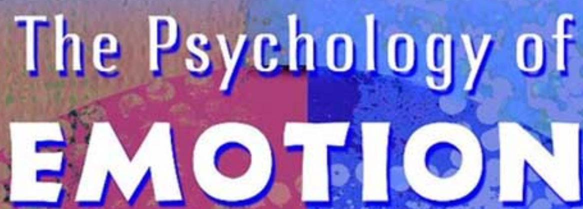

FIFTH EDITION

K.T. STRONGMAN

The Psychology of Emotion

Fifth edition

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The Psychology of Emotion

Fifth edition

From Everyday Life to Theory

K. T. Strongman

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Christchurch, New Zealand

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West Sussex PO19 8SQ, England

Telephone (+44) 1243 779777

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John Wiley & Sons Australia Ltd, 33 Park Road, Milton, Queensland 4064, Australia

John Wiley & Sons (Asia) Pte Ltd, 2 Clementi Loop #02-01, Jin Xing Distripark, Singapore 129809

John Wiley & Sons Canada Ltd, 22 Worcester Road, Etobicoke, Ontario, Canada M9W 1L1

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Library of Congress Cataloging-in-Publication Data

Strongman, K. T.
The psychology of emotion : from everyday life to theory / Kenneth T. Strongman.– 5th ed.
p. cm.
Includes bibliographical references and indexes.
ISBN 0-471-48567-5 – ISBN 0-471-48568-3 (pbk.: alk. paper)
1. Emotions. I. Title
BF531 .S825 2003
152.4–dc21 2002155461

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN 0-471-48567-5 (hbk)
ISBN 0-471-48568-3 (pbk)

Project management by Originator, Gt Yarmouth, Norfolk (typeset in 10/12pt Times and Stone Sans)
Printed and bound in Great Britain by Biddles Ltd, Guildford and King's Lynn
This book is printed on acid-free paper responsibly manufactured from sustainable forestry in which at least two trees are planted for each one used for paper production.

For my family, past and present, now delightfully blended, and especially for Averil, who makes anything possible

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Preface

A fifth edition. Phew! Over a 30-year time span. Where has it gone? Putting such thoughts to one side, the great thing is that during those 30 years the study of emotion has begun to come of age, in a serious way. In the early 1970s there was little information and a general eschewing of emotion by psychologists. The reasons for this are best developed in another context; for now it is enough to say that the study of emotion seemed a little difficult to pursue with the type of scientific rigour that many psychologists had come to believe was the only way forward. No matter that emotion is an integral part of human existence.

Because emotion is inescapable, its study had to develop, and the various editions of this book have reflected that development. Meanwhile, many other texts on emotion have appeared, to the great credit of those who have produced them. At last, we are getting somewhere and not merely within psychology. Emotion is such a ubiquitous aspect of life that it can be viewed from multiple perspectives.

Moreover, in the last few years, the importance of emotion in everyday life, at work, in sport, at home, within the arts and so on has also come to be recognised *by those who study it*. Of course, its importance in those contexts has long been recognised by those who don't study it. But that is another matter. Received wisdom, both of the everyday sort and the academic variety, is at last moving away from the idea that emotion is to be contrasted with reason and then ignored as irrelevant. Emotion has its part to play throughout the lives of all of us, every day. Indeed, it is the very stuff of those lives. So how we regulate emotion, whether or not we might be described as emotionally intelligent, and in what ways emotion can dysfunction, if at all, have come to be hot topics. Even within the realms of clinical psychology, the role of emotion is no longer simply assumed – it is now being studied.

So, what of this fifth edition of *The Psychology of Emotion*? The fourth edition made an honest attempt to deal with emotion from a theoretical perspective, not ignoring empirical work, but not discussing it in detail either. The reason for this was that there was simply too much empirical work to consider in a single text that was aimed at being inclusive. Naturally, however, empirical work informed the synthesis attempted in that edition. The present edition remains theoretically based, its structure similar to the

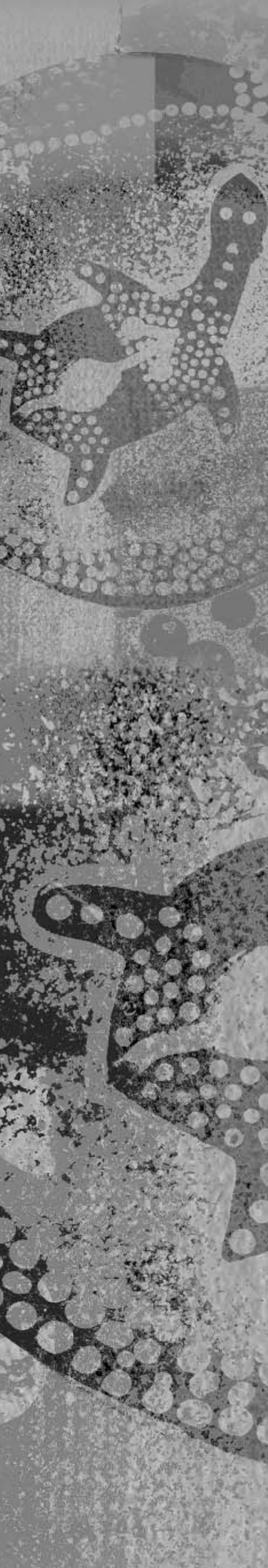
fourth edition. It has of course been brought up to date as far as possible, any omissions being entirely due to a lack of diligence on the part of the author. If there are such omissions and they are irritating, then I apologise. A negative emotional reaction is the last thing that a book on emotion should engender.

The attempt has also been made in this edition of the book to bring it into everyday life, having the various theoretical approaches reflected by creating examples that are grounded in the world at large. If any theory about human existence, no matter from which discipline it derives, cannot be so grounded then one would question its usefulness. Similarly, by asking the reader questions that are aimed at being provocative, the goal has been to give the book an applied flavour. Thus, each chapter begins and ends in this way, even though the middle ground might be quite heady, theoretically. For me, the interplay between theory and the practicalities of daily life are what psychology and the other social sciences depend on.

In detail, some chapters are quite similar in the fourth and fifth editions and some are very different. This reflects what has happened in the intervening six or seven years and how the interests of those who work in the field have developed. Themes have emerged and are strengthening. For example, there is a fine interplay between the biologically based theorists, consistently taking a functional, evolutionary view of emotion, and the social constructionists, who prefer to emphasize societal influences on emotion. Postmodern thought is in there, as are recent developments in cultural theory and a consideration of the role of emotion in the moral order, long discussed by philosophers.

This is sufficient to give an idea of what has been attempted in this fifth edition. Those who read it should learn much about emotion theory and should be able to understand emotion within an everyday framework. That, at least, is the aim.

As ever with a book, one owes a debt to many people. The most important of these are my family to whom this book has been dedicated, but there are also others. I thank all those theorists who have written so cogently in their attempts to grapple with such a basic but nevertheless difficult topic. In particular, I include here the members of the International Society for Research on Emotion. They are a fine interdisciplinary group of scholars who have moved our understanding of emotion on apace. I am also indebted to year after year of graduate students who share my enthusiasm for the study of emotion. Their freshness is invigorating and their insights significant. It is always a privilege to be with them. And it has been a privilege to have been prompted by the publishers into this fifth edition.



Chapter 1
An introduction

It is inconceivable to me that there could be an approach to the mind, or to human and animal adaptation, in which emotions are not a key component. Failure to give emotion a central role puts theoretical and research psychology out of step with human preoccupations from the beginning of recorded time.

R. S. LAZARUS, 1991

'Normal insanity' begins when the emotions are aroused.

C. G. JUNG, 1940

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Some real life

It is late at night and you are sitting quietly. The neighbours are all away. Suddenly, there is a huge thump on the front door, a scream and then a deathly quiet. You pick up the telephone extension to make a call and hear your partner having a quietly intimate conversation.

You are in the manager's office waiting for him to return. You decide to peek at the papers on his desk and as you do so he walks in.

You check your lotto ticket and find that you have won $10,000.

You are out walking and coming towards you you see a close friend who has been away for some years.

You are out walking with your partner and are suddenly surrounded by a bikers' gang blasting you with aggressive dust and noise.

Emotion is a daily, if not a moment-by-moment, occurrence. However, a treatise on emotion theory has to jump away temporarily from the everyday and instead begin with a consideration of what makes a good theory of emotion. If one were setting out to build a theory of emotion, what would one necessarily include, what issues would *have* to be dealt with? Although these are perfectly reasonable questions, they do not delve quite far enough. In order to make judgements about what is a good theory of emotion it is important to have some understanding of what makes a good theory in general, or, if not in general, at least in the science of psychology. This, then, is the starting point.

There have been many penetrating analyses of the characteristics of good theory, but to reiterate them would be to go too far. It is enough to mention a few that might be considered particularly significant in the context of the present endeavour.

Any theory should not only provide a cogent summary of some aspect of the world but should also have reasonable explanatory power. In the world of emotions, does a particular theory explain things that other theories do not? Does it explain things better than other theories? Related to this, is a theory expressed in a language that is (logically) consistent?

Of course, it is often not these two characteristics that are put first in any consideration of the value of a scientific theory. Frequently, pride of place is given to the degree to which a theory leads to testable predictions. Of course, this is an important characteristic of theory evaluation, and should be taken into account, but it is not *the* most important. Nor, in the view of the author, is it a necessary aspect of good theory.

Arguably of more importance than the capacity to generate testable predictions, in an area as complex and fraught with difficulties as emotion, the worth of a theory might depend more on the extent to which it generates new ideas or provides new ways of looking at things. If a theory prompts a critical re-evaluation of thought, which in turn might lead to the sort of theory from which testable predictions jump out, then it has been worthwhile.

