

CHAPTER 14

EMOTION, MOTIVATION, AND ACTION: THE CASE OF FEAR

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CONSIDER a typical fear episode. You are strolling down a lonely mountain lane when suddenly a huge wolf leaps towards you. A number of different interconnected elements are involved in the fear you experience. First, there is the visual and auditory perception of the wild animal and its movements. In addition, it is likely that, given what you see, you may implicitly and inarticulately appraise the situation as acutely threatening. Then, there are a number of physiological changes, involving a variety of systems controlled by the autonomic nervous system. Your heart races, your breathing becomes strained, and you start trembling. These changes are accompanied by an expression of fear on your face: your mouth opens and your eyes widen while you stare at the wolf. There is also a kind of experience that you undergo. You are likely to feel a sort of pang, something that might consist in the perception of the physiological changes you are going through. Moreover, a number

A first version of this chapter has been presented at the workshop *La Peur. Épistémologie, Éthique et Politique*, Paris 2007, organized by Bertrand Guillarme and Ruwen Ogien, whom I would like to thank. For discussions, I am grateful to Frédéric Bouchard, Luc Faucher, Bertrand Guillarme, Daniel Laurier, Vanessa Nurock, Ruwen Ogien, Cass Sunstein, and especially Ronnie de Sousa and Peter Goldie, whose comments greatly helped me to improve the chapter.

of thoughts are likely to cross your mind. You might think that the wild beast is about to tear you to pieces and that you'll never escape from this. In addition to this, your attention focuses on the wolf and its movement, as well as, possibly, ways of escaping or defending yourself. Last, but not least, your fear is likely to come with a motivation, such as an urge to run away or to strike back.

Whatever the details of the story, it is clear that a typical emotion episode involves a number of different components. Roughly, these components are (a) a sensory perception or more generally an informational component, (b) a kind of appraisal, (c) physiological changes, (d) conscious feelings, (e) cognitive and attentional processes, and (f) an action-tendency or more generally a motivational component. One central question in the theory of emotion is which, if any, of these components, constitute the emotion. For instance, is the fear you undergo a feeling, a thought, or an action-tendency? Or else, does it involve several or maybe all of the components on the list? What can we subtract without losing the emotion of fear? In other words, the question is what, if any, components are essential to fear. More generally, emotion theorists have tried to determine what, if any, are the essential components of emotions, regardless of the kind of emotion under consideration.

As is shown by the example of fear, it is natural to think that emotions are intimately related to motivation and action. The question I am interested in concerns the motivational component of emotions. What exactly is its nature? Is it a behavioural disposition? Is it a desire? Is such a motivational component necessarily present? And what is its relation with the other components of emotions?

These questions are closely related to the question of the rationality of emotions. Emotions have traditionally been considered as a threat to rationality, whether theoretical or practical. Our angers, envies, and fears have been accused of interfering with proper reasoning, to favour irrational behaviour, and to elicit immoral actions. Following the works of Ronald de Sousa and Antonio Damasio, a new consensus has established itself among emotion theorists, be they philosophers, psychologists, or neurologists.¹ Most theorists now claim that, far from constituting an obstacle to rationality and morality, emotions are both necessary to the proper functioning of theoretical and practical rationality, and essential to moral action. In brief, emotions would allow us to think and act more appropriately, both from the point of view of prudence and ethics.²

The question is whether or not the proposed revalorization of emotions is plausible. Clearly, some kinds of emotions, such as anger, envy, or fear, do not

easily fit such a rosy picture. These emotions often seem to trigger actions that fail to promote our self-interest, to say the least. And even when such actions happen to be in our best interest, they have little to boast about, morally speaking. Consider fear again. Insofar as this emotion seems to come with innate behavioural dispositions, which are automatically triggered by stimuli that constituted a threat to our ancestors but not for us, and which result in a narrow range of behaviours, one can doubt that fear can help us to act appropriately in the actual world. Moreover, it seems rather hopeless to claim that actions motivated by fear are morally admirable. The motivations that are involved in fear seem clearly self-interested. Thus, it would seem that it is at best by favouring behaviours that conform to what morality requires that fear, and in particular fear of punishment and of blame, can play a role in moral motivation. Fear thus appears to resist the current revalorization of emotions. And much the same could be said of emotions such as anger or envy, for instance.

The picture of emotions presupposed in these considerations is one that involves two theses. First, *the thesis of motivational modularity*, according to which emotional motivations are rigid and innate behavioural dispositions. Second, *the thesis of motivational egoism*, which claims that emotional motivations aim at the interest of the organism that experiences the emotion. Both theses can be questioned; or so I shall argue.

Note that instead of considering emotions in general I shall mainly concentrate on the motivational component of fear.³ Fear is clearly a good candidate for both the thesis of motivational modularity and that of motivational egoism. My aim is to show that these two theses are problematic, even when applied to fear. As far as I can see, it is methodologically preferable to be prudent when making claims about emotions in general. It is likely that the relation to motivation can be tighter or looser depending on the kind of emotion. Thus, joy, hope, and awe seem to have a much looser relation to motivation, compared with other kinds, such as fear and anger.

My plan is the following. I start with some general points about fear. After that, I spell out and discuss the thesis of motivational modularity. We will see that, even though that thesis is plausible in cases of non-human fear, this is not so for human fear. This is why I turn to the claim that fear comes with some specific desire instead. In the last section, I discuss the thesis of motivational egoism. I argue that when we experience fear for someone else, the motivation involved is exactly as altruistic as when we feel compassion for that person.

¹ See de Sousa (1987) and Damasio (1994). Karen Jones speaks of a new pro-emotion consensus (Jones 2008).

² There are notable voices of dissidence to this consensus, such as Jon Elster (1999). Interestingly, the pro-emotion consensus also fails to be widely accepted by laymen, who seem much more ambivalent with respect to emotions.

³ This is not to deny that many if not all emotional dispositions normally come in structured networks, which correspond to concerns or cares. To care for someone is to be disposed to a range of emotions that depend on how that person fares: fear if we think that things will go badly for her, happiness if we think that they will go well, hope if we think that there is a fair chance that they will improve, etc. See Shoemaker (2003), as well as Nussbaum (2001); Prinz (2004, pp. 188 ff.) and Helm (this volume).

