solely in terms of evaluative beliefs and dispositional wants.

II. OBJECTIONS TO THE HYBRID THEORY

The Hybrid Theory looks to be an ideal marriage of cognitive and feeling theories. Yet in crucial respects it is essentially an orthodox (i.e., pure) cognitive theory that makes only token concessions to the Jamesian view. For according to Lyons, evaluations not only serve to individuate emotions, they also explain the desires to act

typical of many emotions: “the evaluation of the object, event or situation, which the subject of an emotion makes, leads [him] both rationally and causally to certain specific desires, which in turn lead to behavior in suitable circumstances” (Lyons 1980, p. 49). For example, the urge to flee typical of fear arises, in Lyons’s view, as the rational product of the agent’s evaluation of danger and his desire to avoid harm.

It is here, I believe, that the Hybrid Theory runs into trouble. The problem is not, however, the use of the term ‘rational’ to describe emotional behavior; for there is still plenty of room for irrationality on this account, since emotional action is regarded as rational given the agent’s beliefs and desires, which may not themselves be rational. Rather my objection concerns the role that bodily disturbances and feelings are supposed to play in emotion. For if emotional desires are explained by antecedent evaluations and desires (which need not be emotional), what difference does it make if the subject of the emotion also undergoes certain bodily disturbances and sensations? These phenomena will, no doubt, make a difference in a person’s subjective experience and, to some extent, in his appearance; but they do not, according to the Hybrid Theory, have any appreciable effect on his intentional actions or tendencies to action.⁶

Suppose for example that a human being lacked the neurological mechanisms that give rise to these bodily disturbances; and suppose the mechanisms in question have no other causal role. Would this defective human lack emotion? According to the Hybrid Theory he would, despite the fact that he may nonetheless flee from danger, seek revenge when insulted, attempt to avoid embarrassing situations, and in general exhibit a wide range of typically ‘emotional’ behavior. He would not, of course, blush with embarrassment or tremble with fear; he would not display typical *signs* of emotion. But why suppose that these signs or symptoms are necessary to emotion? After all, a patient may have a disease yet exhibit none of the typical symptoms.

Now there is no reason, perhaps, why bodily changes and sensations *must* have some causal role (e.g., in producing action) in order to be essential components of emotion. It may be sufficient that they are part of some whole (constituting an emotion) in which some parts (e.g., beliefs and desires) do have such causal roles. However, these other parts of emotion (the beliefs and desires) may occur in the absence of emotion, and this leaves the problem of understanding how emotions function as distinctive explanations of action.

So my objection to the Hybrid Theory may not be a fatal objection; it may be that certain bodily disturbances are not merely symptoms of emotion but (in part) constitute emotion. My present point is that the objection is nevertheless an unanswered objection and that the problem of distinguishing emotional from unemotional evaluations really involves two questions. The first asks for an account of emotion sufficient to distinguish, e.g., the terrified man who flees out of fear from the fearless man who flees out of prudence. That is: what conditions must obtain, in addition to the presence of relevant beliefs and desires, in order for an emotional state to be the case? The second question concerns the significance of the additional conditions: what do they help us to explain, given that emotions have some explanatory role? Alston and Lyons have quite a lot to say about the first question, but neither addresses the second.

To answer the second question we need to look more carefully at the differences between emotional and dispassionate action. It is of course true that emotions do not always lead to action. Sometimes they only lead to tendencies to action; tendencies which may be inhibited or controlled. In other cases an emotion may lead to inaction; a person suffering from depression, for example, tends to neglect his typical interests and activities. In yet other cases there may be no tendency to action or inaction; but the subject of the emotion is nonetheless perturbed or upset or moved: his emotion has produced certain alterations in his typical (i.e., nonemotional) mental life. An account of the passivity of emotion ought to shed some light on all these cases. I shall begin with an example where an emotion issues in action; in Section III I offer an account of that example which is applicable to the other cases.

Before presenting that example let me note a methodological point. As mentioned above, emotions admit of degrees of intensity. Fear, for example, embraces a range of cases extending from mild apprehension to absolute terror; and anger includes the spectrum from slight petulance to full-blown rage. At the low end of the scale emotions converge with dispassionate attitudes; and in some cases it may be difficult to tell whether some particular mental state (or states) is (are) an emotion. But this vagueness needn't stand in the way of attempts to define the concept of emotion; what is needed is an account of the characteristics which become increasingly predominant as we move up the scale of intensity. (We also need an account of why those particular characteristics are essential). In accordance with this view I think it is worthwhile beginning with a case of intense emotion where such characteristics should be clearly evident.