Finally, when considering theory on this broad front, and particularly in an area as wide-ranging as emotion, there is the question of the focus of the theory. Is it general or is it more circumscribed and critical. There might be a cogent and useful theory of emotion in general or of fear or guilt in particular. There might be a theory that is concerned solely with the links between emotion and memory or with emotional expression and recognition, for example. Or a theory might have far broader concerns; for example, with the links between emotion and culture. Both types of theory have their place, but it is important that the extent of a theory's domain be made clear. Again, this is a general quality on which it is important to judge the worth of a theory.

What a theory of emotion should do

With these more general concerns as a background, the foreground is taken up with emotion theories themselves. What should they accomplish if they are to be judged as worthwhile, as *good* theories? A useful way of attempting to answer this question is to consider the views of some of the more recent emotion theorists.

However, standing out from the foreground is emotion itself; the true starting point has to be what it is that the theories are set to account for. A general theory of emotion must have a place for a scream of anguish, a sob of grief, a peal of laughter, a blush of embarrassment and a squirm of shame. It has to deal with stomach-knotting disgust of putrefaction, the pride in a child's achievements and the yearning to be nurtured (*amae*) that characterizes Japanese society. It should have room for the seeming threat to life of a panic attack and the suicidal despair and hopelessness of clinical depression.

Emotion permeates life, it is there as a subtext to everything we do and say. It is reflected in physiology, expression and behaviour; it interweaves with cognition; it fills the spaces between people, interpersonally and culturally. Above all, emotion is centred internally, in subjective feelings. Like physical pain, emotion provides us with personal information that is integral to our well-being or, in the extreme, to our survival.

To return to the characteristics of a 'good' theory of emotion, Lazarus (1991a, b) lists 12 issues that any theory of emotion should address:

(1) definition;
(2) the distinction between emotion and non-emotion;
(3) whether or not emotions are discrete;
(4) the role of action tendencies and physiology;
(5) the manner in which emotions are functionally interdependent;
(6) the links between cognition, motivation and emotion;
(7) the relationship between the biological and sociocultural bases of emotion;
(8) the role of appraisal and consciousness;
(9) the generation of emotions;
(10) the matter of emotional development;
(11) the effects of emotion on general functioning and well-being; and
(12) the influence of therapy on emotion.

In fact, that those who write about emotion agree with the importance of these issues can be seen in their coverage in almost any text that has appeared on emotion in recent years. There are also one or two other issues that are typically mentioned, although they are not considered by Lazarus. They will be returned to later.

In order to deal with all these matters, Lazarus argues that any theory of emotion must put together the numerous eliciting conditions and mediating processes of emotion. To bring this about, such a theory has to make propositions of various sorts. For example, there must be statements based on emotion seen as a dependent variable. So the causes of emotion should be addressed, from personality to environment, from culture to appraisal. Other propositions should derive from emotion viewed as an independent variable (i.e., the effects of emotion). Moreover, from Lazarus's perspective, there must be propositions about specific emotions. Naturally, these must be consistent with the general propositions and must depend on decisions about what particular emotions to include. This, in turn, depends on whatever is the initial definition of emotion, thus bringing the theoretical endeavour back to its starting point.

To take a slightly different approach to the question of what any theory of emotion should take into account, it is instructive to consider Oatley's (1992) stimulating contribution. In a book that is avowedly Aristotelian in approach and reliant on a cognitive science perspective, he lists seven postulates which form the basis of Oatley and Johnson-Laird's (1987) communicative theory of emotion. This will be dealt with in detail later, but for now the areas of the postulates will be listed. They concern:

(1) the function of emotions;
(2) discrete emotions in which there is a bridge between folk theory and scientific theory;
(3) the unconsciousness of the individual of the causes of emotion;
(4) the interpersonal communication of emotion;
(5) emotions as dependent on evaluations of events to do with goals;
(6) basic emotions, with distinctive physiology; and
(7) the ability to simulate the plans and understand the emotions of other people.

The sort of theory that Oatley espouses might be from a particular viewpoint, but it is nevertheless very far-reaching. Clearly, its propositions overlap with the sort suggested by Lazarus, but they do no more than overlap. They have a different emphasis. Oatley proposes that there are two types of test to which the sort of theoretical emphasis he suggests might be put. His point, although self-directed, has a more general application. The Lakatos (1978) sort of test is that a theory can deal with more of the evidence that is considered relevant than any competing theories. The Popper (1945) sort of test is that there can be derived from the theory specific predictions that should cast doubt on the theory if they are not supported.

Considering Oatley's views on what should be accomplished by a theory of emotion also suggests the possibility that perspectives on this will depend to some extent on the breadth of the theory. It might be reasonable to suppose that *any* theory of emotion should be broad enough to include most or all of the facets of emotion that are typically studied. There should be room for matters physiological, behavioural, cognitive and experiential. Consideration should be given to the develop-

ment of emotion, to its abnormal or pathological aspects, to the fact that it is primarily a social phenomenon and so on. However, in spite of these theoretical moral imperatives, not all emotion theorists take such a broad approach. Some put most of their eggs in only one theoretical basket. Naturally, this has implications for what *their* type of theory might be expected to achieve.

It is perhaps instructive to take an extreme example. Denzin (1984) takes an entirely social phenomenological perspective on emotion. This means that any study of emotion must be from within and concerned with the lived emotion, it must be situated in the natural world (of lived experience), and then to search for the meanings of emotion quite independently of the propositions and methods of natural science. Following phenomenological description there must be interpretation, any and all such interpretations being restricted to the lived experience of emotion.

Denzin goes on to list various criteria for judging phenomenological interpretation. The results of any interpretations are then put into a context, a putting of emotion back into the world. Finally, and somewhat ironically in the present context, Denzin points out that the goal is not to test theory, but rather to make descriptive interpretations. In short, any social phenomenological approach to emotion must involve 'deconstruction, capture, reduction, construction, and contextualization' (Denzin, 1984, p. 10). As should be obvious, such criteria for this type of study bear little resemblance to those that might be suggested for the appraisal of emotion theories within the framework of natural science. As will be seen much later in this text, however, they begin to be relevant to some of the more recent approaches to emotion, within a post-modern framework, for example.

A problem that follows from this type of analysis is whether or not there should be an insistence on any theory of emotion having to cover all its facets rather than being restricted to one or other of them. This will depend on one's viewpoint. On the one hand, anything goes, and anything that is relevant theoretically, however narrowly it might be aimed, is useful. On the other hand, some might argue that a full understanding of a topic as broad as emotion will only devolve from theoretical perspectives that are equally broad. The present view is that the narrower perspectives are useful and can be placed within a broader context by others.

How to use this book

As should be obvious by now, the aim of this book is to give an overview of theories of emotion and to consider their worth. The structure of the book is simple. The many theories of emotion, and there are at least 150 covered here, can be categorized according to their particular emphases. The major emphases are: phenomenological (Chapter 3), behavioural (Chapter 4), physiological (Chapter 5) and cognitive (Chapter 6), developmental (Chapter 9), social (Chapter 10) and clinical (Chapter 11). Each of these will be dealt with and the main theories within each will be summarized and a concluding evaluation made.

There are also the theories from which, in one sense, all the others derive – the historically early, background theories (Chapter 2). There are theories that deal only with specific emotions (Chapter 8), such as anger or anxiety, and there are theories in

which emphasis is placed on the individual or the environment or even more broadly the culture, including work, sport and the arts (Chapters 12 and 13). And, of course, there are ambitious theories in which the attempt is made to do everything (Chapter 7). Again, all of these approaches will be considered, theories summarized and evaluations made.

Consideration will also be given to theories of emotion that have their origin outside psychology in related disciplines such as philosophy, history, anthropology and sociology (Chapter 14). Finally, the themes to which all these theories give rise or which may be said to run through them will be abstracted and discussed. Moreover, recent theories of emotion that cut across a number of disciplines will also be canvassed, those stemming from social constructionism or from the postmodern approach to social science, for example. At this point, if it is possible to draw conclusions they will be drawn (Chapter 15).

To have a book devoted to theories of emotion may seem like a rarefied academic abstraction, a goal far removed from the practicalities of daily living that psychology and the other social sciences must ultimately derive from and return to. However, the aim of this book is to appraise and synthesize the attempts that have been made to understand emotion, but to do so in a way that does not lose sight of the commonplace. There are by now many texts and thousands of journal articles that report the results of empirical research on emotion of all persuasions and multiple methodologies. According to Cacioppo and Gardner's (1999) thorough review, recent empirical research on emotion has centred on: procedures for eliciting emotions, measurement, mapping the temporal dynamics of neural-processing, comparisons of laboratory and field settings, linguistic analyses, self-report methods, pan-cultural agreement in emotion judgements, cerebral asymmetry, the nature of basic emotions, individual differences in emotion, emotional intelligence, facial signals, links between emotion and cognition, and the functions of emotions.

Of course, the content of the present book is informed by this research either directly or indirectly. The present goal, though, is to ground an understanding of emotion, however theoretically sophisticated it might be, in everyday life and the world at large, with all of its foibles. In the end, the essence of any science is the interplay between observation and theory and between rigorous thought and practical application.

The attempt has been made to realize the interplay between everyday emotion, on the one hand, and intellectually and academically derived theories of emotion, on the other hand, in two ways. Each chapter begins with examples of emotion taken from everyday life, examples that are sometimes returned to. And each chapter ends with a section called 'A question of application' (except this one, of course). In this are listed questions that derive from the theories discussed, but which are aimed at pulling the reader back into a consideration of emotion in daily life. It is hoped that these two aspects of each chapter can be used to focus study and thought and to help form the bridge between everyday life and the world of scholarship.

