

**Knowledge
and
Self-Knowledge of Emotions**

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Ph.D.**

**University of Edinburgh
2008**

ABSTRACT

This thesis addresses two questions. One concerns the *metaphysics* of emotions and asks what kinds of mental states emotions are. The other asks how the metaphysics of emotions bears on first and third-personal *knowledge* of emotions. There are two prevailing views on the nature of emotions. They are the *perception* and *cognitive views*. The perception view argues that emotions are bodily feelings. The cognitive view, by contrast, contends that emotions are some sorts of evaluative judgments. I show that both views provide inadequate accounts of the nature of emotions. The perception view fails to do justice to the fact that emotions may not involve any bodily feeling. The cognitive view, by contrast, cannot account for the fact that emotions are states that adult humans have in common with infants and animals.

On the basis of these criticisms, I put forward an alternative account of emotions. This involves five main arguments. The first is that emotions are enduring non-episodic dispositions that *may or may not* manifest themselves in experiential episodes such as emotional *feelings* and behaviour episodes such as *expressions*. The second argument is that emotional feelings are perceptions of specific bodily changes brought about by emotions. These feelings serve as clues as to what *kinds* of emotions the subject has. The third argument is that expressions are observable manifestations of emotions in virtue of which emotions can be perceived and subsequently known, directly and non-inferentially, by other people. The fourth argument is that when someone has an emotion without feeling it, she can still come to know it by believing true ascriptions that other people make about the emotion they perceive in her expression. The fifth argument is that full knowledge of emotions requires knowledge of the *emotion objects*.

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ACKNOWLEDGEMENTS

There are so many people and institutions who helped me reach the point where I can write these acknowledgements. I owe my thanks to the AHRC and the Philosophy Department of the University of Edinburgh, which jointly funded my Ph.D. training from 2003 to 2006. I am grateful to the Jacobsen Trust and the Royal Institute of Philosophy that funded the final year of my Ph.D. with a Jacobsen Fellowship. I am also grateful to the Australian Department of Education and Training for awarding me an Endeavour Research Fellowship to visit the University of Melbourne.

My greatest intellectual debt is to my supervisor, Matt Nudds. The thoughts in this thesis would have been far less developed without his help and his rigorous supervision. I am grateful to him for instilling in me a sense of the importance of arguing clearly and thoroughly. He changed my way of seeing and doing philosophy. Most importantly, he taught me a profession. Matt, thank you.

My deepest gratitude and affection goes to two friends: Julian Kiverstein and David Levy. They made every single day of my research enjoyable and worthwhile. Julian has been a delightful office mate and a caring friend. Moreover, he granted me access to his immense philosophy collection that made the university library virtually unnecessary. David helped me through some difficult moments. Without him my life in Edinburgh would have been far lonelier. I spent beautiful moments with him and his family. I acknowledge his

understanding of the frequent bewilderment of writing my thesis in a language other than my native Italian.

There are many people with whom I discussed drafts of this thesis. I am very grateful to Lisa Bortolotti who patiently commented on early drafts. Thanks also to Julian Kiverstein and Jamie Dow. I am especially indebted to Karen Jones with whom I had many fruitful discussions on the emotions. Her knowledge of the topic helped me immensely in the process of writing and working out my ideas.

I would also like to thank Walter Cavini for encouraging me to apply to Edinburgh, and Dino Buzzetti, Rema Rossini Favretti, Giorgio Sandri, and Eva Picardi for believing in my research. I am grateful to Andy Clark, Michael Brady, Mathew Chrisman, Pascal Engel, Cordelia Fine, Peter Goldie, Richard Holton, Thomas Johansen, Peter Kail, Rae Langton, Hanna Pickard, and Pepa Toribio for useful feedback and advice.

I should also mention my friends Ana Barandalla, Catriona Black, Jonathan Cameron, Carlotta Capuccino, Giovanna Cosenza, Antonella Cosi, Valentina Di Lascio, Giovanni Fassa, John Godfrey, Laura Hamilton, Alan Jones, Boon Low, Lisa McKeown, Conor McHugh, and Alex Mai. I owe special thanks to Betty, Alistair, Lorna, Gill, and David, and “the boys” of the Philip family with whom I spent wonderful Sunday evenings in Edinburgh. To Lorenzo Ntogramatzidis and Domenic Santilli-Centofanti, thank you for making my settlement in Melbourne easy and enjoyable. Thank you also to Aisling Crean, Ed Hare, Julian Kiverstein, David Levy, and Roddy Tannahill for their generous help with proofreading.

I remember with affection Susan Hurley, who passed away in August this year. Susan was a kind and generous person. She patiently read and commented on early versions of my work and encouraged me to continue in philosophy. I hold beautiful memories of her. I miss her a great deal.

I reserve special thanks for my parents, Medi and Giuliano Zamuner, and my sister, Eleonora – you always feel close to me despite being so far away. I would like to make particular mention of Dr. Enrico Borghesi. The ideas I discuss in this thesis stem from the work I did with him during those “50-minute hours” also known as psychoanalysis.

Finally, I dedicate this work to the memory of two people I loved intensely and who I miss everyday of my life. Despite their efforts to preserve me from the disruptive emotions of life, they in fact gave me a reason for facing life as it is – complete with its emotional highs and lows. I dedicate this work to the memory of Letizia and Carlo Caropresi, my grandparents.

Edoardo Zamuner

15th November, 2007

INTRODUCTION

The topic of this thesis is how we come to know our own and other people's emotions. Often the attempt to explain how we know a certain thing requires consideration about the nature of that thing. This suggests that an answer to the question of how we know emotions requires determining the nature of emotions. Authors like William James and Jesse Prinz have put forward a *perception view* according to which emotions are bodily feelings. If this were the case, we would then know emotions in the same way as we know other feelings and sensations. On the other hand, authors like Robert Solomon and Martha Nussbaum have proposed a *cognitive view* according to which emotions are states like judgements. If this were correct, we would then know emotions in the same way as we know judgements.

There is, however, reason to doubt that either view is correct. The cognitive view fails to do justice to the fact that higher animals and infants have emotions, even though they are not capable of making judgements. The perception view, by contrast, confines itself to the claim that everything that needs to be explained about emotions can be explained in terms of bodily feelings. Although this view has the potential to account for emotions in humans as well as in animals, it overlooks the fact that emotions do not necessarily involve feelings. This suggests that emotions are not mere bodily experiences but another kind of state. So, neither the perception nor the cognitive view succeeds in providing a plausible and exhaustive account of

emotions. This thesis offers such an account and, further, draws out the implications for the problem of knowledge of emotions.

Some preliminary considerations will help set the scene. Since emotions are psychological states, it is tempting to think that empirical psychology is the discipline best suited to explain what kinds of states emotions are. This view misses the fact that emotions are psychological states we use in everyday folk-psychological explanations. This means that in order to answer the question about the nature of emotions we need to consider how we use emotion concepts when we explain our own and other people's behaviour. This is the approach I develop in this thesis.

It is when we examine ordinary psychological explanations that we begin to understand the nature of emotions. One of the most noticeable features is that emotions are states we form in relation to objects. For example, when we are afraid, we are always afraid of something, even when we do not know what it is that we fear. But what kind of relation is there between emotions and their objects? It is plausible that, since emotions are neither judgements nor bodily feelings, they relate to their objects in a manner that differs from judgements and feelings. In particular, judgements are states we form in relation to objects for which we have concepts. Emotions, by contrast, are states we also find in creatures that do not master concepts. So, it is very unlikely that the way emotions relate to their objects will resemble the way judgements relate to their objects. Moreover, judgements aim at truth, while emotions do not. This is because emotions do not require the sort of assessment that grounds judgements – assessment that necessarily requires mastery of the concepts for what is assessed. It is equally unpromising to link the way emotions relate to

objects to the way feelings have objects. Bodily feelings can be viewed as perceptions of bodily states or changes, that is, as states produced by the action of certain objects upon some sort of perceptual system. Emotions, by contrast, are active states that creatures form in response to objects.

The view I advocate is that emotions are reactions to objects; reactions that do not require the ability to think about such objects. In this respect, emotions may resemble perceptions. Yet, they differ from perceptions because they are states creatures actively form in response to stimuli. So, like judgements emotions are active states and yet, unlike judgements, they do not require the ability to think about and evaluate their objects. On this account, emotions are reactions creatures actively form in response to objects without needing the ability to think about them.

This does not yet say how we know about emotions. Normally, people know their emotions when they feel them. This suggests that feelings play an important role in knowledge of emotions. On the other hand, we may know other people's emotions from their expressions, which indicates that behaviour is also important to knowledge of emotions. How do these aspects relate to the nature of emotions? If emotions are not feelings and yet feelings play an important role in knowledge of emotions, then there must be a connection between emotions and feelings. My thesis is that emotions are non-episodic dispositions that *may or may not* manifest themselves in episodic states such as feelings and expressions.

This view is justified by the fact that every day psychological explanations refer to emotions as two different kinds of states: feelings and dispositions. I explain this aspect in terms of emotions being dispositions to

undergo characteristic feelings and behaviour. For example, we say that someone is reluctant to travel by plane because she fears it. This explanation suggests the person has a state that makes her behave in a characteristic way and that this state lasts over time. On this basis, I argue that emotions are enduring non-episodic states that may or may not manifest themselves in episodes such as feelings and behaviour – where the notion of behaviour comprises short-term behaviour such as expressions and long-term behaviour like the avoidance to travel by plane. In this respect emotions resemble beliefs, since beliefs are also enduring non-episodic states. The difference is that beliefs manifest themselves in judgements, while emotions manifest themselves in feelings and behaviour. Moreover, beliefs aim at truth, while emotions are reactions to how things appear to the subject.

This, however, does not suffice to provide an exhaustive account of knowledge of emotions. If we accept that emotions are non-episodic states that may or may not manifest themselves in feelings, we also need to accept that we may have emotions without them manifesting themselves in emotional feelings. So, how do we know emotions in this case? An answer to this question comes from everyday experience. We may know our emotions either by understanding the content of our thoughts or by listening to what other people say about our emotions on the basis of how we look and behave. In the first case, we understand that we are (say) sad from the fact that we tend to have thoughts that are in some way coloured by sadness. In the other, we come to know that we have emotions from what others say about the way we look to them; for example when they say “You look upset today.” This presupposes that other people can perceive a person’s emotion simply by looking at her expression. On

this account, expressions are perceivable manifestations of emotions that can be observed from the third-person point of view. In contrast, the bodily changes of which emotional feelings are perceptions are manifestations that can be perceived from the first-person point of view.

This bears on the general question of how we know emotions. The answer is that emotions are states that have perceivable manifestations. Some of these manifestations can be observed by the subject; others can be observed by other people. This is consistent with the claim that emotions are enduring non-episodic states that may or may not manifest themselves in episodes such as feelings and expressions. This account shows that the epistemology of emotions is entirely dependent on their metaphysics. In other words, how we know emotions depends on the kinds of states they are. This is the view I develop throughout this thesis.

Chapter I is devoted to the question of whether emotions are natural kinds. I show that folk-psychological emotions are not natural kinds because they fail to meet the requirements that a concept or term must meet in order to count as a natural kind concept or term. Chapter II present a critical review of philosophical theories of emotions. I consider two main views: the cognitive and perception views. I show that they are both flawed because they fail to do justice to the way folk-psychological emotions work in ordinary psychological explanations. Chapter III examines the nature of emotions and presents an alternative account to the cognitive and perception views. I show that emotions are enduring non-episodic dispositions that creatures form in response to objects. Chapter IV concerns manifestations of emotions from the first-person point of view. I argue that emotions manifest themselves in emotional feelings

which can be viewed as perceptions of specific bodily changes brought about by emotions. Chapter V, instead, concerns manifestations of emotions from the third-person point of view. I argue that some of the changes of which emotional feelings are first-person experiences affect the outwardly observable part of the body and can be perceived by other people in the form of expressions of emotions. Chapter VI concerns self-knowledge of emotions. I argue that emotional feelings may serve as evidence for self-ascriptions of emotions. When emotions are not accompanied by such feelings and yet cause bodily changes that others can observe from the outside, we may come to know our emotions by believing ascriptions like “You look upset today.”

CHAPTER I

ARE EMOTIONS NATURAL KINDS?

1. Introduction

This chapter concerns the question whether the mental states we normally call emotions are all states of the same kind. The category of emotions comprises a wide range of superficially different states. Philosophers often divide them into two main groups: *basic emotions* and *higher emotions*.¹ Basic emotions are sadness, joy, fear, disgust, surprise, and anger. They are found in all cultures. Humans have them in common with higher animals like primates. Higher emotions, by contrast, are not found in all cultures and seem characteristic only of humans. They divide into *cognitive emotions* and *moral emotions*. Cognitive emotions are envy, jealousy, and pride. Moral emotions are empathy, gratitude, remorse, indignation, admiration, resentment, guilt, and shame. Cognitive emotions are contrasted with basic ones because they seem to require a cognitive element that is absent in basic emotions. Moral emotions are often viewed as a variety of cognitive emotions.

Our emotional vocabulary includes different kinds of states. Fear is a different kind of emotion from anger. Anger is a different kind of emotion from joy. Joy is a different kind of emotion from surprise, and so on. This is reflected by our ordinary psychological explanations. Fear is a state that produces characteristic feelings and behaviour in response to characteristic properties of

¹ EKMAN 1999.

objects and situations. Joy is a different kind of state that produces different kinds of feelings and behaviour in response to different properties of objects and situations. When someone is afraid we explain her behaviour by means of a state that accounts for the kind of behaviour we observe. If the person had been in a state of joy, we would have observed a different kind of behaviour. Emotions are different kinds of states that account for different kinds of behaviour. Yet, we refer to all these states as emotions. What justifies the intuition that emotions are determinates of the same determinable kind?

As I shall argue later on, answering this question is important because a philosophical account of emotions that aims to be accurate and comprehensive will make claims about the whole category of emotions. It will generalise properties of some specific emotions to other mental states in virtue of the fact that they also are emotions. In order for this generalisation to be justified, one needs to show that the intuition built into our ordinary emotion talk is correct and what is true of a specific emotion is true of other emotions. To this end, one needs to show that emotions are determinates of the same determinable kind.

Some preliminary remarks are necessary. According to one philosophical view, two things are of the same kind when they are of the same *nature* or *essence*.² On this view, in order to be justified in saying that emotions are all

² PUTNAM 1973, 1975; KRIPKE 1980. This view is strongly realist as it identifies natural kinds with constituents of reality. It is worth noting that some empiricist philosophers of science are not at ease with this view. In particular, Richard Boyd (BOYD 1991) argues that the theory of natural kinds can be made independent from the metaphysical realism advocated by Putnam and Kripke. Boyd thinks that rather than making our concepts correspond to the real microstructure of the world the empiricist philosopher should construct *projectable concepts* on the basis of adequate theories. This is because only concepts that are projectable play a role in induction or explanation. Concepts are designed to pick out categories that have explanatory significance in the current best theory of a certain domain. A category brings together objects that share correlated properties. The category has what Boyd calls *causal homeostasis* if the correlation

states of the same kind, we need to show that they are all of the same nature. In other words, we need to show that emotions are a natural kind. But how do we determine the nature of emotions? I will argue that one way of carrying out this project would be by means of a psychological theory of emotions. That theory would say what the folk-psychological states we call emotions are, and it would account for all instances of these states. As I will show, there seems to be no single psychological theory capable of accounting for all instances of emotions. At best, a psychological theory accounts for a subclass of emotions.

In particular, I will argue that scepticism about the possibility of providing a scientific theory of emotions is justified by general considerations about the difference between, at one end of the investigative spectrum, the kinds of emotional states that psychology investigates and, at the other end, folk-psychological emotions. We normally talk in two ways of emotions – as *episodes* and as *dispositions*.³ I will refer to both emotional episodes and emotional

between properties has some underlying explanation that makes it projectable. This is consistent with the observation that people do not simply note the existence of clusters of properties. They assume that underlying causes produce and explain why properties cluster together. Realist philosophers in the Putnam-Kripke tradition may accept this view. Certain concepts are projectable because the categories or kinds they refer to are held together by real essences, or so the best theory available suggests. Paul Griffiths (GRIFFITHS 1997) applies the empiricist view to emotions and describe a subclass of emotion concepts (i.e. basic emotions) as a category with causal homeostasis.

³ The view that emotions are episodes is defended by authors like William James (JAMES 1880, 1884) and, more recently, Jesse Prinz (PRINZ 2003, 2004a, 2004b). The view that emotions are dispositions is defended by Richard Wollheim (WOLLHEIM 1984, 1999, 2003). A further distinction between dispositional and standing emotions is discussed by Karen Jones, who observes: “It is easy to confuse a standing emotion with a dispositional emotion; nevertheless they are not the same thing. This can be seen by considering the difference between two ways of grieving for one’s dead child. One father is disposed to grieve for his dead child. Certain memories or places call to mind his loss and reawaken his sorrow, but outside these occasions his loss does not color his life. Another father, in contrast, has a standing emotion of grief at the death of his child. His loss colors his life, leading him to seek out occasions that will call his loss vividly to mind, leading him to interpret situations as instantiating loss, and making him

dispositions as *folk-psychological emotions*. Episodes are experiences like a sensation of rage, a feeling of fear, or a sensation of disgust. Dispositions are enduring non-episodic emotions. One may love or hate a person or a place for one's whole life. One may respect or detest, be envious or jealous of a person for years. One may be ashamed or guilty of one's misconduct for decades. One may regret one's choices for years. Fear of flying may last a lifetime.

There are two different views on how episodes and dispositions are related. Both views assume that one notion can be explained in terms of the other. The difference lies in which notion is viewed as more basic. On one view, dispositional emotions are explained in terms of recurrent emotional episodes.⁴ Fear of flying, for example, is explained as a recurrent feeling of fear that a person happens to experience every now and then. On the other view, emotional episodes are explained in terms of emotional dispositions which manifest themselves in experiential episodes such as feelings and sensations, and short-term-behavioural episodes such as smiles of joy and scowls of anger.⁵ Emotional dispositions also manifest themselves in long-term behaviour. Because of her fear of flying, a person may make choices that have enduring consequences for her life. She may decide not to travel abroad and turn down job offers that would require her to fly. On the second view, this behaviour is not a mere periodical manifestation of the person's emotion. It expresses her concern about flying. Similarly, a dispositional state of anger towards a

receptive to feelings of bereavement. If we suppose that this second father merely has a disposition to grieve for his dead child we will miss the way in which the more overt incidents of grief are held together and made part of the same ongoing psychological phenomenon. Occurrent emotions can have long duration without thereby fading into the merely dispositional." (JONES 2004, quoted from manuscript).

⁴ See JAMES 1884.

⁵ See WOLLHEIM 1999 and HACKER 2006.

particular person is not a mere disposition to episodic outbursts of anger and feelings of rage, but persistent hostility resting on the subject's reasons for her anger. The view that emotions are dispositions is more plausible. It is, in other words, more plausible to explain episodes in terms of underlying dispositions.

If emotions are a natural kind, there must be a scientific theory which says what folk-psychological emotions are and which accounts for all instances of them. I will show that psychological theories, though, only account for emotional episodes.⁶ Psychological theories generally start with functional definitions of a given mental state. The function of a state is defined as the causal role the state plays in mapping inputs onto outputs. Some psychological theories then seek to establish the extension of the state by determining which brain mechanism or structure uniquely realises the functional role of the state.⁷ On this view, a psychological theory of emotions will try to identify the brain states that uniquely realise the functional role of emotions. A functional description will say that emotions are the sort of states that tend to be caused by bodily changes and to cause emotional behaviour. A theory of emotions will then try to determine which brain mechanism underpins the production of the changes.

It is worth noting, though, that the functional description above is true of emotions only if we assume that when we talk about emotions we refer to emotional episodes and nothing else. The same description is not true if we use emotion terms to refer both to emotional episodes and to emotions, as we do in

⁶ Peter M.S. Hacker observes: "Neuroscientific work, influenced by the misconceived Jamesian theory of the emotions, has screened out the attitudinal, as well as the motivational, cogitative and fantasy aspects of the emotions." (HACKER 2006: 10).

⁷ Of course, this is not true of every psychological theory but only of those that seek to determine the neurophysiological bases of psychological phenomena.

ordinary emotion talk. On the latter view, when a psychological theory defines the nature of emotions, it defines solely emotional episodes; it does not define folk-psychological emotions. This suggests that there is no single psychological theory solely capable of accounting for the variety of phenomena we refer to by emotion terms. I will show that the natural conclusion of this argument is that folk-psychological emotions do not form a natural kind.

This is far from showing that the intuition that emotions are all states of the same kind is mistaken. There are other notions of kind beside that of natural kind. Philosophers speak of normative kinds,⁸ human kinds, relevant kinds, and social kinds.⁹ I will argue that emotions are social kinds. Such kinds do not identify distinctions in nature. They are arbitrary notions that enable people of the same group or community to understand one another. A social kind is, therefore, a notion with some explanatory significance. This is born out by the fact that having a certain emotion rather than another has consequences for one's behaviour. For example, the fact that someone is happy is likely to produce kinds of behaviour that differ from those we would observe if the person were sad or angry. When we talk about emotions, we refer to states that form a social kind because, although they do not identify any distinction in nature, they have some explanatory significance within a certain group or community.

I will structure the discussion in this chapter as follows. First, I will discuss how we should conceive of natural kinds. This will allow me to show that emotions are not a natural kind because they do not meet the requirements that should be set for something to be a natural kind. Second, I will show that

⁸ GRIFFITHS 2004b.

⁹ HACKING 1990.

emotions form a social kind. On this basis, I will show that the intuition that emotions are states of the same kind is correct.

2. The Semantics of Natural Kind Terms

Natural kinds are phenomena, substances, and individuals that exist in nature. Some examples of substances and phenomena that are natural kinds are water, gold, chlorine, light, and heat. Individuals that are natural kinds are tigers, dogs, cats, eagles, and human beings. Natural kinds are kinds of entities we are acquainted with in ordinary life. This state of acquaintance is essentially perceptual and involves information from the senses. We see, touch, and taste water. We see and touch, but do not taste gold. We smell chlorine. It is through information from the senses that we learn how to identify typical instances of natural kinds in the environment.

This is not the whole story about natural kinds though. It is part of our ordinary knowledge about (say) water that there are substances that look like water, although they are not actually water. On the other hand, specific instances of water may not be typical of the kind. For example, water may come in a gaseous form. To work out what is and what is not water, we need to know something more about water. We need more specific criteria than the ones learned through ordinary interactions with typical instances of water. It is at this stage that empirical science comes into play. In order to distinguish water from what looks like water we need to know what water is. This is something we can

determine only through an empirical investigation of water. Not everybody can carry out such an investigation; only experts like chemists can.¹⁰

There are, then, two independent bodies of information about the substance we call water. On the one hand, there is what we learn through interaction with typical instances of water. On the other, there is what scientists discover about the nature of water. It is perfectly possible that ordinary people ignore what scientists know about the nature of a certain substance. This division of knowledge bears on the accuracy of our talk about natural kinds. We may refer to a certain substance as water because it looks like water, although it is not actually water. It follows from this that our judgments about the substance will be false. Scientists are in a position to correct our judgments and say of which substances they are true. They can tell when a substance is actually water and when it is not.

The fact that there are two distinct bodies of knowledge about natural kinds bears on the semantics of natural kind terms. Some philosophers have described this phenomenon by saying that the semantics of natural kind terms involves division of the semantic labour. This is to say that there is a difference between what ordinary people know about the reference of natural kind terms and what experts know about the nature of the substances and individuals these terms designate. Knowledge of the reference is acquired through interaction with typical instances of a substance. This provides perceptual information about what a certain substance typically looks like. This is knowledge of the *superficial properties* of the substance. Consider water. We all know that 'water' refers to a substance that is transparent, liquid, tasteless, and so on. These are

¹⁰ PUTNAM 1973, 1975.

properties we experience in our day-to-day interaction with typical instances of water. A typical instance of water is a sample of water that possesses all or most of the properties that we associate with water. The sort of stuff we find in lakes, rivers, oceans is a typical instance of water.

Knowledge of the extension, in contrast, is acquired through empirical research and leads to knowledge of the *identifying properties* of a substance. These properties derive from knowledge of what a given substance is. Water is a specific compound of hydrogen and oxygen. This allows us to identify any instance of water, including the most unusual ones. Moreover, it allows us to explain any property of water from the most evident one, like the fact that water is transparent, to the least evident one, like the fact that water conducts electricity. Ordinary descriptions of water as the liquid, transparent stuff we find in lakes and rivers cannot account for these properties. This is because this description does not say what water is, but merely how water normally appears to us. It is the experts' job to come up with an actual definition. As Putnam puts it:

The extension of our terms depends upon the actual nature of the particular things that serve as paradigms, and this actual nature is not, in general, fully known to the speaker. Traditional semantic theory leaves out two contributions to the determination of reference – the contribution of society and the contribution of the real world; a better semantic theory must encompass both.¹¹

¹¹ PUTNAM 1973: 161.

It is a characteristic of natural kind terms like 'water' that people may correctly use them without knowing anything about the actual nature of water. Similarly, it is possible for experts to determine the nature of water without knowing the superficial properties of typical instances of water. This means that knowledge of the extension is independent from knowledge of how the reference is fixed. At this stage, one may wonder how people can ever refer correctly to instances of water without knowing what water is. In reply to such concern, one may argue that ordinary people and experts are members of the same linguistic community. This means that they can easily interact and people can defer to experts when their knowledge of the superficial properties does not suffice to determine whether a certain substance is water or not.

To sum up: a term designates a natural kind when it meets two conditions. First, there is a way of fixing the reference. Second, there is a way of determining the nature of the referent, which is independent of how the reference is fixed. Knowledge of the extension is different from knowledge of how the reference is fixed. It concerns the identifying properties of a substance or individual, while knowledge of how the reference is fixed concerns the superficial properties. The latter kind of knowledge is obtained through acquaintance with typical instances of a substance, while the former kind of knowledge is obtained through empirical research.

3. The Reference of Emotion Terms

In the previous section, I have shown what the conditions are for a term to designate a natural kind. I will now apply these conditions to emotion terms. In the attempt at determining whether emotions are a natural kind, one needs to

do two things. First, one needs to describe how we fix the reference of emotion terms. Second, one needs to show that there is a way of determining the extension of emotion terms, which is independent of how we fix the reference. The first task involves describing the superficial properties of emotions. These are features of emotions we learn through acquaintance with typical instances of emotions in ourselves and other people. So, in order to describe how we fix the reference of emotion terms, we need to work out what superficial properties we use to refer to our own and other people's emotions.

The second task involves a totally different procedure. I have shown that in the case of terms that designate substances and individuals the extension is determined through an empirical theory of what a given substance or individual is. It is obvious that emotions are not types of substances or individuals. They are mental states. It follows from this that the task of determining the extension of emotion terms requires a psychological theory of emotions. This theory will have to say which brain mechanisms or structures produce emotions. I will go on to describe what form such a theory should have below. But first I will discuss how we fix the reference of emotion terms.

There are, at least, two ways of accounting for how we fix the reference of emotion terms. One is offered in an argument by David Lewis.¹² The argument is a general account of how we define the meaning and reference of mental terms. It says that the meaning of mental terms is implicitly defined by the causal role they play in ordinary psychological explanations. The other way of describing how we fix the reference is tailored on the model of natural kind terms. It says that we fix the reference of emotion terms by means of superficial

¹² LEWIS 1972. See also LEWIS 1966, 1970.

properties of emotions. The latter view has the advantage of accounting for the role of subjective experience in fixing the reference of emotion terms.

Lewis' argument is based on the idea that our mental terms form the conceptual repertoire of a theory we use to understand one another. This theory is commonly called folk-psychology or common-sense psychology. Lewis thinks that, in general, theories implicitly define the terms they introduce. In light of this, Lewis says that folk-psychology implicitly defines mental terms. The meaning and reference of these terms is defined by the role they play in ordinary psychological explanations. Emotion terms are a subclass of mental terms. Therefore, their meaning and reference is implicitly defined by the role they play in folk-psychological explanations.

To support his argument, Lewis presents an example of common-sense theory. The theory introduces terms the meaning of which is implicitly defined by the role they play in the explanation of a certain phenomenon. The theory in question is a story in which a detective gives his account of a crime. The detective's story goes like this:

X, Y, and Z conspired to murder Mr. Body. Seventeen years ago, in the gold fields of Uganda, X was Body's partner...Last week, Y and Z conferred in a bar in Reading...Tuesday night at 11:17, Y went to the attic and set a time bomb...Seventeen minutes later, X met Z in the billiard room and gave him the lead pipe...Just when the bomb went off in the attic, X fired three shots into the study through the French windows.¹³

¹³ LEWIS 1972: 250.

The story contains three names 'X,' 'Y,' and 'Z,' for three persons. The detective does not know the identity of the three persons, but he thinks he knows the role each person had in the crime. The names work like theoretical terms of a theory. They are introduced by the story, and their meanings and references are defined by the role the three persons, the referents of the names, play in the story. In other words, the names are introduced by functional definitions which define the occupants of three roles in the story. This provides a way of fixing the reference of the names by means of properties of the referents. For example, knowing that Y set the bomb gives us a way of identifying one of the three conspirators. We learn the meaning and reference of the three names by listening to the detective's story and by understanding the terms by which the story is told.

We understood these terms before the story was presented. The way in which we implicitly define the meaning and reference of the names depends on three conditions: (i) the causal relations that the names have with each other; (ii) the causal relation that they have with the terms we understood prior to the story; and (iii) the functional role the named entities play in the explanation of the story.

Suppose that, later, we discover the story is true of three people, Plum, Peacocke, and Mustard. This allows us to replace the original theoretical terms 'X,' 'Y,' and 'Z' with the names of the three people of whom the story is true. This means that we can identify the three persons in the detective's story with three real persons. In other words, we can identify the theoretical entities of the theory with entities in the world. In this way we come to know exactly who committed the crime and what role each person had in the murder. In Lewis'

words, Plum, Peacocke, and Mustard realise the theory devised by the detective. Given that they are the only people of which the story is true, they uniquely realise the theory. Lewis believes that the same transition occurs when we identify terms of one theory with terms of another theory – we discover that the terms refer to the same entities. I will come back to this below.

So, under this account, the meaning and reference of theoretical terms is implicitly defined by the role they play in ordinary folk-psychological explanations. Since mental terms form the conceptual apparatus of folk-psychology, their meaning and reference is implicitly defined by the role they play in the explanations. The same argument applies to emotion terms, which form a subclass of mental terms. This is to say that the meaning and reference of emotion terms is implicitly defined by the role they play in the ordinary folk-psychological explanations. Consider the following explanation. We say that someone fled *because* she feared the dog. The explanation accounts for the person's behaviour by introducing the term 'fear,' which refers to a specific kind of state. The state is caused by the bodily changes that perception of the dog produces. In turn, the state causes the person to flee. 'Fear' refers to the state caused by the changes that a dangerous stimulus has produced in the body, and which has caused fear behaviour.

This account defines the meaning and reference of the emotion term only by drawing on the relation between the input, i.e. the bodily change, and the output, the action of fleeing the dog. The definition says nothing about the state of fear per se. In particular, it says nothing about how fear feels when one experiences it and the role the feeling may play in the explanation. To see why this omission is problematic, one should think of stage fright. An actor may turn

down job offers because he knows that his stage fright is so overwhelming that it would affect his performance. The actor makes some choices because he is aware of how powerful the feeling is that his stage fright can bring about. For the actor, the reference of 'stage fright' is partly fixed by the feeling he experiences on stage. This example suggests that an adequate account of the meaning and reference of emotion terms may need to account for the subjective character of experiencing an emotion. This is consistent with the fact that we normally talk of emotions as states that produce characteristic feelings. Lewis' procedure accounts for the reference of emotion only on the basis of behaviour, while it does not say anything about the subjective experience of an emotion. To get around this difficulty, one may argue that feelings play an important role in determining the reference of emotion terms because they may explain how we refer to emotions in the first-person case. This introduces the second option for describing how we fix the reference of emotion terms.

As I have outlined, we fix the reference of natural kind terms by means of superficial properties of typical instances of substances and individuals. How might we apply this technique of reference fixation in the case of emotions? Well, emotions are kinds of states that produce characteristic feelings and behaviour in response to characteristic stimuli. One may argue that feelings and behaviour are superficial properties of emotions, that is, properties we observe when we experience our own and other people's emotions. In the first-person case, I experience my emotions through characteristic feelings. In the third-person case, I experience other people's emotions when I observe instances of characteristic behaviour. It is through these properties that we fix the reference of emotion terms. Like any superficial properties, they do not warrant that the

reference is correct. The superficial properties of water do not warrant that every time we are acquainted with something liquid and transparent and we call it 'water,' we refer to the right kind of substance. There are substances that look like water, although they are not water. In other cases, genuine instances of water may lack some or all the superficial properties of water.

The same consideration applies to emotions. The superficial properties of emotions do not warrant that, when we refer to emotions, we succeed in picking out states of the right kind. Other mental states may have superficial properties similar to emotions. For example, a feeling of deep sadness may feel like a general state of pain – a state that is not an emotion at all. Or genuine but different emotions may produce feelings that feel alike. For example, some episode of anger may feel like sadness. In some cases, the same pattern of behaviour may be produced by different emotions or other mental states. Crying, for example, may be caused by sadness, happiness, or deep pain. This shows that, like any superficial properties, the superficial properties of emotions do not warrant that we pick out states of the right kind of state.

What I have so far observed shows that there are, at least, two ways of describing how we fix the reference of emotion terms. On one, the reference is implicitly defined by the causal role emotion terms play in ordinary psychological explanations. On the other, the reference is fixed by means of superficial properties of typical instances of emotions. A term designates a natural kind when it meets two conditions. First, there must a way of describing how we fix the reference. Second, there must a way of determining the extension, which is independent of how we fix the reference. So far, it is clear

that there is a way of fixing the reference of emotion terms. The next step is to determine whether emotion terms meet the second requirement.

4. The Extension of Emotion Terms

The extension of emotion terms is determined by a psychological theory that accounts for all instances of emotions. What form would such theory have? An answer to this question comes from Lewis' argument which we have already discussed. His account of the meaning and reference of theoretical terms sets the standard for identifying terms of a domain with terms of another domain. The detective's story is an example of identity between entities of a theory and entities in the world. The three names 'X,' 'Y,' and 'Z' are theoretical terms that name theoretical entities which play specific roles in the detective's story. When we discover that Plum, Peacocke, and Mustard are the people who actually realise the theory, we are in a position to identify the theoretical entities designated by the three theoretical terms 'X,' 'Y,' and 'Z' with three entities in the world. These are three real people that played the exact role the theory assigns to the theoretical entities X, Y, and Z. It is at this point that we can say that Plum, Peacocke, and Mustard committed the crime. Lewis observes:

[W]hen we learn what sort of states occupy those causal roles definitive of mental states we will learn what states the mental states are – exactly as we found out who X was when found out that Plum was the man who occupied a certain role, and exactly as we found out what light was when

we found out that electromagnetic radiation was the phenomenon that occupied a certain role.¹⁴

This explanation describes what form a psychological theory of emotions should have. Such theory must identify which brain mechanisms or structures occupy the causal role that folk-psychological emotions play in ordinary psychological explanations. In order for the identity to be valid, only one brain mechanism or structure can realise the causal role that defines a given emotion. This is to say that the same brain mechanism or structure must realise all the explanations in which a given emotion term features. Consider the case of fear. The term features in many ordinary psychological explanations. We may say that someone flees the dog because she *is* afraid of it. Or we may say that she flees because she *feels* afraid of the animal. These are different instances of fear: one is dispositional, the other episodic. We know what fear is when we know what brain mechanism or structure occupies the causal role the term 'fear' occupies in these and other explanations. I have early flagged the claim that psychological theories may not be up to the task. This is because there is reason to believe that psychological theories of emotions only focus on emotional episodes. Therefore, psychological theories fail to account for folk-psychological emotions. To support this claim, I will consider two examples.

To my knowledge there are two theories that explicitly define the nature of emotional episodes. One is William James' theory of emotions.¹⁵ It claims that emotions are perceptions of specific changes in the body. These perceptions are what we commonly call feelings. The other theory is from the neurologist

¹⁴ LEWIS 1972: 258.

¹⁵ JAMES 1884.

Antonio Damasio.¹⁶ On Damasio's account, emotions are collections of changes in the body. The theory distinguishes the emotions themselves (i.e. the changes) from the experience of the changes (i.e. the feelings).

Let us examine James' theory first. It is both a psychological and philosophical theory of the emotions. It is a psychological theory because it provides an explanation of which physical states are involved in the production of emotions. On the philosophical side, it aims to clarify the role of emotions in ordinary psychological explanations. I will focus on the psychological theory. The fundamental claim is that there is an important difference between folk-psychological explanations of emotional behaviour and a scientific explanation of the same phenomenon, and that the difference is in the *causal order of events*. Folk-psychological explanations say that someone behaves in a certain way *because* she has a certain emotion. James thinks that, in a scientific explanation, the order must be reversed. He writes:

Common sense says, we lose our fortune, are sorry and weep; we meet a bear, are frightened and run; we are insulted by a rival, are angry and strike. The hypothesis here to be defended says that this order of sequence is incorrect, that the one mental state is not immediately induced by the other, that the bodily manifestations must first be interposed between, and that the more rational statement is that we feel sorry because we cry, angry because we strike, afraid because we

¹⁶DAMASIO 1994.

tremble, and not that we cry, strike, or tremble, because we are sorry, angry, or fearful, as the case may be.¹⁷

James' is an example of a functionalist theory. He believes that the body undergoes changes in response to external stimuli. Emotions are perceptions of these changes. So, for example, when someone sees a dangerous dog, the visual experience causes a specific pattern of change in the body that the person then perceives in the form of a feeling of fear. Fear, according to James, is perception of a specific pattern of change. If the change occurred without being perceived, the person would not feel afraid.

One may wonder whether undergoing a change without perceiving it qualifies as being afraid – namely as having an emotional disposition – instead of feeling afraid – namely as experiencing an emotional episode. James' answer is that emotion is the feeling of a bodily change. Therefore, one cannot have an emotion without feeling it. On this account, emotions are perceptions of specific patterns of changes that arise as responses to perceptions of certain objects or situations. A similar theory has been defended, in more recent years, by Jesse Prinz, who argues that emotions are perceptions of specific bodily changes that evolution has selected to track external conditions.¹⁸

The main problem with James' theory is that it does not do justice to the fact that we use emotion terms to refer to emotional dispositions. Hence, the claim that emotions are perceptions of changes in the body does not account for all instances of folk-psychological emotions. This conclusion is open to two interpretations. On one, the theory shows that the kind of state we refer to when

¹⁷ JAMES 1884: 190.

¹⁸ PRINZ 2004b. For more on Prinz's theory, see Chapter II.

we say that someone has an emotion differs from the kind of state we refer to when we say that she feels an emotion. James' theory will account only for the latter kind of state. In this respect James' is a theory of emotional episodes, instead of a theory of emotions. On the other interpretation, when we say that someone has an emotion, we mean that she has an emotional episode. This interpretation denies that there are emotional dispositions because emotions are perceptions of episodic events in the body. The former reading would allow one to rescue James' theory and say that it accounts only for emotional episodes. This conciliatory reading, however, does not do justice to the fact that James wants his theory to define the nature of emotions. James' theory sits more comfortably with the latter reading. This means that the theory simply fails to account for emotional dispositions. And, since emotional dispositions are integral to folk-psychological emotions, it follows that James' is not a theory of folk-psychological emotions at all.

In more recent years, Damasio has revived James' theory and tried to give an alternative account of the nature of emotions. James identifies emotions with perceptions of bodily changes. But, for Damasio, emotions are *the changes themselves*:

I see the *essence* of emotion as the collection of changes in body state that are induced in myriad organs by nerve cell terminals, under the control of a dedicated brain system, which is responding to the content of thoughts relative to a particular entity or event. Many of the changes in the body – those in skin color, body posture, and facial expression, for instance – are actually perceptible to an external observer...Other

changes in body state are perceptible only to the owner of the body in which they take place.¹⁹

Damasio's account has the advantage of allowing that emotions can occur in the absence of bodily changes when brain centres typically associated with bodily changes are active. The brain can enter the kind of state it would enter if bodily changes occurred, even when the changes do not actually occur. Damasio calls the pathway that leads to the activation of the brain centres in absence of bodily changes the 'as-if loop.' When this pathway is used, the brain functions as if the body had been perturbed by the bodily changes that normally accompany emotions. While this view may, *prima facie*, seem to allow one to account for emotional dispositions, in fact this theory is still committed to an episodic conception of emotions, which derives directly from James' theory. This becomes apparent in the fact that Damasio explains emotional dispositions as resulting from episodic states of the brain, while James explains them as resulting from episodic states of the body. So Damasio just locates on the neural level what James locates at the level of the body. It is difficult to see how this could account for emotional dispositions that, by their very nature, are not episodic states. Once again, there seems to be no overlap between folk-psychological emotions and the kinds of emotions in which psychology and neuroscience are interested.