My example concerns the differences in behavior of two individuals, Pat and Ray. Pat is a passionate person who is subject to strong emotions, and who often acts on the basis of those emotions. Ray is a mostly rational agent who usually acts on the basis of his considered judgments. I shall imagine that Pat and Ray make the same evaluation of a situation, and have the same attitudes or preferences with respect to that situation. But where Pat's evaluation leads to an intense occurrent emotion, Ray remains cool and composed. I then compare their respective actions given these assumptions, and consider how Pat's emotion explains his actions. Imagine the following case:

Pat and Ray go to see a film at their local cinema. They have been there many times before, since the cinema is showing a series on the political situation in Central America, and both Pat and Ray hold strong views on human rights. There is a large crowd and they take seats near the back of the theater. Part way through the film they smell smoke and soon the cry of 'Fire!' echoes through the hall. Smoke begins to waft into the theater, apparently coming from the direction of the lobby (the oil in the popcorn machine has ignited). Both Pat and Ray take the situation to be dangerous, though it is not yet difficult to breathe. But where Ray remains cool, Pat becomes very frightened: he feels terror-stricken and looks around anxiously for a route to escape. He leaps from his seat and rushes for what he takes to be the nearest exit—the lobby—and tramples a small boy and his mother who are standing in the aisle. Fortunately for Pat, Ray has surveyed the situation and has realized that everyone can be evacuated safely if they proceed in an orderly fashion through the two exits at the front of the theater. Ray helps up the boy and his mother, and goes to the lobby to assist Pat, who is nearly overcome by smoke. They go back into the theater and join the line of patrons filing patiently to safety through the exits near the screen.

Aside from the fact that I imagine the majority of movie-goers in the example as more closely resembling Ray than Pat, I think the scenario is a plausible one. Consider now the differences in action between Pat and Ray.

Ordinarily, we would explain those differences by saying, "Pat acted as he did because he was frightened; Ray was not." But we need to be more precise than that; what exactly does it mean to say that Pat was frightened, and how does his fear explain his ac-

tions? We cannot reply simply that Pat evaluated the situation as dangerous and wanted to avoid harm. For as I imagine the case, Ray shares those beliefs and desires yet is not in a state of fear.

It might be argued that, though Pat and Ray share certain beliefs and desires, they differ with respect to other antecedent beliefs and desires. Pat, it might be said, rushes for the lobby to escape the fire because he is unaware of other possible exits; and he tramples the people in the aisle in his urge to reach safety because he lacks concern for the welfare of others.

But I have constructed the example to rule out these possibilities. Pat and Ray have been to the theater many times before, and it is assumed they are equally familiar with its layout (they have stared at the two exit lights many times while waiting for a film to begin). And since both hold strong views on human rights, it is assumed they have an equal concern for the welfare of others. But it is consistent with these shared beliefs, attitudes and desires, I think, that Pat, under the influence of fear, is led to act just as he does.

Pat's fear might be summed up in terms of the thought '*I must get out of here now.*' I am not suggesting that Pat necessarily says this to himself (though he may) or that he even has a conscious thought which approximates it. Rather his actions seem to assume a desire of this sort; it explains why he rushes for the nearest exit (a poor choice as it turns out), and why his concern for the welfare of others takes a back seat to his concern for his own safety. This desire in part distinguishes his case from that of Ray, who does not have such a desire. Ray has a slightly different desire; his desire might be expressed by the thought '*I must get out of here now.*' Unlike Pat, Ray does not desire only his own safety; he is concerned for himself (perhaps above all) but not only for himself. And where Pat's '*now*' is a virtually unqualified immediate '*now*', Ray's '*now*' is more in the order of '*as soon as possible, consistent with the reasonable satisfaction of the needs of others.*'

But how is it that Pat finds himself seized with the desire '*I must get out of here now*' and Ray does not? One answer is that explanation terminates at this point; that our answer cannot go beyond '*Because he (Pat) is afraid.*' Or perhaps we can say a little more; we can say:

- (1) Pat differs from Ray insofar as Pat has some dispositional state such that, when he finds himself in a situation resembling the present one, he is likely to be seized with a desire like '*I must get out of here now.*'

A second answer is one that the Hybrid Theory might give.

Lyons's view, as noted above, is that emotional desires are the rational product of antecedent beliefs and desires. But this is clearly inadequate. It is true that Pat's desire to flee is supported by his evaluation of danger and desire to avoid harm. But these states are not alone sufficient to explain the peculiar *urgency* of his desire; after all, Ray shares these states but his desire to flee is rather different. We thus expect the Hybrid Theory will complement this account with some reference to Pat's bodily disturbances and sensations. But how do these bodily changes contribute to Pat's desire and subsequent action? As I see it, the Hybrid Theory has two possible responses.⁷ Both, however, seem to me unsatisfactory.

One response is that bodily feelings are motivational insofar as they are pleasant or painful. If Pat is motivated by certain bodily sensations—caused by constriction of the chest, rapid heartbeat, perspiring palms, and so on—it must be because

- (2a) Pat finds his sensations unpleasant and his actions are designed to eliminate or relieve those sensations; or
- (2b) Pat's sensations directly cause his urgent desire to flee.