Summary

- Any theory can be judged on its explanatory power, language, testability, ability to generate new ideas and its focus.
- Emotion is a multifaceted, ubiquitous provider of personal information.
- Lazarus and Oatley provide cogent accounts of what a successful theory of emotion should address.
- The aim of this book is to synthesise and appraise attempts to understand emotion while remaining grounded in everyday life.

Further reading

Denzin, N. K. (1984). *On Understanding Human Emotion*. San Francisco: Jossey-Bass.
Lazarus, R. S. (1991). *Emotion and Adaptation*. New York: Oxford University Press.
Oatley, K. (1992). *Best Laid Schemes*. Cambridge: Cambridge University Press.

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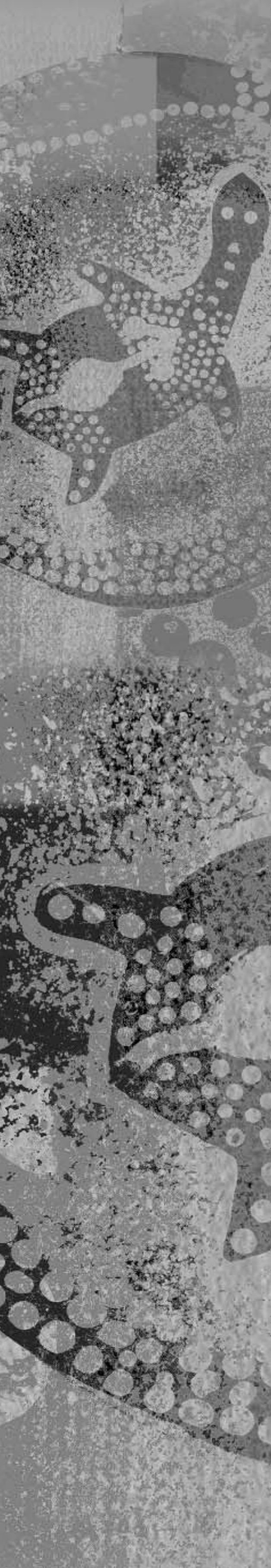

Chapter 2
Early theory

An emotion is a complex psychical phenomenon

JAMES SULLY, 1920

Our most important thoughts are those that contradict emotion

PAUL VALÉRY

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Some real life

Don't let your heart rule your mind. Don't be carried away by your emotions. You'll never make it in business if you allow yourself to be governed by your emotions. Be rational. Keep calm. Don't lose your temper. Don't give in to your anxiety. Feel the fear and do it anyway. You shouldn't feel sad (angry, ashamed, guilty, anxious, happy and so on) – what foolishness: feelings cannot be wrong.

Emotion theory had its origins in philosophy and was for many years contrasted with reason and seen as something to be worked against, guarded against or at least kept on a tight rein. At the end of the 19th century and the beginning of the 20th century, psychologists, and others, then began to be interested, as their own discipline developed. The aim of this chapter is to provide a brief overview of the earlier theories, some of which still have a mild influence today. Although this will give a historical context for the remainder of the book, it can easily be omitted by any reader who either has the context already or who believes it to be unnecessary.

Early philosophical theories of emotion

Both to provide a sort of baseline and a little for the sake of completeness, any account of the theories of emotion should go back further than William James. This is especially so when emotion is considered to be more than a purely psychological phenomenon, as is the case here. The aim in this section then is to paint an outline of some of the early philosophical views of emotion, but with a few broad brush strokes. Far more complete introductory overviews of the philosophy of emotion are given by Lyons (1992) and Solomon (1993).

To begin where most philosophical accounts of anything begin, Plato seemed rather to look down on emotion. Reason, spirit and appetite made up his tripartite soul, so emotion had no central position. If anything, Plato saw emotion as something that confounds, interrupts, gets in the way of or otherwise detracts from human reason. Solomon argues that Plato placed emotion somewhere between spirit and appetite, but it is clear that he viewed it as base. Amazingly, this view is still prevalent in everyday folk theory about emotion. We are expected to curb our base passions, even though few other than evangelical preachers would use such language any more.

For Aristotle emotions were much more interesting facets of existence. He viewed them as being accounted for by a mixture of higher cognitive life and a lower sensual life. Pre-dating much of modern cognitive psychology, Aristotle saw at least some of our feelings as arising from our views of the world around. He also saw emotion as being linked with pleasure and pain, and listed various specific emotions such as anger, fear and pity.

Aristotle also made an interestingly complete analysis of anger, which he based very much on the idea of a 'slight', and also stressed the importance of revenge, a behavioural component. According to Solomon's (1993) analysis, Aristotle's account of emotion should be seen within an ethical framework. Viewed in this way, emotions such as anger are in some cases justified and in others not. Again, this view permeates much of everyday thought; some people judge others with respect to the appropriate-

ness or not of their emotional reactions. 'You shouldn't be feeling jealous; you should be flattered.' 'You shouldn't feel afraid; it won't hurt.'

Although Aristotle's ideas on emotion clearly strike chords today, they did not last for long at the time. Lyons (1992) believes this was because the theologians who followed tried to transform Aristotle's ideas back into Plato, which of course had very little role for emotion. The second reason that Aristotle's account of emotion fell into disfavour according to Lyons also happens to be the reason for the eventual development of many new ways of looking at emotion – namely, the 17th century rise of a science based on observation and experiment. In effect, Aristotle's cognitive account of emotion had to wait to be revived until the new science could embrace cognitions more generally.

Following Aristotle, it was Descartes' conceptualization of emotion that was to predominate until psychological theories started to be generated at the end of the last century. Descartes' name is almost synonymous with dualism, there being a physiological body and a mind that somehow also doubles up as a soul and mediates a decidedly non-corporeal consciousness. Within this framework, Descartes placed emotions uncompromisingly in the soul and made them a solely human affair – animals only have bodies.

As with Aristotle, Descartes' account of emotion was essentially cognitive. Foreshadowing much of what was to come from psychology, Descartes had a place in emotion not only for physiological changes and behaviour but also for mental processes such as perception, belief and memory. But the experience of emotion and hence its essence or core takes places in the soul. The information about the world is carried to the soul via the pineal gland, the soul makes its deliberations and then sends messages back to the body, again via the pineal gland, about what to do. However, the most significant aspect of this is the conscious experience that is occurring in the soul. Animals might be able to react bodily as though experiencing emotion, but the *experience* is actually impossible for them. After sending messages to the body, the soul then produces '. . . a final mirror-image feeling of all that is going on' (Lyons, 1992, p. 299). This is emotion.

As Solomon (1993) points out: for Descartes, emotion was one type of passion. Passions are not like 'clear' cognitions and are rather hazardous to judgement. Emotions are particularly difficult in this way, even though it is possible for reason to have an effect on them. So, from this view, it is possible for us to manipulate our emotions to some extent, even though they tend to obscure proper judgement. This is perhaps an early precursor to the view that emotion regulation is not only possible but an integral part of daily life. Like many who have followed him, then, Descartes had a somewhat confused view of emotion, although he did place it in the soul and therefore as among the higher, more interesting capacities of human beings. His primitive passions of wonder, love, hatred, desire, joy and sadness are not base and animal-like, but particularly human.

Darwin

Darwin had an important influence on the early understanding of emotion, as he had an important influence on many things. His contribution is nowhere better

summarized and commented on than in Fridlund (1992), on which what follows largely depends.

In very brief summary, in *The Expression of the Emotions in Man and Animals* (1872), Darwin suggested that emotional expressions have not evolved, they do not depend on natural selection. Instead, he argued that they are either simply dependent on the way in which the nervous system is wired or possibly are remnants of old habits. What Darwin sought to achieve was, as part of his general thesis, to place humans on a continuum with other animals, based on his documentation of emotional expressions across a range of species. He also sought to point out that the facial expression of emotion is not really an expression at all, but merely something that goes along with the emotion; it has no communicative function. This might have been an interesting point to make at the time, but more recent thought has clearly shown the usefulness of seeing emotional expressions as having a communicative function.

Fridlund (1992) points to two developments that cast more than doubt on Darwin's views of facial expression: '... the rediscovery of Mendelian inheritance led to the refutation of the Lamarckian use-inheritance mechanism for hereditary transmission' (p. 128). The second development was that of adaptationist accounts of signalling behaviour. So, ironically, Darwin's own insistence on natural selection led to the downfall of his non-adaptationist accounts of expressive displays.

Replacing Darwin's views of expressive movements are accounts in terms of information in which '... the ecology of social interaction is shaped by co-evolution of displays of social intent with the vigilance for them' (Fridlund, 1992, p. 130).

Perhaps the major, lasting influence of Darwinian thinking on an understanding of emotion is a predilection among many theorists to adopt a functional perspective. However, there is sometimes confusion between function in an evolutionary sense and function in an everyday sense. This issue will be returned to in Chapter 5.

McDougall

McDougall's theory of emotion (1910, 1923, 1928) depended on some basic biological considerations and on an attempt to distinguish between emotions and feelings and was also linked closely to motivation. He believed that the capacity to approach beneficial goals is fundamental to psychological functioning and that all behaviour stems from seeking food or from escaping or avoiding noxious stimuli. He argued that what we term 'emotions' occur as adjuncts to these basic processes, arising from the way in which we perceive our environment and our various bodily changes.

Although McDougall believed that just two feelings, pleasure and pain, modify all of our goal-directed behaviour, he also recognized the cognitive nature of human beings. This gives them expectations, allows experiences to be fused and sets up unusual concentrations of feelings. It is this cognitive aspect that sets humans apart from other animals and allows a more complex life than would be afforded by the simple alternation of pleasure and pain. Through everyday use these complex feelings have come to be known as the emotions, although these are not 'real' emotions.