14.1 FEAR AND THE PERCEPTION OF THE FEARSOME

Even if you restrict yourself to occurrent emotions, that is, episodes of emotions that are experienced at a certain time by a certain person, it is striking that there is a wide variety of terms related to fear.⁴ This suggests that there are different kinds of fear. *Prima facie*, it seems we can distinguish between anxiety, anguish, apprehension, worry, phobia, fright, terror, panic, not to mention *megatu* of the Ifaluk people, an emotion which seems to be very close to our fear, but which is positively valued, as those who experience it are proud of themselves.⁵ In addition to this, we often distinguish between fears on the basis of their objects: we speak of fear of heights, agoraphobia, arachnophobia, flying-phobia, etc., while the Chinese have a term for fear of the cold: *pa-leng*.⁶

What all these kinds of fear share, I propose, is that they are related to what is fearsome.⁷ Indeed, the claim that fear and the fearsome are intimately related is certainly a good candidate for being a conceptual truth. More specifically, as many would agree, the object of fear appears to be represented as fearsome. According to some, this means that fear consists in or at least necessarily involves the evaluative judgement that something is fearsome.⁸ However, there is reason to think that the representation in question is not a judgement or more generally a propositional attitude, that is, a state that requires the possession of concepts.⁹ For one thing, fear can be experienced by beings that do not seem to possess concepts, such as animals and new-borns.¹⁰ Another reason is that we often experience so-called recalcitrant fears: we can fear something even though we also judge that it is not fearsome.

⁴ For the concept of occurrent emotion, see Lyons (1980), pp. 53–7. Another useful distinction to be made is between long-lived emotional states, such as Marcel's jealousy for Albertine, to borrow an example from Peter Goldie (2000), and shorter emotional episodes, such as the disgust you experience when seeing a rotten corpse. Both philosophers and psychologists have in general concentrated on such short-lived emotions and I will follow their lead.

⁵ See Lutz (1988), ch. 7; Roberts (2003), pp. 197–8.

⁶ Thanks to Jingsong Ma for information on this emotion. According her, it is not clear that *pa-leng* is a morbid fear of the cold, associated with a *yin/yan* imbalance (but see Prinz 2004, p. 135 and Kleinman 1980).

⁷ A nice question is whether the so-called formal object of fear is the fearsome (D'Arms and Jacobson 2003), the threatening (Nussbaum 2001), the dangerous (Prinz 2004), the property of being an aversive possibility (Roberts 2003), or the frightening (de Sousa 1987). Depending on the preferred option, the formal object of fear will be either a relational property of the world or a response-dependent property, something which can nonetheless be perfectly objective (see Wiggins 1976). Though I am not arguing for this here, I think the latter option is the correct one.

⁸ See Solomon (1976) and Nussbaum (2001), for instance.

⁹ By 'concepts', I mean content elements that have to be postulated in order to account for the inferential relations between thoughts. See Evans (1982); Crane (1992); Tye (2006).

¹⁰ See Morreall (1993); Deigh (1994).

If one assumes that fear involves a judgement about fearsomeness, one would have to attribute contradictory judgements to the person who experiences the emotion. But whatever irrationality is involved in recalcitrance, it seems to be a less acute species than what is involved in contradictory judgements.¹¹ To account for recalcitrance, one might suggest that the propositional attitude in question is one that fails to involve a commitment to the truth of the proposition. Thus, it has been claimed that fear involves construing things or seeing things as fearsome, something that is perfectly compatible with the conviction that the thing in question is not fearsome.¹² The problem, however, is that construing or seeing something as fearsome would not explain why, when we experience fear, we are nonetheless tempted to avoid what we fear. If I construe or see a cloud as a horse, I am not likely to be tempted to try to ride it.

Does this entail that fear does not involve any evaluative representation? If so, we would have to explain why we are prone to assess our emotions with respect to how they appear to fit evaluative facts. We criticize our fears when they are about things that are not fearsome, for instance. Fortunately, there is an alternative to the claim that emotions involve evaluative propositional attitudes. It consists in the claim that the appraisal involved in fear is a non-propositional representation, or, what is generally taken to be equivalent, a non-conceptual representation.¹³ To fear something and hence to represent it as threatening, it is not necessary to judge that it is fearsome. Fear can involve a non-conceptual representation of the thing as fearsome. This idea is often formulated as the claim that emotions are perceptions of values, where it is understood that the perceptions in question are non-conceptual.¹⁴ On this account, emotions involve a representational content in the minimal sense that they have correctness conditions. So, they can be assessed in terms of their fittingness. For example, fear would consist in the perception of its object as fearsome. Such a perception represents its object correctly when this object is really fearsome.

Much more would have to be said to spell out and defend the view that emotions are perceptions of values. Let me simply assume its truth. Now, if it is true that fear is the perception of something as fearsome, it will also be true that fear is the perception of something as having a negative value. This follows from the fact that to be fearsome is to be *pro tanto* bad. Now, as far as our fears are reliable, they will inform us about our practical reasons. For nobody would deny that we have

¹¹ See Rorty (1978); Greenspan (1988); Deigh (1994); D'Arms and Jacobson (2003).

¹² See Roberts (2003); and also Greenspan (1988) for the claim that emotions involve evaluative thoughts.

¹³ See Tappolet (2000, ch. 6) and Tappolet (forthcoming); Tye (2006, pp. 13–14).

¹⁴ Perceptual accounts of emotions are defended by Meinong (1917); de Sousa (1987), (2002); Tappolet (1995), (2000), (forthcoming); Charland (1996); Stocker and Hegeman (1996); Johnston (2001); Prinz (2004), (2008); and Deonna (2006).

pro tanto reason to avoid what is fearsome.¹⁵ Thus, fear makes it possible to explain the action it causes in terms of practical reasons. But even if this gives us a better idea of how fear relates to action, this story leaves open the question of the relation between fear and motivation. In particular, it is neutral with respect to both the thesis of motivational modularity and the thesis of motivational egoism.

14.2 THE THESIS OF MOTIVATIONAL MODULARITY

When one thinks of the behaviour of the alpine marmot that has seen an eagle circling in the sky, or of that of the hare when a fox chases it, it seems plausible that fear comes with rigid behavioural dispositions, such as the disposition to flee or to freeze. Such dispositions seem to have the following characteristics:

- (a) they are innate, in the sense that they are causally facilitated by our genes;¹⁶
- (b) they are triggered by a narrow range of stimuli, such as the perception of a predator;¹⁷
- (c) their manifestation is rapid and automatic, and it does not require the intervention of thought or decision;
- (d) they result in a small number of specific behaviours, such as flight or freeze.

A motivational mechanism underlying such reactions can be characterized as modular, for it shares important traits with modular systems as described by Jerry Fodor (1983). Fodor defines modules as information processing systems that are (a) domain-specific, their responses being restricted to a specific class of stimuli, (b) mandatory rather than subject to the will, (c) opaque, in the sense that central cognitive processes have no access to the representations contained in the modules, (d) fast, (e) informationally encapsulated, in the sense that, in the processing of information, the systems' access to beliefs, desires, and utilities is restricted, (f) producing superficial outputs, which are framed in basic categories, (g) having a fixed neural architecture, and (h) corresponding to specific breakdown patterns.¹⁸ Now, on the account under consideration, the motivations related to

¹⁵ This is particularly obvious if one assumes with de Sousa (1987) that the proper object of fear supervenes on dangerousness.