I will set aside (2b); it is a version of the terminal explanation response: it says that emotional desires are caused by state *S* and that this fact is brute and inexplicable. There may be nothing wrong with this general answer. However it is unlikely, in humans, that the sensations directly cause desires; desires appear to be 'central,' sensations 'peripheral.' It is more likely that the sensations *and* the desire are caused by some third state. This then leaves open the question why we should regard the sensations and corresponding bodily disturbances as essential to, rather than by-products of, emotion.

Response (2a) is more interesting. Does Pat flee because he wishes to avoid having certain present sensations? He might, if we attribute certain other beliefs to him: namely, a causal hypothesis about the origin of his unpleasant feelings. For Pat does not, on the face of it, appear to take steps to eliminate his feelings; rather he seems bent on avoiding the danger presented by the fire. If his feelings are indirectly connected to his desire to flee the theater, a plausible explanation would need to posit a bridge between this desire and the aversion to certain feelings, i.e., the belief that the feelings are caused by the present situation and that eliminating the cause will eliminate the effect.

But do we need to attribute these beliefs to Pat? Do we have any reason to do so? Pat could, of course, have such beliefs as the (partial) cause of his actions. Or his fleeing could be motivated by

his desire to escape danger *and* his desire to eliminate his present unpleasant sensations. (This might explain why Pat's desire is more urgent than Ray's; Pat has two reasons to flee). What counts for theoretical purposes is first, whether Pat's actions (or desires) *must* have this sort of causal history (i.e., involving aversion to feelings); and second, if not, whether this causal history is *typical* of emotion (or at least of fear).

I think it is obvious that this causal history is not a necessary condition for the desire to flee. Pat may simply want to avoid the dangerous situation in the theater. A cast of other possibilities (avoiding his ex-wife, preventing his car from being towed, etc.) wait in the wings for confirming evidence. Indeed, the causal history in question, though not *recherché*, is rather special; in relatively few cases are sensations the (or an) object of emotion. The sort of aversion-behavior characteristic of disgust, for example, may centrally involve the desire to avoid certain unpleasant feelings. But it is implausible to take this sort of case as standard. Perhaps it gives us grounds for recognizing the role of bodily disturbances in *some* emotions.

The fact that bodily disturbances are typically associated with many emotions needn't guarantee that they play a central role in action; Pat, for example, may have such disturbances, yet only be dimly aware of them. It would not be surprising, for example, to hear Pat say, in recounting his adventure, that "only after I reached safety did I become aware that my heart was pounding, that I was trembling . . ." Such an admission strongly suggests that Pat may have an urgent desire to flee in the absence of any aversion to his present sensations. Response (2a) is thus unsatisfactory as a general account.

Another response consists in positing a different indirect role for the bodily disturbances. It might be argued that Pat's actions—choosing a poor escape route despite his knowledge of the environment, and trampling bystanders despite his concern for the welfare of others—are not the result of an especially urgent desire for his own safety. Rather we could say that Pat's desire to escape is exactly similar to Ray's, but the disparity in their actions is due to additional influences on Pat which effect the execution or satisfaction of his desire. Pat's bodily disturbances, the response runs, interfere with his process of decision; they somehow inhibit cool calculation and balanced judgment. How do they do this? A plausible answer is

- (3) Pat is *distracted* or diverted by his experience of profound

changes taking place in his body, changes over which he has little or no control.⁸

The result is not that Pat loses his concern for the welfare of others; rather he simply doesn't notice his trampling of the woman and her son. Similarly, he chooses to escape via the lobby not because he is concerned to find the nearest exit, but because the lobby is the only exit that comes to mind. To this might be added the hypothesis that Pat also fails to examine his own beliefs and decisions; he neglects, or is unable, to ask himself the right questions.

I find (3) intriguing, though it too is problematic. First, as I noted in connection with (2a), at the moment of decision Pat may only be dimly aware of the disturbances in his body, and this makes it unlikely that he is distracted by them. Second, the distraction argument would work only for emotions where the bodily disturbances are fairly intense; but not all emotions fall into this category. Third, and most importantly, it is decidedly more plausible to suppose that Pat's attention is focused on the danger rather than on his sensations. For one thing, this is a *simpler* explanation. We know, *ex hypothesi*, that Pat evaluates his situation as dangerous and wants to avoid harm. If his attention is concentrated exclusively on the contents of these states, it might explain his actions, given his other, apparently contradictory, states of mind (his geographical knowledge and other-directed concerns).⁹

I develop this explanation in the next section. Before abandoning the Hybrid Theory, however, there is an objection that deserves to be answered. It might be thought that my survey of possible connections between physiological changes and emotional action ignores some plausible candidates. The release of adrenaline (and other hormonal changes) are seen by ethologists as having adaptive functions for different organisms in life-challenging circumstances. One such function is preparing the body for action: increases in heart and respiratory rates, for instance, serve to marshal an organism's resources for flight or fight. Another function is communicative: the resulting changes in appearance alert others to the organism's state of mind and may succeed in, e.g., deterring an attacker or drawing aid.