One may object that when we talk about emotional dispositions we do not really talk about emotions; we talk about other kinds of states that we mistakenly call emotions. These states are not explained by any fact about the

¹⁹ DAMASIO 1994: 139.

kinds of emotions empirical science investigates. As a consequence, the belief that these dispositional states are emotions is mistaken. On this view, emotions are emotional episodes and nothing else. For the sake of argument, I will grant this claim and see whether there is evidence that shows that emotional episodes are a natural kind. What sort of evidence would we need? It would be evidence showing that different emotional episodes are produced by the same brain mechanism or structure. For example, it would show that episodes of sadness are produced by the same brain mechanism that produces episodes of happiness, fear, envy, pride, and so on. This would prove that emotional episodes are instances of the same kind of neural state. But evidence from neuroscience in fact shows that this is not the case: different emotional episodes are *not* produced by the same brain mechanisms. They are produced by different mechanisms. To illustrate, I will review two bodies of evidence. One comes from Damasio's work on the production of different kinds of emotional responses. The other is evidence from research on the activation of different brain areas in the production of emotional responses. Pet and fMRI data show that different areas are involved in such responses.

Damasio divides emotions into primary and secondary sets. Primary emotions include happiness, sadness, anger, fear, and disgust.²⁰ These are also known as basic emotions.²¹ Damasio thinks that primary emotions are those we experience early in life and for which there is some sort of preorganised mechanism. Secondary emotions are those we experience as adults, whose scaffolding has been built on the primary emotions. Secondary emotions include

²⁰ DAMASIO 1994: 149.

²¹ Affect program theorists include surprise among the basic emotions.

jealousy and envy.²² It is plausible to suppose that these emotions roughly correspond to the higher emotions.

For Damasio, primary emotions are intimately linked with biological regulation and survival. We share them with many species of animals. The subcortical mechanisms of primary emotions are not only important for basic biological regulation (e.g. maintaining homeostatic equilibrium), they also help classify features in the external environment as positive or negative. According to Damasio, each type of emotion is realised by mechanisms that involve different brain areas. Specifically, the limbic system handles primary emotions; and a larger mechanism involving the prefrontal and somatosensory systems deals with secondary emotions. Unfortunately, Damasio does not provide examples of how the two systems produce different types of emotions. He only describes how the first mechanism may produce one specific primary emotion: fear. According to Damasio:

One possibility...is that we are wired to respond with an emotion, in preorganized fashion, when certain features of stimuli in the world or in our bodies are perceived, alone or in combination. Example of such features include size (as in large animals); large span (as in flying eagles); type of motion (as in reptiles); certain sounds (such as growling); certain configurations of body state (as in pain felt during a heart attack). Such features, individually or conjunctively, would be processed and then detected by a component of the brain's limbic system, say, the amygdala.

²² Damasio observes that James' theory works well for those emotions we experience early in life – i.e. the primary emotions – but it does not do justice to “what Othello goes through in his mind before he develops jealousy and anger, or to what Hamlet broods about before exciting his body into what he will perceive as disgust.” (DAMASIO 1994: 130).

Its neuron nuclei possess a dispositional representation which triggers the enactment of a body state of the emotion fear...All that is required is that early sensory cortices detect and categorize the key feature or features of a given entity (e.g., animal, object), and that structures such as the amygdala receive signals concerning their *conjunctive* presence.²³

Damasio supposes that the primary emotions are produced by a mechanism that involves the limbic system and the anterior cingulate cortex. Evidence that the amygdala plays an important role in the production of primary emotions comes from observations in animals and humans. The first hint that the amygdala and emotions might be related was found as early as the 1930s in subjects who underwent surgical resection of the part of the temporal lobe containing the amygdala.²⁴ The surgery produced affective indifference. Evidence on the relation between the anterior cingulate and emotions comes from the study of people with lesions in and around the anterior cingulate cortex. Damasio describes one case he directly observed. The patient, Mrs T., suffered from a stroke that produced extensive damage to the dorsal and medial regions of the frontal lobe in both hemispheres. After the stroke, Mrs T. became motionless and speechless. When asked about her condition, she usually would remain silent. There was no way of knowing whether she could not remember what happened to her or whether she had recollection but was unwilling to talk about it. Months later, as she gradually emerged from her state, she began to answer questions about her condition. Damasio remarks that Mrs T. never showed worry, fear, or concern for her condition or for anything else for that

²³ DAMASIO 1994: 131-2.

²⁴ DAMASIO 1994: 134.

matter. He speculates that the lack of emotional response to her condition was due to the fact that the stroke had damaged an area involved in the production of emotional responses. On the basis of this and other pieces of evidence, Damasio builds his hypothesis that a mechanism involving the limbic system and the anterior cingulate cortex underpins primary emotions.

Damasio thinks that a different mechanism must be involved in the production of secondary emotions. He observes that:

[T]he mechanism of primary emotions does not describe the full range of emotional behaviors. They are, to be sure, the basic mechanism. However, I believe that in terms of an individual's development they are followed by mechanisms of *secondary emotions*, which occur once we begin to experience feelings and forming *systematic connections between categories of objects and situations, on the one hand, and primary emotions, on the other*. Structures in the limbic system are not sufficient to support the process of secondary emotions. The network must be broadened, and it requires the agency of prefrontal and of somatosensory cortices.²⁵

A crucial feature of Damasio's overall hypothesis is that secondary emotions *depend on, and are built from, the mechanisms of primary emotion*. In other words, "secondary emotions utilize the machinery of primary emotions."²⁶ He writes:

²⁵ DAMASIO 1994: 134.

²⁶ DAMASIO 1994: 137.

Nature, with its tinkerish knack for economy, did not select independent mechanisms for expressing primary and secondary emotions. It simply allowed secondary emotions to be expressed by the same channel already prepared to convey primary emotions.²⁷

Secondary emotions are, then, produced by a mechanism that shares some elements with the mechanism that produces primary emotions. This is, however, far from showing that the two types of emotions are realised by the same mechanisms. No matter how small the differences are, the two mechanisms are different. In particular, the one for secondary emotions is built on that for primary ones but it also requires the activity of other brain areas such as the prefrontal and somatosensory cortices. This shows that, even if we were willing to say that emotions are episodic states, evidence shows that different emotional episodes are produced by, at least, two different brain mechanisms. One mechanism produces primary emotions, while the other produces secondary emotions.

One may draw two conclusions from Damasio's theory. The first is that there is evidence suggesting that episodes of primary emotions correlate with a mechanism involving the limbic system. The same mechanism does not suffice to produce experiences of secondary emotions. Although evidence is not conclusive, Damasio shows that two different mechanisms underpin the production of different emotional experiences. Moreover, the mechanism for primary emotions seems more specific and easier to locate. The mechanism for secondary emotions, by contrast, seems more complex and difficult to locate. On

²⁷ DAMASIO 1994: 139.

this basis, one may conclude that only episodes of primary emotions form a natural kind.

Paul Griffiths draws a similar conclusion on a different evidential basis.²⁸ He draws on the work of the psychologist Paul Ekman who identifies six emotions – affect programs, in his words – that are universally shared among humans.²⁹ They are complex, coordinated, and automated responses to environmental situation relevant for an organism. They involve: (a) facial expressions, (b) musculoskeletal changes, (c) vocal changes, (d) endocrine changes, and (e) autonomic system changes. There is evidence that all the basic emotions (the primary emotions in Damasio’s terminology) have these five features. Damasio’s work seems to support Griffiths’ conclusion. It is worth noting that both Damasio’s and Ekman’s theories are committed to an episodic conception of emotions. This means that what they call emotions does not have the same extensions as folk-psychological emotions. Therefore, the two theories do not show that folk-psychological emotions are a natural kind. They show the more limited point that episodes of primary emotions are underpinned by the same brain mechanism and that these primary emotions, therefore, may qualify as a natural kind.

The second conclusion that we may draw from Damasio’s work concerns the whole class of emotions – primary and secondary in Damasio’s terminology, basic and higher emotions in the terminology of Ekman’s affect program theory. Damasio’s account shows that, even supposing we were willing to accept that emotions are episodic states and nothing else, there is no single brain mechanism or structure that uniquely realises episodes of primary and

²⁸ GRIFFITHS 1997: 77-99.

²⁹ EKMAN et al. 1983.

secondary emotions. Primary emotions are mainly produced by activation of the amygdala, while secondary emotions involve more complex structure such as the prefrontal and somatosensory cortices. It follows from this that episodes of primary and secondary emotions do not share the same nature. Therefore, they are not a natural kind.

The same conclusion is supported by PET and fMRI research on the brain areas involved in the production of different emotions. There is a convergence in lesion and neuroimaging data in the identification of the structures underlying positive and negative emotion in the human brain. These studies, which have examined episodes of happiness, sadness, fear, anger, anxiety, and disgust, typically report increased activation in limbic and paralimbic regions of the brain, especially during negative emotional states. These findings are consistent with the notion that limbic and paralimbic regions of the brain mediate emotional states and the processing of information with affective significance.

Evidence supports the claim that the prefrontal cortex is involved in the production of negative emotions such as depression.³⁰ Early studies that evaluated mood subsequent to brain damage suggested that patients with damage to the left hemisphere, particularly in the prefrontal cortex, were more likely to develop depressive symptoms. A common method for the experimental production of negative emotion has been to use anxiety-disordered patients exposed to stimuli that provoke anxiety like pictures of spiders for spider phobics. A study has found that two regions within the prefrontal cortex were

³⁰ DAVIDSON and IRWIN 1999.

strongly activated during the experimental provocation of anxiety.³¹ This suggests that the prefrontal cortex is involved in the production of negative emotions like anxiety and depression.

Other imaging studies suggest that the amygdala is involved in the production of fear responses. Activation of the amygdala in response to faces exhibiting fear has been found with fMRI. Using either pleasant or unpleasant pictures or happy and sad faces accompanied by instructions to generate the emotion depicted in the faces, researchers found activation in the left amygdala during exposure to unpleasant pictures and during generation of a sad mood.³² Another fMRI study found that, when subjects were presented with pleasant and unpleasant pictures, the amygdala was activated only by unpleasant pictures.³³ The role of the amygdala in fear is confirmed by a study on psychopathic subjects.³⁴ Data from the healthy controls confirm that fear conditioning involves the amygdala, orbitofrontal cortex, anterior cingulate, and anterior insula. Psychopathic subjects were significantly different from the healthy controls in their activation in all brain regions. The healthy controls showed sustained activation of the left amygdala throughout the acquisition of fear, whereas psychopathic subjects displayed only right amygdala activation. In the direct comparison, the left amygdala of psychopathic subjects was significantly less active than that of the healthy controls when acquisition occurred.

Other studies show that the insula and basal ganglia are involved in the production of experiences of disgust. Evidence for this claim comes from an

³¹ RAUCH et al. 1997.

³² LANE et al. 1997.

³³ IRWIN et al. 1996.

³⁴ BIRBAUMER et al. 2005.

fMRI study of subjects who produced experiences of disgust via recalling unpleasant autobiographical memories.³⁵ Researchers observed specific activation of the insula, basal ganglia, cingulate cortex, hippocampus, thalamus, and primary visual cortex during experience of disgust. It is plausible that the activation of some of these areas is due to memory recall. Converging evidence on disgust comes from a study on one subject with Huntington's disease.³⁶

Some interesting data concern guilt. Guilt is a higher emotion that involves the ability of judging that one has done something wrong; it qualifies as a secondary emotion in Damasio's taxonomy. One PET study found that episodes of guilt were associated with activity in three paralimbic regions: the bilateral anterior temporal poles, the anterior cingulate gyrus, and the left anterior insular cortex.³⁷ Activation in anterior insular cortex during episodes of guilt is consistent with the theory and data regarding the role this region may play in the processing of emotional information. No activation occurred in the amygdala or orbitofrontal cortex during episodes of guilt in this study. This confirms the hypothesis that the amygdala may be more specifically involved in fear and the processing of fear-related stimuli.

These data, like Damasio's neuropsychological case studies, suggest that different brain mechanisms are involved in the production of different emotional episodes. The consequence is that, even if we were willing to entertain the idea that emotions are emotional episodes and nothing else, the evidence does not support the conclusion that different emotional episodes are instances of the same psychological kind. This means that there is not a single

³⁵ FITZGERALD et al. 2004.

³⁶ CALDER et al. 2000.

³⁷ SHIN et al. 2000.

theory of emotional experience but different theories for different kinds of emotional episodes. This confirms that episodes of primary and secondary emotions do not form a natural kind.

To sum up: I have argued that we speak of emotions in two ways – as episodes and as dispositions. Psychological theories only account for emotional episodes. This is a first reason for thinking that folk-psychological emotions do not form a natural kind. I considered the possible objection that one may argue that only emotional episodes are actually emotions, while emotional dispositions are other kinds of states that we mistakenly call emotions. On this view, only emotional episodes are a natural kind. The objection would be correct only if there was evidence showing that emotional episodes are all instances of the same psychological kind. This would require that they were realised by the same brain mechanism or structure. The evidence, however, shows the opposite. Different brain areas appear to be involved in the production of different emotional episodes. The natural conclusion is that the claim that only emotional episodes form a natural kind is false. A more general conclusion is that there is no overlap between folk-psychological emotions and the kinds of emotions that psychology and neuroscience investigate. The two theories are committed to different kinds of entities. And neither is a natural kind.

5. Emotions as Social Kinds

The conclusion that emotions are not a natural kind leads to two alternatives. On one, we could take an eliminativist position about emotions and say that folk-psychological emotions should not be the object of empirical research into

the nature of emotions. On the other, we could say that the conclusion that emotions are not a natural kind does not entail that they are not a kind of some sort. I favour the second alternative, and will argue that they are a *social kind*. Before discussing this claim I will consider the eliminativist option.

In his book *What Emotions Really Are*, Paul Griffiths defends an eliminativist position about emotions.³⁸ He thinks that emotion terms should be eliminated and replaced by more accurate notions. Griffiths' proposal does not aim at reforming our ordinary talk about emotions. It only concerns the domain of an empirical science of human emotions. It is in relation to this domain that emotion terms should be eliminated. Griffiths bases his proposal on an argument about reference. He observes that emotion terms have partial reference. A term has partial reference when it refers, at the same time, to two different kinds of entities. The term 'jade' is the paradigm case of partial reference. The term is used as if it were referring to a specific mineral, in the same way as 'diamond' refers to one – and only one – kind of mineral. However, the term 'jade' covers two different sorts of minerals: jadeite and nephrite. As a consequence, 'jade' partially refers to each of these two minerals. This means that, for geology or chemistry, the term 'jade' does not refer to any natural kind.

According to Griffiths, the same reasoning applies to emotions. The term 'fear,' for example, refers to a wide range of experiences and behaviour, all of which are instances of fear. For instance, I may use this term to refer both to a state characterised by evident bodily changes such as facial pallor, shaking and fast heartbeat and, on the other hand, to long-term behaviour like avoidance,

³⁸ GRIFFITHS 1997, 2004a, 2004b.

which does not involve evident changes in the body. The former event is an instance of an emotional episode, while the latter is an instance of a dispositional emotion. It seems, for Griffiths at least, that there is no similarity between the two types of behaviour. From this Griffiths concludes that emotion terms have partial reference. They refer to phenomena that have little in common apart from our inclination to call them 'fear.' This is consistent with the claim that folk-psychological emotions do not form a natural kind. Griffiths makes a stronger claim though. He maintains that in the same sense that geology and chemistry hold that there is no such thing as jade, only jadeite and nephrite, for a science of human psychology there is no such a thing as emotion.

Griffiths' conclusion is of concern to empirical research into the nature of emotions, but not to ordinary emotion talk in which we continue to speak of emotions as episodes and as dispositions. The claim that emotions are not a natural kind does not entail that they are not a kind at all, because there are different notions of kind beside that of natural kind. Philosophers speak of normative kinds, human kinds, and social kinds. What kind of kind are emotions? I will argue that emotions are a *social kind*. Social kinds are arbitrary distinctions that do not correspond to distinctions in nature. An example is the distinction between married man and bachelor. Another example recently discussed in social psychology is the distinction between mentally healthy and mentally ill people.³⁹ It can be argued that neither of these distinctions corresponds to states or properties that exist in nature. They are ways of grouping people introduced by convention. In Ian Hacking's words, they are human kinds. Yet, these distinctions play an important role in social and

³⁹ MURPHY and STICH 2000.

interpersonal interactions. For example, whether someone is mentally healthy or not determines her place in society and how 'normal' people relate to her.

The claim that some folk-psychological concepts can be viewed as a social kind has been put forward for the distinction we make between the five senses.⁴⁰ Evidence suggests that the five senses do not identify five corresponding faculties in the perceptual system. Therefore, the five senses are not natural kinds. This does not mean that our practice of distinguishing between five senses is mistaken. Philosophers have argued that this practice may be explained in terms of convention.⁴¹ They point out that if doing something like drawing a certain distinction the same way as others do proves useful to each member of a community, then we can explain why all community members draw the same distinction as the result of a convention. On this account, distinguishing five senses is useful insofar as we all make the same distinction. The distinction is a convention because it does not identify a distinction in nature and it reflects a practice common to all community members. This is in line with J.L. Austin's remark that "our common stock of words embodies all the distinctions men have found worth drawing, and the connections they have found worth making, in the lifetimes of many generations."⁴²

The same consideration applies to emotions. Our emotion vocabulary has remained largely unchanged over the last 2000 years. Only a few notions like anxiety and depression have been introduced recently as disciplines like psychiatry and psychotherapy have become more accessible to the public. There is, of course, reason to believe that the distinction between different kinds of

⁴⁰ NUDDS 2003, also NUDDS forthcoming .

⁴¹ NUDDS 2003.

⁴² AUSTIN 1970: 182.

emotions is not as constant as that between the five senses. Additionally, some emotion terms that are common in Western societies are not found in non-Western societies. This phenomenon mostly concerns higher emotions.⁴³ But some cultural differences are also found in basic emotions.⁴⁴ The claim that emotions are a social kind does not, however, presuppose that they are found in all cultures. The issue at stake is not the universality of emotions, but the reason why we group different kinds of states into the category of emotions. A possible answer is that, as the five senses, we refer to different kinds of states as emotions because this is an implicit convention built into the practice of explaining behaviour. We adopt this convention as soon as we start sharing a language with other speakers.

This is not the only explanation available. Social kinds can also be viewed as ways of grouping entities according to their function. We call 'houses' those buildings that have the function of providing shelter. We call 'cars' those vehicles that have the function of transporting people. We call 'pets' those animals that have the function of keeping people company. The function of the objects explains why we group them in the same category. One may argue that we group different kinds of states into the category of emotions because they have the same function in folk-psychological explanations. Note that I use the

⁴³ Linguist Anna Wierzbicka has observed that the Polish emotion term 'tęskić' has no exact equivalent in English. The closest equivalent is the expression 'to long for.' But this does not capture the exact meaning of the term. One can say in English 'She longs for peace,' but one cannot express the same thought in Polish using the verb 'tęskić'; 'tęskić' implies distance in space, rather like the English word 'homesick' does. But 'tęskić' is not restricted to separation from home. It implies a painful feeling caused by being away (in space) from people or places one loves. See WIERZBICKA 1986, 1988.

⁴⁴ Linguists have shown that the Ilongot language of the Philippines has no word corresponding exactly to the English word anger. The language has another concept, *liget*, glossed as energy, anger, passion, which is not lexicalised in English. See ROSALDO 1980.

term 'function' here not in the sense of functionalist theories of mind. Rather, by 'function' I mean the contribution that a certain notion makes to the explanation of certain phenomena. Emotions are notions we use to explain and understand our own and other people's behaviour. This suggests that they have explanatory significance. Emotions allow us to explain behaviour as the result of different kinds of mental states. When we say that someone cries because she is sad, we explain her behaviour as the result of a specific kind of state. When we say that she cries because she is happy, we explain a similar pattern of behaviour as the result of a different kind of state. Similar pieces of behaviour can be produced by different kinds of emotions and so qualify as different kinds of behaviour. Crying in sadness, for example, is a different kind of behaviour from crying in happiness. On this account, the function of emotions is to explain behaviour as the result of specific kinds of states.

6. Conclusion

The view so far outlined provides an answer to the question with which I opened this chapter – what justifies the intuition that emotions are determinates of the same determinable kind? That is, why do we group different kinds of states into the category of the emotions? I have considered two possible views. On one, emotions are a natural kind. We group them together because they are instances of the same psychological kind. This would be a brain mechanism or structure that accounts for all instances of emotions. I have shown that this answer is unsatisfactory because psychological theories do not account for the two kinds of states covered by the folk-psychological notion of emotion – emotional dispositions and emotional episodes. Psychological theories only

account for emotional episodes. It follows that there is no single theory of emotion capable of investigating folk-psychological emotions in their entirety. Therefore, folk-psychological emotions are not a natural kind.

On the other view, the one that I advocate, emotions are a social kind. The folk-psychological category of the emotions does not map onto any defined scientific category, but we can think of them as mapping instead onto categories that have social significance. On this account, we group different kinds of states together because of conventions built into our ordinary talk about emotions. This convention has the effect that members of the same community explain the same phenomena as resulting from the same kinds of states – the emotions. Therefore, emotions have specific explanatory significance.

CHAPTER II

PHILOSOPHICAL THEORIES OF EMOTIONS

1. Introduction

In the previous chapter, I showed that we talk of emotions in two ways – as episodes and as dispositions. Emotional episodes are feelings and sensations like feelings of fear or anger. Emotional dispositions are enduring non-episodic states like hating a place, regretting one’s action, or fear of flying. It is plausible to think that emotional episodes should be explained in terms of underlying emotional dispositions.¹ On this account, emotions are dispositional states that typically produce emotional episodes such as feelings and behaviour. The experiential character, namely the feeling, is probably the most salient feature of emotions. This is evident in the fact that we know that we have emotions when we feel them. These feelings can be pleasant or unpleasant. When pleasant, we enjoy them and want them to last forever; when unpleasant, we dislike them and want them to go away. The experiential character is, therefore, the feature of emotions that is most likely to capture people’s attention. The experiential character of emotions has also drawn the attention of philosophers. The interest in the experiential character of emotions has produced a brand of theories that I will call the *experiential view*. They all claim that emotions are some sorts of feelings.

¹ I will develop this view in Chapter III.

These views are problematic because they fail to account for those instances of emotions that do not involve feelings and sensations. The fact that someone fears flying does not entail that she constantly feels afraid. Her state may affect her long-term behaviour and, for example, make her choose to travel by train rather than by plane. We normally explain this behaviour in terms of emotional dispositions, rather than in terms of emotional feelings. This is an example of emotion that does not fit with the claim, defended by the experiential view, that emotions are a sort of feelings. Hence, the experiential view fails to provide an adequate overall account of folk-psychological emotions.

Their experiential character is not the only feature of emotions that has drawn the attention of philosophers. Emotions are in some ways similar to evaluative judgements. When someone fears a dog, there is a sense in which she evaluates the animal as being dangerous. This shows that emotions have an evaluative character. Philosophy generally views evaluations as cognitive states. This has led some philosophers to claim that emotions are cognitive states such as judgements. Others claim that emotions are not cognitive states, but that cognitive states are necessary conditions for emotions. I will refer to this range of theories as the *cognitive view*.

The cognitive view is challenged by the fact that creatures that do not possess cognitive abilities do have emotions. Fear is a state we observe in most animals from reptiles to mammals. Basic emotions are found in most primates. Infants also have emotions. This suggests that the cognitive view fails to account for emotions as states that humans share with other species and infants. An adequate account of emotions, by contrast, needs to explain their evaluative

character without identifying it with the sort of cognition of which only adult humans are capable.

In this chapter I will critique both the experiential and cognitive views. I will show what motivates them, and why they fail to provide satisfactory accounts of the emotions. First, I will examine the experiential view. The core commitment of the view is the claim that emotions are some kind of feelings. I will show that this claim fails to account for emotional dispositions. It follows that the experiential view does not account for folk-psychological emotions in their entirety, but only for emotional episodes. Second, I will examine the cognitive view. Here the core commitment is that emotions are evaluative judgements. I will show that this claim is cognitively too demanding and does not allow us to explain how infants and animals can have emotions. Finally, I will consider Richard Wollheim's *dispositional view* of emotions. This discussion will prepare the ground for the account of emotions that I will develop in the next chapter.

2.1 The Experiential View

Broadly speaking, the experiential view divides into two types. They are the *sensation view* and the *perception view*. The sensation view claims that emotions are feelings or sensations of some sort. The perception view, on the other hand, claims that emotions are perceptions of changes or patterns of changes in the body. This kind of perception is what we normally call 'feeling.' The perception view further divides into two types. They are *modest* and *immodest* views. A modest view holds that everything that needs to be explained about emotions can be explained in terms of perceptions of bodily changes. An example of a

modest view is William James' theory of emotions.² An immodest view, by contrast, accepts that emotions are perceptions of bodily changes, but also tries to explain the fact that emotions are directed at objects and situations in the world. What makes this view immodest is the attempt to account for the fact that emotions are directed at objects outside the body and hold the claim, at the basis of the modest view, that emotions are perceptions of bodily changes, that is, states the objects of which are inside the body. An example of an immodest theory is Jesse Prinz's perceptual theory of emotions.³ I will discuss Prinz's theory after criticising the cognitive view because Prinz proposes his theory as a bridge between James' theory and the cognitive view.

2.2 The Sensation View

The sensation view is similar to adverbialism about perception. Historically, adverbialism was proposed as an alternative to the sense-datum theory of perception.⁴ While the sense-datum theory accounts for perceptions by appeal to mind-dependent objects, adverbialism characterises perceptions as adverbially specifiable modifications of the perceiving subject. An adverbialist account of emotions says that emotions are modifications of the subject that can be characterized by specialised adverbs. This view has some intuitive appeal. Expressions like 'I feel sad,' 'I feel happy,' and 'I feel disgusted' seem to be reports of how the subject is differently affected by each experience. So, for example, feeling sad is having an experience in which one feels, so to speak,

² JAMES 1884, 1890.

³ PRINZ 2004b.

⁴ For discussion see MARTIN 1998a. I will discuss adverbialism and the sense-datum theory in Chapter IV.

sad-ly. On this construal, emotions are states of awareness of properties of the experience itself. These properties determine how the experience feels to the subject. It is in virtue of these properties that we distinguish between different kinds of emotional feelings. A feeling of anxiety, for example, is a sensation in which one is aware of feeling anxious-ly. The property of feeling anxious-ly is what distinguishes a feeling of anxiety from other feelings.

The sensation view does justice to some aspects of our pre-theoretical understanding of emotional episodes. We tend to think of these experiences as feelings and sensations with a characteristic phenomenal character. An episode of anger feels the way anger does; a feeling of fear feels the way fear does, and so on. The temptation is then to explain why an experience feels a certain way in terms of properties of the experience. The main problem with this view is that it does not account for the fact that when we feel an emotion, we do not become aware of properties of the experience, but of changes in our body. These changes are what the emotional episode is an experience of. This is something the sensation view does not explain. In contrast, such an explanation is provided by the perception view.

2.3 A Modest Perception View – James' Theory of Emotions

William James' theory of emotions is an example of a modest perception view. It claims that emotions are nothing over and above feelings of changes in the body which follow the perception of exciting facts or objects. When someone meets a dangerous dog, various changes occur in her body: her heart rate increases, her muscles contract, her breathing becomes shorter and quicker. The experience of

these changes is what James calls fear. This view is summarised by the following claim:

[B]odily changes follow directly the PERCEPTION of the exciting fact, and...our feeling of the same changes as they occur IS the emotion.”⁵

James distinguishes two classes of emotions, the *standard* or *coarser* emotions on the one hand, and the *intellectual* or *subtler* emotions on the other. The former are those “in which everyone recognizes a strong organic reverberation.”⁶ In this class, James includes surprise, curiosity, rapture, fear, anger, lust, greed as well as grief, rage, and love. The class of subtler emotions is the class of “those [emotions] whose organic reverberation is less obvious and strong,” and it includes “moral, intellectual, and aesthetic feelings,” as well as “feelings of pleasure and displeasure, of interest and excitement.”⁷

On James’ view, the changes do not occur only inside the body, some changes also affect the outwardly visible parts of the body such as the skin and facial muscles. The former are changes such as the contraction of the smooth muscles of the intestine or increase in heart rate. The latter are changes such as facial expressions and complex behavioural episodes such as fleeing a dog. This account of the physiology of emotions explains James’ famous phrase:

⁵ JAMES 1884: 189-190.

⁶ JAMES 1890: 448.

⁷ JAMES 1890: 448.

[W]e feel sorry because we cry, angry because we strike, afraid because we tremble, and [it is] not that we cry, strike, or tremble, because we are sorry, angry, or fearful, as the case may be.⁸

On this view, the change comes first and is a response to the perception of an exciting fact or object. Perception of the change follows and can be described as a perceptual state the object of which is the change itself. This perceptual state is what we call a 'feeling.' On this account, saying that "we feel sorry because we cry" means that the experience of sorrow is the perception of bodily changes that include modifications in the face like those that occur when people cry. The experience of these and other changes is the feeling of sorrow. On James' view, the emotion 'sorrow' is identified with the feeling of sorrow.

The reason why this theory qualifies as a perceptual view is that James thinks of feelings as perceptual states the objects of which are the bodily changes of which feelings are experiences. To put it differently, having an emotional episode is having a certain feeling. This is a perceptual state. The object of this state is a change in the body.⁹ There is a further reason for regarding the theory as a perceptual view. Perception is by its own nature passive. The physical properties of objects impinge upon the senses and thereby cause perceptual experiences like seeing a red apple, hearing a tune, tasting a lemon, smelling roses, and touching velvet. On James' view, emotions are perceptions of changes in the body. These changes affect the somatosensory system in the same way physical properties affect the senses. On this account, emotions are passive states resulting from the action of bodily changes upon the somatosensory

⁸ JAMES 1884: 190.

⁹ I present a detailed discussion of the perception view of emotional feelings in Chapter IV.

system. It follows from this that emotions and perceptions are alike – they are passive states.

To draw all this together, James provides us with a precise account of the aetiology of emotional experience. Emotions are perceptions of patterns of change directly caused by perceptions of exciting facts or objects. This account implies a specific order of mental events. First there is the experience of the exciting fact or object. This is followed by a bodily change. The emotion is perception of the change. This is what we call a feeling.

2.4 Problems with James' Theory

In the previous chapter, I showed that we talk of emotions in two ways – as episodes and as dispositions. James' theory aims to provide a philosophical as well as a psychological theory of emotions. It is a philosophical theory because it accounts for the role emotions play in ordinary psychological explanations. It is a psychological theory because it provides a definition of what kinds of psychological states emotions are – they are perceptions of bodily changes. As a philosophical theory, James' fails because it does not account for emotional dispositions. These kinds of states are relevant to ordinary psychological explanations.¹⁰ It follows that, as a philosophical account of emotions, James' theory is inadequate.

The theory also raises other problems. There is reason to believe that emotions are states we actively form in response to stimuli. For example, when someone fears a dog, she reacts to it in a specific way – i.e. with fear. Different

¹⁰ This view is developed in Chapter III.

emotions involve different kinds of reactions.¹¹ Fear would involve a different reaction from joy; anger is a different reaction from amusement; and so on. I can react to the same object in different ways. For example, the same joke that now amuses me would upset me if I were to later become particularly sensitive to the joke's subject. On this view, emotions are reactions we form in response to objects and situations in the world. Reactions are, by their very nature, active states.

This suggests that emotions are totally different from perceptions, which are passive states we happen to have when physical properties of objects act upon the senses. The claim that emotions are perceptions of changes in the body is, therefore, problematic. First, it overlooks the fact that emotions are reactions we actively form to objects. Second, it characterises emotions as totally passive states.

Additionally, James' theory leads to two further problems. Emotions have intentionality because reactions are responses to objects and situations *in the world*. When someone fears a dog, the dog is the object of her fear. When she is amused by a joke, the joke is the object of her amusement, and so on. Emotions also have an evaluative character. When a person fears a dog, she evaluates it as a threat or danger. When she is amused by a joke, she evaluates it as funny. James' theory is inadequate to account for either feature. He claims that emotions are perceptions of bodily changes. Perception in general is directed at the objects of which it is an experience. A visual perception of a red apple is directed at the object of which it is an experience – the red apple. As perceptions of bodily changes, emotions are directed at the objects of which they

¹¹ I will discuss the idea that emotions are reactions in Chapter III.

are experiences, namely the changes *in the body*. How can this view account for the fact that emotions are directed at objects and situations *in the world*?

An answer to this question is given by Jesse Prinz. He argues that emotions are appraisals of specific properties – core relational themes, in his words – of objects and situations through bodily changes that evolution has selected to track those properties. I will consider this view in Section 4.1 and show that it does not solve the problem raised by James' theory. The claim that emotions are perceptions of bodily changes is simply not sufficient to account for the fact that emotions are directed at objects outside the body.

This has consequences for an adequate characterisation of the evaluative character of emotions. Evaluations are active states we form when we assess a certain object or situation. Moreover, they are directed at things in the world. A theory that conceives of emotions as passive states directed at objects inside the body is conceptually ill-suited to account for the evaluative character of emotions.

The preceding observations show that James' theory is inadequate. To reiterate it fails to account for four particular aspects of emotions. First, it screens out the fact that we talk about emotions in two ways – as episodes and as dispositions. Second, it fails to account for the fact that emotions are reactions we actively form in response to objects and situations in the world. Third, it cannot deal with the intentionality of emotions. Fourth, it does not explain the evaluative character of emotions. The cognitive view tries to account for those features of emotions that James' theory does not explain. Nevertheless, there is reason to believe that the cognitive view similarly fails to provide an adequate account of emotions. I will discuss the cognitive view in the next two sections.

3.1 The Cognitive View

The cognitive view comes in two brands. They are *strong* and *weak* cognitivism. Strong cognitivism claims that emotions are constituted by cognitive states. Weak cognitivism, by contrast, claims that emotions involve cognitive states.¹² This may mean that a cognitive state is a necessary condition for or a necessary concomitant of emotions. Philosophers who advocate cognitivism about

¹² A form of weak cognitivism is known as the quasi-judgementalist (or neo-judgementalist) view of emotions. This is how Michael Brady characterises the contrast between what I call 'strong cognitivism' and what he calls neo-judgementalism: "*Judgementalism* is a theory which proposes a very close link between emotions and evaluative judgements, by claiming that emotions simply are – or embody – such judgements...However, judgementalism is committed to an implausible account of the irrationality of recalcitrant emotions. Since subjects who suffer from recalcitrant emotions do not consciously assent to the judgement that is supposedly constitutive of their emotion, judgementalists must maintain that the relevant judgement is unconsciously held...In light of this, theorists of emotion have sought to accommodate or recognize the close links between emotions and evaluations, but in a way which allows emotions and evaluative judgements to diverge or come apart. One attempt to do so, which is increasingly prominent in the literature, is to maintain that emotions involve, not evaluative judgements, but evaluative *perceptions* or *feelings* or *construals* or *thoughts*. Such attitudes represent the attempt to accommodate the link between emotions and evaluations within 'a broader evaluative view, allowing for propositional attitudes that are weaker than strict belief: states of mind, like *imagining* that danger looms, that involve entertaining a predicative thought without assent.' (Greenspan 1988: 3). On this 'neojudgementalist' view, the subject of an emotional experience construes or thinks of an object in an evaluative way; this constitutes an evaluative 'take' on the situation which falls short of fully-fledged evaluative judgement. Now, it is not easy to explain the nature of such evaluative construals or thoughts. Nevertheless, there are examples which help to illustrate the *kind* of thing involved in evaluative construal. Thus, I might construe a duck-rabbit figure as a duck at one time and as a rabbit at another; I might see a face in terms of another, as when I see that my father's face reflected in my own; I can think of a chimpanzee in human terms; I can have the impression that the person behind me in the queue is standing too close; and so on. These examples suggest that construals can involve a number of different elements gathered from perception, imagination, conception, and thought." (BRADY forthcoming). Advocates of neojudgementalist are Amelie Rorty (RORTY 1978), Cheshire Calhoun (Calhoun 1984), Ronald de Sousa (DE SOUSA 1987), Patricia Greenspan (GREENSPAN 1988), Michael Stocker and Elizabeth Hegeman (STOCKER and HEGEMAN 1996), and Robert Roberts (ROBERTS 2003), among others.

emotions do not agree over the kind of cognitive state involved in emotions. Different states have been proposed as candidates. Jerome Neu suggests that the cognitive elements that matter most are thoughts.¹³ Robert C. Solomon¹⁴ and Martha Nussbaum¹⁵ defend the view that emotions are evaluative judgements. Robert Gordon argues that emotions involve knowledge.¹⁶ The various views share the fundamental idea that emotions necessarily involve cognitive states. Judgement is the cognitive state most frequently appealed to in the explanation of emotions. Peacocke observes that “[a] persistent trend...holds that emotions are judgements of one sort or another.”¹⁷

Robert C. Solomon is the most prominent advocate of strong cognitivism. He claims that “the emotion is the judgement, and the intensity of the emotion is the personal significance of the judgement.”¹⁸ In recent years, he has defended a slightly weaker version of this view, claiming that:

[E]motions are like judgments. And emotions necessarily involve judgments. Does this entitle me to say that emotions are judgments?...I think so. But, of course, an emotion is not a single judgment...An emotion is rather a complex of judgments and, sometimes, quite sophisticated judgments, such as judgments of responsibility (in shame, anger, and embarrassment), or judgments of comparative status (as in contempt and resentment).¹⁹

¹³ NEU 1978, 2000.

¹⁴ SOLOMON 1976, 1977, 1980, 2003.

¹⁵ NUSSBAUM 1990, 2001.

¹⁶ GORDON 1969.

¹⁷ PEACOCKE 2003b: 254.

¹⁸ SOLOMON 1977: 47.

¹⁹ SOLOMON 2003: 11.

Strong cognitivism is also defended by Martha Nussbaum. She thinks that “emotions are forms of evaluative judgements that ascribe to certain things and persons outside a person’s own control great importance for the person’s own flourishing.”²⁰ The fundamental claim of strong cognitivism is, therefore, that emotions are evaluative judgements.²¹

What is the motivation for the cognitive view? Cognitivism aims to explain two features of emotions. The first is their evaluative character. The second is their intentionality. The cognitive view explains the evaluative character of emotions by claiming that they are evaluative judgements. These kinds of judgements concern specific properties of things, i.e. relational properties.²² Consider dangerousness. When something is dangerous, it has a property – dangerousness – that relates it to the range of objects that can be affected by its dangerousness. Making a judgement is a way of acknowledging that an object is dangerous. But fear is also a way of acknowledging that the same object is dangerous. The cognitivist claims that judgement and emotion are

²⁰ NUSSBAUM 2001: 22.

²¹ One may wonder how cognitivism accounts for the experiential character which is the focus of the experiential view. The answer is straightforward. Emotional feelings and sensations are the effect of evaluative judgements on the body. This is well summarised by Solomon. He observes: “[W]hen we make an emotional judgement, our involvement and excitement is such that it stimulates a physiological reaction, the pumping of adrenalin or noradrenalin, for example, with the resultant sensations and feelings. [I]ntense feelings are the effect of intense emotions, not their essence.” (SOLOMON 1977: 47-8). Cognitivism, therefore, holds that emotions are evaluative judgements that produce bodily changes, which underpin the feelings and sensations that typically accompany emotions.

²² See Chapter III.

instances of the same cognitive state – the evaluative judgement that the object is dangerous.²³

The evaluative character of emotions is sometimes characterised in terms of appraisal. For example, William Lyons writes:

[The] core part of an emotion...has three parts, the cognitive part which will involve factual judgements which give rise to belief or knowledge, the evaluative part which will involve objective *evaluations* or subjective *appraisals*, and the appetitive part which involve desires stemming from the cognitive and appetitive aspects.²⁴

The notion of appraisal comes from the psychological literature on the emotions. In general, appraisal theories can be seen as the way psychology explains the same features cognitivism is concerned with – the facts that emotions have an evaluative character and are directed at objects. In this sense, there is no difference between saying that emotions are judgements or appraisals. Appraisal theories are relevant to my discussion. Philosophers like Jesse Prinz have, in fact, tried to bridge the gap between the perceptual and the cognitive view by claiming that emotions are forms of embodied appraisal of specific relational properties. For this reason a discussion of the notion of appraisal and its relevance to the cognitive view may be helpful.

²³ Of course, this is not the only possible explanation. One may argue that the evaluative character of emotions can be explained in terms of the intentionality of emotions. On this view, it is a feature of the intentional content of emotions that they are evaluative. This explanation does not need to suppose that emotions are judgements or other cognitive states. I will discuss this view in Chapter III. For now, it suffices to notice that there is a plausible alternative to the cognitive view on this issue.

²⁴ LYONS 1980: 70.