¹⁶ As Prinz notes, this does not exclude that dispositions' development depends in part on the social and natural environment. As Mineka et al. (1984) note, the Rhesus monkeys' disposition to fear snakes arises only when they see other monkeys manifesting fear when confronted with snakes (see Prinz 2004, p. 104).

¹⁷ To make room for the fact that most beings can learn to fear new kinds of things, one would need to add that this claim only concerns what we fear without conditioning.

¹⁸ For more details and for other concepts of modularity, see Faucher and Tappolet (2008).

fear manifest domain specificity, the reactions being restricted to the specific range of stimuli that are constituted by the fearsome. They are also characterized by being mandatory, by rapidity, as well as independence from higher cognitive systems, and innateness. So, it would seem that the mechanism that underlies fear reactions, though being an output rather than an input system, is modular.

In one form or another, the thesis of motivational modularity is widespread. First, many have insisted that fear comes with a limited number of motivations. For instance, Nico Frijda, who holds that emotions are in fact what he calls 'action-tendencies', claims that the action-tendency that characterizes fear is avoidance (1986, p. 88). In a similar way, Jon Elster suggests that '[f]ear has two action tendencies: fight or flight' (1999, p. 282).¹⁹ Leda Cosmides and John Tooby have the same general conception, but they add two other types of motivation. They claim that fear, and more specifically the fear of being stalked, involves a range of fixed behaviours:

Behavioral decision rules are activated. Depending on the nature of the potential threat, different courses of action will be potentiated: hiding, flight, self-defense, or even tonic immobility [...]. Some of these responses may be experienced as automatic and involuntary. (2000, p. 94)

The claim that such reactions are modular is explicitly made by Paul Griffiths (1997). Griffiths is interested in the evolutionary benefits of the modularity of emotions in general, but there is no doubt that he would be happy to make the same claim about fear and its related reactions:

[...] the modularity of our emotional responses can be seen as a mechanism for saving us from our own intelligence by rapidly and involuntarily initiating essential behaviors. If central cognitive processes conform more or less closely to rational decision theory and implement plans designed to maximize expected outcomes, there may be evolutionary advantages in retaining more cautious and conservative mechanisms to handle certain vital responses. (1997, p. 95)

One point that speaks in favour of such an account is, given the changes that our environment has undergone since the period in which our emotional capacities became innate, the modularity of such mechanisms would nicely explain why our actual fears often result in inadequate behaviour. A great many of the threats we face in our contemporary world have little to do with the threats encountered by our hunter-gatherer ancestor of the Pleistocene (or of even more distant periods, depending on the evolutionary story one favours), and the behaviours that were adequate to meet those dangers are also quite different. Flight or freeze when confronted with nuclear weapons or global warming, say, is not particularly well adapted.

¹⁹ Note, however, that later on Elster claims that emotions felt with respect to fiction lack behavioural tendencies (1999, p. 293).

To have a better understanding of what the account under consideration entails, it will be useful to say a bit more about animal fear.²⁰ Interestingly, there are many more fear reactions than philosophers usually suppose. In addition to the three 'fs' of flight, fight, and freeze commonly acknowledged, there is tonic immobility, a reaction that by contrast to the other ones involves a slowing down of cardiac activity and respiration, as well as a decrease in bodily temperature, and which results in a paralysis that is close to death, apart from the fact that consciousness is maintained. This kind of reaction, which is manifested once a predator has seized its prey, is quite frequent in the non-human animals. It has been observed in chicken, falcons, geese, ducks, mice, as well as, in a slightly different form, in snakes, fishes, crickets, water beetle, crabs, and spiders. Given that predators are in general only interested in live preys, tonic immobility often allows the prey to escape. Two other kinds of behaviour are common. The first one consists in adopting a protective position, such as the hedgehog that rolls into a ball. The other is simply to hide. To escape from their predators, some small mammals, the tundra voles, even go to the extent of digging their own holes in order to disappear into the ground. Finally, fear behaviour is often associated with expressive movements, sounds and odours—one can think of the skunk and the nauseous scents it produces when threatened.

In addition to this variety of fear behaviours, it is important to understand that there is a certain amount of flexibility even when one considers individuals of the same species. A marmot will freeze and whistle when its sees an eagle circling high up in the sky. When the eagle comes closer, it will run away in flight, try to hide in its terrier, fight back, and finally fall into tonic immobility when its gets caught. As the example shows, a crucial factor here is distance with respect to the fear stimulus. The nature of the stimulus also makes a difference. Experiments with rats show that a violent electric shock results in flight, while shocks of milder intensity trigger freezing. The animal's previous behaviour also makes a difference. The reaction of a chick to the same kind of stimuli (a bright light) differs depending on whether the chick stands still or moves around to pick up corn. In the latter case, the chick most often starts running and shrieking, while in the former case, it usually freezes. Moreover, studies suggest that hormones influence fear behaviour. Chickens that have received a testosterone injection have a stronger tendency to freeze, while those that did not receive the injection tended to run away. Finally, it would seem that gender plays a role. Female rats tend to react with active danger-avoiding behaviour, which involve running and jumping, while male rats more often have the tendency to stop moving and to defecate. In his survey, John Archer summarizes the role of the different factors as follows: 'There is some evidence [...] that the type of fear responses an animal shows depends on its immediately

²⁰ See Archer (1979) for a fascinating study of fear behaviours in animals.

preceding behaviour, its long-term internal state (e.g. its sex hormones make-up) and on the nature of the particular fear-evoking stimulus (e.g. on properties such as intensity and location)' (1979, p. 83).

Given the variety and the flexibility of danger-related behaviour, one might think that the thesis of motivational modularity is in trouble. However, there are two strategies to counter this worry. The first one consists in the suggestion that there are different kinds of fears, which are each related to fixed behavioural dispositions. The second one stresses the importance of contextual factors. Fear would involve the complex disposition to freeze when the predator is far away, to flee when the predator comes closer, to fight back when the predator is even closer, etc.