I don't wish to underestimate the role that physiological changes may play in emotion. But it should be noticed that neither of these functions speak to the issue at hand. Though Pat may indeed be energized by a rush of adrenaline, the resulting peripheral changes contribute to the *efficiency* of actions performed in satisfaction of his emotional desire, and not to the formation of the desire itself.¹⁰ Perhaps Pat's bodily changes enable him to trample the boy and

his mother (or do a 'better' job of trampling them); but, for all we know, he would still try to do so in the absence of such changes. His ill-advised rush to the lobby might be less energetic if he were not affected physiologically; but this is not to say that he would thereby opt for another route of escape. Similar arguments, I take it, apply to the communicative function: the informational content of Pat's terrified appearance is undoubtedly important; but it has no apparent effect on his intentional actions (except via the effect of the actions of others on Pat's subsequent intentional actions, where the actions of others are modified by Pat's terrified appearance).

Let me sum up the gist of the argument thus far. The Pure Cognitive Theory (or at least Solomon's version of it) seems unable to account for the sense in which a subject is affected emotionally. The Hybrid Theory tries to fill this gap by analyzing affect in terms of peripheral bodily changes and sensations, where these phenomena are causal effects of evaluations. However, one may wonder whether these bodily disturbances are merely signs or symptoms of emotion rather than essential components. Alston and Lyons say little to allay these suspicions. An inquiry into the functional role of these bodily phenomena shows there is in fact little to say; these phenomena have important effects on *behavior*, but not on *intentional action*, except for the rather special case where sensations are the object of emotion. This conclusion, combined with two plausible assumptions, leads to the verdict that the Hybrid Theory is on the wrong track. The first assumption is that emotional action frequently has distinctive features not shared by dispassionate action. My example, I trust, makes that claim plausible. The second is that an emotional agent acts as he does because he is upset or perturbed. If that thesis were false, emotions would not play the explanatory role they do in our commonsense psychology.

The Hybrid Theory's first mistake is that it underestimates the Pure Cognitive Theory. To show this will be the burden of the next section. The mistake is, I think, an easy one to make; for the Pure Theory has not been well defended by its supporters. Once that mistake is made, it is natural to commit a second error: to adopt the bodily motions thesis without careful examination of its explanatory potential. For that thesis is not only the best available alternative, it comes certified with the seal of scientific research.

III. A NEW COGNITIVE THEORY

The principal difference between Pat and Ray, I have argued, is that Pat's desire to act is especially *urgent*. His desire is not merely a strong desire, however; Ray may want just as badly to escape

the danger. Pat has a special and immediate concern for his own safety: his desire can be summarized in terms of the thought 'I must get out of here *now*.' The challenge is to explain how is it that Pat is seized with this desire and Ray is not, given that both evaluate the situation as dangerous and want to avoid harm. One answer, which I have labelled the terminal explanation response, posits a direct and inexplicable causal link between this desire and some dispositional state of Pat (operating in tandem with his other beliefs and desires). Thus far I have not objected to that answer. But I believe it is less than satisfactory. For one thing, it is not very informative. For another, it does not promise a unified (or relatively unified) theory of emotion.

Though the particular example of fear I discuss clearly involves an urgent desire to act, that is not the case with every occurrent emotion or even every intense occurrent emotion. Suppose Diane is severely disappointed that she has not been accepted to medical school. Her disappointment need not give rise to some urgent desire to act. Indeed, she may be rendered incapable of action; she may be hurt and confused, muddled and bewildered. She is nonetheless emotionally upset and perturbed. The terminal explanation response would need to posit a number of different states, each giving rise to a different form of affect (urgent desire, bewilderment, etc.). Or, perhaps, it could posit some single state which has different effects depending on the agent's evaluation of his situation. But such a theory would be pluralistic; it would not offer a unified account of emotion, except (perhaps) at the physiological level.¹¹ As I note in Section IV, some degree of pluralism is inevitable in the theory of emotion. But I think we can do better than the terminal explanation response; I think a Pure Theory can offer an account which can illuminate the cases of both Pat and Diane, as well as numerous others.

The central concepts of the New (Pure) Cognitive Theory are *focus of attention* and *overvaluation*. In the remainder of this section I offer a sketch of the theory and show how it can be applied to a range of cases. In the following section I consider what the theory does and does not entail, reply to several objections and note some of the theory's limitations.

Applied to the example of fear, the New Theory proposes the following account. Though Pat and Ray are in similar psychological situations, Pat also has some dispositional state *E* that is activated by this situation. (Ray may have a functionally similar state that is 'kicked in' by different inputs). One output of *E* is an intensification of attention on the content of certain states: typically, the beliefs

and desires which trigger *E*. As a result, Pat fails to access relevant information in his possession and he neglects considerations which would normally have a role in his decisions.