The notion of appraisal was introduced in the sixties by the psychologist Magda Arnold.²⁵ She characterises it as the process through which the significance of a situation for an individual is determined. To appraise something is to see it as affecting oneself in some way that matters. According to Arnold, all emotions include appraisal judgements – judgements to the effect that one is facing a situation that matters to oneself. The notion of appraisal is also central to the theory of emotions provided by psychologist Richard Lazarus.²⁶ He claims that appraisal is a key part of emotions. This is how Jesse Prinz, one of the main defenders of the appraisal theory, presents Lazarus's view:

Emotions...involve feelings or action tendencies triggered by appraisal judgements. Each emotion involves the same appraisal 'dimensions'. There are six of these. We ask ourselves: has something relevant to my goals occurred? Is it congruent with goals? How is my ego involved? Who deserves credit or blame? What coping options are available? And what can I expect for the future? Emotions are distinguished by the different ways in which these questions can be answered. Anger involves the judgments that goals have been violated, that someone else is to blame, and that aggression is an available coping option.²⁷

Each emotion is linked to a set of conditions specifying the circumstances under which it is appropriate to have the emotion. These conditions specify the

²⁵ ARNOLD 1960.

²⁶ LAZARUS 1991.

²⁷ PRINZ 2003: 73.

relations in which a person may stand to aspects of a situation. Lazarus calls these aspects 'core relational themes.' The core relational theme of anger, for example, is a demeaning offence against me and mine. The core relational theme of fear is immediate, concrete, and overwhelming physical danger. The theme of jealousy is spousal infidelity, and so on. "This is not an explicit judgment, but a way of capturing the gist of six more specific judgments answering to each dimension of appraisal."²⁸ Appraisal can be described as awareness of the specific core relational theme that a certain object or situation instantiates. This means that when we become angry we appraise a certain event as offensive; when we become afraid we appraise it as dangerous; when we become jealous, we appraise it as an infidelity, and so on.

There is a strong similarity between core relational themes and relational properties like dangerousness. These properties are relational because they relate the objects that have them to the range of objects that can be affected by them. Core relational themes are descriptions of situations in which features of objects and situations affect people in virtue of the fact that they relate to people's well-being and survival. One may summarise this view by saying that emotions are appraisals of core relational themes.

The explanation of the intentionality of emotions follows from the explanation of the evaluative character. When someone is afraid, there is always something she is afraid of. When she is amused, there is always something she is amused by. When she is angry, there is always something she is angry at, and so on.²⁹ A way of explaining how emotions can be directed at objects is exactly by claiming that they are judgements. It is a characteristic of judgements that

²⁸ PRINZ 2003: 73.

²⁹ I further discuss this view in Chapter III.

they are always about objects. These objects can be concrete or abstract. When I judge that a mathematical proof is exciting, I make a judgement about an abstract object. In contrast, when I judge that my neighbour's dog is dangerous, I make a judgement about a specific object. Saying that emotions are judgements therefore explains how emotions can be directed at objects.

3.2 Problems with the Cognitive View

There are various reasons for thinking that the cognitive view does not provide an adequate account of emotions. The first and most important is that the view is too demanding in cognitive terms. Both philosophical and psychological cognitive views share the assumption that the same conceptual repertoire necessary for evaluative judgements is necessary for emotions. Judgements *only* appear as premises in inferential reasoning; else they could appear in creatures without inferential reasoning. So, it is a condition for being a creature capable of making judgements that the creature is also capable of inferential reasoning. Is the ability to make inferences a condition for emotions too? The answer is clearly no. This becomes apparent in the case of basic emotions. Animals and infants have basic emotions such as fear and anger. Yet, they are not capable of inferential reasoning. It follows from this that the claim that emotions are judgements fails to do justice to the fact that basic emotions are common to humans and animals.

One may object that animals are capable of some sort of judgements. Yet the objection rests on a misconception about judgements. Judgements are constituted by concepts. According to cognitivists, a state of anger is the judgement that someone has offended or wronged one. Thus, if one does not

possess the concept 'offence' or 'wrong' one cannot ever be angry. Animals and infants can be angry and yet they do not seem to possess evaluative concepts such as 'wrong.' If emotions occur in creatures that do not possess sophisticated evaluative concepts, then emotions are not evaluative judgements.

I noted above that one of the motivations for the cognitive view is the attempt at explaining the intentionality of emotions. However, the claim that emotions are judgements is not necessary to explain how emotions can be directed at objects. Perception is also directed at objects and, nonetheless, it does not require cognitive states. As Peacocke observes "[a]cknowledgment that the emotions have intentional content is entirely consistent with their not being judgements."³⁰

There are two strong counter-examples to the claim that emotions are judgements. They show that we can have emotions that openly run against judgements that we make or are disposed to make. One example is the case of emotional responses to fictions. The other is the well-known case of recalcitrant emotions.³¹ The two examples are quite similar, but not identical.

Consider someone who is watching a horror movie. The person knows that the movie is fiction. Nevertheless, she becomes and feels afraid whenever something exciting happens. This phenomenon has often been explained as resulting from the viewer's identification with characters in the story. In contrast, one may suppose that the person becomes afraid because knowing that the movie is fiction does not prevent her from becoming afraid. This is a serious problem for the view that emotions are evaluative judgements. It is a requirement of rationality that a thinker cannot make two contradictory

³⁰ PEACOCKE 2003b: 255.

³¹ D'ARMS and JACOBSON 2003; BRADY 2007.

conscious judgements and still qualify as rational. If emotions were judgements and the viewer judged that what she is watching is fiction, she cannot become afraid because, on the cognitive view, fear is the judgement that the movie is terrifying. And this runs counter to the judgement that the movie is fiction, namely that it is not actually terrifying.

The case of recalcitrant emotions is similar. A recalcitrant emotion is one that is said to conflict with or run counter to evaluative judgement. In particular, a recalcitrant emotion is one that persists “despite the agent’s making a judgement that is in tension with it...A recalcitrant bout of fear, for example, is one where the agent is afraid of something despite believing that it poses little or no danger.”³² A typical example of recalcitrant emotion is fear of flying. People who are afraid of flying normally accept that flying is much less dangerous than other things that they do on a daily basis like driving a car, smoking, or having a diet rich in fat. Nevertheless, they continue to fear flying. In other words, they judge that flying is not dangerous and, at the same time, have an emotion that says the opposite. If emotions were judgements, people afraid of flying would count as irrational because they would judge that flying is and is not dangerous. The best way of accounting for cases like this is to say that emotions are not judgements after all. Rather, they are different kinds of states, i.e. non-cognitive states.

The claim that emotions are judgements is challenged by a considerable body of empirical evidence. Robert Zajonc has offered a detailed review of these data.³³ He observes that emotions are phylogenetically and ontogenetically prior to cognition. This appears in the fact that facial expressions of emotions and

³² D’ARMS and JACOBSON 2003: 129.

³³ ZAJONC 1980.

emotional behaviours occur in human infants and animals without any reason for supposing that there are concomitant cognitions. He then observes that emotions and cognitions involve separate neuroanatomical structures. Evidence collected through neuroimaging techniques indicates that emotions do not occur in areas of the brain where judgement and concept manipulation occur. In particular, Zajonc argues that there are direct pathways from most rudimentary perceptual centres to centres that initiate the bodily responses associated with emotions. If so, those responses can begin before a person has had time to form a judgement.

Zajonc explores the example of taste aversion. Studies show that an animal can develop aversion to certain food if it is injected with a nausea-inducing substance after that food is ingested. Aversion can be established even if the nausea-inducing substance is administered while the animal is unconscious. Zajonc takes such an unconscious association as evidence for the independence of emotion and cognition. He also considers evidence about the so-called 'exposure effect.' The effect was noted during experiments in which participants previously exposed to a stimulus (such as a melody or a shape) at intensity below the awareness threshold show preferences for that stimulus over alternative stimuli presented at a later time. When asked to choose their preferred stimulus from a pair, participants were more likely to choose the one to which they had previously been exposed. These results suggest that an affective state such as preference can be formed without involving any conscious judgement. Like the experiment with the nausea-inducing substance, this seems to confirm that emotions may be formed independent of cognition.

Zajonc's final evidence is that emotions can be induced without any prior mental state. For example, emotions can be induced by drugs, hormones, and electrical stimulation. In some cases, emotions can be induced by changing our facial expressions. If a person smiles, her level of happiness is likely to increase. In a recent study, Zajonc and colleagues performed a series of experiments whose aim was to prove the connection between brain temperature and the formation of emotions.³⁴ The hypothesis was that the cooling of some brain areas induced by inhaling a bigger volume of air through the nose enhances positive affects, whereas the warming induced by a smaller volume of air enhances negative affects. The study found that, when subjects arranged their facial muscles in fashions *analogous* to negative emotional expressions, they reported experiencing more negative feelings. For instance, the pronunciation of the phoneme *ü* resembles the facial action associated with negative emotions, whereas the pronunciation of the phonemes *e* (as in 'cheese') and *ah* resemble facial expressions associated with positive emotions. It turned out that pronouncing *ü* was enjoyed least and put subjects in a negative mood, whereas pronouncing the phonemes *e* and *ah* were enjoyed most and put subjects in a positive mood.

Some advocates of the cognitive view have tried to reject these counter-arguments by claiming that emotions involve kinds of judgements that are not as accurate and well-grounded as ordinary judgement. Solomon, for example, writes:

³⁴ ZAJONC et al. 1989.

Emotions, we can now see, are rash judgements, something I do, but in haste. Accordingly, the evidence upon which I become emotional is typically (but not necessarily) incomplete, and my knowledge of what I am emotional about is often (but again not necessarily) superficial.³⁵

Unfortunately, saying that emotions may be, or may involve, ill-grounded judgements does not avoid the criticism. There is an important difference between ill-grounded judgements and the ability to make judgements that are ill-grounded. The ability to make judgements is undeniably a cognitive one. If someone makes ill-grounded judgements, this does not mean that she is less sophisticated in cognitive terms. It means she has not assessed the evidence in support of her judgements. In other words, the cognitive abilities required for making judgements that turn out to be ill-grounded are exactly the same abilities required for making accurate judgements. Therefore, saying either that emotions are or involve judgements that are superficial or ill-grounded does not avoid the objection that the cognitive view is too demanding in cognitive terms.

Moreover, the claim that emotions are ill-grounded judgements is at odds with the very notion of judgement as it is usually understood – that is, the epistemological notion. To say that emotions are ill-grounded judgements suggests that such theories are working with an alternative notion of judgement that does not fit with the epistemological notion of judgement. This alternative notion tries to play down what is usually taken to be a fundamental feature of judgement, and that is that judgements involve the assessment of evidence. It is

³⁵ SOLOMON 1980: 262.

difficult to see how the sort of evaluative state Solomon has in mind can count as judgement once the practice of assessing evidence is suspended or removed.

To sum up: the cognitive view is an inadequate account of emotions. This is because it is too demanding in cognitive terms. Judgements are constituted by concepts and feature as premises in inferential arguments. If emotions were judgements, it would be a necessary condition for having them that a creature possessed evaluative concepts and could draw inferences. This is rebutted by the fact that animals and infants have basic emotions, even though they are not capable of making judgements. A further argument against the claim that emotions are evaluative judgements comes from considerations concerning emotional responses to fiction and from recalcitrant emotions. It is a requirement of rationality that a thinker cannot make two contradictory conscious judgements and still qualify as rational. If emotions are judgements, their contents must cohere with the content of other judgements. This is clearly denied by emotional responses to fiction and recalcitrant emotions. A body of empirical evidence also shows that emotions are not, and do not resemble, judgements. It follows that the claim on which the cognitive view rests is simply false.

4.1 An Immodest Perception View – Prinz’s Perceptual Theory of Emotions

The cognitive view explains them in terms of evaluative judgements. The perception view, by contrast, explains emotions in terms of perception of bodily changes. The perception view comes in two types. They are *modest* and *immodest* views. A modest view holds that everything that needs to be explained about emotions can be explained in terms of perception of bodily changes. An example

of a modest view is William James' theory. An immodest view accepts that emotions are perceptions of bodily changes, but also seeks to explain the fact that emotions are directed at objects *in the world*. What makes this view immodest is the attempt to account for the intentionality of emotions by claiming that emotions are perceptions of bodily changes. The challenge for the immodest view is to explain how the claim that emotions are perceptual states the object of which are bodily changes can explain the fact that emotions are directed at objects outside the body. An example of an immodest view is Jesse Prinz's perceptual theory of emotions.³⁶

Prinz tries to explain the intentionality of emotions by showing that they are perceptions of external objects via specific patterns of bodily changes. He describes this process in terms of *embodied appraisal* of core relational themes. Prinz regards his theory as an alternative to the cognitive view, which he considers too demanding. Accordingly:

The Emotion Problem is essentially a problem about getting meaning on the cheap. To solve it, we need a way of showing how emotions can have the semantic properties that they seem to have without claiming that emotions are judgments.³⁷

Prinz thinks of emotions as kinds of mental states that humans have in common with animals. This is confirmed by studies on the continuity between chimpanzee and human facial expressions of emotions.³⁸ Even greater

³⁶ PRINZ 2003, 2004a, 2004b.

³⁷ PRINZ 2003: 78.

³⁸ CHEVALIER-SKOLNIKOFF 1973.

continuities can be found if we look at the bodily expressions of emotions across animals with considerably different physical morphology. Darwin observed that both humans and other mammals have body hair that bristles when they are faced with a threat.³⁹ These data give Prinz reason to conclude that, if emotions are common to humans and other mammals, the latter cannot be credited with the same cognitive capacities that, on the cognitive view, are necessary for emotions. Therefore, Prinz rejects the cognitive view and presents an account consistent with James' claim that emotions are perceptions of changes in the body. He accepts the appraisal view, but thinks it too cognitively demanding. So he tries to embed it within a perception view. The result is a kind of perception view involving perception of the relational properties – the core relational themes – that, on the cognitive view, we appraise through evaluative judgements.

To support his denial of the cognitive view Prinz shows that emotions are prior to cognition. His argument draws on Robert Zajonc's claims that emotions can occur without involving any cognitive states.⁴⁰ As I have already described, Zajonc offers five strands of evidence in favour of this claim. First, he contends that emotions are phylogenetically and ontogenetically prior to cognition. Second, he claims that emotion and cognition involve separate neuroanatomical structures. Third, he claims that appraisals and emotions are sometimes uncorrelated. Fourth, he contends that emotions can be formed without any appraisal. Finally, he considers evidence that emotions can be induced without any prior mental state. Prinz regards the last piece of evidence as the most compelling. He concludes that there is strong reason for thinking that most

³⁹ DARWIN 1872.

⁴⁰ ZAJONC 1980.

emotions are not cognitions, but rather spontaneous responses to stimuli. This is consistent with James' claim that emotions are perceptions of bodily changes that arise in response to perception of excitatory objects and situations. Prinz fully endorses this view and claims that emotions are a paradigm case of automatic response.

Given the non-cognitive character of emotions he favours, Prinz needs to explain how they appraise objects outside the body. To do so, he argues that emotions are appraisals of core relational themes via patterns of change and that they do not involve cognitive elements. The argument for this view is structured as follows. The first move is to defend two claims: (i) emotions are perceptions of patterns of change in the body, and (ii) specific patterns of change are peculiar to specific emotions. The next move is to defend the claim that bodily changes are states whose function is to appraise core relational themes. This enables Prinz to conclude that emotions are appraisals of core relational themes via patterns of change that are peculiar to specific emotions.

The claim that emotions are perceptions of patterns of change in the body is supported by evidence from studies originally designed to disprove James' theory. The data are open to an interpretation that, according to Prinz, actually confirms the correctness of James' view. In the sixties, G.W. Hohmann carried out a series of interviews that involved subjects suffering from serious spinal injuries.⁴¹ The subjects were asked to compare their present emotional experiences to their emotional life before the injury occurred. They reported a decrease in the intensity of certain emotions. Moreover, the degree of impairment seemed to correlate with the degree of injury; damage to higher

⁴¹ HOHMANN 1966.

parts of the spinal cord correlated with a decrease in the intensity of emotional experience. *Prima facie*, these results disprove James' view. Spinal subjects were presumed to have no feedback from their bodies and, consequently, to perceive no change. The fact that they still experienced emotions was interpreted as a counter-example to James' theory.

However, the results are open to an alternative interpretation that actually confirms James' theory. Antonio Damasio has noted that spinal cord injuries are often incomplete.⁴² There is reason to believe that information about bodily changes in spinal subjects can travel through the blood stream, the vagus nerve and cranial nerves that remain intact after the spinal injury. This possibility may explain why, despite the spinal injury, the subjects interviewed by Hohmann still experienced emotions. And it would also provide a natural account of why these emotions were less intensely experienced. Spinal injuries do not entirely prevent the body from undergoing some changes. In the light of this and other data, Prinz concludes that James' theory is likely to be correct.

The next step in Prinz's strategy is to defend the claim that specific patterns are peculiar to specific emotions. Prinz considers an experiment by Levenson and colleagues.⁴³ The experiment measured the physiological states associated with six different emotions. Subjects were instructed to make faces that have been independently found to co-occur with emotions. Subjects were then asked to report any emotion they experienced. During this process, heart rate, finger temperature, and electrical conductivity of the skin were measured. Levenson and colleagues found that there were differences between the changes that accompanied happiness and those that accompanied negative emotions.

⁴² DAMASIO 1999.

⁴³ LEVENSON et al. 1990.

Heart rate acceleration was greater for anger and fear than for happiness. This suggests that positive emotions can be physiologically distinguished from negative ones. Physiological differences were also found between negative emotions. Anger, fear, and sadness all had greater heart rate acceleration than disgust. Finger temperature was higher for anger than for fear. On this basis, Prinz concludes that specific emotions are perceptions of specific patterns of change in the body.

Prinz then needs to defend the claim that emotions appraise core relational themes via specific patterns of change. This is supposed to explain what relation there is between emotions and the objects in response to which emotions arise. This can be viewed as Prinz's account of the intentionality of emotions. He interprets the appraisal theory as suggesting that emotions are *reliably caused* by instances of core relational themes. For example, danger reliably causes fear. This is the starting point from which he builds up his account of emotions as embodied appraisals of core relational themes. He writes:

Prevailing theories of intentionality that have been developed within the philosophy of mind are well suited to this end. These theories were not devised to explain emotions. They were devised to explain how concepts refer. If such theories do a reasonable job with concepts, then they may apply to mental states quite broadly. If they help explain the semantic properties of the emotions, then we may have an independently

motivated solution to the Emotion Problem. I think that informational theories are especially promising.⁴⁴

According to such theories, a mental state gets its intentional content in virtue of being reliably caused or having the function of being reliably caused by something.⁴⁵ For example, the concept of dog is acquired as a response to encounters with dogs and its function is that of tracking any further encounters with dogs. The concept represents that by which it is reliably caused. As constituted by concepts, mental states more generally are amenable to the same account, and Prinz applies this view to emotions:

According to Jamesian theories, emotions are the internal states that register bodily changes. On the face of it, these states represent bodily changes if they represent anything at all...Such states are reliably set off by patterned changes in the body. But is it their function to detect such changes? Why did we develop minds that detect *patterned* bodily changes? Why do body-pattern detecting states get set up and why do they persist? An obvious answer is that these patterns happen to occur under conditions that are important to us. The patterns associated with fear (such as fight preparation or freezing) happen to occur when we are facing immediate physical dangers. Danger is, thus, another reliable cause of the inner states that register fleeing or freezing patterns. And it is a cause that has especially good claim to being the one for which such states are attained in the first place. We come to be good body pattern

⁴⁴ PRINZ 2003: 78.

⁴⁵ DRETSKE 1981, 1988.

detectors (through evolution and learning), because body patterns co-occur with matters of grave concern. States that *register* body changes may *represent* the more abstract relational properties that induce those changes in us.⁴⁶

Prinz's argument can be summarised as follows. Emotions are perceptions of changes in the body. Specific patterns of changes are peculiar to specific emotions. Instances of core relational themes reliably cause patterns of change. A mental state gets its intentional content in virtue of being reliably caused by something. So emotions get their intentional content in virtue of being perceptions of specific patterns of changes reliably caused by instances of core relational themes. The bodily change represents the core relational theme that reliably causes it. On this account, the core relational themes can be viewed as the intentional content of emotions. Consider fear. We are wired to undergo a bodily change under a variety of dangerous conditions. These conditions are instances of the core relational theme of fear. Fear is perception of the specific pattern of change that represents this core relational theme. The intentional content of fear is, therefore, the core relational theme that reliably causes the pattern of change we normally perceive when we feel afraid. On this basis, Prinz concludes that emotions are perceptions of patterns of change that represent core relational themes.

⁴⁶ PRINZ 2003: 79.

4.2 Problems with Prinz's Theory

Prinz presents his theory as a version of James' theory, which, as we know, fails to account for emotional dispositions. Prima facie, Prinz manages to avoid this criticism as follows:

Most mental state types have both dispositional and occurrent forms...I regard long-standing emotions as dispositions. That I love my spouse all the time is an enduring disposition to have occurrent states of love...An occurrent state of love is an embodied reaction of the kind one has when one encounters the object of one's love...I would add that long-standing love does not count as love *unless* it carries a disposition to such embodied states. If someone says, 'I love my spouse, but I never experience flutters or giddiness or cuddly tenderness in relation to him' we would doubt her sincerity. As with itches, standing emotions are parasitic on their embodied manifestations.⁴⁷

The problem with this account is that it explains emotional dispositions in terms of emotional episodes, while it is more plausible to explain episodes in terms of dispositions. So, Prinz's move is highly counterintuitive. Moreover, in the passage above, he seems to allow that some emotions are dispositions. It is, however, difficult to see how this concession can fit in with the claim that emotions *are* episodic states. The friction is made explicit in the following claim by Prinz himself: "All emotions are nothing more than embodied appraisal or

⁴⁷ PRINZ 2003: 83.

dispositions to embodied appraisals.”⁴⁸ Saying that a certain state is an episode or a disposition suggests that the same state may be of two different kinds. This seems to conflict with Prinz’s claim that emotions are episodic states. Moreover, Prinz thinks that only some emotions are dispositions. He observes that “[d]isembodied emotions include calm passions, such as loneliness or aesthetic appreciation, and long-standing emotions, such as the enduring love one feels for a spouse.”⁴⁹ This view implies that basic emotions cannot be dispositions, only higher emotions like love can. This is clearly false as basic emotions are dispositional states. For example, one may be angry with someone for days or months.

The second problem with Prinz’s theory is closely related to what I have just observed. His view does not account for those emotions – the calm passions, as he calls them – that often do not involve any bodily change. They are higher emotions like resentment, regret, and envy. Prinz is likely to object that higher emotions are not the focus of his research. He is interested in those emotions that humans and animals share, namely basic emotions. The objection is sound, but it does not avoid the criticism that his theory fails to account for emotional dispositions.

A further problem derives from the claim that emotions are perceptions of specific patterns of changes. This claim leads to a conception of emotions as passive states. Prinz brings into his account the passivity of two states: perception and feelings. He claims that emotions are the appraisal of core relational themes via bodily changes. On this account, the core relational themes act upon one’s senses and cause specific patterns of change the function of

⁴⁸ PRINZ 2003: 84.

⁴⁹ PRINZ 2003: 82.

which is tracking instances of core relational themes. This is analogous to what happens in perception where the physical properties of objects impinge upon the senses and thereby produce states of the perceptual system. The second element of passivity consists in the role of feelings. Prinz shares James' view that emotions are feelings, which are perceptions of changes in the body. These changes impinge upon the system dedicated to monitoring the state of the body – the somatosensory system – and cause specific states of the system. Bodily feelings supervene on these states. This is also analogous to what happens in perception where perceptual experiences supervene on states of the perceptual system. On this account, an emotional episode is the result of two factors that act upon one's perceptual system. On one hand, there is the appraisal of the core relational theme via patterns of bodily change. On the other, there is the perception of the patterns. Emotions are the result of these two states. The upshot is an account that, on one hand, emphasises the passivity of emotions and, on the other, disregards the fact that emotions are reactions to objects.

There is one last objection. Prinz's theory has the explicit purpose of bridging the gap between the perception and cognitive views. In particular, it wants to overcome the limits of James' theory and explain how emotions can be directed at objects outside the body. Yet Prinz thinks of emotions as embodied appraisals of core relational themes. It is difficult to see how this view can account for the fact that emotions are directed at *specific* objects. Consider fear of an aggressive dog. Prinz speculates that the danger is appraised through a specific pattern of change. The same modification is supposed to occur any time one is presented with a danger. This means that the pattern of change that occurs is the same no matter whether one fears a dog, death, or the prospect of a

third world war. How can this physiological mechanism represent the specificity of the objects of fear? Prinz answers that representing emotion objects is the function of other states causally related to emotions, such as beliefs. But this answer fails to do justice to the pre-theoretical intuitions that emotions do have objects. In contrast, the view suggests that the intentionality of emotions should be explained in terms of the intentionality of other mental states. But this seems highly unsatisfying. It follows that Prinz's theory does not provide a satisfactory account of emotions.

5. Wollheim's Dispositional View

In Chapter 1, I have suggested that emotions should be viewed as dispositional rather than episodic states. This view has been defended by authors such as P.M.S. Hacker,⁵⁰ Amelie Rorty,⁵¹ and Malcolm Budd.⁵² The most eminent advocate of the dispositional view is, however, Richard Wollheim. In his book *On the Emotions*,⁵³ he defends the view that emotions are enduring dispositional states. He distinguishes emotions from those states which make up what William James called 'the stream of consciousness.'⁵⁴ States of the latter kind are episodic states such as perceptions, feelings, and thoughts. In contrast, emotions are mental dispositions, that is, in Wollheim's words, "underlying modifications of the mind which are possessed of intentionality but not of subjectivity. They

⁵⁰ HACKER on-line paper.

⁵¹ RORTY 1978.

⁵² BUDD 1985.

⁵³ WOLLHEIM 1999. See also WOLLHEIM 2003.

⁵⁴ The idea that emotions are not part of the stream of consciousness has recently been defended by Michael Martin in conferences and seminars at the University of California, Berkeley.

have histories of some richness, and they endure for some period of time up to the lifespan of the person to whom they belong.”⁵⁵

Wollheim offers two arguments – a positive and a negative one – in support of the claim that emotions are dispositions. The positive argument is that thinking of emotions as dispositions does justice to the common intuitions that emotions have histories. The negative argument is that if we think of emotions as episodic states like, say, bodily feelings, we will then be unable to account for those aspects of emotions that are essentially related their dispositional character like, for example, the impact that emotions have upon our lives. I will review the two arguments in detail.

One may wonder why viewing emotions as dispositions should do justice to the intuition just mentioned. The answer is straightforward. The states of which the stream of consciousness is made are episodic states like perceptions and thoughts. It is a characteristic of these states that they do not last over time. In contrast, emotions exhibit a totally different behaviour: they endure. The property of enduring is characteristic of non-episodic states such as beliefs, desires, and intentions. These states are commonly described as dispositions. Emotions appear to behave in the same way as dispositions do. So, emotions should be regarded as dispositions. Wollheim fleshes out this idea by saying that dispositions typically have histories. Since emotions also have histories, emotions too are dispositions.

I will clarify this point with two examples. Imagine I believe that my neighbour’s dog is dangerous. My belief is the result of a childhood trauma. The belief lasts unchanged for many years, until one day I change my mind after a

⁵⁵ JAMES 1880: Ch. IX.

friendly encounter with the dog in which I find the courage to pet the animal. My old belief thus fades away and is replaced by a new one with a different content. This is the history of a specific belief of mine. Wollheim's point is that emotions behave very much in the same way. Imagine I fear the dog. My emotion too is the result of a childhood trauma. It then lasts for several years until I find the courage to pet the animal and overcome my fear. The emotion then fades away. This example suggests that emotions behave in similar ways to dispositions. This behaviour is different from that of episodic states, the duration of which is typically limited in time. On this account, we should view emotions as dispositional states because they behave very much like typical dispositions such as beliefs.

Let us now consider the negative argument. Wollheim writes:

[I]f we do not follow this line of thinking, if instead we make emotions out of those mental states which we otherwise think of as either initiating or manifesting emotions [e.g. episodic states like feelings and perceptions], they, the mental states, show their inadequacy in that, in two respects, they are fatally dependent upon the very dispositions that they are now displacing.⁵⁶

The argument can be put in the following terms. If we think of emotions as episodic states like, say, feelings, we will then be unable to account for those aspects of emotions that are essentially related their dispositional character. Wollheim has in mind one aspect in particular: the importance

⁵⁶ WOLLHEIM 2003: 21-2.

that emotions have in our lives. This aspect becomes clear when we consider the impact that emotions may have upon our lives in terms of decision-making and long-term behaviour. Wollheim clarifies this thought with the following example. A man has a deep fear of disagreement with anyone whom he loves. He knows that any time a disagreement occurs, he will feel a tightening of his throat and the urge to walk away. It is plausible to think that the man will organise his life around this fear by avoiding any disagreement with his relatives and friends. The man's life will then be marked by evasiveness. Wollheim thinks that the feeling and urge are not sufficient to explain the man's evasiveness. He observes:

Phenomenologically such an experience is disagreeable enough, but surely, if the man as he well might, arranges the whole of his life around this fear, it cannot be simply so as to avoid this experience: it is only by invoking the disposition that we can account for the evasiveness of his life. The avoidance of a visceral feeling is not explanatorily adequate, so the feeling cannot take over the place of the emotions.⁵⁷

Unfortunately, Wollheim does not explain why the feeling is not explanatorily adequate. A possible explanation is that Wollheim views emotions as states directed at objects in the world. These objects explain emotions themselves and the characteristic behaviour emotions produce. So, disagreements are the objects of the man's fear. It is in relation to these

⁵⁷ WOLLHEIM 2003: 22.

objects that his fear becomes something important and pervasive in his life. Feelings, by contrast, are explanatorily inadequate because they are not directed at objects in the world. They are experiences of states and changes in the body. As such, they cannot explain why someone avoids disagreements with relatives and friends. Feelings therefore fail to account for the impact that emotions have upon our lives.

To recapitulate then, Wollheim puts forward two arguments, a positive and a negative one, in support of the claim that emotions are dispositional states. The positive argument is that only this view can do justice to the common intuition that emotions have histories. The negative argument is that only if we think of emotions as dispositions, can we account for the impact that emotions have upon our lives.

Wollheim's account is interesting and sophisticated and, yet, it does not seem to take into account an important aspect of the phenomenology of emotions. Emotions are states we normally know through feelings. For example, I know that I am sad when I feel sad. Wollheim seems, however, to think that the feeling itself is something I understand only when I recognise its relationship with the underlying emotions.⁵⁸ Although this is possible, it does not seem to be the common case. Normally, we feel emotional and this gives us reason to think that we are being emotional about something.⁵⁹ So, the main problem with Wollheim's view is that it does not do justice to the fact that emotions do manifest themselves in the stream of consciousness through feelings and this is the primary source of knowledge about our emotions. This suggests that Wollheim fails to

⁵⁸ WOLLHEIM 2003: 22.

⁵⁹ I further discuss this point in Chapter 6.

provide a satisfactory account of the relation between emotions and consciousness and how this bears on the epistemology of emotions. I will come back to this point in Chapter 3.

6. Conclusion

We have seen that James argues that emotions are episodic states constituted by perceptions of bodily changes. The cognitive view, by contrast, argues that emotions are episodic states constituted by evaluative judgements. Finally, Prinz argues that emotions are episodic states constituted by perception of patterns of bodily change that represent core relational themes.

Each view sheds light upon different aspects of emotions, but also raises various concerns. James' theory provides a satisfactory account of the physiology of emotions, but its reduction of emotions to the perception of bodily changes is problematic because emotions cannot always be explained in terms of bodily changes. The cognitive view accounts for the evaluative character of emotions, but it presupposes a cognitive repertoire that is too demanding. Prinz's theory tries to bridge the gap between the two views. But the theory is entirely committed to the idea that emotions are passive episodic states. This overlooks the fact that emotions are reactions to objects.

I have shown that Richard Wollheim's account of emotions offers an alternative to the perception view by claiming that emotions are dispositions. In the next chapter, I will argue that emotions are dispositional states the formation of which does not require the sort of cognitive abilities that the cognitive view involves.

CHAPTER III

THE METAPHYSICS OF EMOTIONS

1. Introduction

In the previous chapters, I have shown that different theories explain specific aspects of emotions, but fail to give an exhaustive overall account. An adequate account, by contrast, needs to do two things. First, it must explain as many aspects of emotions as possible. Second, it must say what kinds of states emotions are. In this chapter, I will present a view that meets these requirements.

My starting point is the uncontroversial claim that, unlike beliefs, emotions are kinds of states common to humans and animals. It is an equally uncontroversial claim that animals are not capable of conceptual thought. It follows that emotions do not necessarily require the ability of conceptual thought. This conclusion is in line with the rejection of the cognitive view I outlined the previous chapter. However, emotions are not the only states common to humans and animals. Perception is found in all animal species. This may tempt one to conclude that emotions and perceptions are states of the same kind – that is, passive states produced by the action of external stimuli upon a creature's perceptual system. This view is advocated by William James and Jesse Prinz. It is, however, a misleading picture. The fact that both emotions and perceptions are common to humans and animals does not imply that they are states of the same kind. There is a way of conceiving emotions as *active states*

that humans and animals form in response to stimuli from the environment. This is the view I will advocate here. I will argue that emotions are *reactions* to objects. This view has the potential to account for most aspects of emotions such as the fact that they can be appropriate or inappropriate, justified or unjustified; that they produce feelings and behaviour; that they have objects.

In Chapter I, I observed that it is a characteristic of ordinary emotion talk that we speak of emotions in two ways – as episodes and as dispositions. My view also account for this aspect. The claim that emotions are reactions does not commit us to the idea that they are episodes. This leaves open the possibility to conceive them as dispositions to undergo episodes. I will show that this view is supported by how we use emotion concepts in ordinary folk-psychological explanations. To this end, I will consider two claims folk-psychology makes about emotions. One says that emotions are states we feel in the body;¹ the other that emotions affect behaviour.² I will show the two claims imply a conception of emotions as enduring non-episodic reactions that may manifest themselves in experiences and behaviour.

This view is open to a major objection. Emotions are not the only affective states that may manifest themselves in experiences and behaviour.³ Moods and personality traits, for example, often manifest themselves in the same way. I will show that the objection is flawed because emotions are essentially different from moods and personality traits. Emotions are always directed at objects, while moods are not. Personality traits, on the other hand, do not actually manifest

¹ JAMES 1880, 1884; PRINZ 2004b.

² LYONS 1978.

³ Karen Jones observes: “The domain of the affective includes at least occurrent emotions, dispositional emotions, character traits (if such there be), sentiments, moods and some reflex responses like the startle response. (Some theorists also add pleasure and pain and drives like hunger.)” (JONES 2004, quoted from the manuscript).

themselves in experiences and behaviour, but in the tendency of general patterns of behaviour to reoccur. This picture provides an exhaustive account of emotions and an adequate description of how they work in ordinary folk-psychological explanations. Most importantly, it answers the metaphysical question of what kinds of states emotions are.

2. Emotions as Reactions

Reactions are states we actively form in response to stimuli from the environment. The first example of reactions that comes to mind is that of transitive feelings like sensations of cold and warmth. However, there is a sense in which feelings are not reactions. They are the result of modifications in our body caused by external conditions like cold and heat. This means they are passive states we experience when our body undergoes some changes. It follows that transitive feelings and sensations are not reactions because they are not actively formed.

Other states that may be viewed as reactions are intentional attitudes like beliefs, desires, intentions, wants, and so on. These are states we actively form in response to reasons. We believe something when we have reason for taking it as being the case. We desire something when we have reason for thinking it is desirable, and so on. There is reason to believe that emotions, likewise, are reactions. We normally think of emotions as states we form in response to objects and situations in the world. Fear of darkness, for example, may be formed in response to the experience of walking in the darkness. Similarly, fear of a dog may be formed in response to an encounter with the dog. However, emotions differ from intentional attitudes in that they are not formed in

response to reasons, but in response to objects. This view is justified by the fact that emotions are found not only in adult humans, but also in infants and animals.⁴ It is fairly uncontroversial that infants and animals are not capable of conceptual thought. Susan Hurley has observed that to be credited with conceptual thought a creature must fulfil requirements of 'maximal inferential promiscuity' with respect to its thought contents.⁵ The same idea is expressed by Evans' 'generality constraint.'⁶ A mental state qualifies as a thought that 'a is F' when it is possible for the subject to decompose that state into re-combinable ingredients and form with such ingredients mental states of two sorts: states which predicate of 'a' any property G the subject can conceive of, and states which predicate F of any object 'b' of which the subject can conceive. This is the ability to have the concept of a particular object 'a' and the ability to have the concept of a particular property 'F.' There is no evidence that infants and animals meet such strong requirements.⁷

It follows that if emotions are common to humans and animals, then it is not a necessary condition for forming them that creatures have the ability to

⁴ This is consistent with the fact that we often explain children's and animals' behaviour in terms of emotions like anger, fear, sadness, joy. This is something more than a form of projectivism. For example, empirical evidence confirms the continuity between chimpanzee and human facial expressions of emotions (CHEVALIER-SKOLNIKOFF 1973). Continuities are also found in species with physical morphology considerably different from human morphology. Darwin, for example, observes that the bristling of body hairs is an expression of fear in humans and primates, but also in dogs.

⁵ HURLEY 2003.

⁶ EVANS 1982.

⁷ Philip Pettit has argued that the behaviour of non-linguistic animals suggests that they are capable of believing universal propositions of the type 'All *x*s are *G*' *in sensu diviso*, that is, case by case, even if they do not master the concepts of *x* or *G*, and thus cannot believe the same universal proposition *in sensu composito*, that is, as a general principle. (Quoted in SALMELA 2006: 388).

think about the stimuli in response to which emotions are produced.⁸ This view is supported by empirical evidence. I have already reviewed some of these data in the previous chapter. Evidence collected through neuroimaging techniques indicates that emotions do not occur in areas of the brain where judgement and concept manipulation occur.⁹ In particular, LeDoux has demonstrated that fear can be elicited directly in the amygdala without involving the neo-cortex, which is assumed to be involved in the production of conceptual thought.¹⁰ These data are consistent with the idea that emotions are a specific form of information processing. In particular, some psychologists and neuroscientists have supposed that emotions are ways of processing information which we have inherited from our evolutionary ancestors. These processes are realised in phylogenetically ancient anatomical regions surrounding the brainstem.¹¹

Secondly, there is evidence that emotions can be formed without any judgement.¹² This is confirmed by the exposure effect. The effect has been noted during experiments in which participants previously exposed to a stimulus such as a melody or a shape at intensity below the threshold for awareness show

⁸ This is in line with Griffiths' and Scarantino's remark that "[t]he ability to emote is not to be explained in terms of linguaform propositional attitudes and their use in practical and theoretical inferences. Instead, the contentfulness of emotions emerges from the fact that they enable dexterous interactions with the environment. Importantly, when ascribing this form of emotional content to an organism we are entitled to use concepts not possessed by the organism having the emotion, a standard condition for labeling a form of mental content as non-conceptual..." (GRIFFITHS and SCARANTINO forthcoming: 8, quoted from manuscript).

⁹ ZAJONC 1980.

¹⁰ LEDOUX 1993.

¹¹ Paul D. Maclean in a series of publications from the 1950s to the 1980s called these regions 'the limbic brain.' Joseph LeDoux (LEDOUX 1996) regards the limbic brain concept as more or less anatomically and functionally meaningless. Jaak Panksepp (PANKSEPP 1998) accepts that MacLean's concept of an 'emotional brain' is oversimplified, but defends the underlying concept that emotion represents an ancient form of information processing that we share with many other species.

¹² ZAJONC 1980.

preferences for that stimulus over alternative stimuli presented at a later time. When asked to choose from a pair the stimulus that they preferred, participants were more likely to choose the one to which they had previously been exposed. These results suggest that an emotion such as liking can be formed without involving any conscious judgement.

Finally, evidence shows that emotions can be induced without any prior mental state.¹³ Zajonc and colleagues have performed a series of experiments which found that, when subjects arranged their facial muscles in fashions *analogous* to negative emotional expressions, they reported experiencing more negative moods.¹⁴ For instance, the pronunciation of the phoneme *ü* resembles the facial action associated with negative emotions, whereas the pronunciation of the phonemes *e* (as in 'cheese') and *ah* resemble facial expressions associated with positive emotions. It turns out that pronouncing *ü* is enjoyed least and puts subjects in a negative mood, whereas pronouncing the phonemes *e* and *ah* is enjoyed the most and put subjects in a positive mood.

This body of evidence confirms that conceptual thoughts like judgements are not necessary to form emotions. A natural reply is that this conclusion is true of basic emotions, but not of higher emotions like guilt, shame, resentment, envy, and embarrassment. This is because it is widely accepted that higher emotions require evaluative judgements. However, there is no actual argument in support of this view. In fact, evidence shows that higher emotions, like basic ones, can be formed in circumstances in which no conceptual thought seems to occur. In a recent paper,¹⁵ Griffiths and Scarantino report studies¹⁶ showing that,

¹³ ZAJONC 1985; ZAJONC et al. 1989.