As further background to his theory of emotion, it is also necessary to mention the emphasis McDougall placed on instincts, which he believed to provide the impetus

for all thought and action. One of the many facets of McDougall's instincts is that of emotional excitement, which he argued is reflected in discreet visceral and bodily changes.

He also implied that perception triggers emotion. So, for example, an organism might perceive a threatening stimulus, which would provoke it both to flee and to feel fear, the entire process reflecting a basic instinct. However, he is not clear about how the instrumental and emotional aspects of such reactions become connected and did not ever say much about precise bodily reactions of cognition.

McDougall's theory of emotion depended on the view that throughout human evolution goals became more specific and goal-directed behaviour became more specialized. This resulted in more precise and particularized bodily adjustment. The experience of these two types of strivings gave the quality of 'primary emotion'. If two or more of these main bodily reactions conflict, then experientially the result is the secondary or blended emotions.

McDougall (1928) made some points of comparison between complex feelings (which are not emotions) and emotions proper, whether primary or secondary:

(1) 'True' emotions are what make each impulse distinctive and have no effect on later strivings. By contrast, complex feelings are conditioned by success or failure in our strivings and hence colour any subsequent similar impulses.
(2) Real emotions appeared before humans on the evolutionary scale, whereas complex feelings are restricted to humans because they depend on cognitions. Emotions are independent of cognition.
(3) Each primary emotion is long-lasting; it is 'an enduring feature of the mental structure of the organism'.

Again, by contrast, complex feelings are not entities like this; they simply reflect ill-defined and unblended ranges of experience and feeling. Each emotion is associated with desire and so, unlike complex feelings, conflicting desires may produce blends of emotion. These subtle distinctions are not easy to catch, so it may help to compare the everyday experience of the 'true' emotions of fear and curiosity with the 'complex feelings' of anxiety and hope.

James–Lange

The James–Lange theory is probably the best known of all theories of emotion, if for no other reason than that it has generated a controversy that has spread from the 19th to the 21st century. Perhaps because of this it has also acted heuristically and stimulated other theories and much research. As is well known, the theory was put forward at much the same time by James and Lange (1884 and 1885, respectively), although James was its main exponent.

James limited his field to emotions that have 'a distinct bodily expression'. His aim was to distinguish between mental processes that have no obvious physiological concomitants and those in which straightforward and hence easily observable changes

occur. He characterized, rightly, the everyday (now, folk psychological) way of theorizing about these emotions as being:

(1) we mentally perceive something;
(2) this produces a mental affect (the emotion); and
(3) this produces some bodily expression.

However, he argued for the converse of this:

the bodily changes follow directly the PERCEPTION of the existing fact, and that our feeling of the same changes as they occur IS the emotion.

W. JAMES, 1884, p. 189; italics and capitals his

To put this in terms of an example, in terms of the everyday theory, rather than face some public performance to which we are unused *at this point we become anxious* and then have butterflies in the stomach, tremble, stutter and so on. In James's terms we face the public performance, have butterflies, tremble and stutter and *as a result feel anxious*. James was making a clear volte face on previous thought, the guts of his theory depending on the view that the visceral discharges associated with some external situation actually lead to the emotion as we know and experience it.

Support for this theory was based largely on introspection. The argument can be reduced to a few main points. James asserted that any sensation has extremely complex physiological manifestations and that these are all felt, some obviously, some more obscurely. We imagine some strong emotion and then try to push from consciousness all feelings of the bodily symptoms associated with it. If we do this successfully, then in James's terms there will be nothing left; the emotion will be gone. He cited many examples of how everyday situations lead to these complex, strong bodily feelings (seeing a child peering over the edge of a cliff, for example) and argued that his case is supported by the idea of how easily we can classify both normal and abnormal behaviour according to bodily symptoms.

The James–Lange theory can be most easily summarized as in Figure 1. The main points of the theory are that afferent feedback from disturbed organs produces the feeling aspect of emotion. Any cortical activity that comes from this feedback is the emotion itself. It should be remembered that James not only emphasized the role of the viscera in emotion but also gave a similar role to the voluntary muscles. This laid the groundwork for a search for bodily patterns in emotion and for theories that stress the significance of facial expression in emotion.

James (and Lange) produced the first fully psychological theory of emotion, one that assumed the existence of discrete emotions, which themselves have an instinctive basis and are separable from certain feelings. So, for example, in James's conception stimuli that come from colours and sounds lead not only to non-emotional feelings on a pleasantness/unpleasantness dimension, but also non-emotional feelings of interest/excitement from intellectual activity. This type of point, as well as James's theory in general have continued to influence theoretical developments in emotion to the present day. There is an inherent untestability about the James–Lange theory that has proved a

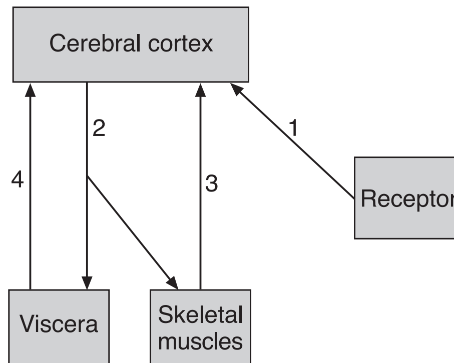

Figure 1. Diagrammatic representation of the James–Lange theory (arrows show direction of function).

consistent irritant. On the other hand, in stressing the importance of the viscera and of facial expression it has had far-reaching effects.

Although James is remembered for stressing that emotional experience follows behaviour, Izard (1990) reminds us that the most important part of James's theory was the view that emotion is feeling, that without feeling it does not exist. Although many contemporary theorists merely nod in the direction of James, Izard believes that those who stress motivation owe him a great deal while behavioural scientists have virtually ignored James's core beliefs. Furthermore, in a painstaking analysis of James's writing on emotion, Barbalet (1999) points out that much of this writing has been overlooked or misrepresented. He argues that, in spite of James's provoking more than a century of research of one type, ignoring his analysis of emotion and social action has inhibited the development of the social psychology of emotions.

Cannon (Cannon–Bard theory)

Cannon's views on emotion were put forward, first, in reaction to those of James and, second (with Bard), in order to propose an alternative theory (1915, 1927, 1931, 1932). Cannon made five major criticisms of James's theory:

(1) The artificial production of visceral changes does not seem to lead to emotion.
(2) There is (or there was at that time) no evidence for visceral response patterning in emotion.
(3) Visceral organs have little sensitivity; any feedback from them could hardly be used to differentiate emotions.
(4) If the viscera are separated surgically from the nervous system then emotional behaviour still occurs even though no visceral responses can be made.
(5) The viscera react slowly. Emotion could occur only at least one second after external stimulation. At times, subjectively, it seems to be faster than this.

It should be pointed out that, some years later, Schachter (e.g., 1964) effectively argued against the first three of these points. He showed that the viscera appear to be a necessary although not a sufficient condition for the occurrence of emotion, although it is hard to be certain that emotion cannot occur without visceral involvement. Moreover, Mandler (1962) argued that Cannon's points (4) and (5) can be accounted for by the fact that after the initial formation of emotional behaviour it may then become conditioned to external stimuli, and therefore may occur before visceral change or without its intervention.

These points of criticism, plus other evidence suggested to Cannon, that the neurophysiological aspect of emotional expression is subcortical, or more particularly thalamic. He argued that all emotions depend on a similar chain of events. An environmental situation stimulates receptors that relay impulses to the cortex. The cortex, in turn, stimulates thalamic processes that act in patterns corresponding to particular emotional expressions. Cannon believed that nothing more specific is required than that the neurons in the thalamus be 'released'. The nervous discharge from the thalamus has two functions: to excite muscles and viscera and to relay information back to the cortex:

> ... *the peculiar quality of the emotion is added to simple sensation when the thalamic processes are aroused.*
>
> W. B. CANNON, 1927, p. 119, italics his

So, when the thalamus discharges, we experience the emotion almost simultaneously with the bodily changes.

Cannon's theory is represented in Figure 2. He brought into regard the importance of the thalamus to emotion and produced some anti-James arguments that

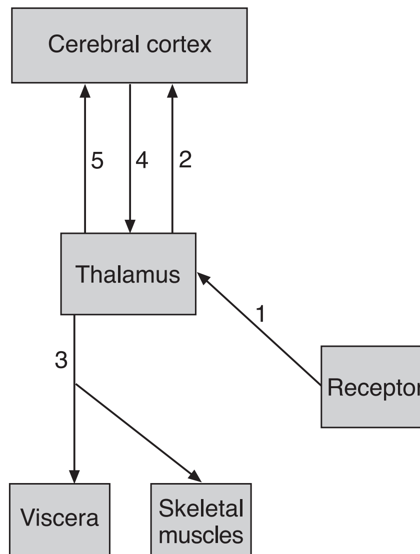

Figure 2. Diagrammatic representation of the Cannon–Bard theory (arrows show direction of function).

seemed cogent at the time. However, the particular significance of Cannon's theory lies in its emphasis on the neurophysiology of emotion. As will be seen in Chapter 5, this has culminated in some recent theorizing about emotion, which is among the most sophisticated to be found.

Papez

After Cannon, Papez's (1937) theory of emotion was the next to have a physiological basis. He emphasized the connection in lower vertebrates between the cerebral hemispheres and the hypothalamus, and between the cerebral hemispheres and the dorsal thalamus. According to Papez, these interconnections, further elaborated in the mammalian brain, mediate emotion.