A number of authors have suggested that different kinds of fear are related to different kinds of motivation. According to Jaak Panksepp (2000, pp. 147–9), anxiety and panic depend on different neuronal mechanisms. One might thus expect that they also differ with respect to motivation. In a similar way, Richard Lazarus (1991, p. 122) distinguishes between anxiety and fright. Anxiety would correspond to an uncertain existential threat, whereas fright involves the appraisal that one faces an immediate and concrete physical danger. Again, this suggests that the motivation of anxiety and fright differ. According to Jesse Prinz (2004, pp. 152–3), who refers to Jeffrey Gray's work (1987), there are two main kinds of fears: anxiety and panic (or fright). Anxiety would usually come with freeze and would be caused by neutral stimuli, such as the ringing of a bell, and conditioning, by associating it with a painful stimulus. It would correspond to a coming danger instead of an immediate danger. Panic, by contrast, would be caused by a painful stimulus and would correspond to flight or else fight, when flight is not possible. There thus seems to be some agreement that two main kinds of fear have to be distinguished: anxiety and fright (or panic). What happens to our marmot, for example, is that it first experiences anxiety at the sight of the eagle and then fright when the eagle gets closer.²¹

It will be clear that the second strategy is needed even if we distinguish between different kinds of fear. Contextual factors, such as the possibility for flight, but also the kind of threat, etc., determine if fright results in flight or fight. In sum, a convincing version of the thesis of motivational modularity can allow for different kinds of fear associated with different behavioural dispositions. It also has to make room for contextual factors. But the advocate of motivational modularity will insist that even though fear motivation is more complex than it first appeared, the mechanism underlying those motivations are nonetheless modular.

²¹ See also Robert Roberts (2003), who distinguishes between fear, anxiety, fright, terror or panic, horror, and spook and claims that each of these emotions involves a particular concern and hence comes with slightly different motivations. Fear, for instance, comes with the desire that the object, that is presented as an aversive possibility having a significant degree of probability, does not realize itself (or that its consequences do not come about), whereas fright comes with the desire that its object or its consequences are immediately avoided (2003, pp. 195–9).

Now, it should be clear that the thesis of motivational modularity seems plausible when applied to marmots and their likes. The question is whether it consists in a convincing description of human fear.²² It is clear that we sometimes manifest the same kind of fear behaviours. It happens that we freeze or run away out of fear. Moreover, tonic immobility is a quite common reaction when we are confronted with acute dangers, such as an attack by a wild animal or the explosion of bombs.²³ But it is not necessary to consult psychological studies to realize that what we do when we experience fear is more varied than what marmots could ever dream of. Panic might make you run out of a building on fire, but it can also get you to call for help on your mobile phone. Your emotion is likely to influence the way you perform these actions. If you panic, you are likely to act in a frenzied and hurried manner. But your panic will not result in specific kinds of behaviour or action. This is why many theorists have claimed that the relation between fear and action is more distant than what the thesis of motivational modularity suggests. Fear would involve desires rather than behavioural dispositions.

14.3 THE DESIRE MODEL

According to the psychologist Gerald Clore, emotions facilitate action, but emotions would not involve behavioural tendencies:

[...] it is common to assume that fear involves behavioral tendencies to escape. But [this link is] probably more indirect than is generally assumed. Such words as 'behavior', 'response' and 'action', even when qualified by such words as 'tendencies', 'readiness' or 'inclination' imply that specific muscle groups and motor circuits are activated when one is [...] fearful [...]. Such [a claim] suggests, rather implausibly, that one's legs are programmed to run when afraid [...]. Of course emotions such as fear do involve a redistribution of blood from the viscera to the large muscle, and such effects would presumably enable one to engage in rapid action or extreme exertion. But such general activation is not at all the same thing as a specific action tendency or a motor program. (1994, pp. 110–11)

Clore distinguishes between what he calls 'motivational' and 'behavioural' effects and claims that:

²² I leave aside the question of whether or not this account fits animals that are cognitively more complex, such as big apes.

²³ According to Suarez and Gallup (1979), more than 50% of rape victims manifest tonic immobility. See Marks (1987, pp. 68–9), reported by Cosmides and Tooby (2000, p. 113).

[...] the direct effects of emotions are motivational rather than behavioral. One can achieve more agreement about the likely goals of [...] fearful [...] persons than about their likely behaviors. It seems clear, for example, that fear involves a desire to avoid harm or loss, but not at all clear whether achievement of this goal would necessitate selling one's stocks, listening to the weather report, or running away. Thus, the immediate effects of emotion may be more mental than behavioral. (1994, p. 111)

Jesse Prinz makes a similar suggestion. Prinz distinguishes between what he calls 'motivations', that is, dispositions that move us to action, or action-commands, and what he calls 'motives'. By contrast with motivations, motives give us reasons for action. According to Prinz, '[...] emotions are motives. One can even describe emotions as motivating, because they drive us to select courses of action. In other words, emotions lead to motivations. But they are not to be identified with motivations' (2004, p. 194).²⁴ Like Clore, Prinz suggests that emotions facilitate action. The physiological changes and the positive or negative valence of emotions prepare us for action and increase the probability that certain type of actions, such as revenge when we are angry, are performed. But just like Clore, Prinz denies that emotions determine specific behaviour or action. What is needed for emotion to result in action is that the agent deliberates and chooses. Thus, fear would give the agent a reason to flee or fight, but even if fear increases the probability of and facilitates such behaviour, fear would not be constituted by a disposition to flee or fight.

Although there are some differences between the accounts proposed by Clore and by Prinz, they suggest a conception according to which fear involves a desire, understood as a state that influences the agent's deliberation by setting a goal. More precisely, what could be called the *desire model* involves the following features:

- (a) given its physiological underpinnings, fear facilitates but does not necessitate certain types of actions;
- (b) fear involves a desire that sets a goal, such as the avoidance of a specific harm or loss, and if it results in action, it does so only on the basis of the agent's deliberation.²⁵

Now, this certainly seems to be a quite plausible conception of the motivational impact of human fear. It allows for the huge variety of actions that we perform when we experience fear by finding a place for emotion in rational deliberation. But given its stress on the physiological underpinnings of fear, it also makes room for the a-rational influence of this emotion.

In fact, the physiological component of fear does not only play a facilitating role. Fear can easily have a hampering effect. Fear of heights can be responsible for the shaky hand of the unexperienced alpinist, thereby colouring his actions whether

²⁴ Cf. Helm (this volume) rejects Prinz' general framework, but nonetheless seems to agree with him on this point when he claims that emotions motivate action as a motive.

²⁵ Alternatively, we might say that it is the emotion itself which sets a goal. The emotion would have to be considered to partly be a desire.

these are motivated by fear or not. So, we need to add a clause specifying this other a-rational influence:

(c) fear colours the action of the agent.