¹⁴ ZAJONC et al. 1997.

¹⁵ GRIFFITHS and SCARANTINO forthcoming.

although embarrassment has usually been associated with the recognition of personal failure, embarrassment can be elicited simply by being pointed at in public, or being praised in public. Embarrassment can thus occur as a result of mere unwanted attention. They conclude that, from this perspective, embarrassment may be available to pre-linguistic children. This is confirmed by a study showing the combination of coy smiles and gaze aversion in two-month old infants.¹⁷ This suggests that primitive forms of embarrassment may emerge before the cognitive capacities generally assumed to underlie them are actually developed.

What I have so far observed suggests that emotions are reactions that do not require the ability of thinking about the stimuli in response to which emotions are formed. Here, one may wonder what advantage there is in describing emotions as reactions. The answer is that viewing them as reactions allows us to explain most aspects of emotions: emotions are positive or negative, appropriate or inappropriate, justified and unjustified; they produce feelings and behaviour; they have objects. I will examine each of these in turn, starting with the distinction between positive and negative emotions.

Reactions can be positive or negative. For example, someone may react in a positive or a negative way to the announcement that she is pregnant. If emotions are reactions, they also must be positive and negative. This is confirmed by the ordinary practice of distinguishing between positive and negative emotions. This distinction can be interpreted in two different and mutually compatible ways. One is that positive emotions are reactions to attractive stimuli, while negative emotions are reactions to aversive stimuli.

¹⁶ PARKINSON et al. 2005.

¹⁷ REDDY 2000.

Amusement at a funny joke is a reaction to a positive stimulus, while anger at an insult is a reaction to a negative one. The other is that positive emotions produce pleasant feelings and sensations, while negative emotions produce unpleasant feelings and sensations. Fear and anger are typical examples of negative emotions because they are responses to aversive stimuli that may produce unpleasant sensations. Amusement, by contrast, is a reaction to positive stimuli that produces pleasant sensations. Philosophers sometimes characterise this distinction in terms of the affective character of emotions. Christopher Peacocke observes that “[t]he distinctive affect of an emotion for its experiencer is pleasant or unpleasant, and the affect – or at least its cause – influences the character of the subject’s thoughts and moods.”¹⁸

Another feature of reactions is that they are appropriate or inappropriate. Appropriateness is a semantic feature. It concerns the relation between reactions and the objects at which reactions are directed. In other words, appropriateness concerns the relation between reactions and how the world turns out to be. This means that the possibility of a reaction being appropriate is completely independent from the subject’s ability to think about the reaction as being appropriate to a certain stimulus. If emotions are reactions, they also must be assessable in terms of appropriateness.¹⁹ Emotions are appropriate when they are the right kinds of reactions to certain objects or situations. For example, fear

¹⁸ PEACOCKE 2003b: 253.

¹⁹ A natural way of understanding the claim that emotions can be appropriate or inappropriate is to say that they are evaluations. This view is upheld by many philosophers.¹⁹ Christopher Peacocke, for example, observes: “[t]he representational content of an emotion seems always to involve an evaluative notion.” (PEACOCKE 2003b: 253). The notion of evaluation is generally viewed as having a cognitive connotation. However, emotions are states we find in infants and animals as well as in adult humans. This is one of the reasons I have raised against the claim that emotions are judgements. So, if emotions are evaluations, they are kinds of evaluations that do not require cognitive abilities.

of darkness is appropriate because darkness is a phenomenon that makes creatures more vulnerable to attacks from other creatures. There are two ways in which emotions can be inappropriate. One is when the emotion is the wrong kind of reaction to a certain object. This is the case with anger at someone's death. This emotion is inappropriate because it is not the right way of reacting to a death. The other is when the emotion is a reaction to a property or object that is not actually instantiated. Imagine a child afraid of darkness in her own bedroom. This emotion is inappropriate because it is a reaction to something which is not actually dangerous as we can assume that a child's bedroom is a safe place (or, at least, safer than, say, a wood at night). The emotion is, however, justified because the child imagines that ghosts may emerge from the darkness. It is worth noting that non-existent entities like ghosts count as objects for emotions because they are intentional objects.

This remark introduces the issue of justification. Reactions are states we form in relation to objects. These objects and their properties explain why creatures have certain reactions. On this account, reactions can be justified or unjustified. If emotions are reactions, they also are justified or unjustified. They are justified when there are objects that explain them. These objects are the things in reactions to which emotions are formed. They can be existing objects like darkness or intentional objects like ghosts. Fear of darkness is justified by the fact one is presented with a dark space or room. The same emotion is justified when darkness is not real but imaginary. For example, one may fear the idea of walking along a dark lane at night. Here darkness is an intentional object because it is not experienced but imagined. Like in the child's example above, this emotion is justified by its object – an intentional one, in this case – but it is

also inappropriate because there is nothing actually dangerous in the idea of walking along a dark lane. On this account, emotions are justified when they are reactions to existing objects presented in perception or to intentional objects represented in thoughts, hallucinations, and dreams.

It is worth noting that, as in the case of appropriateness, the fact that an emotion is justified does not depend on the subject's ability to think about and assess the object in response to which the emotion is formed. For example, fear of natural phenomena like darkness, fire, lightening, and thunder is justified by the fact that they are frightening. The ability to respond to frightening stimuli does not require the further ability of thinking of such stimuli as potentially dangerous or harmful.

Now, in what circumstances are emotions unjustified? Emotions are unjustified when there are no objects in reaction to which they are formed. In other words, unjustified emotions are objectless reactions. Ordinary folk-psychological talk refers to these kinds of emotions as moods. Moods are, in fact, affective states that are not directed at any specific objects.²⁰ On this account, they are unjustified emotions. This is consistent with the fact that we

²⁰ A similar, although more sophisticated, account of moods is given by Karen Jones. She observes: "Occurrent emotions, whether episodic or standing, need to be differentiated from moods. Depression and melancholia are moods, despair and grief emotions. However, while we can easily give clear cut examples of the difference between emotions and moods, the distinction is not always easily drawn and admits of fuzzy boundaries. Emotions shade off into moods as the object towards which the emotion is directed becomes increasingly vague and the affective response becomes increasingly global in its scope. What differentiates emotions from moods thus seems to be the degree to which the affective state is object focused. I can be depressed about the prospect of becoming unemployed and my depression, so long as it stays object focused, will be an emotion. However, such depression rarely does remain object-focused and readily spills over to the depressed's undifferentiated way of seeing the world in which everything is leaden and grey and devoid of hope. My focus is on how to generate an account of the rationality conditions for occurrent emotions, both episodic and standing." (JONES 2004, quoted from manuscript).

explain our own and other people's behaviour in terms of moods when we do not know what objects explain their behaviour. For example, when we do not know why we feel low, we say we are in a bad mood, rather than that we are sad. Explanations in terms of emotions make reference to specific objects (e.g. what one is sad about); explanations in terms of moods, by contrast, do not make reference to any specific object. I will come back to this point below.

Moods are typically caused by physical states and conditions. Evidence to this effect is shown by Zajonc's experiment on the relation between facial expressions and moods. Depression, for example, is described as a mood rather than as an emotion. Psychologists and neurologists agree that depression is often caused by an electrochemical imbalance in the brain. Premenstrual syndrome is another physiological state that may cause moods like depression or aggressiveness. Drugs and alcohol too are invoked to explain unjustified emotional reactions. This view is consistent with the common practice of explaining unjustified emotional behaviour in young children in terms of physical or physiological conditions. For example, we say young children are tired, hungry, or that they need a change.

The project of determining the nature of emotions involves making clear what relation there is between emotions and things in the world. I have argued that emotions are reactions that do not require one to understand the reasons why one reacts with a certain emotion to a certain object. This is compatible with the possibility that the emotion is appropriate or inappropriate. Appropriateness tells us in which circumstances a given emotion is the right kind of reaction to how things are in the world. This does not mean that emotions aim at truth like beliefs do. Beliefs aim at truth because they ought to

be true. This is evident in the fact that as soon as there is evidence that a certain belief is false, it should be dismissed. In contrast, emotions do not aim at truth because they are not revised in the light of evidence. This is clear in the case of recalcitrant emotions like fear of flying where evidence that flying is not dangerous does not prevent one from fearing it. On this basis, philosophers often compare emotions to the Müller–Lyer illusion, and argue that emotions may persist in the face of better evidence, in the same way as perception that the two lines differ in length survives the belief that the lines are of the same length.²¹ This shows that, like perception,²² emotion is not an attitude of regarding something as true, but an attitude of regarding something as seeming to be true, that is, as appearing a certain way.

Another reason for claiming that emotions do not aim at truth is that they do not require the ability of conceptual thought. States that aim at truth require the ability to assess reasons for taking something, rather than something else, as being the case. This requires understanding of the reasons which, in turn, involves possession of the relevant concepts. Emotions, by contrast, are formed even when the emotion subject lacks the concepts necessary to understand the reasons why she has formed a certain emotion in response to a certain stimulus. This prevents emotions from being states that aim at truth. Along these lines, Griffiths and Scarantino observe:

[A] phobic can reconcile the conceptual thought that the object of their phobia is completely harmless with utter terror towards it. The traditional cognitivist must assimilate phobias either to inconsistent

²¹ D'ARMS and JACOBSON 2000, 2003; DÖRING 2003; SALMELA 2006; BRADY 2007.

²² CRANE 1992.

beliefs or to self-deceit. In the case of fear at least, there is good scientific reason to believe that phobias result neither from logical error, nor from self-deceit, but from the neural architecture of the emotion system. By means of ingenious lesion studies, LeDoux has demonstrated that fear can be elicited in a reflex-like fashion through a neural *low road* that projects along a subcortical pathway directly to the amygdala and bypasses the neo-cortex (LeDoux, 1993). Since full-blown conceptual thought is generally assumed to involve the neo-cortex, this appears to be strong evidence that such conceptual thought is not essential for fear...²³

On this account, a creature forms an emotion when she reacts to how things appear to her, not to how things are. This is compatible both with the possibility that, on some occasions, things *are* as they appear to be *and* with the possibility that, on other occasions, they are not.

These considerations introduce a further issue. If emotions are reactions that do not require conceptual thought, it is possible that emotions are formed in reaction to properties to which creatures are naturally sensitive, that is, properties the recognition of which does not require background knowledge but only adequate sensitivity. This is in line with what Damasio observes about the kinds of stimuli the limbic system processes when it produces fear responses:

One possibility...is that we are wired to respond with an emotion, in preorganized fashion, when certain features of stimuli in the world or in our bodies are perceived, alone or in combination. Example of such

²³ GRIFFITHS and SCARANTINO forthcoming: page 9, quoted from manuscript.

features include size (as in large animals); large span (as in flying eagles); type of motion (as in reptiles); certain sounds (such as growling); certain configurations of body state (as in pain felt during a heart attack).²⁴

On this account, we form emotions as reactions to features of the environment to which we are naturally sensitive. They are physical features such as size, speed, pitch, and so on. This explains why creatures like infants and animals that are unable to draw inferences from background knowledge are, nonetheless, capable of emotional reactions.

This does not rule out the possibility that learning and background knowledge can make animals and humans sensitive to other features. For example, knowledge about the dangerousness of guns makes humans sensitive to them. Animals may also learn that some objects have positive or negative properties. Bear cubs, for example, learn what animals are dangerous by observing the adult bears. On this account, there are two kinds of properties in reaction to which humans and animals form emotions. One kind is physical properties to which humans and animals are naturally sensitive. The other kind is features to which they can learn to be sensitive.

It is worth noting that not all individuals of the same kind are sensitive to the same properties in the same way. The same dog that I fear may not be feared by his master. The same joke that I think is hilarious may not amuse another person. The same movie that I think is scary may not scare another person. The same smell that disgusts me may not disgust another, and so on.²⁵ In humans,

²⁴ DAMASIO 1994: 131-2.

²⁵ An accurate description of this phenomenon is given by Mark Johnston. He writes: “[W]hen I find that others are unmoved by what I see as ethereally beautiful then my choices are quite

this difference can be explained as a question of evaluation. Evaluations are ways of seeing things determined by background knowledge. Someone with background knowledge about coins will see a certain coin as valuable or rare. Someone else without such knowledge will see it just as a coin. The same applies to emotions. Not everybody will fear the dog that I fear because not everybody will evaluate it as dangerous. This is because each person may have different sensitivity to the danger that the dog instantiates. The difference may depend on variations in background knowledge. I may be very sensitive to it because I had a bad experience in my childhood. The dog's master, instead, may be insensitive because he knows the animal. The dog's trainer may also be insensitive but for another reason: he is used to dealing with dogs. This does not mean that the dog is not dangerous. The dog may be genuinely dangerous without this implying that everybody is sensitive to it in the same way. In other words, we need to distinguish the property from the reaction to the property. On this account, emotions are subjective reactions to properties of objects.²⁶

differently constrained. I can try to get them to see it too, and be moved appropriately. If I fail, then I am left with two hypotheses. Either I have things wrong, say because of sentimentality or some distorting mood that I was in, so that I then withdraw the judgement of beauty, and say instead that it merely *seemed* ethereally beautiful at the time. Or I conclude that the others are just blind to this kind of beauty. If I draw this second conclusion I then might give voice to my self-confident stance by saying 'I find it ethereally beautiful.' But one thing I am not in a position to say is that it's ethereally beautiful for me, where this is understood on the model of 'pleasantly hallucinogenic for me.' I'm not in a position to say that, because it would be at odds with the concept of ethereal beauty." (JOHNSTON 2001: 199).

²⁶ Some philosophers call these properties values (MCDOWELL 1998d, 1998e; MULLIGAN 1998; TAPPOLET 2005) or value properties (MULLIGAN 1998). Others follow the terminology introduced by the appraisal theory and describe the situations in which these properties are instantiated as core relational themes (PRINZ 2004b). They are relational properties. What makes them relational is that they are features that relate the objects that have them to the range of entities that can be affected by these features. Consider the following example: guns are dangerous. Dangerousness is a relational property because things are dangerous for other things. Guns may, in fact, injure or kill people, and damage or destroy objects. So, when we say that guns are dangerous we say

This does not mean that emotions are always subjective. If we think of emotions as states that regulate our interaction with the environment, we can see that creatures of the same kind need to react in the same way to the same stimuli in order to survive. This is true of some specific stimuli that represent objective challenges to certain creatures. For example, darkness is an aversive property for all those creatures that cannot see in the darkness. This suggests that although emotions are reactions and reactions are subjective, there are stimuli to which all creatures of the same kind need to react in the same way in order to survive. This is consistent with Damasio's remark that creatures with similar brain structures are naturally sensitive to the same physical features like size and speed.

To conclude, it may help to compare my view with other accounts of emotions. The cognitive view argues that emotions are evaluative judgements. However, emotions are states that humans share with animals. Animals are not capable of conceptual thought, which is required for judgement. It follows that emotions cannot be judgements. They are reactions to objects, which do not require the ability of conceptual thought. The perception view, by contrast, argues that emotions are perceptions of bodily changes. However, emotions are reactions creatures actively form in response to stimuli. It follows that emotions are not perceptions because perceptions are, by their own nature, passive.

One may still claim that my view has some similarity with Prinz's perceptual theory of emotions. Prinz argues that emotions are states that humans share with animals. He also thinks that conceptual thought is not a necessary condition for emotions. The problem with his view is that it is

that they have a kind of property – dangerousness – that relates them to the range of objects that can be affected by it.

committed to an episodic conception of emotions. Moreover, it conceives them as entirely passive states that creatures experience when specific patterns of changes are produced by perception of relational properties. The fact that emotions and perceptions are common to humans and animals does not imply that they are states of the same kind. The thrust of my argument is that emotions are active states that creatures form as reactions to stimuli. My view is, therefore, different from Prinz's perceptual theory.

3. "Emotions are states that we feel in the body"

The view outlined above is not sufficient to determine what kinds of states emotions are. Reactions can, in fact, be viewed as episodes or dispositions. In order to clarify the metaphysics of emotions we need to determine what kind of states they are. A way of addressing this issue is to look at how folk-psychology conceives emotions. A claim that people often make about emotions is that they are states we feel in the body. This is confirmed by the fact that we think of emotions as states we may feel in the whole body or in specific body parts. Fear, sadness, surprise, and happiness are emotions we may feel in the whole body. In contrast, disgust and anxiety are emotions we may feel in specific body parts. Disgust, for example, is an emotion we may feel in the mouth or stomach. Anxiety is an emotion we may experience like a sensation of pressure on the chest. This is not a definition of where we feel specific emotions. Different emotions may be felt in different locations. Moreover, there is evidence that cultural differences affect how people think of emotions in relation to the body.²⁷

²⁷ BREUGELMANS et al. 2005.

What matters to my argument is that we can derive a conception of emotions from ordinary emotion talk. The fact that when we talk about emotions we often refer to bodily feelings and sensations, suggests that we think of emotions as kinds of states we feel in the body.

Emotions are not the only states we feel in the body though. There are other states we can describe in the same way. They are pains, sensations of cold and warmth, sensations of pressure, sensations of pleasure, sensations of hunger or satisfaction, and so on. We also think of desires as states we may feel in the body. There is, however, an intuitive difference between these states. They feel different. How I feel when I am afraid is different from how I feel when I am in pain, when I am cold, or hungry. The claim that emotions are something we feel in the body is, therefore, consistent with the idea that they are not generic feelings; they are specific feelings that differ from other kinds of feelings.²⁸

These remarks bear on the question of what reasons we have for saying that emotions are states we feel in the body. The claim is justified by the fact that the main and most direct way of knowing our emotions is through feelings. I know that I am afraid, when I feel afraid. I know that I am happy, when I feel happy. I know that I am angry, when I feel angry, and so on. The claim that emotions are states we may feel in the body is therefore a claim about how we normally come to know our emotions.²⁹ Of course, this is not the only way in which we come to know them. We can learn about our emotions by observing our own behaviour (e.g. when I see that my fingers tremble), by listening to what others say about our emotions (e.g. when someone says that I look

²⁸ For more detailed discussion of the notion of feeling see Chapter IV.

²⁹ I will come back to this topic in Chapter VI.

worried),³⁰ or by noticing that we tend to have specific thoughts about a given subject matter (e.g. when I keep thinking about a certain upsetting event).³¹ On this account, saying that emotions are states we feel in the body is saying that we normally come to know what kinds of emotions we have from the kinds of feelings we experience.

In the previous chapters, I have observed that we talk of emotions in two ways – as episodes and as dispositions. Emotional episodes are feelings, while dispositions are non-episodic states. This means that it is not always true that we feel emotions. How does this conclusion fit in with the folk-psychological claim that emotions are states we feel in the body? There are two ways of combining the two claims. One is to say that emotions and feelings are two different kinds of emotional phenomena. The other is to say that emotions may or may not be felt.

The first way is advocated by Prinz. He thinks that some emotions are episodes of embodied appraisals, while others are dispositions. He writes: “[d]isembodied emotions include calm passions, such as loneliness or aesthetic appreciation, and long-standing emotions, such as the enduring love one feels for a spouse.”³² The problem with this view is that it explains the fact that it is not always true that we feel emotions by drawing a distinction between kinds of emotions we feel, and kinds we do not feel (i.e. what he calls ‘disembodied emotions’). The distinction is, however, dubious. It is clear that, on some occasions, we feel in love or lonely. It follows that there is no reason for thinking

³⁰ I expand on this idea in Chapters V and VI.

³¹ I further discuss this view in Chapters V and VI.

³² PRINZ 2003: 82.

that there are some specific emotions we do not feel. Therefore, Prinz's argument fails to explain why it is not always true that we feel emotions.

The other way of combining the two claims is to say that emotions are states that we *may or may not* feel. This is to say that emotions are dispositions that may or may not manifest themselves in emotional episodes such as feelings and sensations. This explains why it is not always true that we feel emotions. The view is also consistent with the folk-psychological claim that emotions are states we feel in the body because, as dispositions, emotions have the potential to manifest themselves in feelings.

How does this view fit in with the claim that emotions are reactions to objects? The notion of reaction does not make any commitment to the nature of reactions. They can be episodic or non-episodic states. Episodic reactions are, for example, bodily conditions like anaphylactic shock, fever, or skin rash. They are reactions because they are responses to infections or substances to which the body is sensitive. They are episodic because it is possible to say when they begin and when they cease. Non-episodic reactions are intentional attitudes and emotions. They are reactions because they are formed in response to propositions or objects, although emotions differ from intentional attitudes in the fact that they are not formed for reasons. Intentional attitudes are non-episodic reactions because they last over time. It is plausible to assume that the same is true of emotions even though this is something that my argument has not yet established. For now it is sufficient to say that emotions are non-episodic reactions because they may or may not manifest themselves in emotional episodes.

To sum up the point made in this section then: I opened my discussion with the claim that emotions are something we feel in the body. This claim is justified by the fact that, in most cases, we know that we have emotions from the fact that we feel them. I have shown that if we want to do justice to the fact that we talk of emotions in two ways, we cannot confine ourselves to the claim that emotions are episodes because it does not explain why some emotions are unfelt. The best way of accounting for this phenomenon is the claim that emotions are dispositions that may or may not manifest themselves in episodes.

This account does not suffice to provide an exhaustive account of emotions because it does not explain the fact that emotions may last over time. This aspect is the main argument against James' and Prinz's view that emotions are episodic states. It is, therefore, a feature that an adequate account of emotions must explain. The cognitive view explains it by saying that emotions are or involve beliefs, which are enduring states. This explanation is, however, inadequate because it accounts for the enduring character of emotions in terms of the enduring character of belief, while it is clear that emotions are not and do not resemble beliefs. It follows that an exhaustive account of the enduring character of emotions must not appeal to beliefs. In the next section, I will show that emotions are enduring states, that is, they last over time. I will support this claim by showing how emotions factor in the production and explanation of long-term emotional behaviour.

4. "Emotions affect behaviour"

Folk-psychology says that emotions affect behaviour. This is a fairly uncontroversial claim as we normally think of emotions as states that produce

behaviour. When I fear a dog, I scream and flee. When I am angry, I scowl and slam a door. When I am happy, I smile and run. These examples show that emotions produce two types of behaviour: expressions and short-term actions. Emotions may also produce long-term behaviour such as the enduring avoidance of the dog or, in the case of a person who fears flying, avoidance of plane travel (in order to avoid confusion with emotion that produces this pattern of behaviour, I will refer to it as 'refusal to fly'). So, there are three kinds of behaviour emotions produce: expressions like screaming or scowling, short-term action like fleeing or running, and long-term patterns of behaviour like avoiding a dog or refusing to fly.

In the previous section, I have shown that emotions are dispositions that manifest themselves in episodic states such as feelings and sensations. Short-term actions can be viewed as another kind of episodic states in which emotions manifest themselves. An argument for this view comes from considerations about the physiology of emotional feelings and behaviour. Feelings can be described as the results of bodily changes produced by emotions. An argument in the same line is that short-term actions like fleeing or running can be described as the outwardly observable part of the same changes that underpin the feelings. This means that the same bodily changes the subject experiences in the form of feelings can be seen by an observer as short-term actions. I will return to this point in chapters four and five. For now it suffices to say that feelings and behaviour are manifestations of emotions.

There is an important difference between expressions, on the one hand, and short and long-term behaviour, on the other. Expressions are characteristic

manifestations of emotions.³³ An expression that shows a certain emotion can only be explained by the fact that there is an emotion of which it is the expression, unless we have reason to suppose that the expression is contrived. In contrast, short and long-term behaviour is not as characteristic because it can be explained by other mental states besides emotions. In particular, it can be explained by beliefs or combinations of beliefs and desires. For example, I flee the dog because I believe it is the best way of not being bitten. For the same reason, I continue to avoid the animal for a long period. To show that emotions are enduring states we need to show two things: first, that they explain long-term behaviour and, second, that the same behaviour *cannot* be explained in terms of beliefs. In other words, we need to show that there are long-term behavioural patterns that only emotions explain. This will confirm that emotions are enduring states.

There are all sorts of long-term behaviour. Someone working on her Ph.D. is an example. An explanation for the fact that this behaviour lasts over time is that she believes that a Ph.D. will get her a good job, and she desires a good job. One can also say that she continues to work on her Ph.D. because she enjoys it. But, the best explanation is the one in terms of belief. This is because the doctoral candidate may continue to work on her thesis, even though she no longer enjoys it, just because she believes it will get her a good job and she desires it. In this case, enjoyment alone is not sufficient to explain her behaviour because it does not explain why she continues to work on her Ph.D. even though she no longer enjoys it.

³³ I discuss this view in Chapter V.

In other cases the reverse is true and belief alone is not sufficient to explain the enduring character of behaviour. Consider someone who refuses to travel by plane. This pattern of behaviour involves many different actions that last over time. First of all, the person refuses to fly when she has the opportunity. Typically, she chooses to travel by train whenever this is an option. She also gives up plans because they require her to fly. For the same reason she turns down invitations and job opportunities, and so on. A possible explanation is that the person refuses to travel by plane because she believes it is dangerous. This explanation is similar to someone refusing to drink wine because she believes it causes her terrible headaches.

Prima facie, the explanation in terms of the belief that flying is dangerous is perfectly adequate. The same explanation, however, proves inadequate when we try to explain some features of the person's behaviour such as the fact that she continues to refuse to fly after being given evidence that flying is safe or, at least, no more dangerous than other things she does on a regular basis. Now, if the person's behaviour were caused by the belief that flying is dangerous, it would be rational to expect that her behaviour would change as soon as she is given evidence to the contrary. This is because it is an essential feature of beliefs that they are revised in light of further evidence – provided that the agent is rational. As we have seen, however, the person does not change her behaviour and still refuses to fly. She behaves differently in the wine example where she changes behaviour as soon as she is given evidence that it is not wine that causes her headaches, but the cheese she eats with wine. Why does she change her behaviour in one, but not in the other?

The most natural explanation is that this subject's behaviour does not change because the mental state that underlies it has not changed either. This means that she still believes that flying is dangerous. How do we explain this given that she has been given evidence that flying is safe? There are three possible explanations, but they are not all equally good. I take a good psychological explanation to be one that does not ascribe false beliefs to an agent when she has been given the chance to revise them in light of further evidence. This notion of good explanation is fully consistent with the charity principle. The first explanation is that she believes the evidence, but also continues to believe that flying is dangerous and this is the reason why she does not change her behaviour. This is not a good explanation because it implies that the person believes that flying is both dangerous and not dangerous. This means that she believes something that is false, even though she is given evidence of the opposite. This violates the requirement for being a good explanation mentioned above.

The second explanation is that the person does not change her behaviour because she does actually believe the evidence, but holds on to her belief that flying is dangerous. This is a poor explanation for the same reason as before. It implies that the person believes something that is false, even though she is given evidence of the opposite. It follows that this too violates the requirements for being a good explanation.

The third is the best explanation. It says that the person does not change her behaviour because she is afraid of flying. There are three reasons for thinking that this is the best explanation. First, both explanations in terms of belief have failed. Second, it is consistent with the ordinary folk-psychological

explanation that people refuse to fly because they fear it. Third, it allows that the person revises her belief in light of new evidence. But how does the explanation account for the fact that the person believes that flying is not dangerous and, nonetheless, she fears it? I have shown that emotions are reactions we form without the help of reasons. Beliefs, by contrast, are formed for reasons such as evidence that flying is not dangerous. It follows that the person may believe that flying is not dangerous, and also have a fear of flying. The two states are not in contradiction because one is formed for reasons, while the other is not. This provides a straightforward explanation of the reason why the person does not change her behaviour.

How do these considerations bear on the question of whether emotions are enduring states? Our initial assumption was that the refusal to fly is a long-term behavioural pattern. This means that it is produced by an enduring mental state. We normally explain long-term behaviour in terms of beliefs because they are enduring mental states. I have shown that we cannot explain the person's refusal to fly in terms of belief because the explanation would not meet the requirement for being a good psychological explanation. Any account in terms of belief would, in fact, ascribe a false belief to the person who refuses to fly. This would infringe the charity principle. It follows from this that we need to provide an explanation that does not appeal to belief. The most natural choice is an explanation in terms of fear because it is the explanation that folk-psychology normally gives to patterns of behaviour like that in question. This is also the best explanation because it does not ascribe any false belief to the agent. It follows that an emotion like fear can produce long-term behaviour. The natural

conclusion is that the reason why emotions can produce long-term behaviour is that they are enduring states.

What I have so far observed shows that emotions are enduring non-episodic reactions that may manifest themselves in experiences and behaviour. This view faces one last objection. That is, emotions are not the only affective states that may manifest themselves in experiences and behaviour. Moods and personality traits seem to work in the same way. I will refer to this as the *mood-personality view*. In order to prove that my account above is correct, I will show that this objection is ill-grounded. In particular, I will show that emotions are always directed at objects, while moods are objectless states. I will then argue that personality traits do not actually manifest themselves in experiences and behaviour, but in the tendency of states and patterns of behaviour to reoccur. The discussion is structured as follows. In the next section I provide an argument for the claim that emotions always have objects. In Section 6, I reject the claim that emotions and moods are alike. In the same section, I provide an argument against the objection that emotions and personality traits are also alike.

5. Emotions and Objects

I have shown that, when they are justified, emotions are reactions to objects. It follows that justified emotions always have objects. Not everybody, though, agrees on that. Some philosophers object that it is not true that emotions always have objects.³⁴ They support the objection with the example of objectless

³⁴ See THALBERG 1964 and LAMB 1987.

depression or anxiety. I will show that the objection is flawed. In particular, I will argue that emotion objects play an *essential* role in ordinary folk-psychological explanations and that it is only in relation to objects that emotional behaviour becomes fully intelligible. On this account, the question of whether emotions have objects must be distinguished from the question whether we know what the emotion objects are.

People tend to confuse the emotion object with the emotion cause. It is certainly true that, in some cases, to identify the cause of an emotion is to identify its object. But this is not true in general. The object of an emotion might lie in the future like when I am worried about my appointment next week with the dentist. Or the cause of an emotion might be a past event which is too remote from the present manifestation of the emotion to be regarded as its object. For example, my fear of dogs may have been caused by a childhood encounter with a big German shepherd. This dog is no longer the object of my fear because when I fear a dog, I fear a specific dog; usually, one that is in my vicinity. In some cases, the cause of the emotion might be something completely unrelated to its object. Being drunk or on drugs can make me obnoxious and hate my friends. So the fact that we can identify the cause of an emotion does not entail that we can identify what the emotion is about.

What does the claim that emotions always have objects say about emotions? The answer rests on the way we explain emotional behaviour. In most cases, the explanation of emotional behaviour involves reference to objects. It is in relation to the emotion objects that emotional behaviour becomes intelligible to those who try to explain it. For example, we explain someone's fear of flying by making reference to the object of her fear – the experience or the

idea of flying. Similarly, we explain why someone looks angry and shouts at her interlocutor by supposing that she is reacting to something the other person said. These examples show that emotion objects are relevant to ordinary psychological explanations.

This does not suffice to show that emotion objects are *essential* to explanations. Would an explanation of emotional behaviour that does not make reference to the emotion object have the same explanatory significance as one that makes reference? There are many examples of explanations that do not make reference to the emotion object because the object cannot be known. Consider facial expressions. We generally explain them in terms of the emotions they express without making reference to the emotion objects. We say that people scowl in anger, cry in sadness, or smile in delight without knowing what the emotion object is. This does not make the explanation less informative. The fact remains that this is consistent with the possibility of improving our understanding by asking the person what she is angry, sad, or delighted about. This shows that it is always possible to improve our understanding of expressive behaviour by making reference to the objects of the expressed emotions. In some case, we do not even need to ask the subject what her emotion is about. We can observe the situation in which the expression occurs and observe the relation between the expression and the emotion object.³⁵

³⁵ This is particularly clear in the case of joint attention. Joint attention occurs when two people both attend to interesting objects and events in their environment. If someone were present when I saw the beetle and had become afraid of it, she would be in a position to perceive both my emotion and its object by jointly attending the emotion in my expression and the object in relation to which the emotion arose. Of course, this is not always possible as the object of the emotion may vanish before the observer can see it. But it is in principle possible that when the emotion is caused by a perception, an observer could perceive the emotion, its object, and the relation between the two. The latter can be perceived, for example, by observing that the

Prima facie, the case of facial expressions suggests that emotion objects are not essential to ordinary explanations of emotional behaviour. One should bear in mind, though, that facial expressions are a specific kind of emotional behaviour. There is a sense in which they are not behaviour in the same way as short and long-term behaviour are. Expressions are characteristic manifestations of emotions. A facial expression that shows a certain emotion can only be explained by the fact that there is an emotion of which the expression is the manifestation, unless we have reason to suppose that the expression is contrived. Short-term behavioural episodes and long-term behaviour are not as characteristic. Consider behavioural patterns that are not expressions like the refusal to fly. Explanations that do not make reference to the emotion objects would say that the person refuses to fly because she is afraid. This does not say what she is afraid of. It could be that she is afraid of suffering from motion sickness, or that she is afraid of leaving home, or that she is afraid of staying away from her family.

On this account, saying that the person refuses to fly because she is afraid does not provide a full explanation of her behaviour. The same pattern of behaviour is amenable to numerous different explanations in terms of possible objects of fear. This shows that in the attempt at making the person's behaviour intelligible we need to make reference to things of which she can possibly be afraid. In other words, as soon as we try to make emotional behaviour intelligible we try to explain it in relation to objects. This confirms that objects are essentially involved in explanations of emotional behaviour. It is essential to good explanations of emotional behaviour that they make reference to emotion

emotion occurred at the same time that a certain object appeared. For further discussion see Chapters V and VI.

objects. This is because it is a characteristic of emotions that they are *always* directed at objects.

Prima facie, the claim that emotions are always directed at objects is challenged by the case of objectless emotions such as objectless depression and anxiety. The claim is, however, false. There are three arguments against the claim. First, it is dubious that depression is an emotion. Psychologists usually describe it as a mood. However, for the sake of argument, I will grant that depression is an emotion. Second, the claim is committed to the idea that emotion objects must be definite and concrete entities such as a dog or gun. The natural consequence of this view is that if an emotion fails to have a definite object, it must have no object at all. This does not take into account that emotions are also directed at abstract entities. Third, there is an important difference between an emotion being objectless and not knowing what the emotion object is. I will show that those emotions we tend to regard as objectless are actually emotions that have objects that we do not know. But, before this, I will show that emotions can be directed at abstract entities. I will consider the case of objectless anxiety, which I do not regard as a mood.

When suffering from anxiety, people behave in characteristic ways. They become alarmed; they worry about trivial things; they fear changes and novelties. This behavioural pattern is often described as existential anxiety, namely, anxiety about life as it is. When we characterise anxiety in this way, we interpret people's behaviour in relation to what seems to be the issue at the basis of their condition: the difficulty to accept life as it is with all its complexity and

indeterminacy. In other words, life is the object of anxiety.³⁶ The point is that the object of this emotion is not a specific concrete object. It is an abstract object.

Armed with this analysis, we can see that any emotions are directed at abstract objects. We may fear death or the possibility of a third world war. We may long for true love. We may enjoy the beauty of a mathematical proof. We may be sad about the idea that human kind will die out one day. Emotion objects can also be properties. I may dislike the colour of a certain dress; I may be disgusted at the bad smell emanating from a basket of mouldy fruit; I may be offended by the way someone has spoken to me. These considerations show that the objection that there are objectless emotions is false. The objection rests on a narrow conception of what kinds of entities can be the objects of emotions.

I will now consider the second argument. The fact that emotions have objects does not imply that the emotion subjects always know the emotion objects. This view is stressed by Tim Crane:

Everyone will agree that there is such a thing as being anxious and yet not being able to give an answer to the question 'what are you anxious about?'. But this by itself does not show that anxiety can lack intentionality. For one thing, we have just seen that asking 'what is X about?' is not always the most uncontroversial way of deciding whether

³⁶ Jean-Paul Sartre's account of melancholy runs along similar lines. He writes: "My melancholy is a method of suppressing the obligation to look for...new ways [to realise the potentialities of the world] by transforming the present structure of the world, replacing it with a totally undifferentiated structure...In other words, lacking both the ability and the will to carry out the projects I formerly entertained, I behave in such a manner that the universe requires nothing more from me. This one can only do by acting upon oneself, by 'lowering the flame of life to a pin-point' – and the noetic correlate of this attitude is what we call *Bleakness*: the universe is bleak; that is, of undifferentiated structure." (SARTRE 1939/1971: 68-9).

X is intentional. And more importantly, it should not be a condition of a state's being intentional that the subject of that state must be able to express what the state's content is, or even which kind of state it is. Every theory of intentionality must allow that subjects are not always the best authorities on all the contents of their minds.³⁷

On this account, the fact that an emotion has an object is compatible with the possibility that the subject does not know what the emotion object is. This is an epistemic not a metaphysical problem. There is reason to believe that knowledge of emotion objects often depends on the subject's understanding of what is going on in her life as well as on self-understanding. The latter involves the ability of relating the emotion she feels to other mental states of hers as well as to her bodily and linguistic behaviour. For example, someone may understand that she is upset about a discussion she had with a friend because she obsessively goes back, in her thought, to the conversation. Hanna Pickard has argued that a way of explaining the intentionality of emotions is, in fact, in terms of understanding of the reason why someone has the emotion she feels.³⁸ People experience objectless emotions when they lack understanding of the experiential situations they face in their lives. If they lack such an understanding, there is no way for them to identify the objects at which the emotions they feel are directed. On this view, emotions always have objects. The fact that, on some occasions, we do not know these objects is an epistemic problem not a feature of the metaphysics of emotions.

³⁷ CRANE 1998: 8, quoted from manuscript.

³⁸ PICKARD 2003.

To sum up then: emotions always have objects. They play an essential role in the explanation of emotional behaviour. This is evident in the fact that it is when we make reference to emotion objects that emotional behaviour becomes fully intelligible. How does this conclusion bear on the objection that emotions are not the only affective states that may manifest themselves in experiences and behaviour, given that moods and personality traits may also manifest themselves in the same way? While it is clear that emotions always have objects, the same is not true of moods. Personality traits, on the other hand, do not actually manifest themselves in experiences and behaviour, but in the tendency of states and patterns of behaviour to reoccur. It follows that moods and personality traits are different from emotions. I will present the arguments for these conclusions in the next section.

6. Emotions, Moods, and Personality Traits

In Section 1, I have argued that we give the term ‘moods’ to those emotions which are unjustified and which are not directed at objects. In the previous section, I have argued that emotions always have objects. It follows that moods are not emotions, but another kind of affective state. This would be sufficient to refute the objection that emotions and moods are states of the same kind. The advocate of the mood-personality view may still object that emotions and moods explain behaviour in the same way – for example, she may argue that there is no difference between saying that one is sad and saying that one is in a bad mood. It follows that the fact that emotions are directed at objects, while moods are not, does not constitute a substantial difference between the two states. I will show that the mood-personality view is wrong. Objects play an

essential role in psychological explanations. In particular, explanations in terms of emotions are remarkably more precise and informative than explanations in terms of moods.

To see this, consider again the refusal to travel by plane. The advocate of the mood-personality view claims that this behaviour is explained by the fact that the person is in a fearful mood. In contrast, I claim that it is explained by the fact that she is afraid of flying. It is clear that the explanation in terms of fear makes reference to a specific object (i.e. the idea or experience of flying), while the explanation in terms of a fearful mood does not make reference to any object. This is consistent with what I have observed about the metaphysics of emotions: they are reactions to objects. Moods, by contrast, are enduring affective states directed at no specific objects. They often originate from physical conditions of the body like fatigue, premenstrual syndrome, electrochemical unbalances in the brain, or the use of drugs and alcohol.

My opponent may object that it is not necessarily true that moods have no objects. For example, the idea of flying can be one of the objects of the person's fearful mood. Of course, she may fear many other things besides flying, but it is clear that the idea of flying is one of the things her fearful mood is about. *Prima facie*, the objection is sound. The person's mood can be directed at different objects in the same way as her fear can be directed at different things. However, there is a difference between saying, on one hand, that a fearful mood can be directed at all sorts of things and, on the other, saying that fear can be directed at different things. The point is that the same mood can be directed at all sorts of things at once, while the same emotion cannot be directed at different objects at once. On this account, someone who is in a bad mood can complain

about the weather, the political situation, the cost of living, her partner, her job, and so on. In contrast, someone who is annoyed or upset is annoyed or upset about one specific thing. In other words, while emotions are directed at specific objects, moods are directed at all sorts of objects at once.