Papez's theory depended on the simple view that emotion implies behaviour (expression) and feeling (experience, subjective aspects). Expression depends on the hypothalamus and experience on the cortex. Interestingly, in humans Papez believed that the phenomena of emotional expression and experience can be dissociated from each other.

Without going into neurophysiological detail that is now very dated, it is enough to say that Papez's theory depended on much neurophysiologizing. However, it was put in such a way as to account for the apparently different origins of emotion, for emotion felt and emotion expressed, and for the emotional colouring that can be present in apparently non-emotional experiences.

Duffy

For many years the writer has been of the opinion that 'emotion', as a scientific concept is worse than useless.

E. DUFFY, 1941

This compelling sentence begins Duffy's 1941 paper (but see also 1934, 1962). For Duffy, emotion is something to be explained away rather than explained, and she attempted to do so with a behaviourally oriented activation theory.

Duffy had the view that emotional phenomena are separate aspects of responses that actually occur in continua. She saw this as a contrast to the typical use of emotion to refer to the extreme end of a continuum of behaviour, but one that anomalously involves a distinct non-continuation between emotion and non-emotion.

Duffy hypothesized that states of emotion must involve changes in energy level; for example, excitement representing a higher energy level and depression a lower energy level. The energy level itself is dependent on the stimulus. It increases either when we are blocked or when a block is removed. Further, energy decreases only when a goal is so well blocked that we give up altogether.

She widened her argument by pointing out that all behaviour is motivated, without motivation there being no activity. In this expanded context, emotion simply

represents an extreme of motivation, or energy. She then asked how do we know when behaviour is extreme enough to be called emotional? And, of course, by her own argument there is no criterion by which to judge this, because emotion-producing behaviour is no different from other behaviour. All responses are adjustive or adaptive.

The second common characteristic of emotion according to Duffy is that it is disorganizing (cf. Leeper, 1948). She argued though that this is a function of behaviour at high or low energy levels, rather than of emotion. Disorganization can be found at energy levels not high enough to be regarded as emotional. This represents emotion as the hypothetical inverted-U function that relates arousal to performance.

Duffy also dealt with the common conception that our conscious experiences of emotion seem to us to be different from our conscious experiences of everything else. This involves awareness of the relevant environmental situation, bodily changes and of a set for response in the situation. She argued that these same factors make up any non-emotional state of consciousness as well.

So Duffy breaks down all behaviour, including emotion, into changes in level of energy, organization and conscious states, and puts each of these on a continuum. Finally, she argues that it is meaningless to try to study emotion at all, because it has no distinguishing characteristics. Instead, any response should be considered according to its energy level, how well it maintains goal direction and the environmental situation in response to which it occurs. Duffy's is a theory of non-emotion and has been so far overtaken by more sophisticated theorizing as to make it as hollow as she attempted to make emotion. Almost all theories become dated, but there is a sense in which Duffy's has become almost nonsensical. It has historical curiosity value, but little more.

Conclusions

This chapter has been no more than a first skirmish with theories of emotion, simply in order to provide something of a historical perspective to the remainder of the book. Of course, in the history of thought, and no doubt not merely Western thought (with which this book is concerned) other scholars (and many poets) have given consideration to emotion, and have even had their theories about it. However, the theories briefly described in this chapter were chosen because they have helped to generate some of the main shaping forces behind current theories.

It would not be particularly useful to evaluate the theories so far summarized in any of the terms mentioned in Chapter 1. In contemporary terms they do not have enough significance to make this worthwhile. However, it is easy to see the themes that emerge from them.

Between them, the early theorists of emotion began to consider the origins and development of emotion and the distinction between emotion and non-emotion. They started to deal with what exactly is the emotion that we experience. They thought about where it might be sited physiologically and began to deal with the nature of its physiological aspects. They recognised that emotion has its behavioural, expressive side and that it can be seen as functional in an evolutionary sense. Moreover, it is possible to see

in these theories the beginnings of the debate about the origins of emotion lying in biology or social interaction.

Above all, and this is to anticipate the remainder of this book a little, it is in the early theories that a particular type of tension is first manifest – namely, the difficulty of giving an account of emotion that does not have a definite cognitive component. Moreover, it is also possible to see in these theories the dependence of the theorist on everyday observation and lay conceptions of emotions. As will become clear, although emotion theories are sometimes quite rarefied, folk psychology is never far away. The idea, for example, that emotion is disorganizing or somehow contrasting with cognition (reason) is hard to shake off.

In the early theories can also be seen the genesis of many of the issues currently of concern in the study of emotion (see again Cacioppo & Gardner, 1999). Research techniques and theoretical sophistication might have changed, but the issues remain.

Returning to the everyday homilies at the start of this chapter, it is easy to see how and why they came about and how emotion might be seen as a set of reactions and phenomena that contrast with reason or rationality and is something to be dealt with or guarded against or controlled. But the early theorists of emotion did not take long before they started to show that matters are far more complex than this. As soon as we begin to unpack the phenomena involved in emotion, it rapidly becomes apparent how complex it is. Just think, from what you have read so far, how much is implicated in the instruction 'don't give way to your emotions' or 'don't let your heart rule your head'.

Summary

- Traditionally, emotion has been contrasted with reason, a view that remains within everyday life and even lingers a little within academic psychology.
- The idea that emotion is deeply rooted in evolutionary history and has survival value began with Darwin and was carried on by McDougall, who also linked emotion to motivation.
- James and Cannon were the first to draw attention to the significance of the body in emotion. The controversy between them about the order of events in emotion remains relevant today.
- It is easy to see from the earlier theories of emotion that everyday life is never far away when thinking about emotion.

A question of application

- If emotion functions to give information about ourselves, is it always rational? On the other hand, is it possible to make a purely rational decision?
- In day-to-day life does it help to contrast emotion and reason?

Further reading

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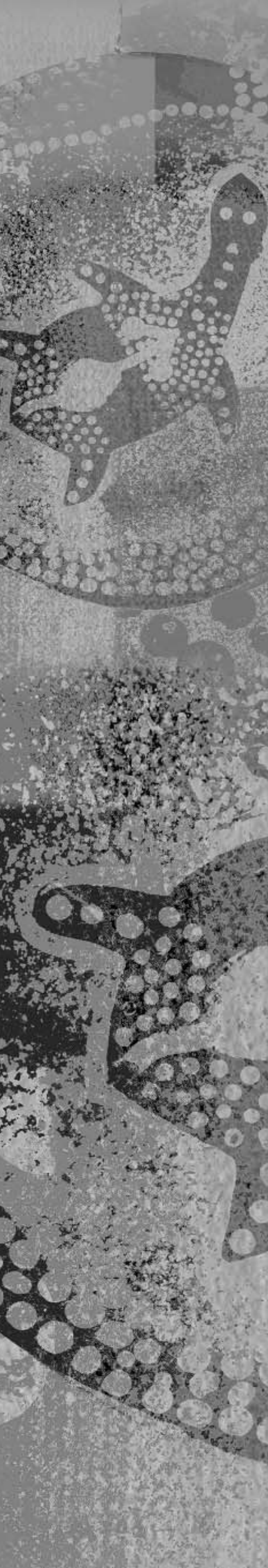

Chapter 3
Phenomenological theory

An emotion is a tendency to feel.

W. JAMES, 1892

. . . the whole psychology of feeling is still in a very unsettled state.

E. B. TITCHENER, 1902

Women and men normally associate emotions with feelings.

A. HELLER, 1990

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Some real life

It is late at night. You are alone in your bed trying to sleep, but with thoughts and feelings pressing in. During the day, at work, you handled a situation badly, causing hurt to someone else. You feel stomach-sinking surges of shame. Occasionally, you think of your father who is in another city, bravely trying to fight cancer. You spent the evening at a movie and were caught up in its humour. Remembering it, you grin inside, but then feel guilty at having enjoyed yourself. Periodically, you are overwhelmed by a poignant sadness as you reflect on the relationship that ended a few months ago. Sleep is a long way off.

Think of a young woman who has just had her first sexual encounter. As with many such moments, it had its light and its heavy side, its hilarities and its seriousness; it was partly successful and partly unsuccessful. But she is keen to try again and certainly keen for the young man involved to telephone her. He hasn't now for a week since their encounter. It is evening and she is sitting at home, quietly telling herself that she wants to stay in, that she has a good book and that that there is a programme on the television that she wants to see. She is definitely not sitting there awaiting his call. As she tries to concentrate on her book, her thoughts and feelings seem to take on a life of their own. She keeps feeling optimistic that he might call any moment and invite her out for the evening and then her thoughts dwell again on the possible way in which the evening might end and the pleasures of being close to him. Then, her feelings shift and she becomes instantly despondent; he will never call, he found her disappointing, no-one finds her attractive anyway. She gets up and roams about her small flat, making coffee, glancing in the mirror. She perks up a little; she does look quite attractive and she has a bubbly personality, everyone says so. He must have just been caught up in something this week. Perhaps she should call him. Her spirits lift at the thought, but, then, no, he might think she was throwing herself at him. And so she goes on, buffeted about almost at the whim of her thoughts and feelings.

The subjective side of emotion can be very powerful, even though it might not be much reflected in behaviour and only minimally in our bodies. And it is always there, in all our emotional experiences:

> Phenomenology is that empiricistic philosophy which asserts that the givens of experience are configurational entities having a unique integrity of their own and are, therefore, not reducible to sense contents or to any other elemental structure.
>
> M. B. TURNER, 1967, p. 60

Turner's definition is of the philosophical foundations of phenomenology as conceptualized by European philosophers such as Husserl (1913). He argued that our thoughts and feelings have a purpose and that this purpose must come from the 'essential' person. A thought or a feeling is about something, it reaches out; in other words, it is *intentional*. Husserl believed that our sense gives us a direct knowledge of the world, but suggested that the intent in our perceptions might distort this reality. Such distortions could take many forms, from something such as racial prejudice through to the effects of simple visual illusions.