Another point that needs to be added to this picture is that emotions have a further and very powerful way to have an a-rational influence on what we do. As has been pointed out by philosophers, neurologists, and psychologists, emotions influence attention.²⁶ As Ronald de Sousa, writes, an emotion '[...] limits the range of information that the organism will take into account, the inferences actually drawn from a potential infinity, and the set of live options among which it will choose' (1987, p. 195). Though there is reason to think that different types of emotions have a different impact on attention—positive emotions are thought to widen and not to narrow our attentional focus²⁷—it is certainly plausible to claim that fear narrows the focus of attention. Although this influence is a-rational, it would be a mistake to infer that it necessarily leads to irrationality. Quite to the contrary, it often makes it possible for the agent to focus on what is important. As de Sousa underlines, emotions thus allow us to supply to the insufficiency of reason, which is unable to determine what we ought to attend to. According to de Sousa, emotions' role is to make up for the shortcomings of reason. Emotions would be '[...] one of Nature's ways of dealing with the philosopher's frame problem' (1987, p. 195). Thanks to fear, we are able to avoid the sad destiny of the robot that kept analysing infinitely many irrelevant data instead of running away from a ticking bomb.²⁸ In any case, we need to add a further clause to our list:

(d) fear influences what we do by narrowing the agent's attentional focus.

A further point that has to be taken into account is that even though what we do when we experience fear often depends on our means–end beliefs, it also happens that we manifest instinctive behaviour. As I have noted, it happens that we instinctively freeze or else fall into tonic immobility. It would be clearly abusive to suggest that these reactions are the result of some quick deliberation. Of course, we would be hard pressed to explain why some frightened people freeze, say, while others do not, but what is clear is that both possibilities exist. It would seem that we all have a tendency to manifest such reactions, but some of us are better at controlling ourselves. In any case, it seems justified to add the following clause to our list:

(e) even human fear can result in reactions that depend on modular behavioural dispositions.

Now, what should we think of the desire model? The question that has to be asked to assess this model is whether or not fear necessarily involves a desire that sets a

²⁶ See de Sousa (1987); Damasio (1994); Wells and Matthew (1994); for a survey, see Faucher and Tappolet (2002).

²⁷ See Frederickson (1998).

²⁸ See de Sousa (1987, p. 195).

goal. According to Sabine Döring, there are cases of fear in which no goal is set: '[o]ne's fear may represent it as being dangerous to be so high up above the ground while one is travelling by plane and better off doing nothing at all' (2003, p. 227). But would it not be more plausible to say that, if you experience fear on this occasion, your fear involves the desire not to be there, high up above the ground? This desire gives you a goal, even though there is not much you can reasonably do about it—you certainly do not prefer to jump out the emergency door to quickly get down. Also, the goal in question might be overruled by some other goal of yours, such as the goal of crossing the ocean to get back home. But are not some fears completely cut off from possible actions? What has to be acknowledged is that fear does not necessarily come with any concrete goal which could lead to action. You might be afraid that the financial crisis will end in a meltdown, but have no directly related goal, for there is strictly nothing you can do to change the course of the events. Insofar as you desire, or rather as you wish that the financial crisis will not end in a meltdown, and thus that you wish to avoid the loss the meltdown would cause, however, there is something that is the object of a conative state of yours. And this justifies the ascription of what could be described as a kind of ideal goal. So, the desire model has to be broadened to include conative states such as wishes.²⁹

More difficult questions arise from so-called expressive actions. As Rosalind Hursthouse (1991) has pointed out, emotions sometimes get us to do things that are hard to reconcile with the idea of aiming at a goal. Consider Hursthouse's example of Jane, whose hatred for Joan gets her to tear at Joan's photograph with her nails and to gouge holes in the eyes of the picture. Let us suppose that this action is intentional. The question, then, is what desire and belief could explain it. According to Hursthouse, no such desire-belief explanation can be given: though intentional, such actions are a-rational.³⁰ Now, it certainly seems that Jane wants to tear out the eyes in Joan's photograph.³¹ The problem is that this suggestion does not account for the quite obvious relation between the action and the emotion. Why exactly would Jane want to scratch the eyes out, given that, as we can safely assume, she does not believe that this will harm Joan in any way? The desire in question does not seem to rationally depend on the kind of desire that seems involved in hatred, such as a desire to harm and destroy the person whom one hates. It thus seems that what we have here is the case of an intentional action, which is motivated by an emotion, but which is not rationally conducive to any goal set by the emotion. Do we have to reject the desire model, then?

The question is how exactly is Jane's action related to the emotion. It might be claimed that the emotion only has a causal role in the production of the action. The desire to scratch the eyes out would be caused by the hatred. This seems true, but it certainly appears that the emotion yields more than a causal explanation of the

²⁹ Thanks to Peter Goldie for suggesting that wishes might be involved.

³⁰ Döring concurs (2003).

³¹ For such a suggestion, see Smith (1998); Goldie (2000).

action. Why is it that Jane scratches the eyes out instead of putting the picture into her pocket or boiling an egg while singing a song? Quite obviously, it is because she hates Joan. A more plausible suggestion is that some innate behavioural disposition is at work. Of course, scratching out the eyes in photographs cannot in itself be the manifestation of some innate behavioural disposition—our Pleistocene ancestors did not have cameras. But it might well be that the disposition to harm the object of one's hatred manifests itself in a variety of more or less efficient ways.³² Given the visual similarity between the photograph and the person, harming the image comes quite close to harming the real person. That this is so is confirmed by the fact that looking at the photograph of someone you hate (or you love) often triggers a vivid experience of hate (or love).

The suggestion, then, is that so-called expressive actions are explained by the misfiring of behavioural dispositions. What does this entail for fear? There are many ways fear can result in so-called expressive actions. Döring gives the example of someone clinging tightly to her bag when she experiences fear of flying. This can plausibly be explained as the misfiring of the disposition to try and grasp something to hold onto when one is afraid of falling down. So, expressive actions can be accounted for by the clause about behavioural dispositions.

A more serious objection to the desire model comes from the fact that there is reason to believe that even an emotion like fear comes without any desires. In one of the most famous passages of contemporary philosophy, Kendall Walton describes the miseries of Charles:

Charles is watching a horror movie about a terrible green slime. He cringes in his seat as the slime oozes slowly but relentlessly over the earth, destroying everything in its path. [...] The slime, picking up speed, oozes on a new course straight towards the viewers. Charles emits a shriek and clutches desperately at this chair. (1978, p. 5)

As Walton underlines, Charles seems terrorized. Yet, he appears to have no motivation resulting from this intense fear; he has no inclination to leave the theatre or to call the police, for instance. Walton concludes that Charles does not really believe that there is danger. This is certainly true. However, Walton is wrong to infer that Charles is not really afraid of the slime. As we have seen earlier, there are independent reasons to think that fear does not require any propositional attitude of that kind. It thus seems that what we have here is a case of purely contemplative fear, which has no motivational force whatsoever. Of course, it is not accurate to say that Charles does nothing at all: he cringes in his seat, shrieks, and clutches at his chair. But these reactions are just the more or less apt manifestations of behavioural dispositions. We do not need to postulate any desire to explain them. So, can fear be purely contemplative, in the sense that it does not involve a desire?