This characteristic of moods depends on the fact that, as unjustified affective states, they challenge our self-understanding. There is, in fact, a sense in which we do not understand moods entirely. This is because we are not always in a position to relate our moods to the underlying physical or physiological causes that produce them. A way of dealing with such lack of self-understanding is to assign putative objects to our moods. Consider the following example. Lack of sugar makes me grumpy and obnoxious. On my way home, I get annoyed at people on the tram when they push me to reach the door. The point is that my fellow commuters are behaving in a normal fashion. My reaction is due to my bad mood, not due to their behaviour. People become the object of my mood because this helps me to make sense of a state that I would not otherwise understand. On this account, there is a specific reason why moods may be directed at all sorts of objects. It is a characteristic of moods that they lack objects and thereby raise a problem to our self-understanding. A way of dealing with this is to assign putative objects to them.

These considerations bear on the role of objects in psychological explanations. When we explain people's behaviour in terms of moods, it is because we do not know what objects justify the behaviour. Accounts in terms of moods allow us to provide general explanations of fairly general patterns of behaviour. For instance, say we encounter an acquaintance who is behaving in an unusually unwelcoming and unfriendly manner. Since we do not know why

she is unfriendly, we tend to explain her behaviour by saying that she is in a bad mood. This does not mean that her behaviour cannot be explained in terms of a reaction to a specific object. The point is that we do not know this object. Since explanations by emotions make reference to objects, we opt for an explanation in terms of mood because it does not need to refer to a specific object.

This shows that the two types of explanations have different degrees of precision. The explanation in terms of emotion is more precise because it actually justifies emotional behaviour by making reference to the object in reaction to which the emotion is formed. The explanation in terms of mood, by contrast, is less precise because it does not make reference to any specific object. Therefore, the claim that emotions and moods are similar because they explain behaviour in the same way is false. Moods and emotions are different kinds of states that lead to different kinds of psychological explanations.³⁹

I will now consider personality traits. Some preliminary remarks may help to set the stage. Personality traits are features of our psychological make-

³⁹ Despite their differences, moods and emotions are causally related. Psychological evidence suggests that moods may second the occurrence of some emotions, rather than others. In particular, Vincent Nowlis (NOWLIS 1963) has suggested that moods are higher-order dispositions, while emotions are lower-order dispositions. This is in line with the fact that negative moods may facilitate states of anger, frustration, discomfort, and sense of failure. This suggests that emotions can be formed within general frames of mind – they are moods. In discussing Nowlis' view, Paul Griffiths observes: "Moods are dispositions to have emotions...An angry mood is a disposition to get angry easily. Anger itself is a disposition to all sorts of behaviors and mental state changes. To take another example, being a depressive is possessing marked disposition to become depressed. Becoming depressed would be an alteration in dispositions to have such emotions as joy and sadness." (GRIFFITHS 1997: 249). Moods may make us more sensitive to some properties of objects and situations that we would not notice otherwise. For example, being in a grumpy mood may make me more sensitive to aversive stimuli that I normally overlook. On this account, moods affect our sensitivity to the world and lead us to prime some features of the world rather than others. This is consistent with psychological data showing that people in a depressed mood tend to prime stimuli that confirm their state rather than positive or rewarding stimuli which might disconfirm their mind-state.

up. They can be divided into two classes. The first is constituted by traits that explain people's tendency to have specific emotions. They are traits like fearfulness, anxiousness, resentfulness, optimism, nervousness, or hypochondria. Fearfulness, for example, explains the fact that one has a strong tendency to fear or worry about anything dangerous or challenging. The second class of personality traits is constituted by traits that explain people's tendency to behave in specific ways. They are bravery, generosity, fastidiousness, precision, and so on. Generosity, for example, explains the fact that one has a strong tendency to help and support those who are in need.

The advocate of the mood-personality view claims that there are three reasons for thinking that emotions and personality traits are states of the same kind. First, personality traits are reactions to positive or negative events in one's life. For example, a person may be a pessimist because she has gone through many negative experiences in her life. Second, personality traits are enduring non-episodic states that may manifest themselves in experiences and behaviour. A shy person, for example, may feel awkward and behave in an odd way on public occasions. Third, personality traits may have objects. In the case of shyness, for example, other people are the object at which the trait is directed. In the case of pessimism, in contrast, abstract entities like 'life' or the 'future' are the objects at which the trait is directed.

There are various arguments against the mood-personality view. First, it is not always true that personality traits are reactions to experiences and events in one's life. We normally think of shyness, for example, as a congenital trait. Some infants appear shy and withdrawn; others appear friendly and engaging. Other personality traits like pessimism or assertiveness are, indeed, features that

people acquire in reaction to how they are raised, educated, or to what they went through in life. This shows that it is not always true that personality traits are reactions. They can be reactions as well as congenital features. In contrast, emotions are reactions. This is the first reason to conclude that emotions and personality traits are not alike.

The main argument against the mood-personality view concerns the claim that personality traits manifest themselves in experiences and behaviour. This claim is dubious. Personality traits can be viewed as dispositions to form emotions and moods, which manifest themselves in experiences and behaviour. Personality traits explain why certain specific moods and emotions tend to reoccur more frequently than others. For example, pessimism explains why some people are more inclined to become sad or depressed than others. On this account, personality traits do not actually manifest themselves in experiences and behaviour. They manifest themselves in the tendency of certain patterns of behaviour to recur. Such patterns are explained by those moods and emotions which personality traits facilitate. This is the main reason for concluding that emotions and personality traits are not states of the same kind.

To sum up: emotions, moods and personality traits are different kinds of enduring non-episodic affective states. Emotions are reactions to specific objects that manifest themselves in experiences and behaviour. Moods are, instead, objectless. Personality traits are different in two respects. Firstly, they are not always reactions since they can be congenital. Secondly, they do not manifest themselves in experiences and behaviour, but in the tendency of certain patterns of behaviour to recur.

7. Conclusion

I have shown that emotions are different from all those states to which they are frequently compared. They differ from beliefs and judgements because emotions do not require the ability of conceptual thought. They differ from perceptual experiences because emotions are active states. They differ from moods because emotions have specific objects. Finally, they differ from personality traits because emotions are reactions which manifest themselves in experiences and behaviour. This allows me to conclude that emotions are *sui generis* states that need to be understood and described in their own right.

CHAPTER IV

EMOTIONAL EXPERIENCE

1. Introduction

In the previous chapter, I argued that emotions are enduring non-episodic reactions that may or may not manifest themselves in emotional experiences and behaviour. In this chapter, I will discuss the notion of emotional experience. An emotional experience is what a person feels when she experiences an emotion – e.g. what she feels when she is afraid. Therefore, emotional experiences are bodily feelings.

The notion of bodily feeling is often ill-understood. Many philosophers contrast bodily feelings with perceptions of the external world. They do this because they think that bodily feelings do not provide one with awareness of anything independent of those feelings. In contrast, perceptions provide one with awareness of objects the existence of which is independent of the perceiver. For this reason, many philosophers have argued that although feelings are experiences, they are not forms of awareness of anything independent of them. I shall refer to this conception as the *sensation view*.¹

This is not, however, the only possible way of viewing feelings. An alternative view is that they are perceptions of one's body. I shall refer to this as

¹ In recent years this view has been defended by McGinn (MCGINN 1982) and John Searle (SEARLE 1983). For discussion see CRANE 1998 and MARTIN 1998c.

the *perception view*.² Emotional feelings are just another type of bodily feelings. This means that they also can be viewed as perceptions of the body. I support this view. In particular, I will argue that emotional feelings are perceptions of *specific bodily changes* brought about by the action of emotions upon the body. These changes are the objects of which emotional feelings are experiences. For example, a feeling of anger is perception of a pattern of change that is peculiar to anger. In contrast, a feeling of sadness is perception of a pattern of change that is peculiar to sadness. On this account, each emotional feeling is perception of a specific change in the body.

I will structure the discussion as follows. First, I will present the sensation view and explain why it is inadequate as an account of feelings. Second, I will present the perception view and explain why it is preferable to the sensation view. On this basis, I will provide a perceptual account of emotional feelings. This will involve a discussion of the varieties of perceptual error in emotional feelings. I will then address the question of what distinguish emotional from non-emotional feelings. Finally, I will discuss emotional feelings of higher emotions and show that the kind of perception they involve is different from the kind of perception involved in feelings of basic emotions.

2. The Sensation View

Bodily feelings are normally caused by states within one's body. They typically serve as signs for these states. Cramps, for example, signal damage to a specific

² This view further divides into a representational account and a naïve realist account of feelings. Defenders of the representational account are ARMSTRONG 1962, 1968; PITCHER 1970; TYE 1997, 2006a, 2006b. Defenders of the naïve realist account are MARTIN 1992, 1995, 1998c and PICKARD 2004, among others. For discussion see AYDEDE 2005.

part of the body. Similarly, thirst signals that one's body is dehydrated. It is not always the case that feelings signal the bodily states to which they are typically associated. One can feel thirsty even when one's body is not dehydrated.³ Feelings have locations within one's body. They can have specific location like when one feels a pain in one's knee. But they can also suffuse body parts like when one has cold feet. Some feelings are associated with the body without having location like when one feels fatigued. Other feelings occur in body parts different from those where their actual causes are located, as in the case of referred pain.⁴

Feelings are also what we experience in the grip of emotions. A feeling of anger is what someone experiences when she is angry, and anger manifests itself in experience by affecting the body. Emotional feelings often lack location. Happiness, for example, may feel like a general feeling of elation. This does not apply to all emotional feelings though. Some feelings perfuse body parts. Rage may feel like a sensation of warmth in the face. Others have specific locations. Disgust may feel like a sensation of nausea in the gut. Anxiety may feel like a sensation of pressure or constriction in the chest.

What puzzles philosophers about feelings is that, unlike perceptions, they do not always allow us to draw a distinction between the feeling and the object of which the feeling is an experience. This distinction is applicable only to a small group of feelings. We can distinguish between warmth and sensation of warmth, pressure and sensation of pressure. For warmth and pressure can exist in the absence of a sentient subject. The same distinction does not apply to

³ Brain tumours may cause one to feel thirsty even after drinking water in large quantities.

⁴ For instance, inflammations of the stomach mucosa like gastritis may cause pain in the upper back.

feelings like pains, itches, and tickles. A pain is something that cannot exist in the absence of someone who is in pain. The same consideration carries over to emotional feelings. A feeling of fear is something that cannot exist in the absence of someone who is afraid.

On this basis, some philosophers have proposed what I have called the sensation view. This view contrasts bodily feelings with perceptions, which are typically directed at external objects. Unlike perceptions, bodily feelings are viewed as subjective states, which are not directed at objects that exist independently of the sentient subject.

There are various brands of sensation view. One is the so-called *act-object view*.⁵ It claims that, in having bodily feelings, there is a genuine object of awareness, even if it depends for its existence on the subject's awareness of it. On this view, the objects of awareness are mental entities. A version of the view is the *sense-datum theory*.⁶ The theory was originally proposed as an account of perception, but it may be easily adjusted to bodily feelings. The core commitment of the theory is that perception is an act directed at objects. So, perception is a relational state that links the perceiver to the objects of perception. These are not physical objects, but experiential intermediaries of which we are directly aware and that resemble external objects. Sense-datum theorists conceive these intermediaries as mental objects internal to one's consciousness. The theory appeals to intermediaries in order to account for non-veridical perceptions like hallucinations. When someone hallucinates a certain object, she is presented with a sense-datum that resembles a physical object, but

⁵ JACKSON 1977.

⁶ MOORE 1905; RUSSELL 1912; BROAD 1925; PRICE 1932; AUSTIN 1962. For discussion see CRANE 2000 and MARTIN 2002, 2004.

which is not caused by any physical object in the world.

An account of bodily feelings in line with the sense-datum theory says that feelings are mental objects the existence of which depends on their being felt by a sensing subject. The difference between feelings and perception is that feelings are not taken to resemble anything in the physical world. They are not intermediaries but mental objects on their own, internal to one's consciousness.

This view also accounts for emotional feelings which are taken to be inner mental entities present to one's consciousness. What distinguishes them from feelings and sensations that do not manifest emotions is how they feel. So, for example, a feeling of anger is a mental object that feels different from other feelings and sensations.

Some philosophers reject the idea that feelings and sensations are states of awareness of mental objects. This view is also known as the *no-object view*⁷. Like the sense-datum theory, the view was originally proposed as an account of perception. It denies that there is any distinction between the act of perceiving and what is perceived. A specific version of the view is known as *adverbialism*.⁸ It denies that in perception one is related to objects of any sort. It maintains that perceptions are to be understood as describing *how* we perceive something, rather than what we perceive. On this view, perceptions are modifications of the perceiver that can be characterised by specialised adverbs specifying how the perceiver is 'appeared-to.' Visual perception, for example, is an experience in which the perceiver is aware of properties that make her experience a visual perception. So, for example, when one sees a red tomato, one has an experience in which one is aware of properties that make the experience a visual perception

⁷ MARTIN 1998c.

⁸ DUCASSE 1942; CHISHOLM 1966; TYE 1984a, 1984b. For discussion see MARTIN 1998a.

of a red tomato. These are properties such as seeing *red-ly* and *round-ly*.

An adverbialist account of feelings and sensations says that they are modifications of the subject that can be characterised in terms of specialised adverbs. If a sensation of pain is just a painful sensation, then feeling pain may just be to have a certain sort of sensation, a painful one, or to feel in a certain way – *painfully*, for example. What is felt exists just in case one has the feeling, because it is a way in which one feels. This view has some intuitive appeal. Expressions like ‘I feel cold,’ ‘I am in pain,’ and ‘I feel miserable’ seem to report how the subject is affected by each experience. So, for example, feeling cold is having an experience in which one feels, so to speak, *cold-ly*.

On this construal, feelings are states of awareness of properties of experience and not of properties of the body. These properties do not only determine *how* the experience feels, but also *where* the experience is felt. So, having cold feet is being aware of properties that make one feel *cold-ly* and, as it were, *feet-ly*. This view also applies to emotional feelings. A feeling of anger, for example, is a sensation in which one is aware of feeling *angry-ly*. This property distinguishes a feeling of anger from other emotional feeling in which one is affected differently.

The sensation view raises the following problem. It is uncontroversial that bodily feelings and sensations are experiences. A natural way of understanding experience is as states of awareness of objects in the world. The sensation view, by contrast, conceives of feelings and sensations as awareness of mental objects or of properties of experiences. This view, therefore, fails to do justice to the idea that, as experiences, feelings and sensations provide one with awareness of objects that exist independently of one’s awareness of them.

This view appears even more problematic when we consider what it is that we know through bodily feelings and sensations. Experience is often a source of knowledge about the world. But if we conceive of bodily feelings as experiences in which one becomes aware of objects and properties internal to one's mind, it follows that they do not provide knowledge of anything in the world. At best, they provide knowledge of one's own mind. This challenges the idea that experience is a source of knowledge about the world.

The perception view offers a solution to these problems. Its thrust is the idea that the body and what happens within the body are things that are parts of the physical world like chairs, houses, and mountains. And like we perceive chairs, houses, and mountains, we also perceive our body and what goes on in it. I will discuss this view and its relevance to a plausible account of emotional feelings in the next section.

3.1 The Perception View

The perception view says that in having a feeling one comes to be aware of one's body. When I feel pain in my knee, it is my knee that hurts in some way. The location of the feeling is the body part of which I am aware when I feel pain. The view denies that feelings are mental objects by arguing that the body parts of which we are aware in feelings are parts of the world. As Mike Martin puts it:

One's ankles, toes or teeth are no less part of the objective world than are tables and chairs, so bodily sensations cannot be purely subjective states of mind which give one awareness of nothing independent of them. Rather, having sensations gives one an awareness of an item in the

objective world: one's body.⁹

Some philosophers have claimed that feelings are just a form of perception of one's body.¹⁰ For example, pain is perception of located tissue damage. This view is difficult to defend because, in ordinary perception, there is a difference between the properties perceived and the experience of them. For example, a round plate may look elliptical. In this case there is a difference between the property perceived (i.e. the object's being round) and how the property appears to a perceiver (i.e. its looking elliptical). It is difficult to draw the same distinction with feelings. While we can say that the plate looks elliptical even though it is not, we cannot say that a pain seems to hurt, even though it does not. This is apparent in the case of pains located in phantom-limbs. These feelings appear to be located in body parts that no longer exist; yet, nonetheless, they still hurt.

Another reason for thinking that a purely perceptual account of bodily feelings is not plausible is that, while some aspects of feelings can be treated as perceptions of the body or body parts, other aspects cannot be ascribed to the body. For example, when I feel a burning sensation in my stomach, there is no objective feature of my stomach corresponding to the fact that it feels as if it is burning. My stomach might well be irritated, but this does not explain why it feels as if it is burning, rather than achy. Similarly, when I have the illusory sensation that an insect is crawling on my back, there is no objective feature of my back corresponding to the fact that it feels as though as insect is crawling on it. The feature belongs to my state of awareness and not to my body as an object

⁹ MARTIN 1998c.

¹⁰ TYE 1997, 2006a, 2006b.

of my awareness. I will come back to this point in Section 5.

Some philosophers argue that the implausibility of a purely perceptual model of bodily feelings need not lead us to reject the idea that feelings and sensations are forms of awareness of one's body. In particular, Mike Martin points out that supposing that sensation is a form of awareness of one's body fits very well with the fact that we feel the locations of sensations to be locations within the body, and not within other parts of space.¹¹ This is true even of phantom-limb pains. These pains do not feel located out in empty space, but in an apparent limb which extends beyond the point of amputation.

This view also applies to emotional feelings. Most feelings that manifest emotions do not have bodily location. This is not true of all emotional feelings as some feelings perfuse body parts. Others have specific locations. So, although most emotional feelings do not have location, this should not be viewed as a distinctive feature of emotional feelings. Like other bodily sensations, they are states of awareness of one's body (e.g. when I feel happy) or body parts (e.g. when I feel nauseous and the sensation is located in my stomach).

It is clear that the body and body parts are not the only objects of which we are aware in emotional feelings. When someone feels angry, she perceives various modifications in her body. She feels her heart racing, her face flushing, her muscles contracting, and so on. This suggests that she perceives not only her body itself but also changes within it. William James claims that emotions are perceptions of changes in the body, and these perceptions are what we call 'feelings.'¹² I have shown that this claim is false because emotions are not feelings. But if we interpret it as a claim about the nature of emotional

¹¹ MARTIN 1992, 1995, 1998c; PICKARD 2004.

¹² JAMES 1884: 189-90.

experience rather than about the nature of emotions, the claim puts forward a perceptual account of emotional feelings, which says that emotional feelings are perceptions of changes in the body. James goes beyond this claim and gives an account of the nature of the changes. He thinks they are modifications in the inner organs produced by the activity of the autonomous nervous system in reaction to stimuli from the environment. Emotional feelings are, therefore, perceptions of autonomic changes. This view is summarised in the following passage from James' paper *What is an Emotions?*

That the heart-beats and the rhythm of breathing play a leading part in all emotions whatsoever, is a matter too notorious for proof. And what is really equally prominent, but less likely to be admitted until special attention is drawn to the fact, is the continuous co-operation of the voluntary muscles in our emotional states. Even when no change of outward attitude is produced, their inward tension alters to suit each varying mood, and is felt as a difference of tone or of strain. In depression the flexors tend to prevail; in elation or belligerent excitement the extensors take the lead. And the various permutations and combinations of which these organic activities are susceptible, make it abstractly possible that no shade of emotion, however slight, should be without a bodily reverberation as unique, when taken in its totality, as is the mental mood itself.¹³

On this account, emotions produce autonomic changes of which emotional

¹³ JAMES 1884: 192.

feelings are perceptions. In other words, the changes are the objects of which emotional feelings are experiences. The first objection to this view is that we do not perceive bodily changes through a dedicated sense organ, while it is through the senses that we perceive physical objects. There are two arguments against the objection.

The first is that, in general, perception can be characterised as phenomenal awareness of objects without making reference to the sense organ involved in experiencing objects. In some cases it is not clear which sense provides us with awareness of a certain object or property. Think of wine tasting, for example. Sometimes we try wines that taste like strawberries. It is natural to say that it is through the taste that we perceive the flavour. Yet, the same flavour disappears or diminishes if we sip the wine while holding our nose. This seems to suggest that it was through the smell that we perceive the flavour. Yet, we cannot deny that the wine still has an aftertaste like strawberries. In this case, it is not clear which sense provide us with awareness of the strawberry flavour. Perhaps both senses are involved in perception of the flavour. Or perhaps only one sense actually perceives the flavour, while the other is in some way biased. What is clear is that, regardless of the details, we are aware of the flavour. This example shows that considerations about the senses are not essential to explain how we gain awareness of objects. This suggests, in turn, that even if we had no answer to the question of what sense organ makes us aware of bodily changes, we could not deny that we are aware of them. This is confirmed by the fact that we feel them.

The second objection to the view that the changes are the objects of which emotional feelings are experiences is that, at any rate, a sense modality is

actually involved in perception of bodily changes, even though it is not one of the five senses. The modality is known as interoception.¹⁴ Again, James is the first to offer an account of how interoception operates in awareness of the bodily changes emotions bring about. He writes:

If we suppose [the brain's] cortex to contain centres for the perception of changes in each special sense-organ...and to contain absolutely nothing else, we still have a scheme perfectly capable of representing the process of the emotions. An object falls on a sense-organ and is apperceived by the appropriate cortical centre; or else the latter, excited in some other way, gives rise to an idea of the same object. Quick as a flash, the reflex currents pass down through their pre-ordained channels, alter the condition of muscle, skin and viscus; and these alterations, apperceived like the original object, in as many specific portions of the cortex, combine with it in consciousness and transform it from an object-simply-apprehended into an object-emotionally-felt.¹⁵

On this account, bodily changes are the objects of which emotional feelings are experiences. This is analogous to ordinary perception where physical objects are the objects of which ordinary perceptions are experiences.

These considerations may not be sufficient to convince the opponent of my view that emotional feelings are perceptions of bodily changes. In particular, there is one further objection the opponent is likely to raise. It says that the objects of perception are entities located in a public space – the world – to which

¹⁴ For a contemporary discussion of the notion of interoception see CAMERON 2001 and 2002.

¹⁵ JAMES 1884: 203.

anyone can gain access. In contrast, the objects of emotional feelings are located within the body. This makes them private because no one apart from the subject has access to them. There are two arguments against the objection. The first questions the idea that the changes are actually confined within the body. The second questions the idea that only the subject can perceive them. I will discuss each response in detail.

In the previous chapter, I have argued that feelings and expressions can be viewed as different appearances of the same pattern of bodily change. An emotional feeling is how the change appears to the subject, while an expression is how the same change appears to the observer. On this account, the changes of which emotional feelings are perceptions do not occur only inside the body. They also affect the outwardly visible part of the body like the face, skin, posture, and hair. When this is the case, the same change that the subject experiences as a certain emotional feeling may appear to the observer as the expression of a certain emotion by the subject. For example, if I touch someone's cold and sweaty hands I perceive part of the same change she experiences as nervousness. On this account, bodily changes are not confined within one's body. They can actually be observed from the outside. This is the first argument against the objection that bodily changes are private objects.

The second argument challenges the idea that only the subject can perceive the changes. I have shown that we can perceive the changes in someone else's body simply by observing how they affect the outwardly visible part of her body, as occurs if I touch someone's cold and sweaty hands. The same is true of other senses. By hearing someone's shaky voice I may perceive part of the change she experiences as fear. By seeing the scowl on her face I may

perceive part of the change she experiences as anger, and so on. Smell and taste seem less relevant to perception of changes in other people's bodies. This can be explained as the result of our evolutionary history as well as of social conventions. This does not apply to animals that can smell and taste the changes emotions produce in other animals (e.g. skunks and green shield bugs). These examples show that the subject is not the only one to perceive the changes emotions produce by acting upon the body.

Of course, it is not always the case that emotions affect the outwardly observable part of the body. For example, someone may feel angry without showing any outer sign of it because she has learned how to suppress or conceal her emotions. This does not mean we cannot possibly observe them. We can perceive someone else's excitement by taking her pulse or by listening to her heart beat with a stethoscope. One may object that in these cases we do not perceive the change directly because we use a tool. However, tools can be viewed as extensions of the senses that allow us to gain phenomenal awareness of the same changes that others experience as emotional feelings. On this account, both the subject and the observer are phenomenally aware of the same object – that is, the same bodily change – even though the perceptual modalities are different since the observer listens to the heart beat with a stethoscope, while the subject feels it. This situation is not uncommon. When I listen to someone playing the piano, I perceive the same notes that she reads on the score (provided that she is a good player). Therefore, the two arguments show that bodily changes are not private objects and that the subject is not the only one who has access to them.

3.2 The Phenomenal Character of Emotional Feelings

What I have so far observed confirms that emotional feelings are perceptions of bodily changes. One may reasonably wonder what relation there is between such a change and the phenomenal character of an emotional feeling. A possible answer is that it is the same relation that exists between perceptions and the objects of which perceptions are experiences. An experience of a round object is a perception of an object that is round – provided that one’s visual system and the visual conditions are normal. The object’s being round is responsible for the fact that the object looks round to one. In other words, the object’s properties explain the phenomenal character of the experience.

Some theories of perception distinguish between two types of properties of experience.¹⁶ They are observational and non-observational properties. Each property features in a specific kind of experience: observational properties feature in what are sometimes called ‘observations,’¹⁷ while non-observational properties feature in experiences of objects that are represented as specific kinds of objects. It is possible for both properties to feature in the same experience. Observational properties of experience correspond to features of the world that perceivers can experience solely in virtue of the fact their perceptual system functions to detect such features. It is not a condition for experiencing observational properties that the subject has background knowledge about the world. This is to say that possession of concepts is not a condition for this kind

¹⁶ PEACOCKE 1983, 1992, 2003a, 2003b, 2007. For discussion see MACDONALD 1998.

¹⁷ PEACOCKE 1983: Ch. 4.

of experience. Paradigms of observational properties are properties of the visual field like shape, size, distance, mutual location, colour, speed, and so on.

Non-observational properties of the experience, by contrast, correspond to features of the world that perceivers can experience in virtue of what they know about the world; that is, when they master the relevant concepts. Examples of non-observational properties are the property of being a strawberry, a dog, a television, a car, a mountain, or a cathode ray tube. I will further discuss this topic in the next chapter.

There is reason to believe that perception of changes brought about by emotions is independent of background knowledge. In other words, it is perception of observational properties of the changes. An argument for this claim draws on evidence that six basic emotions are shown by the same expressions in all cultures. In the 1960s, psychologists Paul Ekman¹⁸ and Carroll Izard¹⁹ interviewed members of diverse Western and non-Western literate cultures. The subjects were asked to choose the emotion terms which, in their language, corresponded to photographs of Caucasian individuals who expressed emotions with their faces. Izard and Ekman each showed different photographs, gave the subjects different lists of emotion terms and examined people in different cultures. They obtained consistent evidence of agreement in the labelling of the facial expressions of six basic emotions: anger, disgust, fear, joy, sadness, and surprise. To rule out the possibility that such agreement could result from imitations and cultural contamination, Ekman extended the findings to a preliterate culture in New Guinea whose members could not have learned

¹⁸ EKMAN et al. 1969, 1971.

¹⁹ IZARD 1971.

the meaning of expressions from other cultures.²⁰ He found that New Guinea aboriginals were capable of recognising the six basic emotions in pictures of Caucasian individuals who expressed these emotions in their faces.

These data show that perception of emotions in other people's expressions is independent of background knowledge about emotions. If this were not the case, we could not explain why individuals with different social and cultural background perceive the same emotions in the same arrangements of facial muscles – i.e. in the same facial expressions. The argument for this conclusion is as follows. A perceiver sees a square when her perceptual system is sensitive to square objects. Different perceivers can see the same square because they share the same perceptual system. Perceivers with and without knowledge about squares can all perceive the square because the only necessary condition for perceiving a square is that the perceiver's perceptual system is sensitive to square objects. The same argument applies to expressions of emotions. Individuals from different cultures have different background knowledge about all sorts of things including emotions. But individuals with different background knowledge see the same emotions in the same arrangement of facial muscles. This is because their ability to see emotions does not depend on background knowledge about emotions, but on their perceptual system.²¹ I will come back to this point, and the results from Ekman's and Izard's research, in the next chapter.

How does this argument bear on the kind of perception involved in emotional feelings? I have shown that an expression is the outwardly observable part of the overall change of which an emotional feeling is an experience. This is

²⁰ EKMAN and FRIESEN 1971.

²¹ I will discuss this view in Chapter V.

to say that seeing an expression of (say) sadness, and feeling sad is having an experience of the same kind of change even though in the first case the expression is located in another person's body, while in the second the feeling is located in one's own body. Evidence shows that background knowledge is not necessary to perceive basic emotions in other people's expressions. This indicates that background knowledge is not necessary to perceive basic emotions in oneself either. In other words, when we see the changes emotions bring about in others and we feel the changes emotions bring about in ourselves, we perceive the same kind of changes. And the perception of these changes is independent of background knowledge in both cases.

One may wonder whether emotional feelings are always independent of the content of background mental states. I will discuss this problem in Section 5. For now, I confine myself to the claim that specific emotional feelings are perceptions of specific bodily changes, and the ability to perceive these changes is independent of background knowledge. This is to say that emotional feelings are perceptions of observational properties of changes brought about by emotions.

This account explains why feelings of different emotions are different. They are perceptions of changes with different properties. These properties explain the phenomenal character of the various emotional feelings. Different properties or different arrangements of the same properties are responsible for the phenomenal character of different emotional feelings. Specific emotional feelings are perceptions of bodily changes with specific properties.

This view is supported by empirical evidence. Zajonc and colleagues²² have performed a series of experiments the aim of which was to prove the connection between brain temperature and the formation of emotions.²³ The hypothesis was that the cooling of some brain areas induced by inhaling a bigger volume of air through the nose enhances positive moods, whereas the warming induced by a smaller volume of air enhances negative moods. Zajonc and colleagues, in the context of research on the vascular theory of emotional efference,²⁴ compared the subjective experience of subjects pronouncing various phonemes, some of which involve the action of muscles that are dominant in emotional expressions. For example, the production of the phoneme *e* resembles the smile. The German phoneme *ü* has just the opposite action. Repeated pronunciation of *e* resulted in positive feelings as measured by ratings of liking, pleasantness, and preferences for the sound, whereas *ü* was judged unpleasant and was disliked, not only by American but by German subjects as well.²⁵

An explanation why different feelings correlated with the pronunciation of different phonemes is that the pronunciation produced different bodily changes with specific properties. The changes were essentially located in the face. The different feelings can be viewed as perceptions of the different changes. This is not quite sufficient on its own to explain why the subjects reported to experience not mere feelings, but pleasant and unpleasant feelings

²² ZAJONC et al. 1989.

²³ For discussion see of the experimental results see ADELMANN and ZAJONC 1989, and MCINTOSH et al. 1997.

²⁴ ZAJONC 1985.

²⁵ Similar results have been obtained in another experiment. Strack and colleagues (STRACK et al 1988) have used a technique requiring subjects to hold a pen in their mouths in different ways. In two initial experiments, subjects held the pen either in their teeth (simulating a smile) or in their lips (simulating a frown). Their ratings of cartoon funniness were higher during the 'smile' and lower during the 'frown' patterns compared to ratings in a control condition.

like those experienced in emotions. A possible means of extending the explanation is to say that, although the subjects were not actually emotional, the changes they produced by pronouncing the phonemes were very similar to the changes people normally produce when they express positive or negative emotions.²⁶ On this view, changes in the arrangement of facial muscles are part of the spectrum of changes emotions bring about when they act upon the body.²⁷

This view is confirmed by self-reports from subjects suffering from acquired conditions that prevent the movements of facial muscles. The neurophysiologist Jonathan Cole reports the case of a young man suffering from bilateral Bell's palsy that immobilised his facial muscles for a few months. Before suffering from palsy, the subject had normal emotional feelings. During the palsy, he became unable to move his facial muscles and to make any facial expression. This affected his capacity to feel emotions. He described his state this way: "I feel almost as if I am in a *limbo between feelings*. I still feel happy to see or hear something I like, but I don't think that I feel it as much because I am not actually smiling."²⁸

²⁶ My account of the experiment differs from the interpretation of the experimental results given by Zajonc and colleagues who concluded that the reason why subjects experienced different emotions is that the pronunciation of the phonemes affected the volume of air inhaled and thereby altered the temperature of some brain areas. I do not criticise this conclusion, but I think the experiment also shows that there is a relation between specific changes and specific emotional feelings.

²⁷ It is worth noting that this account is in line with what Wittgenstein observes on the relation between emotional feelings and facial expressions. He writes: "[T]he personal experiences of an emotion must in part be strictly localized experiences; for if I frown in anger I feel the muscular tension of the frown in my forehead, and if I weep, the sensations around my eyes are obviously part, and an important part, of what I feel." (WITTGENSTEIN 1958: 103). Wittgenstein seems to think that sensations deriving from facial expressions are involved in the formation of the overall sensation one experiences when one feels an emotion.

²⁸ COLE 2000: 62. See also the cases discussed in COLE 1998 and 1999.

Further evidence about the relation between specific changes and emotional feelings is provided by another experiment.²⁹ The experiment measured the changes associated with six different emotions. Subjects were instructed to make faces that had been independently found to co-occur with emotions. Subjects were then asked to report any feeling they experienced. During this process, heart rate, finger temperature, and electrical conductivity of the skin were measured. Researchers found that there were differences between the changes that accompanied happiness and those that accompanied negative emotions. Heart rate acceleration was greater for anger and fear than for happiness. *Prima facie*, the results *seem* to suggest that specific emotional feelings *do not* correlate with specific bodily changes. Jesse Prinz, however, gives an alternative reading of the data.³⁰ He thinks the experiment actually shows that each of the six emotions has its own pattern of changes. Prinz points out that the results were obtained using a small group of physiological responses. If researchers had measured other physiological responses, further differences might have emerged.

Let us recap the situation: both experimental evidence and single subject case studies show that specific emotional feelings are perceptions of specific changes. The changes are the objects of which emotional feelings are experiences. On this account, how a certain emotion feels when it manifests itself in experience depends on the kind of change the emotion brings about. This is to say that the phenomenal character of emotional feelings is determined by the properties of the changes.

²⁹ LEVENSON et al. 1990.

³⁰ PRINZ 2004: 73-4.

3.3 Emotional Feelings and Misperceptions

It is a characteristic of perception that it can be mistaken. In particular, there are two kinds of perceptual mistakes: misperceptions and hallucinations. Misperceptions are experiences in which objects seem to have properties they do not actually have. For example, if we see a circular object as elliptical, or a rectangular object as square, we have experienced a misperception. Hallucinations are experiences of objects that do not actually exist. A hallucination is seeing a square object when there is no square object at all. If emotional feelings are perceptions, then they must allow for the possibility of being mistaken. This is confirmed by the fact that there are three ways, at minimum, in which emotional feelings can go wrong.

The first kind of mistake occurs when one misperceives a change that does not manifest an emotion for one that does. For example, someone feels anxious when she is actually tense because she had too many coffees. In cases like this, the person misperceives the change because its appearance is similar to that of a change caused by an emotion. This is analogous to the visual case where a rectangular object looks square because the difference between the two sides is so small that they seem to be of equal length.

The experiment carried out by Zajonc and colleagues, in which subjects pronounced different phonemes, is another example of this kind of misperception. There is no reason to suppose that subjects in the experiment actually became emotional about anything. Nevertheless, they reported pleasant and unpleasant feelings like those that typically correlate with emotions. The explanation I proposed is that the changes the subjects produced by

pronouncing the phonemes were similar to the changes that positive and negative emotions typically bring about. Because of the similarity, subjects misperceived the changes produced during the experiment for the changes that positive and negative emotions typically bring about when they are expressed.

The second kind of mistake occurs when one misperceives a change that manifests an emotion for one that does not. This is the opposite of the previous case. For example, someone may mistake a feeling of nausea that manifests anxiety for the symptoms of stomach upset. In this case, the person misperceives the change because its appearance is similar to that of a change caused by a physical condition.³¹ It is worth noting that this kind of error is more problematic than the previous one because it implies poor understanding of one's mental life. Emotions are reactions to objects. When someone mistakes a change that manifests an emotion for one caused by a physical condition, she fails to understand that she is reacting to something.

Panic attacks are another example of this kind of perceptual mistake. Some people, upon suffering their first panic attacks, misrepresent the dramatic changes they undergo as symptoms of heart attacks. This means that they fail to understand that what they feel is a reaction to objects, situations, or events in their lives.³² Psychologists explain this misrepresentation as the result of beliefs

³¹ Literary examples of this phenomenon are given by the following passages from two rather different novels. In *Emma*, Jane Austen writes: "[T]his sensation of listlessness, weariness, stupidity, this disinclination to sit down and employ myself, this feeling of everything's being dull and insipid about the house! – I must be in love." (AUSTEN 1816/1966: 266). In *Brokeback Mountain*, Annie Proulx writes: "'That summer,' said Ennie. 'When we split up after we got paid out I had gut cramps so bad I pulled over and tried to puke, thought I ate somethin bad at that place in Dubois. Took me about a year a figure out it was that I shouldn't a let you out a my sight. Too late then by a long, long while.'" (PROULX 1999: 299, quoted in JONES 2007b forthcoming).

³² For more detailed discussion on this example see Chapter VI.

people with panic disorder have about the meaning of what they feel. These beliefs lead them to misrepresent changes produced by emotions for symptoms of heart conditions.

It is worth noting that panic attacks are often associated with alexithymia.³³ This condition is characterised by a deficit in the ability to experience, describe, and identify emotions.³⁴ As a result, people suffering from alexithymia say that they do not feel anything or do not know how they feel. Alexithymia is a further example of perceptual error in which a change produced by an emotion either goes unnoticed or is not taken to be one that manifests an emotion. What is puzzling about alexithymia is that, even though sufferers are not aware of the changes or the nature of the changes, they behave emotionally. This has led some researchers to draw an analogy between alexithymia and blindsight.³⁵ Blindsight is associated with lesions in the primary visual cortical receiving area, V1. Patients with such lesions claim that they are blind. Yet, when presented with complex visual tasks, their behavioural responses are appropriate. This indicates that they perceive the visual stimuli at some level but are not aware of what they perceive. Similar phenomena have been described in other sensory modalities such as touch and smell. The common feature of these conditions is the absence of phenomenal awareness of objects despite the presence of appropriate behavioural responses. Similarly, people suffering from alexithymia say that they do not feel anything or do not know how they feel, even though they behave emotionally. This suggests that they form emotions which produce the same kinds of changes emotions

³³ COX et al. 1995.

³⁴ LARSEN et al. 2003.

³⁵ LANE et al. 1997.

produce in normal subjects. The difference is that people with alexithymia fail to perceive the changes or fail to perceive them for what they are – i.e. manifestations of emotions.

The third kind of mistake occurs when one seems to perceive a change that does not actually occur. This is analogous to hallucinations and to the phenomenon of pain in phantom-limbs. An example of illusory emotional feeling is briefly described by James in a footnote to his paper *What is an Emotion?* He writes:

It must be confessed that there are cases of morbid fear in which objectively the heart is not much perturbed. These however fail to prove anything against our theory, for it is of course possible that the cortical centres normally percipient of dread as a complex of cardiac and other organic sensations due to real bodily change, should become primarily excited in brain-disease, and give rise to an hallucination of the changes being there, an hallucination of dread, consequently, coexistent with a comparatively calm pulse, &c.³⁶

According to James' description, the person experiences an illusory increase in her heart rate. This illustrates that emotional feelings can be as illusory as other perceptions. When they are illusions, they are perceptions of changes that do not actually occur. James and Damasio explain this phenomenon in terms of brain states. In particular, Damasio argues that the brain can enter the kind of state it would enter if bodily changes occurred, even when the changes do not

³⁶ JAMES 1885, footnote 4.

actually occur.³⁷ This is an explanation of how illusory emotional feelings may arise.

But, there is a sense in which the explanation above is unnecessary because bodily changes can be viewed as the intentional objects of emotional feelings.

This claim is supported by the following consideration. It is fairly uncontroversial that objects of perception are the objects of which perception is an experience. The table over there is the object of which my visual perception of a table over there is an experience. The same argument carries over to emotional feelings. Emotional feelings are perceptions of bodily changes. These are the objects of which emotional feelings are experiences. Some philosophers claim that the objects of perception are intentional objects.³⁸ The argument for this claim is as follows. Perception can be accurate or inaccurate. It is accurate when the objects of which perception is an experience exist and have the properties they seem to have. It is inaccurate when the objects do not exist or do not have the properties they seem to have. It is a characteristic of intentional objects that they may or may not exist. Since perception can be experience of objects that exist or do not exist, it follows that the objects of perceptions can be viewed as intentional. The same argument applies to emotional feelings because they are perceptions of bodily changes which can be accurate or inaccurate. It follows that the bodily changes are the intentional objects of emotional feelings.

³⁷ DAMASIO 1994.

³⁸ TYE 1995. This view is not uncontroversial. Some philosophers (MARTIN 2002, CRANE 2006) argue that perception is factual. This means that the objects of perception must exist. Experiences like hallucinations that do not relate to existing objects are not perceptions but another kind of state. My argument does not actually require taking a position in this debate. It is sufficient to claim that bodily changes are the objects of emotional feelings. For discussion see CRANE 2005.