The beliefs and desires which trigger *E* are Pat's evaluation of danger and his desire to avoid harm. As a result of *E* (and these other states) he is completely absorbed with thoughts of danger and concern for his own safety, though the situation is not yet a crisis; this preoccupation leads to, or is implicit in, the desire '*I must get out of here now.*' Though in possession of relevant knowledge—the location of the various exits—he does not stop to reflect on the best route of escape: he follows the first stratagem that comes to mind. Unluckily, he flees towards the smoke-filled lobby, a poor choice. His preoccupation also leads him to neglect considerations which would normally figure in his planning: his concern for the well-being of others is pushed into the background, and he callously tramples others in his desperate urge to escape.

Pat's emotional desire need not be the outcome of some explicit chain of reasoning. Once he perceives the danger he is quickly seized with the urgent desire to flee. It may be that he forms this desire as the result of some rapid but unconscious computation, distinguished by the focus of attention described above. But I needn't make that (plausible) assumption in order to distinguish my view from the terminal explanation response. For even if Pat's desire is a direct effect of the hypothetical state I call *E* (in conjunction with relevant evaluations and desires), the New Theory differs from the terminal explanation response in identifying certain essential features that are implicit in that desire; it involves an *obsessive overvaluation*: a focus of attention on particular aspects of the situation, resulting in a disproportionate weighting of the facts. As I shall argue, it is these features which are applicable to cases of emotional passivity not characterized by especially urgent desires.

In an important sense Pat's actions are irrational; it is just this sort of case that lends credence to the popular view that an emotional response is not a rational response. At the same time, there is a sense in which Pat acts rationally, given his (irrational) overvaluation; if his life is in imminent danger (as it appears to him), it makes sense to escape through the nearest exit, leaving others to fend for themselves. However, not every case of an urgent emotional desire to act can be rationally reconstructed in this way. Consider a case of anger. Ira has been overlooked for a choice assignment; a co-worker with less seniority has been handed the job. Ira sees himself as the victim of an injustice, and he finds himself preoccupied with thoughts of revenge. The desire for revenge is arguably

a classic case of irrationality; not only is revenge unlikely to correct the apparent injustice, it may lead to further injustice. (It is true that revenge may sometimes have a deterrent effect; but the vengeful person typically has retribution, not deterrence, in mind).

Now Ira forms the desire for revenge in part because he is entirely preoccupied with the injustice. He tends to overvalue certain facts—namely, the injustice he perceives himself as suffering—because he is unable, or finds it difficult, to consider other facts bearing on the situation. It may be that the co-worker has relevant talents that he does not; or perhaps the employer is saving an even choicer assignment for Ira. But these possibilities do not even occur to him. His anger has become a criterion of salience; he only perceives his own talents, the defects of his rival, and the animosity of his employer. Though the injustice, if genuine, is relatively minor, Ira tends to blow it out of proportion; he regards it as disgraceful and criminal.

How does this tendency to overvaluation contribute to the desire for revenge? The explanation here is not as obvious as in the example of fear; Ira's desire is not the rational outcome of his overvaluation of injustice and his desire not to be a victim of it. The tendency for aggressive counterattack may be instinctual or 'hard-wired'; a complete explanation may require an evolutionary account of emotion. Thus the terminal explanation response has some currency. But the obsessive overvaluation is nonetheless relevant; it serves as a trigger for the aggressive reaction: the more extreme the evaluation, it seems, the greater the tendency to seek revenge.

The notion of an obsessive overvaluation applies equally to cases of emotion not distinguished by an urgent desire. Consider the case of Diane, disappointed at her failure to be accepted to medical school. Her fondest hope has been frustrated and she is hurt and bewildered. She doesn't know where to turn; she finds herself brooding over her failure and her uncertain future. But things are not as bad as they appear; she is young and bright and a world of possibilities await her. Were she not emotionally affected she would sit down calmly and map out her options: she could take a graduate degree in biology or re-apply to medical school or pursue her interests in medical ethics. But these possibilities receive little weight in her reflections. For her attention is focused squarely on her failure; she sees her years of work as wasted, her ideals an illusion, the encouragement of her teachers a cruel joke. Fortunately this emotionally-induced loss of perspective is usually temporary; when the shock of disappointment passes she will likely be in a better position to make rational plans for her future.

Diane may also be affected physiologically as the result of her evaluation. She may feel 'down' or 'blue'; she may have little energy and no appetite. These bodily changes, perhaps, make it even more difficult for her to deal with her situation in a rational and constructive way. I do not deny that physiological changes of the sort proposed by the Hybrid Theory have some role in emotion. What I deny is that bodily changes *constitute* being emotionally upset or perturbed, or are even necessary to such a state. For imagine that Diane is *not* affected by peripheral physiological changes; it would nonetheless be fair to describe her as emotionally affected on the basis of her obsessive overvaluation. On the other hand, if she were affected bodily but not cognitively we might describe her as 'moved'; but such a description would have little point: it would not connect up in any interesting way with her beliefs and goals.