Modern phenomenological psychology developed from this foundation. It is the study of consciousness and experience, an individual's perception of the world being the crucial aspect of psychological investigation. It is implied that each of us perceives the world in a unique way, although there might be common elements in our experiences. *And it is these perceptions that determine the way in which we react or the way in which we behave*. Phenomenological psychology might be empirical, but it is a very different sort of empiricism from that of the behaviourist or that of the cognitivist. It rests on a different set of assumptions about human functioning.

Phenomenological psychologists are concerned with what a person is experiencing here and now, at this moment, in this place, in their present state. Such experiences can to some extent be manipulated by controlling prior experiences. The data of experience though are necessarily subjective; they are personal reports of conscious processes, or of experiences. Interest centres on the content of whatever reports the person makes – experiences or conscious processes being given a casual role in determining behaviour.

Apologists who stress this approach (e.g., Giorgi, 1970) argue that it gives the psychologist a specialized, unique way of dealing with a specialized, unique set of problems. Psychology is set apart because its object of study is human beings; human beings have consciousness and this should therefore be the proper and foremost concern of psychologists.

It follows from this that psychologists should be concerned with the functioning of the whole person rather than isolated processes such as learning or memory. From the phenomenological perspective, we have choice, free will to choose what to do next. So phenomenologists should deal with real-life needs, problems and motivations of fully functioning people. As part of this, psychologists may well have to make value judgements, rather than to eschew them as modernist science would have them do (see Chapter 15 for more discussion of this).

The type of question prompted by a phenomenological approach to emotion is concerned very much with whether it is possible to generate a good theory from this angle. Can it be anchored to the real world, does it summarize what we know, does it lead to predictions, is it internally consistent, does it have heuristic value and so on? What follows in this chapter are the more compelling phenomenological theories of emotion. For the sake of completeness, the thorough reader might also be interested in Rapaport (1950) and Pradines (1958).

Stumpf

Reisenzein and Schönpflug (1992) provide an interesting overview of Stumpf's (e.g., 1899) theory of emotion, which was based in introspective psychology although it is pertinent to current cognitive–evaluative theory. Stumpf maintained that mental states are intentional and can be divided into the intellectual and the affective. He further divided the affective category into (1) active affective states (non-performative desires, motivational desires, and volitional states – intentions) and (2) passive affective states (for and against evaluations of various states of affairs). Stumpf also saw a two-part relationship (causal and semantic) between beliefs and evaluations: (1) beliefs cause

evaluations and (2) evaluations are directed at the same state of affairs as the object of the belief.

According to Reisenzein and Schönpflug, Stumpf believed that emotion can only be defined through emotionally relevant judgements; so, non-cognitively caused evaluations are not true emotions. Stumpf argued that his theory accounted for intentionality in emotions, their differentiation and discrimination, their dependence on beliefs and desires, and their modifiability.

Sartre

Perhaps not surprisingly, given his existential philosophical background, Sartre (1948) was prompted to his theory of emotion by an over-generalization; this was that psychologists tend to think of consciousness of emotion as reflective, a state of mind. Even in 1948 there were a number of psychologists to whom this would not have applied, many in fact not even seeing the usefulness of an analysis of consciousness in any sphere, not just that of emotion. More substantively though, Sartre argues that an emotion such as fear does not begin as a consciousness of being afraid. Instead he believes emotional consciousness is non-reflective, emotional consciousness being a general consciousness of the world.

For Sartre, emotion is a way of apprehending the world, thus combining the subject and the object of emotion. To take an example, if a woman believes that her partner is losing interest in her then she apprehends her every action in terms of what she should do about it. If her attempts fail then again her apprehension of the world is coloured.

As well as an apprehension of the world, Sartre also believes that emotion involves a transformation of the world (reminiscent of Hillman's, 1960, view). The argument runs that if paths to a goal are blocked or thwarted in some way, one might try to change the world so that the path or some alternative path can be followed. If one cannot do this straightforwardly, then the world could perhaps be dealt with if it is changed. Emotion allows such a transformation to take place.

To take an example, if someone has said something critical of me in a social context, I might be in the situation of wanting to be thought well of, but having been criticised. I might not be able to sit quietly and accept this, but nor might there be anything I can say calmly in return – normal channels of social intercourse are blocked. So I become righteously angry, which transforms the situation into something to which I can respond.

Sartre then is emphasizing the qualitative change that emotion brings to an object. The body changes its relationship with the world, seeing it, through consciousness, with new qualities. The important characteristic of this transformation for Sartre, is that it is *magical*; of course, the world itself does not change.

Sartre gives many examples to illustrate his theory, including that of fear. It is usually considered to be rational to run away from the source of one's fear. But, for Sartre, this is not rational. One runs away not to find shelter, security or protection, but because one cannot 'annihilate (oneself) in unconsciousness'. Both the fear and the running away make a magical change in the world to negate the dangerous object. By

running away in fear one is pretending to be in a world in which the dangerous object does not exist. So, from Sartre's perspective, fear is consciousness magically negating or denying something that exists substantively and is dangerous. (In passing, it should also be said that running away from something dangerous may also serve the purpose of physically removing the danger.)

Emotion always involves a qualitative transformation of the world, and, if it is genuine, fills us to overflowing. Sartre distinguishes this from spurious or false emotions, such as pretending to be happy or angry when one is not. In his terms, such false emotions can be stopped at will, but it is impossible to stop the trembling of genuine fear or anger.

Emotion originates in a spontaneous debasement lived by the consciousness in the face of the world. It provides us with a way of enduring something that would otherwise be difficult or impossible to endure. However, Sartre makes the point that consciousness is not conscious of itself in emotion. If it were, then the emotion would be false. If I am aware of myself being angry then this is not true anger. In emotion, the consciousness is entirely absorbed by the belief, it knows only itself. Consciousness is in turn moved by the emotion and heightens it. We run faster and in so doing become even more afraid. So, emotions give a transcending quality to an object or situation: magical qualities that seem infinite.

According to Sartre's theory, not all emotions are fully fledged. The more subtle emotions can give a brief glimpse of the unpleasant or the excellent. One might be overwhelmed by a vague sense of disaster or of something good just round the corner. In Sartre's eyes, the social world is full of such potential; it constantly nudges toward the magical.

In emotion, *everything* in the world is modified, so giving the world a new quality. Everything might become horrific or beautiful. The view of the world we have when we are in an emotional state simply cannot be achieved in the everyday, deterministic, non-emotional world. From Sartre's perspective, when we are in an emotional state it is as if we were dreaming – the *whole* world is magically transformed and perceived in a different way. Emotion allows us to see an absolutely coherent world in which everything hangs together magically. For Sartre, emotion is a sudden plummeting of consciousness into the magical, giving a different mode of existence, a way of existentially being-in-the-world.

Buytedjik

Buytedjik's (1950) analysis begins with the nature of facts; science might be concerned with facts, but are feelings facts? If I say, 'I feel angry with him' or 'I love her', are these factual statements? For Buytedjik, feelings are acts that are intentionally present, their meaning coming from what they signify. If we feel angry or feel that we are in love then this implies that we know the meaning that some situations have for us. It might be argued that statements about feelings are indisputably factual in comparison with, say, scientific 'facts' that are, in fact, probabilistic.

The phenomenological approach begins with the notion that consciousness is consciousness of something and that we are also conscious of existing. So we are

aware of being in situations in which we must respond, that is, we must have attitudes and feelings and make intentional acts. Feeling and emotion function to assure us of our attitudes in various situations, each situation having its own special feeling for us. A spontaneous response to a situation transforms it into a new world. Choice must be involved. Our emotional attitude toward a situation is confirmed by a feeling, although we choose to become happy in some situation in order to alter our feeling toward it.

Against this background, Buytedjik argues that emotion is *not* intentional, but it is like sensation or excitement. I am only conscious of myself. I might detest someone whom I project myself as detesting and then make further projections about the person. This is brought about by feeling. Such projection rebounds and takes on the character of emotion. Thus, we cannot experience emotion without feeling, but emotion is not intentional, it is the quality of our existence that occurs through feeling. Although feeling and emotion, according to this way of looking at things, are spontaneous and unintentional, we are able to alter our feelings by the situations we create with the words we use. We use language intentionally to modify, enhance or suppress our feelings.

Buytedjik uses the example of the smile to illustrate the understanding of meaning that a phenomenological analysis makes possible. He argues that a smile anticipates something in the future, representing a moderate excitement linked to the knowledge that this excitement will remain moderate in our intentional act. A smile is an easy physical act that indicates a relaxation on the threshold of something such as joy or elation. A smile makes a transformation of the situation that faces us while simultaneously confronting ourselves with this transformed world; that is, being aware of it.

In arguing for the value of a phenomenological analysis, Buytedjik points out that it is not directed at introspection, but at experienced phenomena and at acts such as thinking and feeling. To ask 'What is guilt or anger?' is similar to asking 'What is a table or a chair?'. It is not causal relationships that are of importance here, rather it is an exploration of the inner essential structure of the phenomena; in this case, of emotion. The aim is to make analyses of the experience of feelings in various situations, in order to discover patterns and invariances in our usual mode of existence. Described in this way, this type of analysis resonates with the influences of post-modern approaches to emotion (see Chapter 15).