It is a characteristic of intentional objects that they may or may not exist. On this account, it is not a mysterious fact about emotional feelings that, from time to time, they seem to be perceptions of bodily changes that do not actually occur.

James' case is interesting also for another reason. One may wonder why it is the emotion of fear and not anger, for example, that the person seems to feel? The most natural explanation is that she feels afraid *because* she *is* afraid. On this account, the fact that she is in a state of fear explains why she seems to perceive a specific kind of change – i.e. the kind of change she would perceive if she were afraid. It is plausible to think that if she were not afraid, she would not seem to perceive the kind of change that typically correlates with fear. This suggests that having a certain emotion may make one experience changes that do not actually occur, but that are characteristic of the emotion one has. This is similar to the perceptual case where having dispositional states like desires may make one experience objects that do not actually exist but fulfil one's desires. For example, the desire of receiving an important phone call may make me hear a ring even though my phone is not, in fact, ringing. This suggests that, like other dispositional states, emotions may affect the content of perception. In particular, the perceptual content may deploy concepts that are made available by the underlying emotions that one has. I have more to say on this phenomenon in Section 5.

What I have so far observed confirms that emotional feelings are perceptions because they can be mistaken like ordinary perceptions. There are two kinds of perceptual mistakes. They are misperceptions and hallucinations. A misperception is exemplified by seeing as square an object that is rectangular. A hallucination is exemplified by seeing a square object where there is no square

object. Emotional feelings can be mistaken in the same ways. They are misperceptions on two occasions: when one misperceives a change that manifests an emotion for one that does not; and when one misperceives a change that does not manifest an emotion for one that, in actuality, does. Emotional feelings are hallucinations when one seems to perceive a change that does not actually occur.

4. The Metaphysics of Emotional Feelings

One may object that, on the account above, there is no difference between feelings that manifest emotions, and feelings that only seem to manifest emotions. For example, the feelings people experienced in the experiment carried out by Zajonc and colleagues did not manifest emotions. Nevertheless, they felt like emotional feelings – the subjects involved in the experiment described them as experiences of positive and negative emotions. This confirms that emotional and non-emotional feelings may feel alike. This is analogous to the visual case where an experience of a rectangular object that looks square is identical to an experience of a square object. It is a trivial fact about perception that, insofar as the phenomenology is concerned, two experiences with the same content are indistinguishable even though one is accurate, while the other is not. It follows from this that, as perceptions, two feelings can be indistinguishable even though one manifests an emotion, while the other does not. This does not mean that they are the same kinds of experiences. One is what I called an emotional feeling – namely, perception of a specific change brought about by a specific emotion – while the other is not an emotional feeling. But, what is the best way of cashing out this apparently elusive difference?

A possible way to approach this issue is in terms of the essence or nature of the change of which each feeling is an experience. Considerations about the essence of something aim at determining what *kind* of thing that it is. It follows that considerations about the kind of change of which each feeling is an experience may help to draw a distinction between emotional and non-emotional feelings. In Chapter I, I have shown that things may look the same without being the same kinds of things. For example, gold and fool's gold may look the same, even though one is gold, while the other is pyrite. Gold and pyrite are different kinds of substances because they have different microstructures.³⁹ The same argument may apply to bodily modifications. Two changes that feel the same are not of the same kind when they have different microstructures. So far it seems that the only way of distinguishing emotional and non-emotional feelings is by means of considerations about the microstructure of each specific change. But it is not obvious that an investigation into the microstructure of bodily changes is the only way of determining when two changes are of the same kind, and when they are not. There is a more intuitive way of cashing out the difference. It says that, even though the two changes *feel* the same, they are different in kind because one is brought about by an emotion, while the other is not. In this sense, we can determine what difference there is between the two changes by considering the role that emotion plays in the characterisation of one of them.

How might we go about this? The issue at stake is what distinguishes an emotional feeling from a non-emotional one which resembles an emotional feeling. This question is analogous to what distinguishes perception of an object

³⁹ PUTNAM 1973, 1975; KRIPKE 1980.

from hallucination of the same object. Some philosophers describe the difference in terms of what constitutes perception.⁴⁰ They say that perception is constituted by the object of which it is an experience. This is because it is in the nature of perception that it provides awareness of objects in the world. When a state looks like perception but does not provide awareness of objects, it is not perception. Rather, it is another kind of state such as hallucination. A similar argument applies to emotions. One may argue that the change of which an emotional feeling is an experience is a kind of change constituted by the emotion that it manifests. In contrast, the change of which a non-emotional feeling is an experience (e.g. the feelings experienced in Zajonc et al.'s experiment) is not constituted by the emotion it seems to manifest. On this account, emotion is a constitutive part of the change of which an emotional feeling is an experience in the same way as objects are constitutive of perceptions. This means that two feelings that look alike are different kinds of feelings when one is perception of a change partly constituted by the emotion it manifests, while the other is not.⁴¹

The constitutive claim is relevant to the epistemology of emotions. In general, knowledge can be described as awareness of how things are in the world. Experience is often source of knowledge because it is awareness of objects in the world. But it is in the nature of experience that it can get things wrong. In contrast, knowledge is obtained only when experience gets things right. This means that we need a description of the circumstances under which experience gets things right. A constitutive claim about perception provides such a description. Perception yields knowledge when it is accurate and constituted by the objects of which it is an experience.

⁴⁰ MARTIN 2002, 2004.

⁴¹ I will further develop this view in Chapter V.

The same argument carries over to emotions. In the previous chapter, I have shown that one of the reasons why we say that emotions are states we feel in the body is that, in many cases, we know our emotions from the fact that we feel them. This confirms that emotional feelings are relevant to self-knowledge of emotions.⁴² I have argued that emotional feelings are perceptions of changes that are partly constituted by the emotions they manifest. It follows that we know what emotions we have when our bodily experiences are emotional feelings. On this account, the relationship between emotions and changes is the same as that between objects and perceptions. They are constitutive parts of the changes like objects are constitutive of perceptions. This account gives us a way of telling emotional feelings apart from those feelings that resemble emotional feelings, but that are not constituted by the emotions they seem to manifest.

5. Emotional Feelings and Higher Emotions

In Section 3.2, I have shown that emotional feelings are perceptions of specific changes, the phenomenal character of which is determined by the physical properties of the changes of which they are experiences. In other words, specific emotional feelings are perceptions of specific changes. There is reason to believe that this is not true of higher emotions such as envy, jealousy, guilt, regret, and resentment. In particular, there is reason to doubt that feelings of higher emotions are perceptions of specific changes. The doubt is supported by the following considerations. The experiment by Zajonc and his colleagues shows that when people arrange facial muscles in fashions similar to expressions of

⁴² I will say something more about this subject in Chapter VI.

positive and negative emotions, they experience pleasant and unpleasant feelings. My explanation of this phenomenon is that the changes produced in the experiment are similar to the changes people normally produce when they express positive and negative emotions. The similarity is explained by the fact that the changes in the experiment are similar to those involved in ordinary expressions of emotions. This is analogous to the visual case where a rectangle may look like a square when the difference between the two sides is too small to notice. The experiment suggests that changes in the face may be an important part of the overall change of which emotional feelings are experiences. This is consistent with the fact that most emotions have characteristic expressions as well as characteristic feelings. This view is supported by an argument I briefly outlined in the previous chapter and in Section 3.1 above. Emotions produce changes in the autonomic nervous system which affect the inner organs as well as the outwardly observable part of the body such as the face. The emotional feelings are how these changes appear to the subjects, while expressions are how the same changes appear to the observer.

These considerations bear on the supposition that higher emotions do not produce specific changes in the body. For instance, higher emotions do not seem to have characteristic facial expressions. This is consistent with the fact that these emotions do not seem to have characteristic feelings either. On the view I advocated, this is explained by the fact that they do not produce specific changes and, therefore, fail to produce characteristic feelings. This may be because higher emotions are cultural constructs we acquire through social interactions, while basic emotions are phylogenetic constants that we find across cultures, and also in animals.

The view that higher emotions do not produce specific changes is consistent with the affect program theory that only basic emotions produce complex, coordinated, and automated responses that involve: (a) facial expressions, (b) musculoskeletal changes, (c) vocal changes, (d) endocrine changes, and (e) autonomic system changes. Higher emotions, by contrast, do not seem to have the same kind of effect on the body. As Griffiths remarks: “[i]n many instances of guilt, envy, or jealousy the subject does not display a stereotypical pattern of physiological effects.”⁴³ On this basis, one may conclude that higher emotions do not produce specific bodily changes and, consequently, they do not manifest themselves in characteristic emotional feelings.

Clearly, this conclusion is in tension with the fact that we do feel jealous, envious, guilty, and resentful. How is that possible if higher emotions do not produce specific changes? The answer I propose is as follows. The kind of experience we have when we feel (say) jealous is different from the kind of experience we have when we feel sad or angry. The latter is perception of a specific change, while the former is perception of an unspecific change we perceive *as* one of jealousy. To put it in terms of the distinction between observational and non-observational properties I introduced in Section 3.2, a feeling of jealousy is perception of non-observational properties of a change. We can see this clearly by considering the visual case again.

We often see things as desirable, expensive, useless, or important. When I see something as valuable, the content of my experience deploys a concept that does not correspond to any physical property of the object. Imagine that I am a coin collector and I see an old coin as valuable. The physical properties of the

⁴³ GRIFFITHS 1997: 100.

coin are features like its shape and size. They are observational properties because it is a necessary condition for perceiving these features that my visual system is sensitive to them. In contrast, the properties of being a coin and being valuable are non-observational because it is not sufficient for perceiving them that my visual system is sensitive to physical properties of the coin. I perceive the object as a coin when I know what coins normally look like. This is to say that when I see the object as a coin, the content of my visual experience deploys a concept that does not correspond to any physical property of the object. The concept of being a coin is one my visual experience deploys because I have knowledge about coins and the round object before my eyes meets the appearance conditions for coins.

What about the property of being valuable? Again, the content of my visual experience deploys a concept that does not correspond to any physical property of the coin. The concept is made available to me by a mental state of mine that represents the coin as valuable. This does not need to be knowledge. It may be merely a desire. On this account, we see things as having certain non-observational properties when the perceptual content of our visual experiences deploys concepts that are made available to us by concomitant mental states such as knowledge or desires. These states form the psychological *context* in which perception occurs. When perception occurs in a specific psychological context it is likely that it will be affected by concepts – the concepts that form the states involved in the psychological context. This is exemplified by many ordinary experiences. Sexual desire, for example, may make me see a person as sexually desirable.

How do these considerations bear on feelings of higher emotions? I have

shown that there is reason to believe that these emotions do not produce specific bodily changes. This is, *prima facie*, at odds with the fact that we feel jealous, envious, guilty, or resentful. How do we explain this phenomenon? When we feel a higher emotion such as jealousy, the emotion produces unspecific changes that we perceive as manifestations of jealousy because we are in a state of jealousy. The perceptual content deploys a concept – that of jealousy – that is made available to us by our concomitant state of jealousy. In other words, the perception occurs in a specific psychological context – that of jealousy. This affects the way in which we perceive the unspecific change jealousy brings about. This is analogous to what I observed earlier about James' case of morbid fear, where the person seems to perceive a change characteristic of fear because she is in a state of fear.

The difference between feelings of basic emotions and feelings of higher emotions is that the former are similar to perceptions of observational properties, while the latter are similar to perceptions of non-observational properties. Put another way, feelings of basic emotions are perceptions of specific changes that determine the phenomenal character of the feelings. A feeling of anger, for example, is perception of a specific change that feels like anger. The properties of the change are determinant of how the change feels. If the change had different properties – i.e. if it were a different change – it would not feel like anger but like another emotion. In contrast, feelings of higher emotions are perceptions of unspecific changes. The perceptual content of these perceptions deploys some concepts that do not correspond to specific properties of the changes. These concepts are, instead, made available by the concomitant emotions that bring about the changes. On this account, emotions, like desires,

contribute to determining the psychological context in which perception of unspecific changes occurs.

This account of how higher emotions determine the content of emotional feelings is supported by empirical evidence on the relation between emotions and unspecific bodily changes. In the early 1960s social psychologists Stanley Schachter and Jerome E. Singer devised an experiment to disprove James' theory that emotions are perceptions of bodily changes.⁴⁴ The experiment succeeded in showing that bodily changes alone are not sufficient to produce emotions. The results have, however, been the object of serious criticisms.⁴⁵ I am not concerned with this debate here. I consider the experiment interesting because it is based on the induction of non-specific changes that are experienced as manifestations of specific emotions.

Schachter and Singer recruited subjects for an experiment billed as testing the effect of a vitamin on vision. The participants were given an injection of either adrenaline or a placebo, which was actually a saline solution with no side effects. The effects of adrenaline are an increase in blood pressure, heart rate, blood sugar level, respiration rate, and blood flow to the muscles and brain, with an accompanying decrease in blood flow to the skin. This is often experienced as palpitations, tremors, flushing and faster breathing. The effects

⁴⁴ SCHACHTER and SINGER 1962.

⁴⁵ Jesse Prinz points out that the experiment rests on the fallacious assumption that the drug administered to the subjects is thought to entail the same physiological changes throughout the experiment. This conclusion is far from being correct. Physiological arousal may be modified by further states that occur over the social interaction. In this view, the main weakness of Schachter's and Singer's conclusions is the assumption that the physical underpinning remains constant over the development of the interaction. By contrast, it is perfectly possible that the emotional episode develops over time in response to further stimuli. Social interaction typically involves the manifestation of emotions through bodily, facial and linguistic expressions. This may enrich the underpinnings involved in the development of the emotional episode. For discussion see PRINZ 2004: 71-2.

begin after three minutes and last from ten minutes to an hour. The participants were then put in one of the following four experimental conditions. First, (adrenaline ignorant) participants were given an adrenaline injection and not told of the effects of the drug. Second, (adrenaline informed) participants were given an adrenaline injection and warned of the side effects of the drug (shaking hands, heart pounding, dry mouth etc.). Third, (adrenaline misinformed) participants were given an adrenaline injection, told to expect side effects, but misled into believing these would be numb feet and headache. Fourth, (control group) participants were given an injection that would have no effect and were given no instructions of what to expect. Participants were then allocated to either 'euphoria condition' or 'anger condition.' In the euphoria situation a stooge in a waiting room carried out a number of silly tasks designed to entertain and amuse the participant. In the anger situation, the stooge behaved in a manner designed to annoy the participant.

The researchers then made observational measures of emotional response through a one-way mirror, and also took self-report measures from the participants. In the euphoria condition the misinformed participants were feeling happier than all the others. The second happiest group was the ignorant group. The informed group felt the least happy. In the anger condition, the ignorant group felt the angriest. The second angriest group was the placebo group. The least angry group was those who were informed. Schachter and Singer concluded that bodily changes in different emotions are entirely the same and that people label these changes as different emotional feelings on the basis of the cognitions available to them.

I do not share these conclusions because, as I have shown in the previous

chapters, I am sceptical about the relevance of cognition to emotion. But I believe the experiment shows that emotions may affect how we perceive unspecific bodily changes. In particular, it shows that the same bodily changes were experienced differently according to which emotions subjects formed in response to the situations they experienced. When subjects were amused by the stooge, they perceived the changes as a feeling of happiness. When they were annoyed, they perceived them as a feeling of anger.⁴⁶ In other words, the same bodily changes were interpreted according to the psychological context in which perception occurred. Although the experiment does not draw on higher emotions, it does show that specific emotions dispose subjects to perceive unspecific changes as manifestations of specific emotions. This is because perception of bodily changes may deploy concepts that are made available to the perceivers by the specific states (i.e. emotions, desires, and knowledge) that form the psychological context in which perception occurs. This phenomenon is particularly noticeable with higher emotions where unspecific changes are perceived as manifestations of specific emotions.

Spinal injury patients have been another long-running source of interest to emotion researchers. The position that I am advancing has the potential to explain how such subjects can possibly have emotional feelings. The claim that emotional feelings are perceptions of bodily changes implies that any disruption

⁴⁶ This does not imply that the subjects who were aware of the effects of the injection did not form any emotion at all. It is perfectly possible that, like other participants, they also became happy or angry at the stooge's behaviour. The difference is that they did not *feel* particularly happy or angry. This may be for two reasons. First, the informed subjects knew that the modifications they experiences were induced by a drug. This may have prevented them from perceiving the modifications as the manifestations of happiness or anger. Second, the modifications were not specific to happiness or anger. This, in combination with the belief that the modifications were induced by a drug, may have prevented the informed subjects from experiencing emotional feeling.

to the perceptual system (i.e. interoception) leads to alterations in emotional feelings. This is analogous to ordinary perception where disruptions to sight or hearing lead to alterations in visual and aural experiences. Most interoceptive stimuli from inner organs travel through the spine. This means that serious spinal injuries may compromise one's ability to perceive changes and modifications in one's body. It follows from this that subjects with spinal injuries should become totally or partly unable to perceive changes in their bodies and thereby have emotional feelings. James makes exactly the same prediction when he writes:

[I]f I were to become corporeally anaesthetic, I should be excluded from the life of the affections, harsh and tender alike, and drag out an existence of merely cognitive or intellectual form.⁴⁷

That said, there is some evidence of the contrary. Subjects with serious spinal injuries do experience emotions. I have already mentioned the study carried out by Hohmann on 25 people with spinal cord injuries.⁴⁸ He found reductions in emotional feelings throughout the group, and those reductions became more acute with injuries higher in the cord. However, he also found that these patients tended to experience an increase in 'sentimentality,' characterized by crying and feeling choked up. When Hohmann asked 25 spinal patients to compare their present emotional feelings to their past feelings, they reported a significant decrease in overall levels. The decrease was greatest for those whose injuries were highest in the cord. In sum, the data show that, even though the

⁴⁷ JAMES 1884: 194.

⁴⁸ HOHMANN 1966.

ability to perceive changes is compromised by the injury, spinal subjects can still perceive some changes.

How is that result possible given that spinal patients' ability to perceive changes in their bodies is compromised?⁴⁹ The answer draws on the view I have been outlining. It is plausible to think that spinal subjects can still perceive some changes, although it is likely these changes will not appear to be as specific as before the injury. This is analogous to cases of partial loss of sight or hearing where the perceptual stimulus appears less defined than before the loss. When spinal subjects form emotions and the emotions produce changes, the latter are perceived as manifestations of specific emotions because the perceptual content deploys concepts that are made available by the emotions that subjects have formed. On this account, spinal subjects can feel specific emotions because they can *perceive* changes, the appearance of which is now unspecific *as* manifestations of the emotions they have. Put differently, losing the ability to accurately perceive changes does not imply losing the ability of forming emotions. This is because emotions are not feelings.

One may suppose that, given the unspecific character of the changes produced by higher emotions, they are likely to be mistaken for changes that manifest other emotions or for changes caused by states that are not, in fact, emotions at all. Recall our visual analogy: a rectangle with sides of almost equal length is likely to be mistaken for a square because its appearance is not as

⁴⁹ Damasio thinks that information about the autonomic state of a spinal subject's body can travel through the blood stream, the vagus nerve and cranial nerves that remain intact after the spinal injury. This possibility may explain why the subjects interviewed felt emotions despite the injury. Damasio also argues that *spinal patients can still undergo normal autonomic changes in the body part not affected by the spinal injury. These changes include modifications in the throat and in the face.* This explains why Hohmann's patients could still experience some feelings, such as the urge to cry and the feeling of being choked-up. (DAMASIO 1999).

specific as it would be if the sides were clearly uneven. It follows that knowledge of higher emotions is more difficult to obtain because misperceptions are more likely to occur. This objection, however, does not take into account the fact that emotions may produce thoughts with the contents that are in some way linked to the emotions. Thoughts are episodic states that, like perceptions, can deploy concepts made available by underlying emotions. For example, someone's obsessive thoughts about her partner cheating on her may serve as clues to the fact that she is jealous of her partner. This suggests that, even though higher emotions produce unspecific changes, they make themselves manifest in conscious thoughts that may serve as clues to the emotions. This is because the thought contents deploy concepts made available by underlying emotions.⁵⁰ In this case, a certain degree of self-understanding is required in order to work out the connection between a thought or thoughts (e.g. obsessive thoughts of infidelity) and the emotion to which they are linked by deploying the same concepts. Nevertheless, this is a way in which, given sufficient reflection, the person can come to know that she is jealous, even in the event that she misperceives the unspecific changes jealousy brings about. This procedure is also available for basic emotions, the difference being that basic emotions produce specific changes which are less likely to be misperceived in the first place.

⁵⁰ The relation between emotions and thoughts in self-understanding is discussed by TAYLOR 1985a, MORAN 1988, and JONES 2007b forthcoming. I will discuss it more extensively in Chapter VI.

6. Conclusion

As we have seen, emotional feelings are perceptions of changes in the body. What distinguishes emotional from non-emotional feelings is that the former have emotions as constitutive parts of the changes of which they are experiences. Basic emotions produce specific changes. Characteristic emotional feelings like sensations of anger or fear are perceptions of specific changes. Higher emotions, by contrast, do not produce specific changes. Yet, we feel them. This is because the perceptual content deploys concepts that are made available by the emotions that the unspecific changes manifest.

CHAPTER V

EXPRESSIONS OF EMOTIONS

1. Introduction

In the previous chapter, I argued that emotional feelings can be viewed as the way specific bodily changes appear to the subject. A similar account can be given for emotional expressions such as smiles of joy and scowls of anger. Emotions do not occur only inside the body, they also affect the outwardly visible part of the body like the face, skin, posture, and hair. When this is the case, the same change that the subject experiences as a certain emotional feeling may appear to the observer as the expression of a certain emotion. This suggests that emotions have *perceivable manifestations* in virtue of which they can be perceived by others. Since accurate perception is a source of knowledge, it is plausible that we can know other people's emotions by perceiving the manifestations of their emotions.

This view implies a major philosophical claim: we have perceptual awareness of other people's emotions. It is possible to explain this form of awareness in terms of ordinary perceptual experience. Experiences occur when two conditions are met. One is that objects have properties in virtue of which they can be perceived. The other is that perceivers are endowed with a perceptual system that functions to detect such properties. An explanation of how we perceive other people's emotions, then, needs to show that emotions have properties in virtue of which they can be perceived, and that the

perceptual system functions to detect these properties of emotions. This is analogous to the visual case where we see (say) squares because they are made of vertical and horizontal lines which, in turn, are things the perceptual system functions to detect.

The claim that we see other people's emotions is open to two main objections. One is that we see people's emotions in their expressions because we know the meaning of the expressions. This, so the argument goes, would show that we do not really perceive people's emotions in other people's expressions; instead, we interpret what we perceive according to what we know about the meaning of the expressions. I will refer to this as the *meaning view*. The other objection is that expressions can be pretended or staged in such a way that we cannot tell whether they are genuine or not. It follows that we cannot really know people's emotions. I will refer to this as the *illusion view*.

I will show that both objections are ill-grounded and that we perceive other people's emotions like we perceive square or round objects. I will reject the meaning view by showing that we perceive emotions not because we know the meaning of the expressions, but because emotions have perceivable manifestations in virtue of which they can be perceived and because the perceptual system functions to detect them. This does not mean that expressions do not have any meaning for us. Rather, it means that it is not in virtue of this meaning that we perceive other people's emotions.

I will reject the illusion view by demonstrating that there is a substantial difference between expressions that show emotions and bodily changes that only *seem* to show emotions, such as when we pretend or stage emotions. I will argue that genuine expressions have emotions as their *constitutive parts*. This is

to say that they are necessarily caused by the emotions they show. When they are not caused by emotions, they are not expressions of emotions, but other kinds of bodily changes which only *look like* expressions of emotions. On this account, we perceive and subsequently know other people's emotions when the expressions are constituted by the emotions they show.

This view faces a further problem. There is a difference between knowing that one has a certain emotion and knowing what one is emotional about. In other words, there is a difference between knowing the emotion kind and knowing the emotion object. We have *full* knowledge of another person's emotion only when we know both the kind and object of the emotion. I will show that perception can provide full knowledge of emotions when we can jointly attend to an object and to the emotion that arises in response to that object.

The structure of this chapter is as follows. First, I will discuss the notion of expression. I will argue that emotions have perceivable manifestations (i.e. expressions), and that it is therefore plausible that we can perceive emotions. Secondly, I will discuss the kind of experience that occurs in perception of another person's emotion. I will argue that it is a characteristic of perceptions of emotions that they are experiences with a *non-conceptual content*. This content consists of *observational properties* of emotions that the perceptual system functions to detect. Finally, I will argue that perception of emotions yields *direct* and *non-inferential* knowledge of emotions when the expressions are constituted by the emotions they show.

2. Emotions and Perceivable Manifestations

It is a fairly uncontroversial claim that we see people's emotions in their expressions. For example, we see them smiling in happiness, scowling in anger, or frowning in concern. What is far less uncontroversial is the relation between emotions and expressions. The notion of expression¹ is often ill-understood.² People generally agree that expressions are movements of some sort like smiling in delight or scowling in anger. This view does not account for expressions that do not literally occur in the face like sighs, screams, or tremors of the voice. This is problematic as there is no doubt that ordinary folk would say that sighs or screams express emotions. This suggests that expressions are not limited to movements in the face. One might say that expressions are involuntary movements that occur all over the body. This view has, however, two undesirable consequences. First, it includes all involuntary movements in the class of expressions. This does not seem plausible because there are involuntary

¹ The notions of expression and expression of emotion are discussed by several philosophers and psychologists. The most important contributions are DARWIN 1872, THALBERG 1962, ALSTON 1965, BENSON 1967, EKMAN 1993, GOLDIE 2000, DÖRING 2003, BAR-ON 2004, and GRIFFITHS 2004c.

² I will consider solely bodily expressions of emotions like smiles of delight, scowls of anger, frowns of worry and the like. The most intuitive objection to this notion of expression is that linguistic expressions are expressions too and they must be part of a general account of expressions of emotions (BAR-ON 2002). The reason for ruling linguistic expressions out of my account is as follows. Expressions (bodily and linguistic) convey information about the emotions they show. This must not obscure an important difference. Most philosophers agree that linguistic expressions are *reports* of emotions. The practice of reporting mental states and, in general, states of affairs requires the ability to preserve the information reported. This is possible only when the information has a syntactic and semantic structure. This allows me to draw a neat distinction between linguistic and bodily expressions. In order to explain linguistic expressions, one will need an account of linguistic understanding. In contrast, an explanation of bodily expressions requires an account of how we see, hear, or feel people's emotions by observing their expressions (for example, by touching one's cold and sweaty hands). This is the kind of account that I present here.

movements (e.g. twitches) that do not express emotions. Second, it evicts voluntary movements like crossing arms or drumming fingers from the class of expressions. In some cases, these movements also express emotions.

These considerations show that we lack a clear understanding of what an expression of emotion is. The only point of agreement seems that expressions are movements. But this is also questionable. Emotions can be expressed by bodily changes that do not involve moving any body part – going pale, having a dry mouth, having cold hands, and having goose pimples. This suggests that, perhaps, the best way of characterising expressions of emotions is as bodily changes, broadly construed, that show emotions by making them perceptually available to others. This is consistent with the view that emotions produce patterns of change in the body.

Now that we have a clear notion of expression, let us review the position for which I have thus far argued. In the previous chapter, I argued that emotional feelings are perceptions of bodily changes. Empirical evidence shows that such changes do not occur only inside the body;³ they also affect the outwardly visible part of the body like the face, skin, posture, and hair. When this is the case, the same kinds of changes of which emotional feelings are perceptions may appear to the observer as expressions of emotions. For example, when I see someone crying, I perceive part of the same change that she experiences as sadness. On this account, expressions are nothing else than specific changes affecting the outer part of the body.

So far I have, for the sake of convenience, been talking in terms of visual perception of expressions of emotions. This does not mean that vision is the only

³ STRACK et al. 1988; ZAJONC et al. 1989. For discussion see ADELMANN and ZAJONC 1989.

sense involved. It is in principle possible for any sense to convey information about other people's emotions. Just as we can see someone else's fear in her face, we can also hear the same emotion in her voice and feel it in her trembling hands. Prima facie, two senses – taste and smell – do not seem to be involved in perception of other people's emotions. But this is not entirely correct. The sense of smell, for example, is involved in perception of chemical signals like pheromones and other substances that humans and animals produce when they have certain emotions. On the other hand, the fact that taste and smell are not as prominent as other senses in perception of other people's emotions can be viewed as the result of our evolutionary history as well as of social conventions. Animals, by contrast, perceive emotions in other animals through the sense of smell and taste. On this account, we perceive other people's emotions through the senses, even though some senses are more prominent than others. Expressions are features of emotions that the senses detect.

This view has interesting philosophical implications. It is a general claim about perception that, when an object is perceived, it must have properties in virtue of which it is perceived. For example, the stew simmering in the pot has properties in virtue of which I perceive it. It has a distinct smell. It makes a typical bubbling noise. It has a typical colour as well as texture, thickness, and flavour. These are properties in virtue of which the stew becomes the object of my experience. The same considerations apply to emotions. Emotions produce inner and outer changes in virtue of which they can be perceived. So, when I feel a certain change in my body, I feel (say) sadness. When I perceive the outwardly visible part of the same kind of change in another person, I perceive her sadness. Expressions are the outwardly visible part of the changes that

emotions produce; they are perceivable manifestations of emotions. This means that when emotions are perceived, it is in virtue of their manifestations.

One may object that we do not really perceive the emotions but the changes they bring about; that is, the effects of emotions. This is in principle correct, but does not entitle the conclusion that we do not perceive other people's emotions. There are three main arguments against the objection.

The first is that emotions are dispositional states. This means that when one has a certain emotion, one has a certain mental property that is dispositional. It is a characteristic of dispositional properties that we can perceive them only when they manifest themselves. For example, crystal glasses have the dispositional property of being brittle. We perceive this property only when it manifests itself through the breakage of the glasses. The same is true of emotions which, as dispositions, can be perceived only when they manifest themselves through bodily changes that we perceive in the form of either emotional feelings or expressions. It follows that it is of the very nature of emotions that we do not attend to them directly, but to their manifestations. In other words, we perceive the manifestation of an emotion, and that really is perceiving the emotion because a manifestation is an aspect of the emotion.

The second argument is that objects may reliably produce specific phenomena which enable us to track the objects. Consider the stew example. There is a sense in which the bubbling noise is not an intrinsic property of the stew; it is something the stew produces. Yet, when I hear it, the stew is the object of which I become aware through the noise. This is consistent with the fact that in perception we can shift attention from the object to its properties and from the properties back to the object. So, I can listen to the stew bubbling in the pot

or I can listen to the bubbling noise the stew produces. This is because my experience can represent the world in different ways. The bubbling noise is a phenomenon that the stew reliably produces in certain conditions. This enables me to perceive the stew. We perceive many objects by means of the phenomena they produce. We hear the rain dripping on the thin roof, even though we do not directly hear the rain but only the noise that the rain produces. We hear the approaching storm by listening to the thunders it produces. This shows that we can perceive objects with which we are not directly acquainted by perceiving the phenomena they reliably produce and which count as contingent properties of these objects. On this account, we perceive our own and other people's emotions by perceiving the inner and outer changes that emotions typically produce. They are contingent or superficial properties of the emotions.

The third argument is that we cannot give an exhaustive description of what we see or hear when we perceive another person's emotion in her expression without making reference to the emotion expressed. In other words, if we described what we see only in physical terms by detailing, for example, the specific changes in her face, we would fail to account for a characteristic feature of our experience, namely, that ours is an experience of the person's emotion as it appears to us in her facial expression. This is true of any experience of specific objects. I cannot describe the content of my olfactory experience of the stew only in physical or chemical terms without failing to account for what makes my olfactory experience an experience of the stew. On this account, emotions are part of what we perceive when we look at or listen to someone's expression of emotion.

These three arguments show that it makes perfect sense to say that we perceive other people's emotions in their manifestations – i.e. expressions. This view is also supported by a close scrutiny of how expressions change along with the emotions they manifest. Emotions have the characteristic of varying over time. For example, my present state of anger may slowly fade away until I no longer look angry. This is explained by the fact that my body undergoes different changes that vary along with my emotion. Expressions show, at least, two properties of emotions. They reveal the *intensity* and the *affective character* of emotions.

The intensity appears in various expressions such as the tone of voice, complexion, arrangement of the facial muscles and posture. These expressions vary along with the emotion intensity. Consider when a person is first inflamed by anger and then slowly calms down. The emotion intensity changes over time and may vary from intense to mild or moderate. The variation is shown by various bodily modifications. The person first goes red in the face, screams her head off and waves her hands. As the emotion intensity decreases, other expressions occur. Her red complexion lessens, tone of voice becomes lower, and her whole body is less agitated.

The other feature is the *affective character*. This is the fact that emotions are positive or negative, pleasant or unpleasant. The facial expression as well as the tone of voice, complexion, and posture shows that one has an emotion with a certain affective character. This appears in the fact that, sometimes, I can perceive the variation of someone's emotional life by noticing how she shifts from positive to negative emotions and vice versa.

In summary: emotions produce characteristic bodily changes; the outwardly observable parts of these changes are what we call 'expressions.' Expressions are perceivable manifestations of emotions in virtue of which emotions are perceptually available to others.

3.1 Emotions and Observational Properties

What I have so far observed shows that emotions are perceivable *because* their *manifestations* are perceivable. One may object that we infer what emotion someone is feeling on the basis of how she looks. My claim is that we do not infer the emotion; we simply perceive it through its manifestation. The argument for this claim is that emotions are manifested in ways that are perceivable, and that it is plausible that we perceive them. The task is then to explain in what sense we perceive emotions.

In Chapter III, I showed that basic emotions are states adult humans have in common with infants and animals. This has consequences for an adequate characterisation of how we perceive emotions. It is plausible that the ability to perceive emotions is not peculiar to adult humans. Infants and some higher animals seem to have the same ability. There is evidence that ten-week-old infants already respond to adults' expressions of emotions. We have evidence also that higher animals like chimpanzees recognise emotions in other primates and humans.⁴ If we combine this piece of evidence with the fairly

⁴ Research carried out by Lisa Parr (PARR 2001) provides evidence that chimpanzee facial expressions are processed emotionally, as are human expressions. It is also plausible that expressions of emotions in humans and great apes share morphological and physiological similarities. Darwin (DARWIN 1872) was one of the first to speculate that human and non-human primate facial expressions share similar mechanisms for production and similar functions in

uncontroversial claim that infants and animals do not have psychological concepts, it then becomes clear that it is not a necessary condition for perceiving emotions that a perceiver has the relevant emotion concepts. In other words, it is plausible that an infant can perceive (say) joy in an adult even though she does not have the concept of joy and thereby has no knowledge about joy. This suggests that an explanation of how we perceive emotions must be one that does not account for what we perceive (i.e. emotions) in terms of concepts, but in terms of properties that can be perceived independently of concepts.

Properties of this kind are features that can be detected solely on the basis of how the perceptual system works. These kinds of properties are also known as *observational properties*.⁵ Paradigms of observational properties are features of the visual field like shape, size, distance, mutual location, colour, speed, and so on. Examples of observational properties can also be drawn from perceptual modalities that are not intrinsically spatial like smell and hearing. They differ from *non-observational properties* which are features perceivers can experience because they have the relevant concepts. Examples of non-observational properties are the property of being a strawberry, a dog, a television, a car, a rose, or a cathode ray tube.

Each kind of property features in different kinds of experiences. Experiences of observational properties are states perceivers have simply because they are endowed with a perceptual system which is sensitive to

expressing emotion. In recent years, primatologists Suzanne Chevalier-Skolnikoff (CHEVALIER-SKOLNIKOFF 1973) and William Redican (REDICAN 1982) have concluded that the same facial configurations can be observed in humans and a number of other primates. Further evidence is discussed in PARR 2003.

⁵ PEACOCKE 1992, 2003a, 2003b; FODOR 1998.

observational properties. I will call these kinds of experiences *observations*.⁶ Since concepts are not a condition for experience of observational properties, observations are non-conceptual states. It is plausible that mature perceptual experiences have observations as their components. For example, an experience of a white paper sheet involves the observation of something with specific observational properties such as a certain shape, colour, size, location, and orientation in space.

The idea that observations can be part of mature experiences is generally expressed in terms of the divide between *conceptual* and *non-conceptual content* of the experience.⁷ On this account, experiences can be viewed as comprising two types of contents. One is non-conceptual and consists of information delivered by the perceptual system. Since features that are experienced solely on the basis of how the perceptual system works are observational properties, it is plausible that the non-conceptual content of experience consists of observational properties. The other type of content is conceptual and it originates from the application of concepts upon the non-conceptual content. This is the case, for example, when we represent the non-conceptual content of the experience of a white paper sheet as perception of an object *that* is a white rectangular paper sheet. In this case the non-conceptual content is represented in terms of the observational concepts 'white' and 'rectangle.' This content is then further conceptualised in terms of the non-observational concept 'paper sheet.' So, experiences have non-conceptual and conceptual content. The latter can be structured out of observational and non-observational concepts.

⁶ PEACOCKE 1992: Ch. 4.

⁷ CRANE 1992.

The notion of non-conceptual content plays an important role in explaining how perceivers with different conceptual repertoires may display agreement in perceptual judgements as well as in perception-guided behaviour. I will illustrate this point with an example borrowed from Thomas Kuhn.⁸ Imagine two perceivers – a child and a scientist – who are presented with the same object: a cathode ray tube. Suppose that the child is very young and masters neither the non-observational concept ‘cathode ray tube’ nor observational concepts for shapes, colours, and sizes. What difference is there between the child’s and scientist’s experience of the same object? Clearly, we cannot say that the child does not see anything because she has a perceptual system and she is therefore capable of perceptual experiences. It seems clear that she perceives those properties of the cathode that her perceptual system functions to detect. So, she sees something that has square and curved surfaces and is composed of different colours and sizes. But, since she lacks the relevant observational concepts, the child does not see or represent the object *as* being square or white; nor does she see or represent it *as* being a cathode ray tube. In other words, she does not see *that* the object has certain observational properties. She simply sees an object that looks a certain way to her. How it looks to her is the result of the object having specific observational properties that impinge upon the child’s perceptual system. This is to say that the child has an experience of the cathode ray tube the content of which is non-conceptual. This content consists of observational properties of the cathode ray tube which she experiences simply because her perceptual system functions to detect them.

⁸ The same example is discussed by Tim Crane in CRANE 1992.

In contrast, the scientist has an experience that represents the object *as* a cathode ray tube. In other words, she sees the object as a specific kind of entity with specific kinds of properties. This is because she masters the relevant concept and thereby knows what cathode ray tubes look like. She also sees or represents the object *as* having square and curved surfaces, and parts composed of different colours and sizes. This is because, beside the non-observational concept of a cathode ray tube, she masters all the relevant observational concepts for shapes, colours, and sizes. On this account, the scientist's experience comprises two types of contents. One is non-conceptual and consists of observational properties of the cathode ray tube. The other is conceptual and consists of observational and non-observational concepts.

Now imagine that the child acquires the concept of a cathode ray tube. She has the opportunity to see the object anew. She then recognises that the object she saw before acquiring the concept is what she now knows to be a cathode ray tube. How do we explain the fact that she recognises that the same object she saw in the past is a cathode ray tube? The explanation is that the experiences she has before and after mastering the concept must have something in common; something that enables her to recognise that the object she saw in the past is the same object that she now knows to be a cathode ray tube. The natural explanation is that the common element consists of how the object looked and still looks to her. One may suppose that such a common element is a non-conceptual content. The argument for this claim is as follows. The common element has to be something the child could experience before acquiring the concept of a cathode ray tube. At that time, all she could experience were observational properties of the cathode. These are features

perceivers can experience even when they lack the relevant concepts. So, experiences of observational properties – as opposed to experience *that* objects have observational properties – are non-conceptual. It is then reasonable to say that what is common to the child's young and mature experience of the cathode is a non-conceptual content.

The same consideration applies to the scientist's experience. Since both the child and the scientist have the same perceptual system that functions to detect observational properties, it is plausible that their experiences have a common non-conceptual content which consist of observational properties of the cathode. Imagine that the child has only superficial knowledge about the cathode; she simply knows that the strange looking object before her eyes is a cathode ray tube – whatever a cathode ray tube may be. In contrast, the scientist has very accurate knowledge about the object. Despite the asymmetry in knowledge, they agree in judging that the object is a cathode ray tube. This is explained by the fact that the perceivers have experiences with a common content that is totally independent of their knowledge of the object; that is, a non-conceptual content which consists of observational properties of the cathode.

What I have so far observed has direct bearing on the question of what kind of experience one has when one perceives another person's emotion. Should we think of perception of emotions as like the scientist's perception of a cathode ray tube or like the child's perception of shapes and other observational properties of the cathode? In other terms, should we think of perception of emotions as having a conceptual or a non-conceptual content? I will argue that

perception of emotions has non-conceptual content that consists of observational properties of emotions.