The explanatory power of the New Theory should be evident from these examples. I note some of the limits of the theory in the next section. By way of concluding this sketch of the theory let me mention one of its other virtues. Solomon's version of the Pure Theory seems unable to account for the intensity of emotion; beliefs and judgments do not seem to be the sorts of things which admit of degrees of intensity. The New Theory shows that there are in fact two parameters of belief that allow us to measure the intensity of an emotional state. First, attentional focus itself admits of degrees; a person may be mildly interested in or completely absorbed by some state of affairs. Another mode of intensity is a typical product of attentional focus: overvaluation. Though beliefs do not admit of degrees (except along the scale of certainty or confidence), evaluation terms do admit of such degrees: an agent may evaluate a situation as better or worse, less or more dangerous, unjust, disappointing, embarrassing, etc. Since an emotional agent's evaluation of a situation tends to be more extreme than it would be in the absence of emotion, we can measure the intensity of his state according to the degree to which his evaluation diverges from his dispassionate norm.

I call this account a 'new' cognitive theory. Its central idea is hardly new, however; it can be traced back at least to Descartes, who remarked that the passions "almost always cause the good things, as well as the evil, to seem much greater and more important than they are; so that they incite us to seek after the one and flee from the others with more ardor and care than is desirable" (Descartes 1911, sec. 138). A number of contemporary writers have also alluded to concepts like attention and salience (Rorty 1980; Calhoun 1984). But this view has not, to my knowledge, been system-

atically developed; most importantly, it has not been developed as an alternative to the Hybrid Theory's analysis of passivity.

IV. OBJECTIONS AND LIMITS

The chief objections to my theory concern attentional focus and overvaluation. Does the theory commit us to regarding every instance of attentional focus as an emotion? Since attention is always directed to something or other (at least during waking life), does this mean every conscious person is always in some emotional state? Or, if focus of attention entails some minimum period of attention, does this mean that we are not in some emotional state only when our attention flits rapidly from one thing to another? With respect to overvaluation: does the theory make it a matter of definition that emotions are irrational or unreasonable? If so, how does it rule out the existence of plausible cases like appropriate anger or shame? Why is it impossible to have an emotional judgment which is proportionate to its object?

As far as attentional focus is concerned, the questions above rest on a misunderstanding of my use of the phrase. We can distinguish between *active* and *passive* attention; the difference between, say, my thoughts of tomorrow's session with the dentist, and my dentist's thoughts of that same session. Where the dentist carries out a prior intention to plan for tomorrow's appointments—she sits down at four o'clock and reviews the next day's cases—I find myself at four o'clock dwelling on the impending experience of being in the dentist's chair, despite my earlier intention to avoid thinking about it. When the dentist finishes her planning, her attention turns elsewhere; mine, however, remains on the dreaded future prospect, thought it may occasionally shift elsewhere. I require considerable effort to avoid thoughts of the dentist's drill; for her the shift in topic is effortless.

It is not so much that I think *longer* about tomorrow's appointment, though I probably do. My case may present difficulties, and the dentist may spend considerable time examining X-rays, checking reference works, and so on. (Her reflections may also include thoughts of me as a person, not just a set of molars). It is rather that I am *prepossessed* by (or with) certain thoughts; her psychological life at four o'clock is best described with active verbs like 'reflecting' and 'deliberating'.

I use the phrase 'attentional focus' to indicate this passive sort of attention. Though it is probably true that a significant portion of mental life consists in thoughts and images that are not deliberate—that simply occur, randomly, by association or as a result of

perception—only a minority of these are emotional. The emotional thoughts are, in the first place, evaluative. They also tend to be powerful and persistent: unlike many nondeliberate thoughts, emotional ones have important links with desire and action.

The objections to overvaluation are more challenging. Isn't it possible for a person to be in an occurrent state of anger—even an intense state of anger—yet his anger be in just proportion to its object? Moreover, aren't there situations where it is right or appropriate for a person to be angry? Similarly, does it follow from the fact that a man is in love that his attitude towards the beloved is disproportionate or unreasonable?

To answer these objections we should first distinguish questions about the universality of overvaluation in emotion from questions about the value of such overvaluation. It could be that anger is sometimes right or appropriate *because of* the tendency to overvaluation. (Perhaps this tendency helps to ensure active opposition to injustice). I will set the normative issue aside and consider whether it is fair to assume that all emotions involve overvaluation.