³² As Döring (2003) notes, it is possible that the selection of the action—scratching the eyes out instead of trampling on the picture, say—might also be influenced by cultural norms.

Now, it might be suggested that had Charles really experienced fear, he would have run out of the theatre. The absence of motivation would show that Charles does not experience real fear. This seems difficult to believe, given that we can easily imagine that all the other elements of fear are in place: the physiological reaction, the subjective experience, the behavioural dispositions, etc. More plausibly, one could claim that Charles in fact has the fear-related desire, but this desire fails to manifest itself in action. Why would this be so?

One possibility is that Charles has another desire, such as the desire to watch the end of the film, which proves stronger. Charles' case would be akin to that of the bungee-jumper whose fear-related desire not to jump proves weaker than the desire to jump. The problem is that the suggestion that there is a conflict of desire, which could possibly require some deliberation, does not seem to fit Charles' case. Charles seems far from torn between a desire to watch the film and a desire to run away. Also, one wonders how it could be that Charles' desire to watch the film could be stronger than the desire to avoid a horrible death.

Another possibility is that Charles' beliefs interfere with his fear-related desire. If Charles did not have the conviction that the green slime is just a fiction, and hence that there is no real danger, he certainly would have tried to escape. But the belief that he is watching a film prevents the manifestation of the fear-related desire. The problem is that it seems just as plausible to claim that Charles fails to have the fear-related desire, given his beliefs. We are asked to suppose that the belief that there is no danger interferes with the manifestation of the fear-related desire, but we can just as well suppose that the belief in question interferes with the desire itself. Thus, given the belief that he is watching a film, it would not be true of Charles that he has escaping from the slime as a goal. This seems to make more sense than to attribute to Charles the belief there is no slime *plus* the desire, and thus the goal, to escape from the slime.

If this is on the right track, we have to allow for cases of *contemplative fears*: full fears that do not involve any desire. So, proposition (b) has to be amended in the following way:

(b¹) in the absence of a belief that the object of one's fear is a fiction, fear involves a desire, or more generally a conative state, that sets a specific or ideal goal, and if it results in action, it does so only on the basis of the agent's deliberation.³³

But in what sense exactly is the desire involved: is the desire an essential ingredient of normal, non-contemplative fear or is it a causal and contingent effect of the emotion, which happens to be always present?³⁴ Given the cases of contemplative fears, what is clear is that desires are not essential ingredients of the emotion of fear as such. This suggests that, even in normal cases, the desire involved is only

³³ As Ronnie de Sousa pointed out to me, this could be too narrow: other circumstances might have the same effect as the belief that what one fears does not exist.

³⁴ Thanks to Peter Goldie for raising this question.

contingently related to the emotion of fear. Let me now turn to the question of whether or not the motivations of fear are necessarily self-interested.

14.4 THE THESIS OF MOTIVATIONAL EGOISM

When the frightened hare runs away from its predator, or when the hedgehog rolls into a ball, it is in order to try to save its life. When you are frightened by the wolf that leaps at you, your desire is to avoid what threatens you. Thus, the motivations involved in fear seem to aim at the well-being of the one who experiences the emotion.

What I called the thesis of motivational egoism is not often explicitly mentioned, but it is very generally assumed. Here are nonetheless a few explicit statements of this thesis. According to Nico Frijda '[f]ear, presumably, motivates actions to protect *oneself* from the event that caused it, or to prevent the event from actually materializing, or to suppress activity until the threat has passed (as in anxious freezing)' (1994, p. 114). And here is what Jesse Prinz writes: 'An appraisal is a representation of the relation between an organism and its environment that bears on well-being. I might appraise that the environment presents a physical danger *to me*' (2004, p. 51, my italics). It is of course tempting to relate this thesis to the idea that emotions, or at least some kinds of emotions such as basic emotions, are adaptations. Paul Griffiths, who argues that basic emotions are 'affect programs' in the sense that such emotions consists in a number of correlated reactions, claims that '[a]ffect programs are adaptive response to events that have a particular ecological significance for the organism. The fear response is adapted to dangers [...] ' (1997, p. 89). Clearly, Griffiths assumes here that these dangers are dangers for the person who experiences the fear.

However, it is quite obvious that two kinds of fears have to be distinguished: fear for oneself and fear for others.³⁵ As John Morreall claims, a mother who sees her child disappear under a huge wave is likely to experience fear for her child. The fears we feel with respect to fiction are in fact often of that kind. We fear that Spiderman misses his jump and miserably gets squashed on the ground or that Anna Karenina attempts to kill herself. Moreover it would be wrong to believe that fear for others can only be found in human beings. It seems quite clear that animals fear for their offspring as well.

³⁵ See Morreall (1993) as well as Davis (1987); Nussbaum (2001, p. 28); Roberts (2003), pp. 197 and 201. As Ronnie de Sousa pointed out to me, one can ask whether these are really two variants of the same emotion instead of two different kinds of emotions. Given that fear for oneself and fear for others differ only with respect to their motivation, I think we have good reasons to believe that these are two variants of the same emotion kind.

It is worth noting that both human and non-human responses to what threatens offspring can be just as immediate as responses to threats to oneself. Here is how Hume describes the immediacy of such reactions, which he considers to be central to humanity and benevolence:

The social virtues of humanity and benevolence exert their influence immediately, by a direct tendency or instinct, which chiefly keeps in view the simple object, moving the affections, and comprehends not any scheme or system, nor the consequences resulting from the concurrence, imitation, or example of others. A parent flies to the relief of his child; transported by that natural sympathy, which actuates him, and which affords no leisure to reflect on the sentiments or conduct of the rest of mankind in like circumstances. (*Enquiry*, Appendix, III, Paragraph 2, p. 303)³⁶

As Hume notes, fear for others motivates us to help those for whom we feel fear. In fact, fear for others might be stronger than the fear we feel for ourselves. Here is how Morreall puts it: 'To the extent that I feel fear for others, I want to prevent them from being harmed; in heroic cases I may fear for them more than for myself, and give up my own life to save theirs' (1993, p. 364). It thus seems that we have to reject the thesis of motivational egoism: someone who is motivated by fear for someone else acts not for his or her own good, but for the good of this other person; his or her motivation seems altruistic.