I believe that many philosophers will be uneasy with this claim, suspecting instead that perception of emotions is like the scientist's perception of the cathode ray tube. This is because they assume that we have background knowledge about the relation between expressions and emotions. In other words, we perceive other people's emotions because we know the meaning of the expressions that show them. This is what at the outset I called the *meaning view*. The view implies that when we perceive people emotions we do the same thing we do when, for example, we see the age of a tree by looking at the tree rings. That is, we interpret what we see on the basis of what we know about the relation between a tree's age and the number of rings in the trunk (assuming we know the meaning of the rings). This notion of meaning is what Paul Grice called 'natural meaning.'⁹ The same notion is implied by the claim that we perceive emotions in people's expressions because we know the meaning of the expressions. This view does not deny that perception is involved in the acquisition of information about emotions, but it maintains that what we perceive depends on what we know about the relation between specific expressions (e.g. smiles) and specific emotions (e.g. happiness).

So far this seems like a good account. But it loses its grip as soon as we consider some of its implications. It is a characteristic of the notion of meaning – also of that of natural meaning – that what a certain sign signifies is subject to changes across cultures. In particular, the body of knowledge that a given culture or community attaches to a certain sign is likely to be different from the

⁹ GRICE 1957. For discussion see GREEN 2003.

body of knowledge that another culture will attach to the same sign. This is a direct consequence of the fact that the two cultures are different cultures. For example, a culture whose community life is based on growing and trading trees is likely to attach a richer meaning to the phenomenon of tree rings. This will enable community members to see in the rings information that we, as members of another culture, cannot see. For example, they may see the rings as showing not only the age of the tree, but also the seasons the tree went through and if they were warm or cold, dry or rainy.

This has consequences for the claim that we perceive other people's emotions in the expressions because we know the meaning of the expressions. It is reasonable to expect that the same sorts of variations we would observe in the meaning of the tree rings will also affect the meaning of expressions of emotions as we move across cultures. For example, we should expect that the same expressions that in Western society shows (say) anger would show a different emotion in another society. This is true of some expressions that are cultural constructs. In Japan, for example, hissing is a polite act of deference to a social superior, while in Western societies it is an expression of irritation. Another example is an anecdote from Wittgenstein's life. Once, on a train to Cambridge, the Italian economist Piero Sraffa asked Wittgenstein whether he knew the meaning of a gesture, familiar to Neapolitans, meaning something like disgust or contempt. The gesture involves brushing the underneath of one's chin with an outward sweep of the fingertips of one hand. Wittgenstein was confused and could not understand the meaning of the gesture. These are expressions the meaning of which changes or gets lost as we move across cultures.

There is evidence, however, that not all expressions of emotions have culturally relative meaning. In particular, there is evidence that expressions of six basic emotions have the same meaning across all human cultures. In the 1960's, psychologists Paul Ekman¹⁰ and Carroll Izard¹¹ interviewed members of diverse Western and non-Western literate cultures. The subjects were asked to choose the emotion terms which, in their language, corresponded to photographs of Caucasian individuals who expressed emotions with their faces. Izard and Ekman each showed different photographs, gave the subjects different lists of emotion terms, and examined people in different cultures. They obtained consistent evidence of agreement in the labelling of the facial expressions of six basic emotions: anger, disgust, fear, joy, sadness, and surprise. To rule out the possibility that such agreement could result from imitations and cultural contamination, Ekman and Friesen extended the findings to a preliterate culture in New Guinea whose members could not have learned the meaning of expressions from other cultures.¹² He found that New Guinean aboriginals were capable of recognising the six basic emotions in pictures of Caucasian individuals who expressed these emotions in their faces. These data show that the same arrangements of facial muscles express the same six basic expressions in all cultures, and that individuals across cultures see these specific arrangements of facial muscles as showing the same six basic emotions.

Now, if advocates of the meaning view were right and expressions showed emotions in virtue of their meaning, we should find that individuals of different cultures perceive the same expressions as showing different emotions

¹⁰ EKMAN et al. 1969, 1971.

¹¹ IZARD 1971.

¹² EKMAN and FRIESEN 1971.

because, as members of different cultures, they attach different information to the expressions. But, as we have just seen, evidence collected by Ekman, Izard and Friesen shows that this is not the case. Individuals of totally different cultures perceive the same basic emotions in the same expressions. This suggests that knowledge about the meaning of expressions is not as important to perception of emotions as the meaning view supposes. The ability to perceive other people's emotions is not influenced by variations in the body of knowledge that different perceivers attach to emotions and expressions.

This shows an interesting analogy with the cathode ray tube example. In that case, congruence in judgements is explained by the fact that the child and scientist have experiences with the same non-conceptual content. An analogous argument applies to the evidence collected by Ekman, Izard and Friesen. The fact that individuals of different cultures make converging judgements about basic emotions suggests that perception of basic emotions is not influenced by conceptual differences. So, congruence in judgements is explained by something independent of concepts. An explanation of this phenomenon is that perception of emotions has a non-conceptual content which is constant across perceivers and across cultures. In order to show that this is not only a possible explanation, but the best explanation available, we need to demonstrate that the perceptual system actually functions to detect emotions. This will show that perception of emotions has a content that solely depends on the perceptual system which, as we know, is non-conceptual. What sort of argument would show that the perceptual system functions to detect emotions? One way to this question is to ask how we know that the perceptual system functions to detect properties like shapes. The answer is straightforward. When the functioning of the perceptual

system is in some way compromised, the ability to perceive these properties is also compromised. This is clear in cases of visual agnosia where subjects are unable to experience features of objects like surfaces.¹³ This suggests that, in order to support the claim that the perceptual system functions to detect emotions, we need to see whether alterations of the system would prevent people from perceiving emotions.

3.2 Emotions and the Perceptual System

Evidence in this direction is provided by the case of autism spectrum disorder. Autistics are often described as lacking understanding of other people's minds.¹⁴ In particular, they seem to have a specific problem in understanding other people's emotions. Moreover, autistics show problems in processing facial expressions. This suggests that autism may be the sort of condition we are looking for to support the claim that the perceptual system functions to detect emotions.

There has been much empirical work detailing the problems and difficulties that people with autism and Asperger's syndrome have with faces and facial recognition. Difficulties with eye gaze have been considered among

¹³ Subjects with visual agnosia are not blind, but are unable to perceive or recognise objects; they can detect visual features, but they do not experience features like surfaces. In some cases, they do not experience objects as grouped into categories. The most prevalent pattern of this deficit is difficulty in recognising living things while recognition of non-living things is preserved. Warrington and Shallice (WARRINGTON and SHALLICE 1984) report the case of four patients who showed inability to identify living things and foods. Hart and colleagues (HART et al. 1985) report a case of a patient with very selective disability in naming fruits and vegetables. Dixon and colleagues (DIXON et al 2000) studied a group of subjects who did not show impairment in naming artefacts but showed severe impairment in naming musical instruments and biological objects.

¹⁴ BARON-COHEN 1995.

the most striking characteristics of autism.¹⁵ Some autistic children can recognise emotions of 'happy' and 'sad,' though they have more difficulties with complex facial expressions.¹⁶ Adults with Asperger's have been shown to have profound defects in recognising faces as being famous or not.¹⁷ It is therefore clear that subjects with autism spectrum disorder have complex problems with facial information processing. What is less clear is the reason for this and whether there is any relation between this problem and their poor understanding of other people's emotions. The core problem in autism spectrum disorder has been characterized as a lack of a theory of mind,¹⁸ or of interpersonal relatedness,¹⁹ of sensory overload,²⁰ or of a defect in non-verbal learning.²¹

A new trend in psychological research has shown that autism is often accompanied by perceptual deficits or abnormal perceptual abilities.²² The argument for a perceptual alteration view is based on the observation that individuals with autism spectrum disorder are particularly attentive to local details and, concurrently, fail to perceive the gestalt of the input. The impairment for faces in autism might then result from the tendency to process perceptual information locally, rather than holistically.²³ Further evidence confirming perceptual alterations in people with autism spectrum disorder

¹⁵ RUTTER and SCHOPLER 1987.

¹⁶ BARON-COHEN et al. 1993.

¹⁷ ELLIS et al. 1994; ELLIS and LEAFHEAD 1996.

¹⁸ BARON-COHEN 1995.

¹⁹ HOBSON 1993.

²⁰ DELACATO 1974.

²¹ ROURKE 1987.

²² DAKIN and FRITH 2005.

²³ There is evidence that a specific brain area known as 'fusiform face area' is more engaged by human faces than any other category of image. This is of special relevance to autism, because recent studies have shown that the fusiform face area is hypoactive in subjects with autism spectrum disorder. See SCHULTZ et al. 2000.

concerns impairments in processing the kinematics of human motion. Facial expressions are kinds of bodily movements whose production is extremely fast. There is evidence that autistic children perform relatively well in recognition of emotional and non-emotional expressions when the expressions are displayed slowly on video, but less well when they observe expressions displayed at normal speed.²⁴

It is not clear what conclusion one should draw from these data. Do they show that autistics do not perceive emotions, or that widespread and systematic perceptual deficits compromise autistic subjects' ability to gather accurate evidence from which to infer the meaning of the expressions? I will refer to the latter view as the *misperception view*. My interpretation of the data is that it shows that people with autism spectrum disorder do not perceive emotions because their perception lacks the non-conceptual content that is characteristic of perception of emotions. This is due to the fact the perceptual system in people with autism fails to detect emotions. But, before discussing this view, I will consider a major argument against the misperception view.

The main argument against this view is that it is difficult to explain why the perceptual anomaly is confined to faces. If autistics cannot gather accurate evidence because their perception is generally inaccurate, they should have the same problem with all sorts of objects and properties, not only with emotions. There is, in fact, evidence to the contrary. Some studies show that individuals with autism do not show deficits on complex object perception tasks.²⁵ Moreover, there is overwhelming anecdotal and non-anecdotal evidence that

²⁴ GEPNER, DERUELLE, and GRYNFELT 2001.

²⁵ SCHULTZ 2005.

autistics possess extraordinary drawing and painting skills.²⁶ Their drawings are generally extremely accurate not only in the reproductions of details but also in rendering properties of the visual field like perspective, distance, size, and orientation. Some autistics are also very good at recognising specific kinds of objects like car brands.²⁷ This is a first reason for concluding that it is false that autistics do not perceive other people's emotions because they cannot accurately perceive the world. Their perception of the world is not only accurate, but often more accurate and rich in detail than normal people's perception.²⁸

This suggests that the deficit does not concern objects in general, but rather emotions in particular. This account is confirmed by some self-reports from autistics. Donna Williams, for example, is an autistic who has written several books about her condition. Moreover, she has collaborated with the neurologist Jonathan Cole who has been researching the role of the face in human interactions, and the social and psychological consequences of facial problems.²⁹ This is how Cole describes Williams' problems with expressions and emotions:

Part of the way in which she had begun to know of our world seemed to include observation of the face and facial expression. A repeated theme

²⁶ SACKS 1995.

²⁷ SACKS 1995.

²⁸ It is worth mentioning evidence (BEHRMANN 2006) showing that some autistics suffer from perceptual deficits that compromise their ability to experience objects other than emotions. Adults with autism spectrum disorder discriminate non-face objects more slowly than their comparison group; deciding that two different instances of a duck are 'different' and that a chair and a duck are 'different' takes significantly more time for subjects with autism spectrum disorder than for control groups. These data are, however, quite marginal and can be explained as the result of forms of visual agnosia associated with autism. Moreover, these data do not explain why autistics have profound defects in recognising other people's emotions.

²⁹ COLE 1998, 1999, 2000.

was that face represented person-hood and feelings. So, through letters and faxes, I asked her to tell me about her problems with faces:

My difficulties in looking at faces were a) to stand looking, b) to comprehend what I saw.

A. To stand looking.

These were based on several things.

Fear based on learning that looking would cause people to attempt to engage me in interaction — the fear of this was for three reasons in turn.

- a. Such interaction would engulf my selfhood in a flood of 'other'.
- b. Such interaction would evoke body sensation caused by intense emotion that would be beyond my ability to process, and therefore be confusing and frightening, and also be physically intolerable.
- c. Such interaction would generally be only inconsistently comprehensible and would soon cause information overload after a few minutes and be poured down onto to me with a total absence of my own social interest or want.

B. To comprehend what I saw.

I also avoided looking at faces because of the meaninglessness of their component parts, [which] led to non-interpretable sensory-based behaviours and curiosity which were generally not welcomed. I also did not like the shock of finding I had touched or stared at a part of someone's face and then realised that these parts belonged to the person. The jolt always disturbed me. I did not learn to stop touching or staring at people though I learned to stop touching hair, comparing noses and staring at blemishes...

C. About mood.

I could tell mood from a foot better than from a face. I could sense the slightest change in regular pace and intensity of movement of foot. I could sense any asymmetry in rhythm that indicated erraticness and unpredictability. Facial expression, by comparison, was so overlaid with stored expression, full of so many attempts to cover up or sway impression that the foot was much truer. I used sound in the same way, even breathing. You ask about the back and forth flow. [I had asked about conversation, about the relatedness between people talking to one another]. For me there is none. One thing that people find with me is that expression, rather than being constantly present, breaks through, in bursts, and this probably reflects system shifts and its effect on body connectedness and emotion. On a receptive level, my comprehension of the expression of others through their faces fluctuates in a similar way, though less so now with the lenses. [Irlen lenses which she has found helpful in improving the processing of visual information]. Facial expression in my presence may be like bouncing a ball off a wall. The ball bounces back but nobody threw it.³⁰

The report suggests that Williams may have a problem in making sense of other people's expressions of emotions. She finds it less difficult to infer one's mood from a piece of behaviour that does not typically express an emotion, like pace or the movement of a foot, than understanding what a certain facial expression shows. This does not seem to depend on perceptual deficits as her perception of face details appears to be extremely accurate.

Williams' description of what it is like for her to perceive other people's expressions of emotions recall the third argument I presented in Section 2 against the claim that we do not perceive emotions but their effects. I observed

³⁰ COLE 2000: 250-1.

that we cannot give an exhaustive description of what we see when we perceive another person's emotion in the expression without making reference to the emotion thus expressed. In other words, if we describe what we see only in physical terms by detailing, for example, the specific changes in the face, we fail to account for the fact that we are having a visual experience of another person's emotion. This seems to be the case with Williams' description. It is, in fact, clear that emotion concepts do not feature in her description of what it is like for her to perceive another person's expression of emotion.

This phenomenon is open to two interpretations. One is that Williams lacks the relevant emotion concepts. The other is that her experience lacks the common non-conceptual element that is a feature of any perception of emotions across cultures as well as across different stages of cognitive development, as was illustrated by the cathode tube ray example. The first interpretation is consistent with the hypothesis that autism is a developmental disorder in which people do not acquire a theory of mind. The problem with that view is that it runs counter to the fact that Williams has some rudimentary understanding of emotion concepts. If this were not the case, she could not infer someone's mood from pace or foot movement. So, it is very unlikely that Williams totally lacks some understanding of emotion concepts, nor does she seem to totally lack a theory of mind.

The second interpretation – the one I advocate – is that something is missing from Williams' perception of other people's expressions of emotions. This is likely to be the non-conceptual content that is a characteristic of perception of emotions. Since the non-conceptual content is the result of information delivered by the perceptual system, one may suppose that autistics

like Williams have a perceptual system that fails to detect emotions. Lack of a common non-conceptual content can also explain why Williams and other autistics fail to apply emotion concepts to expressions, even though they have some rudimentary understanding of these concepts. The idea is that autistics do not apply these concepts because their experience lacks the non-conceptual content on which full mastery of such concepts is built. This is consistent with the fact that many autistics talk of themselves as having mere intellectual understanding of emotion concepts, but they do not actually experience them.

As I observed earlier, we can learn about processes in normal subjects by studying subjects with impairments. What I have so far observed tells us something about perception of emotions in normal subjects. If perception of emotions has a non-conceptual content that results from information delivered by the perceptual system and this system does not seem to work in subjects with autism spectrum disorder, then it is likely that, in normal subjects, perception of emotions does indeed depend, as I have claimed, on the perceptual system. The system provides a common non-conceptual content that explains why individuals of different cultures perceive the same emotions in the same expressions, even though they are divided by profound conceptual differences.

I opened my discussion with the question of whether we should think of perception of emotions as analogous to the scientist's experience of the cathode ray tube or as like the child's experience of observational properties of the cathode. I showed that mastery of emotion concepts is not a condition for perceiving emotions in others. It follows that perception of emotions does not resemble the scientist's perception of the cathode ray tube which requires mastery of the relevant concept. This suggests that we should think of

perception of emotions as being like the child's perception of observational properties of the cathode ray tube such as its shape, colour, and size.

One may wonder how this view can explain how perception of emotions generates mutual understanding. Empirical evidence suggests that mirror neurons may be involved in this process. When we observe other people having emotions as well as performing intentional actions, mirror neurons fire in the same way as they do when we ourselves have the same emotions³¹ or perform the same actions.³² It is possible that an explanation of how understanding of other people's emotions works can be pinned down to the activity of mirror neurons and their functional role in the production of higher-level mental states.³³ There is also evidence that the activity of mirror neurons is subnormal or absent in autistic subjects when they perceive other people's emotions.³⁴ Mirror neurons may provide the basis for an explanation of how perception of other people's emotions may lead to understanding of emotions, and of what goes wrong when such understanding is missing like in autism.

Let us quickly recap: emotions have perceivable manifestations in virtue of which they can be perceived – these are expressions. Perception of other people's emotions has a non-conceptual content which consists of information delivered by the perceptual system. It is a function of the system that it detects emotions. When this function is compromised, people do not perceive emotions, as shown by the case of subjects with autism spectrum disorder.

³¹ Particularly well studied is the case of disgust. See WICKER et al. 2003.

³² GALLESE 2001.

³³ HURLEY 2007.

³⁴ DAPRETTO et al. 2005.

4. From Perception to Direct Knowledge of Emotions

Some philosophers contend that experiences of observational properties, on the one hand, and experiences of non-observational properties, on the other, lead to the acquisition of two forms of knowledge.³⁵ Experiences of observational properties yield knowledge that is direct and non-inferential. In contrast, experiences of non-observational properties yield knowledge that involves some form of inference from background knowledge.³⁶ This distinction is clear in the cathode ray tube example. Imagine that the child acquires observational concepts like 'square.' She is therefore in a position to judge that the object before her eyes has square surfaces. The scientist, on the other hand, has mastery of the non-observational concept 'cathode ray tube.' She is therefore in a position to judge that the object before her eyes is a cathode ray tube. Are the two judgements on the same level? There is a sense in which they are because they are both based on perceptual evidence. This does not mean that they are the same kinds of judgements. Judgements of observational properties are more likely to be true and, when they are, yield direct non-inferential knowledge. This

³⁵ PEACOCKE 1983, 2003a, 2003b. See also PRYOR 2000 and BURGE 2003.

³⁶ A similar distinction is drawn by James Pryor who observes: "Some propositions are such that we see or seem to see that they are so in virtue of seeming to see that other propositions are so. For instance, I seem to see that there's a policeman ahead partly in virtue of seeming to see that there's a blue-coated figure ahead, and partly in virtue of having certain background evidence about the ways that members of our society typically dress. Perhaps we ought strictly speaking to deny that my perceptual experiences themselves have the content: *There is a policeman ahead*. Much of our use of locutions like 'It looks as if...' and 'I (seem to) see that...' is influenced not just by what representational contents our experiences have, but also by what further conclusions we take those experiences to make obvious...I will call those propositions we seem to perceive to be so, but *not* in virtue of seeming to perceive that other propositions are so, **perceptually basic** propositions, or propositions that our experiences **basically represent**...The propositions that there is a policeman ahead, and that a certain person passed a test, are not perceptually basic. I think it is only perceptually basic propositions which purport to be justified just by the deliverances of our current perceptual experiences." (PRYOR 2000: 338-9).

is because the only condition for an experience of an observational property to be accurate is that the property is as it appears to be. For example, the only condition for an experience of a square object to be accurate is that the object is actually square. As Peacocke observes:

It is not epistemically possible for someone who has the concept of squareness that: from all the different angles from which an object may be seen, it is seen as square, his perceptual mechanisms are operating properly, the circumstances of perception (the environment in which the causal processes take place) are normal, the object is constant in shape, and yet that presented object not be square.³⁷

The same does not apply to non-observational judgements. It is not sufficient for an experience as of a cathode ray tube to be accurate that the object looks like a cathode ray tube. This is because the object could be a perfect replica of the cathode. This shows that a further condition for the experience to be accurate is that the concept 'cathode ray tube' is applied to an object that is, in fact, a cathode ray tube. This implies that the scientist draws an inference from what she knows about cathode ray tubes to how the object she has before her eyes looks to her. On this account, experiences of observational properties yield knowledge that is direct and non-inferential, while experiences of non-observational properties yield knowledge that involves some form of inference from background knowledge.

³⁷ PEACOCKE 1983: 99.

This applies to knowledge of other people's emotions. I have shown that perception of emotions is an experience of observational properties. It follows that it is the kind of perception that grounds direct and non-inferential knowledge. This does not mean that it always yields knowledge. This is the case when we seem to perceive emotions that are not actually there – for example, when people contrive or pretend to be delighted or happy. This shows that we cannot really know people's emotions because it is always possible that we seem to perceive emotions that people do not actually have. This is what I called the *illusion view*. A satisfactory account of how we perceive and subsequently know other people's emotions needs to say when we actually perceive emotions and when we only seem to do so.

In the previous chapter, I argued that the change of which an emotional feeling is a perception is a kind of change which is constituted by the emotion it manifests. In contrast, the change of which a non-emotional feeling is an experience is not constituted by the emotion it seems to manifest. On this account, emotion is a constitutive part of the change of which an emotional feeling is a perception in the same way as objects are constitutive parts of perception. Two feelings that feel alike are different kinds of feelings when one is a perception of a change partly constituted by the emotion it manifests, while the other is not.

The same argument applies to expressions of emotions. Expressions are the outwardly visible part of the overall change that an emotion brings about when it manifests itself. An emotional feeling is how the change appears to the emotion subject, while an expression is how the same change appears to an observer. It follows that the constitutive claim about changes occurring inside

the body carries over to expressions. This is to say that expressions are the outwardly visible part of changes that have emotions as their constitutive parts. On this account, expressions show emotions when they are constituted by the emotions they manifest. When changes in the outer part of the body resemble expressions of emotions, but they do not have emotions as their constitutive parts, then they are not expressions of emotions; they are other kinds of changes that resemble expressions.

The same argument can be phrased in terms of properties. The properties of the observable manifestations of mental states that are not emotions may resemble the properties of the observable manifestations of emotions. There are many states with properties which resemble those of the observable manifestations of emotions. Ordinary examples are the properties instantiated when people fake or stage emotions. Less common examples are pathological cases. For example, tetanus may produce facial spasms with properties that resemble those of expressions of delight or amusement – which gives rise to the name ‘sardonic smile.’ Facial spasms produced by cerebral palsy or stroke may have properties that resembles those of observable manifestations of disgust. Similarly, linguistic expressions like swearing and coarse language in people with Tourette’s syndrome have properties that resemble those of genuine linguistic expressions of anger. The pictures that the French neurologist Guillaume Duchenne made in the late 19th are another example of bodily changes with properties that resemble those of the observable manifestations of emotions.³⁸ Duchenne induced involuntary contractions of facial muscles by applying electrodes to the faces of subjects with facial palsy. The pictures he

³⁸ DUCHENNE 1862/1990.

took show people who seem delighted, afraid, terrified, or worried, although they are not. These are examples of states whose manifestations have properties that resemble the properties of the observable manifestations of emotions. Yet, they are different kinds of states from emotions. It follows that the changes they produce are not observable manifestations of emotions (i.e. expressions), but other kinds of changes. Perception of any of these states would not be perception of emotions, but of states whose manifestations only resemble those of emotions.

This bears on the question of when we really know other people's emotions. Perception yields knowledge when it is the perception of an observable property that is the manifestation of the emotion. It is possible that this kind of perception is very similar to perception of a property that is not actually the manifestation of the emotion, but this does not undermine the claim that perception of a property that is, indeed, the manifestation of an emotion amounts to knowledge of the emotion. The illusion view is thus defused. We can know other people emotions by perceiving them in the perceivable manifestations of the emotions, that is, in the expressions.

This account does not suffice to provide *full* knowledge of emotions though. Properties of emotions show the emotion kind. For example, an expression of sadness shows that one has the kind of emotion we call 'sadness.' But, as reactions, emotions are essentially directed at objects. This means that we have complete knowledge of another person's emotion only when we also know what she is emotional about. A way of getting to grips with this problem is to consider in which circumstances the emotion object is perceptually available.

In Chapter IV, I argued that emotions are reactions to objects that are either *presented in perception* or *represented in thoughts*. It is clear that when the object is represented in thoughts it is not perceptually available. In contrast, when the object is presented in perception, it is possible for an observer to perceive it. In particular, it is plausible that we are in a position to perceive both the emotion kind and the emotion object, when we can observe the relation between the emotion we perceive in another person's expression and the object in reaction to which the emotion arises. For example, I may see my friend's fear of a dog when I see her fear arising as the dog comes forward. This suggests that we perceive the object of the emotion when we jointly attend to the emotion and to the object to which the emotion is a reaction; in other words, when we observe the causal connection between the object and the emotion. When the expression is constituted by the emotion it shows, and the object perceived is the object in response to which the emotion is formed, we have direct and full knowledge of another person's emotion.

The fact that joint visual attention is essential to obtaining full knowledge of emotions may provide a further explanation for the fact that subjects with autism spectrum disorder do not detect other people's emotions. Evidence shows that joint visual attention is particularly deficient in autistics.³⁹ This suggests that the inability to understand other people's emotions characteristic of autism may result from lack of information on two levels. One is the level of the emotion kind as autistics do not seem to perceive emotions. The other is the level of the emotion object. This suggests that, because of the deficit in joint

³⁹ NABER et al. forthcoming.

visual attention, autistics do not perceive the relation between a given object and the emotion the object may produce in other people.

To conclude, it is worth noting that the fact that we can perceive the emotion object only when the emotion is caused by an object presented in perception can be viewed as a feature that human emotions have in common with animal emotions and, probably, that we have inherited from our ancestors. Emotions are states that creatures form in response to environmental conditions and that indirectly signal these conditions to other animals. Imagine an animal in the grip of fear due to seeing a snake lurking in the grass. The fact that its fear can be perceived by other animals creates the conditions for them to become aware of the danger and adequately respond to it. In particular, the possibility of jointly attending to the emotion and its object provides them with information about the character of the object (e.g. that it is dangerous) and its nature (e.g. that it is a predator). This enables the other animals to choose between two coping strategies like fleeing and fighting and, hopefully, overcome the danger.

5. Conclusion

We have seen that emotions produce bodily changes. Perception of the outer visible part of these changes is perception of the perceivable manifestations of emotions. This perception typically has a non-conceptual content. This yields direct knowledge of emotions when the manifestations are constituted by the emotions that they show.

CHAPTER VI

SELF-KNOWLEDGE OF EMOTIONS

1. Introduction

On the account that I have been defending, emotions are enduring non-episodic states that may or may not manifest themselves in emotional feelings. A satisfactory account of self-knowledge of emotions needs to explain how we know emotions when we feel them as well as when we do not. It needs to explain how we know what *kinds* of emotions we have. And it needs to tell us the *objects* at which they are directed.

Emotions are not the only non-episodic mental states we have; beliefs, desires, and wants are also non-episodic states. Of these, beliefs are particularly important to the task of explaining self-knowledge of emotions. Many philosophers have argued, and still argue, that emotions are some sorts of beliefs or judgements.¹ This may tempt one to say that an account of self-knowledge of emotions should have important similarities with how we account for self-knowledge of beliefs. This view's appeal is that when we know beliefs we also know their objects. So, an explanation of self-knowledge of emotions modelled on self-knowledge of beliefs has the potential to explain how we know emotion objects. There is a further reason for trying to model self-knowledge of emotions on knowledge of beliefs. It is fairly uncontroversial that, even though beliefs are non-episodic states, we mostly know them. This may

¹ I have discussed this view in Chapter II.

tempt one to hope for a strong similarity between beliefs and emotions, and for an explanation of how we know emotions that draws on how we know beliefs.

It is not obvious, though, that we can explain self-knowledge of emotions in exactly the same terms as knowledge of beliefs. Judgments and beliefs aim at truth. Emotions, by contrast, do not. They are reactions to how things appear.² This is a first reason for doubting that one could explain self-knowledge of emotions on the model of self-knowledge of beliefs. Another reason is that emotions do not manifest themselves in judgments – they manifest themselves in emotional feelings. This may give us a clue as to how we know emotions. It is plausible to think that we know what kinds of emotions we have on the basis of which emotional feelings we experience. So, for example, a feeling that feels like anger may give me a clue to the fact that I am angry. The problem with this view is that it does not explain knowledge of emotion objects. Secondly, it does not explain knowledge of emotions in the event that we do not feel them. These are features that a satisfactory account needs to explain. I will show that knowledge of the emotion objects is mostly acquired through self-understanding. I will also show, however, that testimony from other people plays an essential role in knowledge of emotions when we do not feel them. An account that takes into account all of these elements has a good chance of providing an exhaustive explanation of how self-knowledge of emotion works.

2.1 Peacocke's Account of Self-Knowledge of Beliefs

There are various accounts of self-knowledge of beliefs. Some philosophers

² I already presented and developed this view in Chapter III.

argue that knowledge of beliefs is the result of some sort of inner perception of which beliefs are the objects.³ Others deny the perceptual model and argue that knowledge of beliefs is not obtained by directing our attention at beliefs themselves as objects of inner perception, but at the objects of beliefs.⁴ Some philosophers argue that rationality can justify belief self-ascriptions.⁵ They think that no rational person who had the concepts 'belief', 'desire', 'pain', and so on, could be incapable of self-knowledge. Others argue that self-knowledge of beliefs is a matter of commitment to the truth of our beliefs.⁶ Finally, some philosophers think that self-knowledge of beliefs should be explained in a way that combines the role of rationality and the commitment to truth. This view is defended by Christopher Peacocke.⁷ I will focus on his account for the following reason. Many philosophers have described and still describe emotions as some sorts of judgements. I have shown that many arguments stand against this view. One, in particular, is relevant to the issue of self-knowledge of emotions. If emotions were judgements, we could easily come to know them by explaining how we know judgements. Peacocke's view provides such an explanation and accounts for the role of judgements in belief self-ascriptions. So, it is plausible to expect that, if emotions were judgments, this view should also explain how we know emotions. In Section 2.2, I will show that this expectation is misplaced because emotions have no similarity with the kinds of states that judgements and beliefs are. I will first discuss Peacocke's view and explain the role judgements play in self-knowledge of beliefs. This will provide a basis for

³ For discussion see SHOEMAKER 1994.

⁴ This view is introduced by Gareth Evans (EVANS 1982).

⁵ This view is defended by Sydney Shoemaker (SHOEMAKER 1994).

⁶ MORAN 2001.

⁷ PEACOCKE 1992, 1996, 1998, 1999.

showing that the same model does not apply to emotions.

Peacocke's account draws an analogy between knowledge of conscious states like experiences and knowledge of beliefs. He observes that, in general, conscious states can provide a thinker with reasons for performing certain actions. A pain experience, for example, can give a thinker a reason for pulling her hand back from a hot stove; a visual experience of a car rushing towards her can give her a reason for moving out of the way. Judgements are mental actions because they are states by which a thinker assents to contents. So, if conscious states give reasons for actions, and judgements are mental actions, then it is plausible to think that conscious states can also give reasons for making judgements about those states. On this account, an experience of pain may give a thinker reason for judging that she is in pain. This will provide her with a true and justified belief about her pain experience.

Peacocke observes that we cannot gloss this procedure in terms of the experience causing a belief, which gives me reason for making the judgment. He writes:

An experience of pain can be a thinker's reason for judging that he is in pain. To try to construe this as a case of judgement reached by inference would make it impossible to give an epistemology of the self-ascription of sensations. (Am I supposed to rationally reach the conclusion that I am in pain from the premiss that I am in pain?) The pain case shows too that the model need not be that of perception, either. The conscious pain itself, and not some alleged perception of it, is reason-giving.⁸

⁸ PEACOCKE 1998: 72.

The case of pain is a specific form of self-ascription. Peacocke calls it 'consciously-based self-ascription' because it is the conscious state that provides the thinker with reason for self-ascribing the state. One may object that beliefs are not conscious states and this account cannot explain self-ascriptions of beliefs. Peacocke, however, thinks that the procedure also applies to beliefs. He thinks that judgements are conscious states by which beliefs are made consciously available to thinkers. This view is, though, controversial. Peacocke's reason for holding it is that both judgements and beliefs aim at truth. The difference is that while judgements are episodic, beliefs are non-episodic states. He also thinks that judgements are prerequisites for beliefs, but this is a view we do not need to buy into in order to understand his account of self-knowledge. So, given the belief that p , the corresponding judgement can be viewed as the conscious manifestation of the belief that p .

Peacocke supports this view with the following example. Someone is asked who the Czech Prime Minister was in 1956, during the Soviet invasion. If the person knows it, she has a specific belief stored in her memory. So, by remembering who the Prime Minister was, she makes the belief consciously available in form of a conscious recollection that Dubcek was the Czech Prime Minister in 1956. This is a conscious state that gives her reason to judge that Dubcek was the Czech Prime Minister in 1956. The judgement, in turn, is a conscious state that manifests the belief and gives the person reason for judging she believes that Dubcek was the Czech Prime Minister at that time. So, the thinker makes a consciously based self-ascription of belief and this provides her with knowledge of what she believes about the identity of the Czech Prime

Minister in 1956.

It is worth noting that the role judgments play in self-ascriptions of beliefs does not carry over to self-ascriptions of other mental states. One may self-ascribe the memory that Dubcek was Prime Minister in 1956 only on the basis of the memory itself. In this case what is self-ascribed is not a belief but a memory. Similarly, one may come to self-ascribe pain on the basis of a pain sensation. This is because, on Peacocke's account, a conscious mental state may give one reason to self-ascribe that state. There are all sorts of conscious states and they may all give one reason for self-ascribing them. In the case of beliefs, the conscious states are judgements because beliefs are non-episodic states that manifest themselves in judgements. So, first-order judgements or beliefs give the subject reason for self-ascribing those states. This procedure enables one to know one's beliefs because judgments make the content of beliefs consciously available.

Peacocke observes that this account is consistent with Gareth Evans' that we know beliefs by attending not to the beliefs themselves, but to their objects. Peacocke regards this procedure as special way of knowing *some* beliefs. Evans writes:

The crucial point is [that] in making a self-ascription of belief, one's eyes are, so to speak, or occasionally literally, directed outward – upon the world. If someone asks me 'Do you think there is going to be a third world war?', I must attend, in answering him, to precisely the same outward phenomena as I would attend to if I were answering the question 'will there be a third world war?' I get myself in a position to

answer the question whether I believe that p by putting into operation whatever procedure I have for answering the question whether p.⁹

Evans' view is interesting because it identifies a fundamental feature of judgments: they aim at truth. Beliefs have the same aim with the difference that, unlike judgments, they are non-episodic states. The point of Evans' remark is that, since both judgments and beliefs aim at truth, we can come to know them by attending to the world. For example, in order to answer the question whether there will be a third world war, one seeks the truth about whether there will be a third world war; the answer as to the truth of this question will be what one believes given that our beliefs aim at truth. In turn, we come to know what we believe about the world through the relevant judgements because judgments make beliefs consciously available. As Peacocke points out, Evans' procedure is only one of the many different ways we know beliefs. Memory is another way in which we know them.

What matters to my argument is that, on Peacocke's view, we come to know beliefs by making judgments, that is, by forming conscious states that aim at truth. Evans' point is that, in some cases, it is sufficient to attend to the belief objects, namely to objects and situations in the world, in order to form judgments and subsequently know what we believe. This is because judgments aim at truth and one way of knowing truth is to look at the world. So, in general, we come to know our beliefs by making judgments. Looking at the world is a specific way of making judgments.

⁹ EVANS 1982: 225.

2.2 Self-Knowledge of Emotions

While it may be tempting to extrapolate Peacocke's account of knowledge of beliefs and apply it to emotions, we must resist this temptation. The reason is that, unlike beliefs, emotions do not aim at truth. This makes emotions similar to perceptions. To make this point clear, I will first consider the case of perception. Sometimes, the content of perceptions consists of propositions. For example, I can see *that* there is a table in the room, or hear *that* someone is knocking on my door. Prima facie, this makes perceptions with propositional content similar to the equivalent perceptual beliefs. However, this is far from saying that beliefs and perceptions are states of the same kind. This view is summarised by Tim Crane:

Perceptions (unlike desires, for instance) are representations of how the world *is*, and thus 'made true' by the facts. [...] Perceptions seem to 'aim' at truth in something like the way beliefs do. But the way perceptions aim at truth is not the same as the way beliefs do. For part of what it is for belief to aim at truth is shown by Moore's so-called 'paradox': the absurdity, for all p , of asserting 'I believe that p but not p .' Yet as the Müller-Lyer Illusion shows, there are values of p for which asserting 'I perceive that p but not p ' is perfectly coherent. There is thus no Moorean 'paradox' of perception.

So one clear reason perceptions are not beliefs – and there are others – is that they are not revisable in the light of either other perceptions or beliefs that the perceiver has. Although perceptions do

normally involve inclinations to believe, they cannot be identified with these inclinations, since unlike inclinations to believe, they are resilient to conclusive counter-evidence.¹⁰

So, perceptions do not aim at truth in the same sense beliefs do because when we combine, in the same sentence, the propositional content of a perception and its negation as occurs in the sentence “Under this light the fabric looks red, but it is not”, what we say makes perfect sense. This depends on the fact that the first conjunct “Under this light the fabric looks red” does not have assertoric force, that is, it does not state how things are; it says how they appear to the perceiver. In contrast, the second conjunct states how things are and, therefore, has assertive force. If this were not the case and the propositional content of perception had assertoric force, the sentence would then be absurd because it would say that the fabric *is* and *is not* red.

The same is not true of beliefs. Consider the classic version of Moore’s paradox: “It rains but I do not believe it.” The paradox is open to various alternative interpretations.¹¹ Here, I commit myself only to the idea that, given that the sentence is uttered, the first conjunct can be viewed as an assertion about the weather, while the second can be viewed as a negation of the first conjunct. On this account, the sentence is absurd because we expect someone to believe what she recognises to be true. So, when she asserts *p*, we take her to believe that *p*, and yet she denies that *p*. This can be viewed as the result of the fact that beliefs aim at truth. Making an assertion that *p* implies the aim to say something true. Sentences of the form “*p* but I do not believe that *p*” are absurd

¹⁰ CRANE 1992: 16. Quoted from manuscript.

¹¹ For discussion see Moran 2001: 69-77.

because if we accept that the first conjunct states how things are, then it is clear that the second conjunct, which appears to be a belief, fails to behave as beliefs ought to behave, that is, to aim at truth. In other words, the first conjunct state how things are, while the second fails to take notice of how things are and, as a consequence, fails to behave as a belief even though its linguistic appearance is that of a belief. The sentence is therefore absurd.

The same argument does not carry over to emotions. Like perceptions, emotions may have propositional contents. So, for example, I can be happy *that* a friend is visiting me or I can fear *that* my neighbour's dog is dangerous. Not every emotion has a propositional content, though. Often, emotions are directed at objects, rather than at propositions. Emotions with propositional contents may help to show that emotions do not aim at truth. Consider the sentence "I fear that my neighbour's dog is dangerous even though it is not." The sentence is of the form "I fear that p but not- p ." As for the case of perception, asserting the conjunction does not commit one to say anything absurd because it is perfectly possible for someone to fear something even though she knows it is not actually dangerous. This depends on the fact that emotions do not assert their content, that is, they do not aim at truth. Rather, they entertain contents like thoughts and perceptions do.

On this account, emotions and beliefs are totally different states. Beliefs are open to further evidence because they aim at truth. This explains why a sentence like "It rains but I do not believe it" is absurd. The claim "It rains" states how things are and thereby provides evidence in light of which the belief in the second conjunct should be revised given that it is uttered by the same person who claims that it rains. But the sentence fails to meet this requirement

and credits the same person with knowledge of evidence about the state of things, namely that it rains, and a belief that does not take notice of this piece of evidence. In contrast, emotions are not open to further evidence because they do not aim at truth.¹² This explains why a sentence like “I fear that my neighbour’s dog is dangerous even though it is not” is not at all absurd.