Hillman

Hillman (1960) bases his account of emotion on Aristotle's four causes, although he writes from a Jungian background:

(1) *Efficient cause*. Stimuli that function as efficient causes (i.e., that cause emotion) are in Hillman's view either representations, conflicts and situations or those with a physiological basis such as arousal, instinct, constitution or energy. Also important to this conceptualization is the symbol, which Hillman characterizes as a mixture of inner and outer, conscious and unconscious representations. So a

situation will arouse emotion if it is perceived symbolically: 'Emotion is thus the symbolic apprehension of the subjective psyche . . .' (1960, p. 253).

(2) *Material cause*. Material cause is concerned with the *stuff* of emotion. Hillman's conclusion, reached through an Aristotelian type of analysis, is that the material cause of emotion is energy. To be able to say that emotion is present, there must be gross bodily changes plus representations of these in consciousness. Simultaneously, though, emotion *is* the body experienced in the here and now. The body is the stuff of emotion and the order of its energy is a person's homeostatic balance.

(3) *Formal cause*. Whatever it is that defines emotion, that distinguishes it from everything else, is its formal cause. In Hillman's view, this is the psyche, emotion being the total pattern of the psyche, which comes from a combination of expression and inner states. So far, then, in emotion, Hillman has symbol and form corresponding to each other and occurring only when there is energy.

(4) *Final cause*. Aristotle's conception of final cause is either the purpose or goal of something, or more simply its end point. Hillman reconciles these by suggesting that the finish of any emotional process is in itself an achievement; this is its purpose. This purpose or end does not have to be at the end in time, but can occur contemporaneously with the other three causes. However, it is the final cause of emotion that gives it its value, a value that comes about through change, particularly if it is a change that promotes survival or improvement.

The difficulty with this type of view, as is so often the case with emotion, lies in determining how emotional change can be distinguished from any other type of change. Hillman suggests this can be done with the idea of transformation. Emotion is the transformation of conscious representations in terms of symbolic reality; it is a transformation of energy, of the whole psyche. Other types of change are presumably lesser than this.

As will be seen in Chapter 15, the question of the value of emotion is significant. Although Hillman mentions value, he is not clear on the possible value of emotion. He suggests that true emotion always achieves its purpose and so may be seen as always good. However, its results may be good or bad, even though the emotion itself must always be an improvement of some sort. It is difficult to know where one is in this thicket of ideas, particularly since the way into it is through the difficult gate of *true* emotion, which has to be distinguished in Hillman's terms from abortive emotion, or deep feelings, or even concentrated willing.

To summarize, Hillman's account of emotion depends on Aristotle's four causes. Efficient cause is the symbolic perception of the objective psyche, the material cause is the body's energy, the formal cause (essence) of emotion is the total pattern of the psyche or soul and the final cause of emotion (i.e., its value) is change or transformation, which is always good. It should be mentioned in passing that the force of Hillman's contribution to understanding the human condition has come after his theory of emotion. He has recently developed his ideas into a fascinating, if unfashionable, analysis of character and its development from birth to old age. This appears in *The Soul's Code* (1996) and *The Force of Character* (1999).

Fell

Fell's (1977) compelling analysis of the phenomenology of emotion depends on the idea of *pre-theoretical* experience. This is concerned with the foundations of both science and knowledge more generally in that Fell sees the starting point for science as coming from a person who has a prior understanding of a familiar world. To be investigated there is a sense in which a phenomenon must already be known. Whatever psychologists might say of emotions such as fear, anger or happiness, they must first recognize what they are studying as being fear, anger and happiness.

Husserl provided the starting point for Fell's analysis, in placing human beings in cognitive situations that allow them to find the world patterned, organized and intelligible. This ability is there from the start and so allows us to make sense of the world intuitively (i.e., immediately and directly). Among other things we can intuit emotion in this way and just see other people as angry, afraid or happy. A human emotion is a meaningful relation between a person and a meaningful environment. Behaviour and physiology are simply components in this.

Fell makes some interesting points of comparison between the phenomenological approach and the behavioural. One takes an external viewpoint and the other an intuitive viewpoint. For one the environment is filled with reinforcers, for the other it is filled with meaning. Observationally, emotions are responses; experientially, they are feelings that make sense. Emotions might depend on contingencies, but their power, according to Fell, hinges on what they mean or how they are understood. Emotions might have behavioural aspects, but they are qualitative experiences.

The behaviourist is concerned with the prediction and control of emotion. By contrast, the phenomenologist is concerned with its description. An emotion is an amalgam of the observed and the experienced, of behaviour and meaning. Because emotion as a felt experience is difficult, perhaps impossible, to quantify and measure, does this mean that it is not real or does it mean that science should be supplemented by direct experience and understanding, or even that our conception of what is acceptable science is broadened? Fell implies that it is foolish to attempt to restrict what is real, to restrict knowledge to what can be observed. From his perspective, the objective scientist must have intuited and experienced emotions to know what is being studied. Pre-scientific experience should not be ignored.

A difficulty that Fell recognizes for his analysis is that if concern centres on pre-theoretical experience then how can a phenomenological *theory* of emotion be conceived? Or, to probe further, is it possible to describe pre-theoretical experience without to some extent theorizing about it? A measure of sorts comes from consensual validation; do others agree with the description or not?

According to this type of analysis, any phenomenonological investigation of emotion depends on a prior understanding of what emotion is and subsumes six possibilities:

(1) emotions considered as meanings in a meaningful environment;
(2) emotions considered as events by the person experiencing them;
(3) emotions considered as 'making sense';
(4) distinctively human emotions and moods considered from a perspective of how

they are brought about by the intuitive understanding that characterizes cognition;

(5) consideration given to emotions that seem similar being qualitatively different in humans because of cognition;

(6) a consideration of the way in which language might affect emotion.

Fell argued that the best way of deciding on the adequacy of the various theories of emotion is by returning to what he terms the 'original cognitive situation'. Whatever a theory of emotion might suggest, a precondition for it is the preliminary or experiential comprehension of the emotion. Whatever the 'it' is that is being studied is specified by ordinary experience. This approach predicates any investigation on naive understanding; understanding or intuition is a necessary precondition for knowledge.

Fell stresses the importance of always returning to the original cognitive situation and argues that a phenomenological approach to emotion helps in this aim. Fell's final justification for taking a phenomenological approach to emotion is that it is so fundamental, a necessary prerequisite, that nothing less would do. It sounds like a compelling argument when Fell makes it, but it is nevertheless an article of faith.

de Rivera

Since his *A Structural Theory of the Emotions* (1977), de Rivera has had an important influence on our understanding of emotion from a phenomenological perspective. Recently, he has turned his attention to the idea of *emotional climate*, his analysis of which again adds to our knowledge of the experiential side of emotion.

By emotional climate de Rivera (1992) is referring to '... an objective group phenomenon that can be palpably sensed – as when one enters a party or a city and feels an atmosphere of gaiety or depression, openness or fear ...' (1992, p. 198).

de Rivera distinguishes between emotional atmosphere, climate and culture. An emotional atmosphere is a collective emotional response to a particular event, it is localized, and an emotional culture is enduring and relatively stable, part of the social structure and institutions of a society. Emotional climate is somewhere between the two, possibly although not necessarily enduring for a generation or two (considered societally), but responsive to factors such as religion, politics, economics and so on.

de Rivera is particularly interested in emotional climate within nations and predicates his account directly on his structural view of emotion in general. He argues that emotions are not *in* people, but rather that they exist *between* people. So, against this background, emotions are *in* a society. He believes that a nation's emotions have the function of maintaining both political unity and cultural identity.

In a penetrating analysis, de Rivera exemplifies the concept of emotional climate with a number of examples and also considers the problems of measurement when dealing with what amounts to an amalgam of a nation's prevailing emotional experiences. An instance of emotional climate is fear in Chile during the Pinochet regime. He describes this type of fear as brought about systematically by acts of violence directed against the people by the government. Political control is maintained by the sense of

isolation that this produces in the population. Repression gradually increases as everyone becomes less and less willing to express views on anything. It pervades all aspects of life, making it impossible to maintain ordinary behaviour, beliefs, attitudes or values.

Of particular interest to de Rivera is the relationship between emotional climate and political unity. He attempts to link such unity with the dimensions of emotional climate as he sees them, these being fear/security, hostility/solidarity, dissatisfaction/satisfaction, despair/hope, depression/confidence and instability/stability. For example, he believes that national unity can spring from a climate of solidarity, although this may or may not embrace a sense of security that allows the existence of difference. 'To the extent that solidarity is based on enmity or on a respect for authority that is mingled with fear, there will be strong conformity pressures that will hinder expressions of ethnic diversity and true individuality' (1992, p. 215).

de Rivera, then, has taken a phenomenological analysis of emotion a stage further than it has been taken previously by extending it to the national level. His concept of emotional climate represents a cohesion between the individual experiences of emotion within a society or a nation as engendered mainly by political forces. It continues de Rivera's structural analysis of emotion in a particularly interesting way and at the very least points to a series of social or cultural influences that should be taken into account when attempting to understand the experience of emotion.

Denzin

Denzin (1984) has provided what is probably the most thorough analysis of emotion from a phenomenological perspective, being concerned with the way in which emotion as a form of consciousness is lived and experienced. His is a social phenomenonological view since, although he is interested in emotion as experienced, he places this experience very much within a social context:

> *Emotion is self-feeling. Emotions are temporarily embodied, situated self-feelings that arise from emotional and cognitive social acts that people direct to self or have directed toward them by others.*
>
> N. DENZIN, 1984, p. 49, italics his

Denzin is suggesting that any emotional experience serves a double function: it refers to the self and it takes into account the other. Although an emotion might originate 'out there' it will always refer back to the self. Within a person's emotionality, the experienced feelings have three elements to their structure:

(1) an awareness and definition;
(2) a self-awareness of experiencing the feeling; and
(3) a disclosing of the essential (moral) self through the experience.