The advocate of the thesis of motivational egoism is likely to remain unconvinced. Is it so clear that the motivation to help others is altruistic? Is the final end of such a desire not to promote one's own interest? Psychological egoists are likely to insist that it is always to help oneself that one tries to help others. I am not convinced, but let me leave this question open and consider instead two less theory-laden arguments.

The first argument starts with the claim that fear is an adaptation. According to Cosmides and Tooby (2000, p. 92), for instance, the function of fear is to coordinate a number of reactions that help to deal with danger. Fear thus increases the chances that the organism survives, thereby increasing the probability that it has lots of offspring, spreading its genes. One might therefore be tempted to conclude that the motivation of fear must be egoistic. But this clearly would be a *non sequitur*. Natural selection does not have the same 'aim' as the organism. What promotes the spreading of your genes has little to do with what is in your interest. It could well be the case that having motivations that threaten your self-interest nonetheless promote the survival and spreading of your genes. For instance, it is certainly quite an advantage from the point of view of genes that you are inclined to sacrifice yourself for your offspring.

More convincingly, it could be argued that it is only insofar as you consider the well-being of someone else as being your own, i.e. that you identify with this other person to the extent of not making any difference anymore between your well-

³⁶ Thanks to Peter Goldie for this quote.

being and his or hers, that you will experience fear for that person. Thus, in helping this other person, you nonetheless promote your own interest. After all, the mother who fears for her child would certainly be devastated if her child drowned. According to Martha Nussbaum, who explicitly defends this view, all emotions are oriented towards our own flourishing.³⁷ She allows for fear for those whom we love, but she claims that the well-being of those for whom we experience fear is intimately related to our own well-being:

I do not go about fearing any and every catastrophe anywhere in the world, nor (so it seems) do I fear any and every catastrophe that I know to be bad in important ways. What inspires fear is the thought of damage impending that cut to the heart of my own cherished relationships and projects. (2001, pp. 30–1)

It is the thought of damage to *your* relationships and projects that is crucial in the fear you feel for others. Thus, it would be hard to deny that the motivation that comes with this emotion is fundamentally oriented towards your own well-being.

It is certainly true that in most cases it is for our closest and dearest that we feel fear. And it is when we become familiar with and start to care for some fictional character that our emotions are engaged. However, it would be a mistake to deny that we can experience fear for perfect strangers. Imagine that you see some stranger from quite a distance and from the back. When he crosses the street, a truck speeds around a curve and towards him, threatening to kill him. Quite certainly, you are likely to experience fear for that person even though he is a stranger, someone you have never met and are not likely to ever meet. It is of course true that your emotion shows that you in a sense care for the fate of this person. Your reaction is a way of caring for that person. But of course, the fact that you have this reaction does not mean that you quickly adopt the stranger as one of your closest and dearest or that you consider your own well-being to depend on his well-being. Thus, whatever motivation you have because of your fear seems to be purely altruistic.

Without assuming the falsehood of psychological egoism, what is likely to be uncontroversial is that the motivations involved in fear for others are exactly as other-regarding as the motivations that depend on compassion. Apart from the temporal factor, the conditions in which we experience fear for others are of the same kind as the ones in which we experience compassion for that person. You experience fear for someone when he or she is threatened by something and compassion when that threat has materialized and he or she is harmed. Consider the following statement: 'Speaking generally, anything causes us to feel fear that when it happens to, or threatens, others causes us to feel pity' (Aristotle, *Rhet.*, Book II, ch. V, 1382b). Aristotle was clearly right with respect to fear for oneself. But

³⁷ She writes: '[...] emotions appear to be *eudaimonistic*, that is, concerned with the person's flourishing' (2001, p. 30). Nussbaum denies, however, that this entails that all emotions are egoistic, for we can include the well-being of someone else into our ends (2001, pp. 53 and 31, note 23).

if one takes into account fear for others, what one would have to say is that what inspires fear for oneself are the events that inspire fear for others when they threaten others, and pity or compassion when others have been harmed. Thus, if you accept that pity or compassion come with altruistic motivations, you must also accept that fear for others involves altruistic motivations.

14.5 CONCLUSION

Fear does not fit well with the contemporary enthusiasm for emotions. In spite of this, I hope to have shown that fear is better placed than one might have initially thought. Fear need not come with ill-adapted and rigid behavioural dispositions or with egoistic motivations. Both the thesis of motivational modularity and the thesis of motivational egoism are wrong at least in the case of human fear. As I have tried to spell out, the relation of fear to action and motivation is complex. Insofar as emotions are perceptions of values, they can inform us about our practical reasons, such as the fearsome. Moreover, in addition to a number of important a-rational influences on motivation, an emotion like fear normally involves a desire that sets a goal. But as cases of fear for others show, this goal need not be related to the promotion of one's own well-being and flourishing.

REFERENCES

- ARCHER, J. (1979), *Behavioural Aspects of Fear*. In W. Sluckin ed., *Fear in Animals and Man* (New York: Van Nostrand Reinhold Company), 56–85.
- ARISTOTLE (1924/2007), *Rhetorics*. Trans. by W. Rhys Roberts, originally published Oxford: Clarendon Press (University of Adelaide, South Australia: e-book@Adelaide, <<http://www2.iastate.edu/~honeyl/Rhetoric/index.html>>).
- CHARLAND, L. (1996), Feeling and Representing: Computational Theory and the Modularity of Affect. *Synthese*, 105, 273–301.
- CLORE, G. (1994), Why Emotions are Felt. In P. Ekman and R. Davidson eds., *The Nature of Emotion* (New York: Oxford University Press), 103–11.
- COSMIDES, L. and TOOBY, J. (2000), Evolutionary Psychology and Emotions. In M. Lewis and J. Haviland-Jones eds., *Handbook of Emotions*, 2nd edn. (New York: The Guilford Press), 91–115.
- CRANE, T. (1992), The Nonconceptual Content of Experience. In T. Crane ed., *The Contents of Experience*, Cambridge: Cambridge University Press.
- DAMASIO, A. (1994), *Descartes' Error: Emotion, Reason and the Human Brain* (New York: Gossett/Putnam).