Three characteristics of emotion should be kept in mind when reflecting on this question. First, emotions admit of degrees of intensity; and this intensity (I have argued) is proportional to the degree of attentional focus and overvaluation. So it is possible for a person to be angry while exhibiting only a subtle degree of overvaluation. Second, I claim only that emotions involve a *tendency* to overvaluation; and this tendency may be overridden by other beliefs and desires. So a person may be angry, yet betray no obsessive overvaluation. Third (and most importantly), my concept of overvaluation should be understood in relative terms; not in terms of some objective standard of rationality, but rather in terms of the emotional subject's everyday dispassionate attitudes. For obviously a person's dispassionate judgments may be over- (or under-) valuations; in the absence of emotion he may have an inflated sense of his self-worth or believe that the injustice in South Africa is real but minor. Emotion has no monopoly on unreason. But what emotions tend to do is *amplify* judgments and attitudes: when this same person is in the relevant emotional states his sense of self-worth expands to massive proportions (pride) and his evaluation of racial injustice moves up the scale from minor to serious (anger or indignation). Though both emotional judgments are overvaluations relative to the agent's dispassionate beliefs, the second is nonetheless a fair and appropriate evaluation from the point of view of normative reason. So it is possible, within the framework of the New Theory, for an instance of anger (or any other emotion) to involve judgments which are objec-

tively in just proportion to their objects.¹²

There may be cases, however, where attention (of the passive sort) is concentrated on some situation and an overvaluation is virtually impossible. A grief-stricken parent who views the death of her young child as tragic and catastrophic can hardly be regarded as guilty of an overvaluation; and indeed, it is hard to imagine that her dispassionate evaluation (were she able to view the situation dispassionately) would be any different. Yet the New Theory can still distinguish her emotional state from a dispassionate state involving the same judgement: while grief-stricken she finds it difficult to think of anything but her loss. Notice also that, if her grief were so intense that it persisted beyond a decent interval, it would be appropriate to offer her the gentle reminder that life does, and must, go on.

I turn now to the case of love. That case seems at first a fairly weak counterexample to my theory, since the process of 'falling' in love is so often represented by poets as a (wonderful) sort of irrationality. But ecstatic passionate love is of course not the only sort of love; there is also the case of steady and durable devotion. And it doesn't seem that loving devotion necessarily involves overvaluation. Such a case presents a problem because we cannot say that the emotional attitude is sensible because the emotion is weak; for the beloved in this case cannot fairly charge her lover with not loving her deeply enough.

A better answer, I think, is that loving devotion is largely dispositional. It counts as an emotion because it involves a disposition to experience other emotions in typical circumstances, e.g., anxiety and sympathy when the beloved is ill. These emotions typically involve the sorts of obsessive overvaluations I have discussed. If the devoted lover did not tend to experience these emotions in relevant circumstances, we could still label his attitude 'love.' But we would not describe him as 'emotional.' 'Love' in this case would denote a dispassionate evaluative judgment rather than an emotion. Emotion-terms do not always denote emotions: I may fear it is going to rain or regret leaving the party early, yet 'fear' and 'regret' not refer to emotional states.

Finally, let me acknowledge some of the limitations of the New Theory. Though the theory can, I believe, illuminate a wide range of cases, it cannot handle every case. There are momentary emotions—cases of surprise and irritation, for example—that are too fleeting to involve the sort of focus of attention I have described. Perhaps emotional affect, in these cases, is best described in terms of bodily changes and sensations. There are other cases like joy where

the emotion begins with a focus on some particular object—a financial windfall, say—but then develops into a generally joyful mood where relatively many things are seen as in a rosy glow. This sort of case is at least partly amenable to analysis by the New Theory: the focus on attention is not on a particular object, but on *aspects* of the world in general. Certain features of the world—namely, the positive ones—stand out, and others recede. But in this case, unlike the momentary cases, the agent's cognitive state—his general point of view—has undergone a transformation. Relative to his dispassionate state (and, sadly, the world) his perspective constitutes an overvaluation.

It is unrealistic, I think, to expect any theory of emotion to capture every case; emotional phenomena are simply too diverse. Any theory bold enough to attempt a thoroughly unified account of emotion is inevitably sentenced to death by counterexample. Yet there are cases and there are cases. The momentary emotions that give the New Theory trouble are, I think, fairly trivial. One of the merits of the New Theory is that it addresses the morally interesting cases: those in which emotion leads to action (or inaction or cognitive transformation) that cries out for explanation. One of the glaring weaknesses of the Hybrid Theory is that it has most to say about the trivial cases. Let me conclude by mentioning a final example: a nontrivial case that poses problems for the New Theory and which one would expect the Hybrid Theory to handle nicely. However, I am not convinced that the Hybrid Theory can in fact illuminate this case; and this suggests the alternative to the New Theory may lie elsewhere.

Consider the rather curious emotion of embarrassment. Embarrassment involves the subject's evaluation that he is the object of the attention of others, and a desire not to be such an object. But embarrassment is selective; not even very shy people have a universal aversion to being the object of attention. Why then this aversion in some situations? We cannot say that the relevant features of embarrassing situations always involve others noticing one's defects or inadequacies, for a person can be embarrassed by (justified) compliments as well as by criticisms. One can be embarrassed without being ashamed.