This is not to say that emotions cannot possibly be sensitive to evidence. Richard Moran observes:

The fact that mere beliefs about my emotions can alter what I feel *would* be surprising if the emotions themselves were not attitudes directed toward something. Coming to believe that some fear of mine is unfounded will normally change my emotional state [...].¹³

Moran’s idea is that emotions are in some ways judgement-sensitive.¹⁴ This is clear in psychotherapeutic settings where patients reshape their emotions by changing their background beliefs. This is also clear in the treatment of phobias where the judgement that (say) spiders are not dangerous may help people overcome their fear. This is perfectly compatible with the claim that emotions do not aim at truth. The possibility for judgement to affect the content of states that are not truth-apt is well known in the case of perception. Peacocke makes the following example:

¹² I discussed this point in Chapter III.

¹³ MORAN 2001: 54.

¹⁴ Thomas M. Scanlon (SCANLON 1998: Ch. 1) uses the notion of judgement-sensitivity with reference to attitudes like desires. The same view is defended by Moran (MORAN 2001: 54) with reference to emotions.

You may walk unto your sitting-room and seem to hear rain falling outside. Then you notice that someone has left the stereo on, and realize that the sound you hear is that of applause at the end of the concert. It happens to many people that after realizing this, the sound comes to be heard as applause: the content of experience is influenced by that judgement.¹⁵

This shows that perceptions are also judgement-sensitive. The same phenomenon seems to occur in the case of perceptual illusions like the Müller-Lyer diagram where, sometimes, perceivers see that the two lines are of equal length after measuring them.

The same considerations apply to emotions. It is clear that we can try and, sometimes, succeed in changing our emotions by means of judgements. As reactions to how things appear, emotions can be inappropriate. In such cases judgements may help us to reshape emotions according to what we know to be the case. In other words, we may try to make emotions coherent with our judgements. Sometimes we succeed and overcome the emotions. At other times, we do not and continue to have emotions that run counter to beliefs.

A further reason for claiming that emotions do not aim at truth is that we can have epistemic attitudes such as beliefs or disbeliefs to emotions, in a similar manner to how we can have epistemic attitudes to perceptions. Consider the perceptual case first. You dip a stick into water and seem to see that the stick has bent. You do not endorse the content of your perception because you know that sticks do not bend as soon as you dip them into water. So you do not form the

¹⁵ PEACOCKE 1983: 6.

perceptual belief that the stick is bent. Rather, you disbelieve or suspend judgment about what you seem to see. That is, you take an epistemic attitude to the perceptual content.¹⁶

The same phenomenon occurs in emotions. Sometimes, we realise that our emotions are not appropriate reactions to their objects. This is the case, for example, when we become aware of over-reacting to a certain situation. We can then attempt to distance ourselves from how things appear to us in the emotion and judge that the emotional response is not appropriate to how things are. This is similar to what we do when we disbelieve the content of perception.

The reason why we can take epistemic attitudes to our perceptions and emotions is that they do not present (in the case of perceptions) or represent (in the case of emotions) how things are, but only how things appear to the subjects. It follows that, on some occasions, we are entitled to suspend judgement about how things appear and await further evidence before drawing any conclusions. This happens, for example, when we advise people to see how serious things actually are before panicking or behaving emotionally.

What I have so far observed lends support to the idea that we cannot know emotions through judgements. Judgements are states that aim at truth while emotions do not. This means that judging that (say) flying is dangerous does not give me any *direct non-inferential* reason for believing that I fear flying. This is because I may well judge that flying is dangerous and, nonetheless, enjoy it or not fear it at all. Similarly, judging that flying is not dangerous does not give me any direct non-inferential reason for believing that I do not fear flying. This is because it is perfectly possible for me to judge that flying is not

¹⁶ MARTIN 1993.

dangerous and yet fear it. Therefore, judgements do not provide *direct non-inferential evidence* about emotions.

One may wonder whether judgements can provide at least *indirect inferential evidence* about emotions. For example, can the judgement that flying is not dangerous give me reason for believing that I enjoy flying? There is a sense in which I can try to predict my emotional reactions on the basis of background beliefs. But this procedure is more a way of making plausible predictions about the emotions I am likely to form than a way of knowing the emotions that I actually have. Plausible predictions may always turn out false. So, they are not reliable ways of gaining knowledge. Consider the following example. I book a holiday in a certain locality because I believe it to be a nice holiday destination. On this basis, I make the prediction that I will enjoy my holiday. Later, it turns out that the locality is not as nice as I expected and I do not actually enjoy my holiday. I am thus disappointed because the emotions I expected to experience (e.g. enjoyment) on the basis of what I believed about the holiday destination are not the emotions I actually experience (e.g. boredom or disappointment). This shows that predictions based on background beliefs do not yield knowledge of emotions. And, in turn, it suggests that judgments such as the one that I make about my holiday destination do not provide *indirect inferential evidence* about emotions either.

What I have so far observed shows that Peacocke's account of self-knowledge of beliefs and judgements does not apply to emotions. This is because emotions do not represent how things are, but how things appear. Nevertheless, Peacocke's account can still help us understand how we come to know emotions. He argues that conscious states play an essential role in self-

ascriptions of those states. So, for example, pain experiences can give people reasons for believing that they are in pain. Along these lines, one may argue that, in order to understand how we know emotions, we need to look at how they manifest themselves in conscious states. I will address this issue in the next section.

3.1 Varieties of Self-Knowledge of Emotions

Emotions produce bodily feelings like pangs of fear or anxiety, feelings of rage or elation, of disgust or boredom, of love or hatred. It is plausible to think that emotional feelings play an essential role in self-knowledge of emotions. This must not obscure the fact that there are other ways of knowing emotions. Sometimes, the content of thoughts and the observation of one's own expressions and behaviour are reliable and fairly direct ways of knowing emotions. Yet, they are not as specific as emotional feelings. There are two arguments for this claim. One is that emotions manifest themselves in feelings, while they do not manifest themselves in thoughts even though they can influence the content of thoughts. The other is that emotions are states humans share with animals. Given that animals are capable neither of conceptual thought nor of observation of their own expressions and behaviour and yet are capable of feeling emotions, then it is reasonable to suppose that emotional feelings are characteristic of emotions in a way that thoughts are not. This justifies the claim that feelings are the most important way of gaining knowledge about emotions. In the next section, I will show how emotional feelings feature in the knowledge process. In Sections 3.3 and 3.4 I will discuss two alternative ways of knowing emotions. They are self-understanding of

thought contents and self-observation of expressions and behaviour.

3.2 Emotional Feelings

In Chapter IV I showed that there are two ways of understanding the notion of emotional feeling, namely the sensation and perception views. Here I will summarise the two views and show that only one is relevant to self-knowledge of emotions. The sensation view comes in two brands. One is the so-called 'act-object' view.¹⁷ It claims that, in having feelings, there is a genuine object of awareness, even if it depends for its existence on the subject's awareness of it. On this view, the objects of awareness are mental entities. A version of the act-object view is the sense-datum theory. An account of bodily feelings in line with this theory says that feelings are mental objects the existence of which depends on their being felt by a sensing subject. This view also accounts for emotional feelings which are taken to be inner mental entities present to one's consciousness. What distinguishes them from feelings and sensations that do not manifest emotions is how they feel. So, for example, a feeling of anger is a mental object that feels different from other feelings and sensations.

Some philosophers reject the idea that feelings are states of awareness of mental objects. This view is also known as the no-object view.¹⁸ A specific version of the view is known as adverbialism. An adverbialist account of feelings and sensations says that they are modifications of the subject that can be characterised in terms of specialised adverbs. If a sensation of pain is just a painful sensation, then feeling pain may just be to have a certain sort of

¹⁷ For discussion see CRANE 2000 and MARTIN 2002, 2004.

¹⁸ For discussion see MARTIN 1998a.

sensation, a painful one, or to feel in a certain way – painfully, for example. On this construal, feelings are states of awareness of properties of the experience itself. This view also applies to emotional feelings. A feeling of anger, for example, is a sensation in which one is aware of feeling angry-ly. This property distinguishes a feeling of anger from other emotional feelings in which one is affected differently.

The sensation view raises the following problem. Bodily feelings and sensations are experiences. A natural way of understanding experience is as states of awareness of objects in the world. The sensation view, by contrast, conceives of feelings as states of awareness of mental objects or of properties of experience. The view, therefore, fails to do justice to the idea that, as experiences, feelings provide one with awareness of objects that exist independently of one's awareness of them. This view appears even more problematic when it comes to determining what we know through bodily feelings and sensations. Experience is often a source of knowledge about the world. But if we conceive of bodily feelings as experiences in which one becomes aware only of objects and properties internal to one's mind, it follows that they do not provide knowledge of anything in the world. At best, they provide knowledge of one's own mind. This challenges the idea that experience is a source of knowledge about the world. The perception view offers an alternative to these problems. Its core commitment is the idea that the body and what happens within the body are parts of the physical world like chairs, houses, and mountains. Just as we perceive chairs, houses, and mountains, we also perceive our body and what goes on in it.

On the perception view, emotional feelings are perceptions of changes

brought about by emotions. Empirical evidence suggests that specific changes or patterns of changes are peculiar to specific emotions.¹⁹ On this account, each emotional feeling is an experience of a specific change, that is, a change with specific properties. These properties are responsible for the phenomenal character of emotional feelings. In other words, specific emotional feelings are perceptions of bodily changes with specific properties. This is analogous to the visual case where specific shapes produce specific shape experiences. When I see a square object, the content of my experience is determined by the fact that there is a square object before my eyes.

On this construal, a specific emotional feeling is a specific kind of experience; one that feels like a specific emotion. This lends room to an account of self-knowledge of emotions inspired by Peacocke's notion of consciously-based self-ascriptions. He employs the example of a specific experience – a pain sensation – that gives the thinker reason for self-ascribing that experience. The same idea can be expressed by saying that the pain experience gives the thinker reason for self-ascribing a psychological predicate corresponding to the psychological concept that the experience instantiates – i.e. the concept of pain. The same procedure is available in the case of emotions. Emotional feelings are specific kinds of experiences not only because they differ from other bodily experiences, but also because they have characteristic felt qualities. A feeling of anger has a different felt quality from a feeling of sadness; a feeling of joy has a different felt quality from a feeling of fear, and so on. On this account, having a given emotional feeling may give a thinker reason for self-ascribing an emotion predicate corresponding to the specific emotion concept the feeling instantiates.

¹⁹ ZAJONC et al. 1989. For discussion see of the experimental results see ADELMANN and ZAJONC 1989, and MCINTOSH et al. 1997.

So, for example, feeling angry may give me reason for self-ascribing anger.

Self-ascriptions yield knowledge of emotions when they meet two requirements. One is that the emotion concept deployed in the ascription is the same emotion concept that the feeling instantiates. For example, a self-ascription justified by a feeling of anger must deploy the concept of anger in order to provide knowledge of the emotion that motivates the ascription. The other condition is that the feeling must be an accurate perception. Emotional feelings are perceptions of changes produced by emotions. I showed that they are vulnerable to three kinds of perceptual error. The first kind occurs when one misperceives a change that does not manifest an emotion for one that does. The second kind occurs when one misperceives a change that manifests an emotion for one that does not. The third kind occurs when one seems to perceive a change that does not actually occur. An emotional feeling is accurate when none of these errors occur. When these conditions are met, the feeling is an accurate perception of a change that has the emotion as its constitutive part. A self-ascription based on such feeling amounts to knowledge because it attributes to the thinker an emotion property that is true of her.

This account of self-knowledge of emotions rests on the idea that specific emotions produce specific changes of which emotional feelings are perceptions. This is not, however, true of every emotion. In Chapter IV, I highlighted evidence that higher emotions like jealousy or envy do not produce specific changes.²⁰ It follows that they are not accompanied by characteristic emotional feelings, but by feelings that are in some way unspecific. An account of self-knowledge of higher emotions must take into account this feature and explains

²⁰ GRIFFITHS 1997: 100.

how we know higher emotions. It is unquestionable that, in most cases, we know when we are jealous or envious. But it is plausible that the way in which we know this is not exactly the same as for basic emotions. This is because the sorts of changes these emotions produce are not as specific as those that basic emotions produce. This gives one reason to suspect that these non-specific changes alone may not suffice to provide one with knowledge of higher emotions. The challenge is to explain how such unspecific feelings factor in self-knowledge of higher emotions, and which other elements contribute to it.

There is a substantial difference between the kind of experience we have when we perceive changes brought about by basic emotions, and the kind of experience we have when we perceive unspecific changes brought about by higher emotions. The former is an experience of the observational properties of the changes. It is a feature of this kind of experience that it is independent of background knowledge, and it solely depends on the perceptual system – interoception in this case. For example, a feeling of anger is an experience of the observational properties of a specific bodily change that directly impinges upon the subject's perceptual system. It is not a condition for experiencing this change that the subject knows what anger is or feels like. Such knowledge is only a condition for the subject to make the *judgement* that what she feels is anger.

The kind of experience we have with higher emotions is quite different. As we know, these emotions produce unspecific changes that the subject *experiences as* feelings of higher emotions. This is to say that when we feel higher emotions we do not simply experience the observational properties of the changes. We represent these properties as feelings of higher emotions. Consider the example of jealousy. Our starting point is the claim that, as a higher emotion,

jealousy produces unspecific changes that, nonetheless, we experience as a specific feeling: the feeling of jealousy. How is that possible if the changes are unspecific? The explanation I proposed in Chapter IV is that the representational content of the feeling of jealousy deploys a concept – that of jealousy – that is made available to the subject by her concomitant state of jealousy. In other words, the perception occurs in a specific psychological context – that of jealousy. This affects the way in which she perceives the unspecific changes jealousy brings about. This is analogous to what happens when we experience a certain sound as that of a violin in virtue of the fact that the perceptual content deploys a concept – that of a violin – that is made available to us by the underlying state of knowledge about what violins sound like.

This procedure is not required for basic emotions because they produce specific changes that cause characteristic emotional feelings which, in turn, justify specific emotion ascriptions. The procedure is instead required for higher emotions because they produce totally unspecific changes. It follows that how we perceive these changes depends on what emotion concepts are available to us when the changes occur. Since the changes are produced by higher emotions, the emotion concepts available are those of the emotions that produce the changes – that is, higher emotion concepts.

This account is entirely consistent with Peacocke's notion of consciously-based self-ascriptions because it credits feelings of higher emotions with the same justificatory role that they have in ascriptions of basic emotions. A self-ascription of jealousy is justified by a feeling of jealousy. The feeling is, in turn, a perception of an unspecific change that is represented as one of jealousy because

jealousy is the emotion that produces the unspecific change and subsequently makes available the relevant emotion concept. The difference between a basic emotion ascription and a higher emotion one is that the latter is more likely to suffer from concept misattributions. This is because the feelings that justify self-ascriptions may not be sufficiently characteristic to give the ascriber evidence as to what emotions the feelings actually instantiate. I will show in the next section that the possibility of misapplying concepts is in some way limited by the fact that emotions often influence the content of thoughts. In the case of higher emotions, the ability to track and understand the content and course of one's thoughts often helps to understand what higher emotions one has and thereby to avoid concept misattribution.

3.3 Emotional Thoughts

Some philosophers think that it is a necessary condition for having emotions that the subject makes certain evaluative judgements.²¹ I argued that this view is too demanding in cognitive terms because creatures that do not master evaluative concepts are, nonetheless, capable of emotions. Some philosophers have tried to avoid this criticism by arguing that thoughts, and not judgements,

²¹ I discussed the cognitive view in detail in Chapter II. In brief: philosophers who advocate cognitivism about emotions claim that emotions involve cognitive states. This may mean that a cognitive state is a necessary condition for, or a necessary concomitant of, emotions. There is no agreement over the kind of cognitive state involved in emotions. Different states have been proposed as candidates. Jerome Neu suggests that the cognitive elements that matter most are thoughts. Robert C. Solomon and Martha Nussbaum defend the view that emotions are evaluative judgements. Robert Gordon argues that emotions involve knowledge. The various views share the fundamental idea that emotions necessarily involve cognitive states. Judgement is the cognitive state most frequently appealed to in the explanation of emotions.

are essential to emotions.²² For example, D'Arms and Jacobson make the following remark about what they call the quasi-judgementalist²³ theory of emotions:

The revised theory still type-identifies the emotions by their defining propositions, and claims that certain thoughts are partly constitutive of being in an emotional state, but it loosens the requirement that these thoughts must be affirmed by the agent.²⁴

This theory is also false since conceptual thought does not seem a necessary condition for emotions, as shown by the fact that infants and animals have emotions, even though they do not have conceptual thoughts. Nevertheless, there is a sense in which this view has merit. It points out the important connection between emotions and thoughts. Thoughts are episodic states that, like perceptions, do not assert but instead entertain contents. It is plausible that the content of thoughts can be influenced by emotions in the same way perceptions of bodily changes (i.e. emotional feelings) are. This means that thoughts may help in the task of knowing emotions. The idea is that when thoughts are influenced by emotions, they deploy concepts that the underlying

²² NEU 1978, 2000.

²³ Quasi-judgmentalism or neo-judgmentalism is form of weak cognitivism. On this view, the subject of an emotional experience construes or thinks of an object in an evaluative way; this constitutes an evaluative 'take' on the situation which falls short of fully-fledged evaluative judgement. It is not easy to explain the nature of such evaluative construals or thoughts. Nevertheless, there are examples which help to illustrate the *kind* of thing involved in evaluative construal. Construals can involve a number of different elements gathered from perception, imagination, conception, and thought. For discussion see D'ARMS AND JACOBSON 2003, and BRADY forthcoming.

²⁴ D'ARMS AND JACOBSON 2003: 130.

emotions make available. This gives thoughts a characteristic content that is, so to speak, coloured by emotions. Wittgenstein expresses a similar view in the following remark:

I am inclined to say: emotions can colour thoughts, bodily pain cannot. Therefore, let us speak of sad thoughts, but not, analogously, of toothache thoughts. It is as if one might say: Fear or indeed hope could consist only of thoughts, but pain could not. Above all pain has the characteristics of sensations and fear does not. Fear hangs together with misgivings, and misgivings are thoughts.²⁵

This is analogous to the view that I advocate. Thoughts may occur in specific psychological contexts the character of which is partly determined by the emotions and moods one has. When someone is angry, for example, she is likely to have thoughts the content of which is influenced by her anger. These thoughts may help the person understand that she is angry, even though the sort of evidence they provide is not as direct as that provided by a characteristic feeling of anger.

It is plausible that thoughts are important to self-knowledge of higher emotions. Many philosophers have argued that what distinguishes higher from basic emotions is that the former require the ability of making sophisticated judgements.²⁶ This view is denied by a considerable body of evidence showing

²⁵ WITTGENSTEIN 1980: II, 153. In the same vein, Richard Moran observes that “[...] being envious requires that the person have a certain range of thoughts about herself and her situation, which may or may not include the specific thought that she is envious.” (MORAN 2001: 43).

²⁶ PRINZ 2004b.

that infants are capable of higher emotions like embarrassment and guilt.²⁷ We have seen that some philosophers are inclined to think that thoughts and not judgements are actually essential to higher emotions. However, evidence about higher emotions in infants also proves this view false. Nevertheless, it is plausible that higher emotions and thoughts have not only a connection – Wittgenstein’s remark shows that this is a feature of emotions in general – but that such a connection may play an important role in self-knowledge of higher emotions. In particular, it is plausible that the psychological context that thoughts create may help one to understand the unspecific changes that higher emotions produce.

Considering higher emotions gives rise to a specific concern – that is, the possibility of concept misattribution. Since the changes these emotions produce are unspecific, it is more likely that they will be mistaken for changes produced by other emotions or states. This is analogous to the visual case where a rectangle with sides of almost equal length is likely to be mistaken for a square because its appearance is not as specific as it would be if the sides were clearly uneven. It follows that knowledge of higher emotions may be more difficult to obtain because misperceptions seem more likely to occur.

Thoughts may help avoid this problem and supplement understanding of what kinds of higher emotions we have and experience. This is for two reasons. One is that thoughts are episodic states that, like perceptions, may be influenced by the underlying emotions. This means that thoughts may provide clues as to what emotions one has. The other is that thoughts contribute to forming the psychological context in which the unspecific changes occur. When someone is

²⁷ I reviewed these data in Chapter III.

capable of self-understanding, she is in a position to appreciate the connection between certain characteristic thoughts and her underlying emotions. This enables her to understand and subsequently know that the unspecific feelings she has are manifestations of certain higher emotions such as jealousy or envy, for example.²⁸

This account is supported by a further argument. Moran observes that “someone’s envy and gratitude are themselves attitudes, modes of understanding the world as well as oneself.”²⁹ I argued that emotional and bodily feelings are perceptions of the body or states of the body, and they are part of the physical world in the same way that chairs, tables, and mountains are. So emotions can be viewed as modes of understanding physical events that occur inside our body. This applies to any emotions, but it is particularly important in the case of higher emotions. Given that feelings of higher emotions are perceptions of unspecific changes, that is, events that are in some way unclear, emotions like envy, gratitude and jealousy are ways of understanding these events. However, emotions are non-episodic states and we may not be directly aware of having them. Thoughts, by contrast, are episodic states. If we accept that thoughts may be influenced by emotions, we see that by considering the content of these thoughts, we can understand those unclear events that consist of the unspecific changes brought about by higher emotions.

Let us review the argument: thoughts may help us understand what emotions we have because they are episodic states the content of which may be influenced by underlying emotions. The claim that the ability of understanding

²⁸ The relation between emotions and thoughts in self-understanding is discussed by TAYLOR 1985a, MORAN 2001, and JONES 2007b forthcoming.

²⁹ MORAN 2001: 41.

one's own thoughts may facilitate self-knowledge is true of any emotion. However, basic emotions are generally known through specific emotional feelings. In contrast, higher emotions produce feelings that do not enjoy such specificity. It is for this reason that the ability of understanding one's own thoughts may increase one's chances of knowing one's higher emotions.

3.4 Expressions and Emotional Behaviour

What I have so far observed shows that we may come to know emotions by experiencing them and by understanding the content of our thoughts. There is one last way in which we can know emotions. It is by observing our own expressions and behaviour.³⁰ In the previous chapter, I argued that perception of expressions may yield direct knowledge of emotions. This explains how other people can know my emotions, for example. It is plausible that, on some occasions, the same procedure is available to myself with regard to my own emotions. For example, I may see and subsequently know that I am nervous by noticing that my hands are shaky; know that I am sad by looking at myself in the mirror and seeing that I look sad. These are example of emotions that I know not by experiencing them from the inside, but by observing them from the outside. Although this way of knowing emotions is quite uncommon and secondary to the subjective experience of emotions, it is still a way in which we can know emotions.

This source of knowledge o our emotions may also function retrospectively. For example, by examining how I behaved in certain

³⁰ For discussion see MARTIN 1997 and PICKARD 2004.

circumstances, I may understand that I was emotional even though I was not aware of it at the time. This is not to say that given what I remember about my behaviour, I draw the conclusion that I was emotional. Rather, I recall specific patterns of behaviour and I understand or interpret them as the result of certain emotions or moods that I had.

What I have so far observed explains how we know what *kinds* of emotions we have, but it does not explain how we know the *emotion objects*. Knowing an emotion object is essential to having full knowledge of the emotion because it is an essential feature of emotions that they are directed at its objects. This means that we have complete knowledge of them only when we know both the emotion kind and object. I will now turn to an examination of how such knowledge is obtained.

4. Knowledge of Emotion Objects

Emotions are reactions to objects that are either presented in perception or represented in thought. When I fear my neighbour's dog, I either perceive or represent it in my thoughts. This picks out a difference between perceptions and emotions. Perceptions are directed at objects without the mediation of any other mental state. Emotions, by contrast, are directed at objects that are presented or represented by other mental states. This is not to say that emotions have no intentionality or that they "borrow" it, as some philosophers have argued,³¹ from other mental states. Emotions are intentional states the objects of which are specific entities. The point is that the way in which emotions acquire their

³¹ GOLDIE 2002.

objects is not as direct as in perception where objects directly cause experiences. Like other mental states, emotions acquire their objects through the mediation of other mental states – mostly perceptions and thoughts.

This has some important consequences for knowledge of emotion objects. If these objects are entities that are either presented or represented by other states, then it seems that, in order to know them, we need to consider the content of these states. This suggests that there are two ways of knowing emotion objects. When the object is perceived, we may identify it by looking at the environment. Sometimes, this is not sufficient as we may see all sorts of things without understanding which one is the emotion object. In this case, we need to understand the object or situation in reaction to which the emotion arose. When the object is represented in thoughts, it is clear that looking at the environment does not help to identify it. In this case, we need to consider the thoughts in reactions to which the emotions arose and understand the relation they bear to the emotions we feel. This is a form of self-understanding that may help us identify emotion objects when they are intentional objects. I will discuss the two options in detail.

Consider the following example. I know that the object of my fear is the dog because the dog stands right before me and I feel afraid. In this case, I simply need to perceive the causal connection between the dog and the feeling of fear to know what my fear is directed at. Unfortunately, things are not always this simple. We may form emotions in response to objects or situations that we have just experienced or that we are still experiencing and yet fail to perceive the connection between the emotion and its object. Crane illustrates this possibility with the following example:

In some cases, although it might not be immediately obvious what the intentional object of a mood is, it may have an object which is revealed by further examination. So it is with those moods whose objects are their causes. For example, you might feel generally irritated and it not be clear to you what you are irritated about, but only on reflection do you realize that it is the presence of your aged relative who is both the cause and the object of the irritation.³²

This suggests that, sometimes, in order to identify emotion objects we need to do something more than simply perceiving the connection between what we feel and what we experience. That is, we need to *understand* what we experience and how this bears on what we feel. In Crane's example, the person identifies what he feels irritated about when he understands that the presence of an aged relative is in some way bothering him. Without such understanding, the mere perception of the relative would not enable him to identify the object in response to which the emotion arose.

In a similar vein, Hanna Pickard argues that a way of explaining the intentionality of emotions is, in fact, in terms of understanding the reason why someone has the emotion she feels. She writes:

[O]ne way of explaining emotional intentionality is by appeal to the subject's own understanding of the reason why she is feeling as she is.

For instance, when you come to realize that you are sad because you miss

³² CRANE 2007: 28. Quoted from manuscript.

her still, say, that is what makes your emotion intentional: about the fact that you miss her. Of course, our understanding of many of our emotions is much easier to come by: it may be palpably apparent to you that you are angry at him because he insulted you. Nonetheless, this is a simple way to account for emotional intentionality: what makes your emotion intentional is that you understand the reason why you are in such a state, and so an emotion will not be intentional if you utterly lack understanding of the reason why you are in such a state.³³

On this account, we need to understand the situation in response to which the emotion arises in order to identify the emotion object.³⁴ This view provides the basis for an interesting explanation of objectless emotions. If we accept that understanding what one experiences is an important element of emotion intentionality, we may then say that people experience objectless emotions when they do not understand the situations they face. If they lack such an understanding, there is no way for them to identify the objects at which their emotions are directed.

This explains how we know emotion objects when they are perceived. Things are different when emotions are directed at objects represented in thoughts, namely when emotion objects are intentional. In this case, understanding the situations we experience is not sufficient to identify the objects because they are not things we perceive, but things we think about. This is to say that in order to identify the objects, we need to consider the content of

³³ PICKARD 2003: 96.

³⁴ The idea that some emotions may have objects which are revealed by further examination or identified as one makes up one's own mind has been recently defended by Bennett W. Helm (HELM 2001).

those thoughts in reaction to which our emotions arise. This is a form of self-understanding and it requires the ability of considering thoughts as objects of investigation and their contents as clues to emotion objects, rather than as clues to emotions themselves as shown by the case of higher emotions.

The fact that the content of thoughts may help to identify the emotion objects does not rule out the possibility that it may also mislead us. This phenomenon illustrated by panic attacks. When people suffer their first panic attack, they frequently interpret it as a symptom of a heart condition, rather than as a manifestation of emotion. It follows that they misinterpret the nature of their experience and fail to grasp the connection between what they feel and the objects – presented or represented – in response to which panic arises.

The misrepresentation typical of people with panic disorder may be seen as the result of an inference to the best explanation made in conditions in which the subjects have poor understanding of their psychological lives. Panic attacks are disruptive emotional experiences that typically occur in concomitance with traumatic events. People often refuse to think about these events because this would bring more psychological pain. However, by so doing, they also preclude themselves from the possibility of understanding that panic attacks are emotional feelings. As a consequence, they fail to understand which emotions these feelings manifest and what they are about. When self-understanding is so limited, people try to explain their panic attacks in the best and, possibly, most rational way. An explanation that appeals to heart conditions perfectly suits the need to understand what they feel. Moreover, it prevents them from thinking about the traumatic events that may have triggered the emotions that panic manifests. Clearly, this is a situation in which people fail to grasp the connection

between their emotions and what they experience or think.

Cases like this are quite extreme and they should not be viewed as ruling out the possibility of acquiring full knowledge of emotions in more normal cases. We know our emotions when we feel them. We know what they are about when we perceive or understand the connection between what we feel and what we experience or think. This shows that self-knowledge of emotions is a cognitive achievement that involves understanding of our bodily experience as well as of our mental life.

This account explains how we come to know our emotions when they manifest themselves in experience. However, it is a characteristic of emotions that we may have them without feeling them. This may initially seem problematic for my position since, *prima facie*, this is a situation in which we have no way of knowing emotions. I will show, however, that in cases like this we can still know emotions by listening to what others say about them in the form of emotion ascriptions like "You look sad today." This is not an alternative way of knowing our emotions as such – rather, it is how we come to know emotions when we do not feel them.

5. Knowledge of Unfelt Emotions

In general we learn many things on the basis of what someone else tells us. This is how we learn most things at school or from the news. The source of the speaker's knowledge may be of a different nature. It can be *direct*, as when someone attends an event that she later reports to someone else. It can also be *indirect*, as happens when someone learns something from the news, newspapers, or from other people. The question of how the speaker acquires

knowledge is not the issue at stake here. Answering this question would require some general considerations about knowledge and knowledge by testimony.³⁵ For the sake of argument, it suffices to say that, provided that the speaker knows what she is talking about, we can come to know about this by listening to her words.

Some authors argue that two conditions need to be met in order for this knowledge to be obtained.³⁶ One condition is that the receiver must understand the *linguistic content* of the message. For example, when the receiver is told that the person she is looking for is sitting over there, she needs to understand to which location the expression “over there” refers, in order to learn where the person is. The other condition is that the receiver understands the *force* of the message. Some philosophers think that information is mostly transmitted through assertions.³⁷ So in order to learn something from what others say, the receiver needs to understand that what they say are assertions. Assertions are a kind of speech act we perform when we say what we believe to be the case. So, a proposition conveys information when it is asserted, not when it is asked. Consider the proposition “Gordon Brown is the new Prime Minister.” It conveys information about a fact only when it is asserted. The same proposition would not convey information if it were part of a question like “Do you know whether Gordon Brown is the new Prime Minister?” So it is a condition for a message to convey information that the receiver understands both the linguistic content as well as the force of the message.

These conditions are necessary but not sufficient as the receiver may

³⁵ COADY 1991; FRICKER 1987, 2004.

³⁶ BURGE 1993.

³⁷ UNGER 1975; WILLIAMSON 1996, 2000.

understand both the content and force and, yet, refuse to believe the message or to take it seriously. In order to learn something through interlocution, the receiver needs to believe what she is told.³⁸ This is not a characteristic of interlocution. It is a fact about knowledge that it starts from belief. When someone learns things through the senses, she believes the content of her perceptions. Similarly, when she learns something through interlocution, she believes what she is told. The difference between interlocution and perception is that, in interlocution, perception alone does not suffice to justify the receiver in believing what she is told.³⁹ This is because in order to be justified in believing it, she needs to understand the message she hears. The perceptual experience of someone telling her something is the basis for her to understand what she is told, but it does not justify her in believing it. This is because hearing a certain sequence of sounds on its own does not give her any reason to believe anything. She needs to understand what those sounds mean in order to be justified in believing what the interlocutor says. This shows that, in interlocution, justification depends on the fact that the receiver understands the content and force of what she is told.

What I have so far observed also applies to knowledge of emotions through ascriptions. When a speaker tells the receiver that she looks unhappy and the speaker has knowledge of it, the receiver is then in a position to know her emotion (i.e. that she is unhappy) even though she does not feel it. In the previous chapter, I have shown that it is perfectly possible for the observer to know what emotion another person has by perceiving it in her own expression. In particular, I argued that people know other people's emotions when they

³⁸ BURGE 1993.

³⁹ BURGE 1993.

perceive them in others' expressions, and the latter are partly constituted by the emotions they show. This knowledge can be verbalised in the form of emotion ascriptions like "You don't seem terribly happy." On this account, if we accept that the ascriber knows that the ascribee is unhappy even though she does not feel it, then the ascribee is in a position to gain knowledge about her emotion by listening to the emotion ascription and believing it. This requires that she understands the content and force of the ascription. That is, she needs to understand that the sentence "You don't seem terribly happy" is an assertion about her emotional state.

This is not as obvious as it may seem. Emotion ascriptions often use perception verbs. This is because the source of the ascription is perceptual. So we say "You don't seem terribly happy today", rather than "You are not terribly happy today." This raises a problem. *Prima facie*, emotion ascriptions convey information about the content of the ascriber's experience, rather than about the ascribee's emotion. This means that, in some cases, the ascribee may interpret the ascription as saying how she appears to the speaker, rather than saying that she in fact has a certain emotion. It is probably for this reason that we tend to dismiss emotion ascriptions and take them as reports about how other people see us, rather than as assertions about our mental states. This is consistent with the fact that seeming to have an emotion does not entail really having it, given that, as shown in the previous chapter, many bodily changes resemble expressions of emotions without actually expressing emotions.

Such factors illustrate that emotion ascriptions have an element of ambiguity. They can be interpreted as saying something about the content of the ascriber's perceptual experience or as something about the ascribee's mental

state. Therefore, understanding is crucial to the acquisition of knowledge about emotions through ascriptions. When the ascriber does not understand that the ascription says something about her emotion, she does not acquire knowledge about it. Ascriptions provide the ascriber with knowledge of her emotions only when she understands them as saying something about her emotions. When they are understood in this way emotion ascriptions link the ascriber's belief that she has a certain emotion to the ascriber's knowledge of the ascriber's emotion. It is through this procedure that the ascriber comes to know that she has an emotion of which she was previously unaware.

What reason does the ascriber have to believe the ascriber's words? We tend to think that our mental states are transparent to us and that we are the highest authority on them. I have illustrated that, in the case of emotions, this assumption is mistaken. Emotions are not necessarily transparent to us because we may have them without feeling them. I also showed that the ascriber can know the ascriber's emotion from her expression. What still needs to be explained is what reasons the ascriber has to believe the ascriber. To begin to solve this problem requires articulating the ascriber's reasons for accepting what she is told. To this end, it will help to understand that we believe emotion ascriptions on the basis of two different justificatory grounds. In one case, we have *background reasons* to do so. In the other, we have *no background reasons*, and we take at face value what we are told.

Background reasons for believing people's words are of two different types. The first concerns the content of what we are told. The second concerns the authority of the speaker. In ordinary interlocution, the receiver may believe the message that Gordon Brown is the new Prime Minister because she already

knew he was the favourite. So, she believes the message because it fits in with what she previously knew. In the case of emotion ascriptions like “You don’t seem terribly happy today”, she may believe the ascription because she knows that she is in a bad mood. The problem with this scenario is that background reasons may lead the ascriber to accept ascriptions that are incorrect. For example, if she believed herself to be a dull person, this would give her reason to accept only those ascriptions that confirm what she already believes about herself and to reject ascriptions that do not confirm this view, even if the latter are, nonetheless, true. This shows that background reasons may prevent the ascriber from believing true ascriptions simply because what they say does not cohere with what she already believes about herself.

The second type of background justification concerns the authority of the speaker. Sometimes we believe what others say about us because we take them to be competent or reliable sources. In ordinary interlocution, the receiver may believe what the engineer says about her washing machine because she takes engineers to know what they are talking about. Similarly, she believes that Gordon Brown is the new Prime Minister because she learns it from the news, which she takes to be well-informed about the political situation. In the case of emotion ascriptions, she believes what other people say about her emotions when they know her very well, when they are perceptive people; or when they have some specific skills or expertise as in the case of psychotherapy. These are all reasons for the ascriber to believe what she is told about our emotions. Believing things because the ascriber has a certain attitude to the ascriber, though, makes her vulnerable to credulity. In interlocution, believing everything one hears on the news may lead one to accept things that are not correct or

accurate. The same applies to emotion ascriptions. Accepting that one is depressed because this is what a doctor says may lead the person to believe a wrong diagnosis and prevent her from understanding her real emotion.

The second kind of justificatory ground does not rely on background information. In this case, the receiver simply takes at face value what people say. She does so when they tell her the time, when they say that it rains outside, that it is cold, or that the train is late. In these cases, she has no background reasons to believe what she is told. She believes messages conveyed in interlocution simply because she understands their content and force, and they come from speakers that seem normal and rational.⁴⁰ This is also true of emotion ascriptions. When someone tells her “You look sad today”, she is in a position to learn that she is sad simply by taking the ascription at face value. This requires her to understand that the message is about her emotion, and not about how she looks to the ascriber. It also requires her to understand that the message is an assertion, and not a question or another kind of speech act. In these circumstances, she comes to know that she is sad simply by taking at face value what the ascriber says about her emotion. This way of learning things about herself does not expose her to the sorts of problems that affect acquisition of knowledge via background reasons. In particular, by taking at face value what the ascriber says, the ascribee does not appeal to what she already knows about herself, nor does she take the ascriber to be competent or reliable in some special way. She simply believes the emotion ascriptions on the basis of her understanding of it. When the ascription is an expression of knowledge on the ascriber’s part, the ascribee comes to know that she has a certain emotion.

⁴⁰ BURGE 1993.

It is worth noting that this does not provide the subject with knowledge of the emotion object. This is because being told that she looks sad does not say anything about what she is sad about. Most emotion ascriptions only provide knowledge of the kind of state one has, not of its object. It is only in a few cases that emotion ascriptions convey information about the emotion object. This generally occurs when the context allows the ascriber to identify the object. For example, the ascription “You are worrying too much about this thing” makes anaphoric reference to an object that has been mentioned during the conversation and which is the emotion object. However, evidence from the context is not always available. Moreover, some emotions are directed at objects represented in thought. This means that the ascriber cannot observe the emotion object because it is not a physical object in the environment but a mental content of the ascriber.

There are some exceptions, for instance when the emotion is caused by perception. Perception is awareness of objects. Objects of perception are physical entities located in the environment. When the emotion is directed at an object presented in perception, it is possible for the ascriber to observe it and make an ascription that also conveys information about the emotion object. Joint attention typically allows for this possibility. Consider the following example. The ascriber sees someone to whom she is attracted. A friend observes both the emotion in her expression and the person in relation to which the emotion arises. Then she says: “You seem to like him.” By listening to the ascription and believing it, the ascriber comes to know what emotion she has and also its object. This possibility is not always available. In most cases, people can see emotions in others’ expressions and yet are unable to comprehend what the

emotions are about. So, in most cases, emotion ascriptions form the basis for knowing what emotions one has, but not what the emotion objects are.

It is plausible to say that, when the ascription does not convey information about the emotion object, understanding situations or the content of one's own thoughts are essential to gaining knowledge of the emotion objects. For example, I understand that the object of my anxiety is tomorrow's session with my dentist because I keep thinking about it and it is then that I feel worried. A similar explanation applies to knowledge acquired through emotion ascriptions. When the ascriber is told "You don't seem happy", she may come to know that she is not happy, but not what she is unhappy about. It is when she understands either what she is experiencing, or the content of her thoughts, that she may know what she is unhappy about.

6. Conclusion

I have shown that we know emotions by experiencing them in the form of emotional feelings. These experiences give us reason for self-ascribing emotion predicates corresponding to the emotion concepts that the emotional feelings instantiate. It is through this procedure that we know what kinds of emotions we have. This is not the only procedure available. In some cases, we know emotions by understanding the relation between the content of our thoughts and what we feel. In others, we know emotions by perceiving them in our expressions and by considering our behaviour.

Emotions are essentially directed at objects. This means that we have full knowledge of emotions only when we know the emotion objects. These are entities that are either presented in perception or represented in thought. In the

first case, we know the emotion objects by perceiving the object or situation in response to which the emotions arise. Sometimes perception is not sufficient, and so we need to *understand* the situation. In this case, we know the objects by understanding the content of our thoughts.

Emotions may not manifest themselves in emotional feelings. This does not mean that we cannot possibly know them. Other people can perceive emotions in our expressions. Perception of the expressions may yield knowledge of the emotions that produce them. Such knowledge can be expressed by emotion ascriptions which have the potential to inform the ascriber about the emotions she has even when she does not feel them. This procedure does not necessarily warrant knowledge of the emotion objects. Ascriptions convey information about emotion objects when emotions are caused by perceptions of objects in the environment. The ascriber then observes both the emotion and the object at which the emotion is directed, and conveys information about both the emotion kind and object to the ascriber. When emotion objects are not located in the environment because they are represented in thoughts, ascriptions only convey information about the emotion kinds. In this case, the possibility of knowing the emotion objects rests solely on the ascriber's ability to understand her own psychological life.

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