- D'ARMS, J. and JACOBSON, D. (2003), The Significance of Recalcitrant Emotions; Or Anti-Quasi Judgmentalism. *Philosophy*, Suppl. vol. *Proceedings of the Royal Institute of Philosophy*, 127–46.
- DAVIS, W. A. (1987), The Varieties of Fear. *Philosophical Studies*, 51, 287–310.
- DE SOUSA, R. (1987), *The Rationality of Emotion* (Cambridge, MA: MIT Press).
- DEIGH, J., (1994), Cognitivism in the Theory of Emotions. *Ethics*, 104, 824–54.
- DEONNA, J. (2006), Emotion, Perception and Perspective. *Dialectica*, 60 (1), 29–46.
- DÖRING, S. A., (2003), Explaining Action by Emotion. *The Philosophical Quarterly*, 53 (211), 214–30.
- ELSTER, J. (1999), *Alchemies of the Mind: Rationality and the Emotions* (Cambridge: Cambridge University Press).
- EVANS, G. (1982), *The Varieties of References* (Oxford: Clarendon).
- FAUCHER, L. and C. TAPPOLET (2002), Fear and the Focus of Attention. *Consciousness and Emotion*, 3 (2), 105–44.
- (2008), Introduction: Modularity and the Nature of Emotions. In L. Faucher and C. Tappolet eds., *The Modularity of Emotions, The Canadian Journal of Philosophy*, Suppl. vol. 32, vii–xxx.
- FODOR, J. (1983), *The Modularity of Mind* (Cambridge, MA: MIT Press).
- FRIJDA, N. H. (1986), *The Emotions* (Cambridge: Cambridge University Press).
- (1994), Emotions Are Functional, Most of the Time. In P. Ekman and R. J. Davidson eds., *The Nature of Emotion: Fundamental Questions* (New York: Oxford University Press), 112–22.
- FREDRICKSON, B. L. (1998), What Good Are Positive Emotions? *Review of General Psychology*, 2 (3), 300–19.
- GOLDIE, P. (2000), *The Emotions: A Philosophical Exploration* (Oxford: Oxford University Press).
- GRAY, J. A. (1987), *The Psychology of Fear and Stress* (New York: McGraw-Hill).
- GREENSPAN, P. S. (1988), *Emotions and Reasons* (New York: Routledge and Kegan Paul).
- GRIFFITHS, P. (1997), *What Emotions Really Are* (Chicago: University of Chicago Press).
- HUME, D. (1777/1975), *Enquiry Concerning Human Understanding and Concerning the Principles of Morals*. Ed. L. A. Selby-Bigge (Oxford: Oxford University Press).
- HURSTHOUSE, R. (1991), Arational Actions. *Journal of Philosophy*, 88, 57–68.
- JOHNSTON, M. (2001), The Authority of Affect, *Philosophy and Phenomenological Research*, 53, 181–214.
- JONES, K. (2008), Quick and Smart? Modularity and the Pro-Emotion Consensus. In L. Faucher and C. Tappolet eds., *The Modularity of Emotions, The Canadian Journal of Philosophy*, Suppl. vol. 32, 3–27.
- KLEINMAN, A. (1980), *Patients and Healers in the Context of Culture* (Berkeley: University of California Press).
- LAZARUS, R. S. (1991), *Emotion and Adaptation* (New York: Oxford University Press).
- LUTZ, C. A. (1988), *Unnatural Emotions: Everyday Sentiments on a Micronesian Atoll and Their Challenge to Western Theory* (Chicago: University of Chicago Press).
- LYONS, W. (1980), *Emotion* (Cambridge: Cambridge University Press).
- MARKS, I. (1987), *Fears, Phobias, and Rituals* (New York: Oxford University Press).
- MEINONG, A. (1917), Ueber Emotionale Präsentation, *Kaiserliche Akademie der Wissenschaft in Wien*, 183, 2nd part, 1–181.

- MINEKA, S., M. DAVIDSON, M. COOK, and R. KEIR (1984) Observational Conditioning of Snake Fear in Rhesus Monkeys, *Journal of Abnormal Psychology*, 93, 355–72.
- MORREALL, J. (1993), Fear without Belief. *The Journal of Philosophy*, 90, 359–66.
- NUSSBAUM, M. C. (2001), *Upheavals of Thought: The Intelligence of Emotions* (Cambridge: Cambridge University Press).
- PANKSEPP, J. (2000), Emotions as Natural Kind within the Mammalian Brain. In M. Lewis and J. Haviland-Jones eds., *Handbook of Emotions*, 2nd edn. (New York: Guilford Press), 137–56.
- PRINZ, J. J. (2004), *Gut Reactions: A Perceptual Theory of Emotion* (New York: Oxford University Press).
- (2008) Is Emotion a Form of Perception? In L. Faucher and C. Tappolet eds., *The Modularity of Emotions, The Canadian Journal of Philosophy*, Suppl. vol. 32, 137–60.
- ROBERTS, R. C. (2003), *Emotions: An Essay in Aid of Moral Psychology* (Cambridge: Cambridge University Press).
- RORTY, A. O. (1978), Explaining Emotions. Reprinted in A. O. Rorty ed., *Explaining Emotions* (Berkeley: University of California Press).
- SHOEMAKER, D. W. (2003), Caring, Identification, and Agency. *Ethics*, 114, 88–118.
- SMITH, M. (1998), The Possibility of Action. In J. Bransen ed., *Human Action, Deliberation and Causation* (Dordrecht: Kluwer).
- SOLOMON, R. (1976), *The Passions* (Indianapolis: Hackett Publishing Company).
- STOCKER, M. and E. HEGEMAN (1996), *Valuing Emotions* (Cambridge: Cambridge University Press).
- SUAREZ, S. D. and G. G. GALLUP (1979), Tonic Immobility as a Response to Rage in Humans: A Theoretical Note. *Psychological Record*, 29, 315–20.
- TAPPOLET, C. (1995), Les Émotions et les concepts axiologiques. In P. Paperman et R. Ogien eds., *La Couleur des pensées, Raisons Pratiques*, 4, 237–57.
- (2000), *Émotions et valeurs* (Paris: Presses Universitaires de France).
- (forthcoming), Emotion, Perception, and Perceptual Illusions, in C. Calabi and K. Mulligan eds., *The Crooked Oar, The Moon's Size and The Necker Cube. Essays on the Illusions of Outer and Inner Perception*, Cambridge, MA: MIT Press.
- TYE, M. (2006), The Thesis of Nonconceptual Content. In C. Van Geen and F. de Vignemont eds., *The Structure of Nonconceptual Content, European Review of Philosophy*, vol. 6, 7–30.
- WALTON, K. (1978), Fearing Fiction, *The Journal of Philosophy*, 75, 5–27.
- WELLS, A. and G. MATTHEWS (1994), *Attention and Emotion: A Clinical Perspective* (Hove and Hillsdale: Lawrence Erlbaum Associates).
- WIGGINS, D. (1976), Truth, Invention and the Meaning of Life. In D. Wiggins ed., *Needs, Values, Truth* (Oxford: Blackwell).