It may be possible to explain the aversion-behavior typical of embarrassment without solving the mystery of why people get embarrassed. For the fact is, embarrassment is an unpleasant experience; the subject of embarrassment is bothered by feelings of self-consciousness. He might not mind being an object of attention—many people don't—if the attention didn't make him feel awkward and uneasy. In order to minimize these feelings he tries to shift

attention to another topic or in some way make himself inconspicuous. Or at least he has a tendency to do so; he may just grin and bear it while at the same time wishing he were elsewhere.

An organism that lacked feelings might have no reason to avoid or minimize the embarrassing situation; it would not *feel* embarrassed. It is tempting to conclude from this that the Hybrid Theory is, after all, on the right track: a full-blown theory of emotion should include feelings as well as evaluations and desires, at least with respect to some emotions. But there is a problem about the nature of (some) emotional feelings that the Hybrid Theory may be ill-equipped to handle. According to that theory, emotional feelings are bodily sensations caused by disturbances in the periphery of the body. These sensations (or the bodily changes which give rise to them) are caused by, *inter alia*, certain evaluations. But the sensations themselves have no intentionality; they are mere throbs, pangs and tingles. They count as feelings of fear or anger or embarrassment insofar as they bear the right sort of causal connection with the relevant evaluations. But the example of embarrassment should make us suspicious of this account. It seems to me that the experience of the embarrassed person cannot be divided into an evaluation *and* certain feelings. However, we can make such a distinction in the case of bodily feelings. One can imagine having all the bodily symptoms associated with fear in the absence of any evaluation of danger. (Apparently injections of adrenaline can produce such symptoms). But can we imagine feelings of self-consciousness without some reference to the attention of others? It seems to me we cannot. Feeling self-conscious is the experience of the unwelcome attention of others, not just a feeling caused by (the perception of) such attention. The feeling itself appears to be an intentional state or an aspect of an intentional state. The bodily sensation account of feelings is unable to capture what may be an 'intimate' relation between emotional feelings (or some emotional feelings) and evaluations. So the Hybrid Theory not only neglects the cognitive approach to affect, its account of (some) emotional feelings may also be suspect.¹³

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NOTES

¹Those who explicitly defend this view include Alston (1967), Lyons (1980), Rey (1980), and Schaffer (1983).

²This is usually what philosophers have in mind when they refer to the "passivity" of emotion. For a more minimal sense see Gordon (1986). I express doubts about Gordon's approach in Nash (1987).

³Lyons (1980), p. 115. That Lyons intends to analyze 'being emotionally upset' in terms of bodily motions is made clear elsewhere in the same work (e.g., p. 58).

⁴I thus use the term 'cognitive' rather broadly, as embracing a good deal more than knowledge or belief. Such a theory might be more accurately labelled purely cognitive/conative or purely intentional. I adopt the broader usage primarily for convenience. Still, my use of the term does not diverge widely from that of the so-called cognitive sciences, which concern themselves with wants, goals and intentions as well as beliefs.

⁵Alston uses the terms 'bodily disturbance' and 'bodily upset'; Lyons prefers 'unusual bodily changes,' so as to allow for decreased pulse and respiratory rates associated with emotions like depression or ennui (Lyons 1980, pp. 116-117). The distinction is not crucial for my discussion in this paper and I often ignore it.

⁶Neither Lyons nor Alston explicitly makes this claim. Since they are silent on the effects of bodily disturbances on action, I attribute the claim to them by default. Jerome Schaffer, however, does make the point explicit; noting the "irrelevance of emotion to belief and desire on the one hand and action on the other," he concludes that emotions are "superfluous" (Schaffer 1983, p. 163).

⁷As noted earlier, Alston and Lyons do not address the present question; the responses I attribute to the Hybrid Theory are thus speculative.

⁸Alston alludes to this point in passing (1967, p. 482).

⁹Another possibility is that the bodily disturbances disrupt or interfere with the agent's intentional actions whether or not he is clearly aware of those disturbances. This possibility

falls under the terminal explanation response, which I discuss in Section III. See also n. 10.

¹⁰If the release of adrenaline is responsible for the desire itself, then we return to the terminal explanation response. As noted earlier, there may be nothing wrong with that answer. It cannot be the Hybrid Theory's answer, however, for in that case the relevant physiological changes would be central rather than peripheral.

¹¹The empirical data do not appear to support the single state hypothesis, however. There appear to be at least four different neural circuits involved in emotion, though even this reduction is controversial. See Panskepp (1982) and the commentary in the same volume.

¹²It might also be possible for an agent to have similar (disproportionate) attitudes in both emotional and dispassionate states. It is conceivable that Ira could continue to over-value the injustice, his merits and his colleague's demerits, though now he is no longer angry but resigned. However, such a case would arise, I suspect, as the result of a sort of cognitive inertia; if Ira had not first been angry, he would not now regard the matter in this light.

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