All of which provides a process rather than a static experience.

From Denzin's view, the self is centred in social interaction and is defined by reference to anything that is called 'mine' at a particular time and what that means to

'me'. Emotion is simply in the social situation, and any and all emotions are dependent on social relationships. This is with respect to their feeling components, their interpretation, their vocabularies and even their individual and social history.

Denzin's theory places emotion squarely within social interaction, and in this bears strong similarity to de Rivera's views. Emotions as self-feelings must come partly from the appraisals of self that are made by others. Denzin describes a 10-point sequence of emotional self-interaction:

(1) the person is interacting and interpreting;
(2) an object of interaction comes within the phenomenological field;
(3) this object is defined via self-feelings (say, anger or fear);
(4) these self-feelings are checked through bodily reactions;
(5) there is imagination by the person of how he or she appears in the eyes of others;
(6) this is interpreted;
(7) feelings build toward the other based on these judgements;
(8) this feeling is incorporated;
(9) there follows a feeling of moral self-worth; and
(10) the process is summarized into a sort of emotional self-definition.

Denzin describes this sequence as the 'hermeneutic circle of emotionality'.

Denzin sees emotionality as a form of dialogue with the world:

Emotionality is a circular process that begins and ends with the transactions of the self in the social situation interacting with self and other.

N. DENZIN, 1984, p. 58, italics his

Within this context, he regards it as important to consider emotions as social acts, the circular nature of the temporality of emotion, the significance of others, the reality of emotion and what, drawing from Sartre, he terms the 'circle of selfness'. In this, the individual and others around together produce a field of experience that is shared by everyone involved.

Denzin believes that his theory takes emotions beyond cognitions, making them instead interactional processes. Understanding of emotion should then come from the study of selves and others via an analysis of self-feeling. Denzin's is essentially a sociological theory of the phenomenology of emotion that has clear and obvious import for an understanding of emotional experience, the phenomenological analysis of the consciousness of emotion (see Chapter 14 for a discussion of other sociological theories of emotion).

Stein, Trabasso and Liwag

Stein, Trabasso and Liwag (1993) put forward a theory that is phenomenological in that it is concerned with how emotional experience is represented. It is built on four principles:

(1) it is knowledge-based and situated;
(2) it rests on assumptions about human intentionality and about actions that are goal-directed;
(3) concern centres on describing processes that maintain goals so that states of positive well-being can also be maintained; and
(4) appraisal and problem-solving are given central importance in emotional experience.

An essential aspect of their theory is that subjective states and bodily reactions are monitored by a representational system. A value system is viewed as basic to emotional behaviour, through which the person is alerted to whatever can bring pleasure or pain. The system has three fundamental characteristics: it is both hierarchical and sequential, some goals may be given more value than others and it is dynamic. It is also integral to the model that change can be detected in both the environment and in internal states.

Stein et al.'s general model of emotional experience depends on the tracking of an individual's specific goals, particularly with respect to success and failure in achieving them. Any event can be evaluated as obstructing a goal, facilitating a goal or as irrelevant to any present goal states. There are also three possible outcomes of plans that might achieve a desired goal: a plan is available, a plan is not available or no plan is known of. The model has it then that personal goals are critical to an understanding of any emotion. Differences depend on the particular events that bring about emotions and the particular plans that determine the success or failure of goal achievement.

Self, identity and well-being

There are a number of phenomenologically based theories that are more usefully linked under this heading than giving them their individual status. For example, Epstein (see 1993) is primarily a self-theorist, but he is also interested in looking at the link between the self-concept and emotions and motives. He proposed a cognitive–experiential self-theory (CEST) in which he asserts that all people automatically construct implicit theories of reality, in which there are subdivisions of self-theory, world-theory and connecting propositions.

Within CEST, emotions are viewed as both influencing and being influenced by a person's implicit theory of reality, and as playing an important role in the development of conceptual systems. Constructs are seen as developing around primary emotions, which Epstein sees as organized and organizing cognitive–affective systems. Emotions conceived in this way are cognitive-affective units that organize adaptive behavioural patterns providing a background against which a model of the self and the world can develop.

This is simply a taste of the way in which one theorist attempts to find a place for emotion in a theory of self. However, related to this is Haviland and Kahlbaugh's (1993) interesting analysis of emotion and identity. Although, identity is clearly a concept that has an obvious place in an experiential or phenomenological analysis, it also reflects a concern for what is socially constructed (see Chapters 13, 14 and 15).

Emotion and identity influence interpretations of each other, and in Haviland and Kahlbaugh's view any research into identity must examine the role of emotions.

Haviland believes that there is an innate set of emotions or emotion processes (and so moves away from a strongly social constructionist position). For her, particular emotions provide links between particular stimuli and responses, perceived causes and effects, and the self and others. Emotions function not just as responses to the environment but also metaphorically to unite scenes, experiences, internal cues and thoughts.

From this perspective, emotion functions as the 'glue' of identity that magnifies and resonates to create experiences. Things emotional help us to distinguish the central and organizing parts of identity from skills or ideals. Haviland and Goldston (1992) mention two types of emotional magnification that can occur in constructions of identity. A single content issue (theme) may be 'emotionally elaborated' (i.e., associated frequently with many different emotions). Diversity is important here. Alternatively, a single emotion may be 'content elaborated'. This produces scripts about emotion in which emotional experience is the primary link between different roles or scenes.

Diener and Larsen (1993) speculate about the experience of emotional well-being, a matter that is again relevant to a phenomenological approach to emotion. They ask three basic questions about the structure of emotional well-being:

(1) Given that emotions constantly fluctuate, does emotional well-being obtain across situations and time?
(2) Should discrete specific emotions be studied in this context rather than large-scale pleasant/unpleasant emotions?
(3) What is more important to the experience of well-being, intense or prolonged pleasant emotions?

The various theories of emotional well-being do not provide fully fledged accounts of its origins. However, each suggests particular factors that may influence it. In summary these are personality dispositions, resources, social comparisons, personal aspirations and ideals, emotional training and the end state of various psychological needs or motives.

Diener and Larson incorporate a number of the relevant theories into a cognitive–evaluative theory of emotion. Here the emphasis is on emotion depending on evaluations of events happening to a person that may be influenced by the temperament of the person and early-learning. The evaluations will also depend on the extent to which the events meet needs and goals, emotion giving people feedback on how well they are doing in this regard.

They draw a number of conclusions:

(1) pleasantness and unpleasantness over time contribute largely to people's evaluations of their well-being;
(2) the process is influenced by events, physiological state, genetic temperament and personality factors;
(3) intense emotion is rare in daily life and so is not significant in evaluations of well-being;
(4) people learn to adjust emotionally to changes in the circumstances of the resources available to them;

(5) the general state seems to be one of mild happiness most of the time;
(6) there is cultural variation in the emotional associations with well-being.

Diener and Larson believe that the type of conceptual analysis they make of emotional well-being will further our knowledge of emotions more generally. It is essentially a phenomenological analysis.

Conclusions

Clearly, the theories considered in this chapter represent a very specific approach to emotion; they are primarily concerned with the nature of emotional experience. In this emphasis on *some* aspects of the subjective side of emotion, they have something in common with the everyday or folk theoretical approach. Inevitably, however, this means that in placing the emphasis as they do, much is left out. Phenomenological theorists of emotion do not have much to say about behaviour and physiology and, in some cases, even cognition.

To evaluate such theories in this context then is immediately to see their disadvantage. They might be interesting and cogent with respect to emotional experience, they might offer a good summary of existing knowledge and they might have good heuristic value. However, they are inevitably incomplete, they cannot offer full explanations of emotion and, for the most part, it is difficult to derive testable predictions from them. This is the case in spite of the development of qualitative research methodologies.

Looking at phenomenological theories from the perspective of Lazarus's (1991a, b) various points about what a theory of emotion should accomplish, then they have to be found wanting. Generally, they are concerned with possible causes of emotion, but they have little to say about emotion either as a dependent or an independent variable. More specifically, the only points among Lazarus's list that they tend to cover are to do with definition, with discrete emotions, with effects on general functioning and possible therapeutic ramifications. They are concerned to some extent with the development of emotion and again to some extent with appraisal. However, of course, they are fundamentally couched in terms of emotional consciousness.

If one applies Oatley's (1992) suggestions about what should be accomplished by a theory of emotion to the theories summarized in this chapter, they can only be described as relatively poor on all of them. Certainly, in Oatley's characterization of the Lakatos approach, phenomenological theories of emotion do not deal with more evidence than other theories. In fact, they are so restricted as to deal with rather less evidence than most. Alternatively, it is possible to apply the Popper type of test, namely, can specific (and hence testable and refutable) predictions be derived from these theories? It is probably fair to say that some predictions can be derived, but this is hard to do. Moreover, some of the predictions that can be derived are difficult to test.

Perhaps the fairest test to apply to phenomenological theories of emotion is that which Denzin (1984) argues to be appropriate. These are criteria that he judges to be important only for phenomenological interpretations. These will be listed below. In general, and perhaps not surprisingly, it may be said that most of the theories in this

chapter fulfil the criteria to some extent, with those of Fell, Denzin himself and to some extent de Rivera fulfilling them most readily.

Denzin's suggested criteria for applying to the efficacy of phenomenological theories of emotion are:

(1) Does the interpretation of emotion illuminate, disclose and reveal lived emotion?
(2) Does the interpretation rest on thickly contextualized, thickly described materials and on concepts near to experience?
(3) Is the interpretation historically embedded and temporally grounded?
(4) Does the interpretation reflect the emotion as a process that is relational and interactive?
(5) Does the interpretation engulf what is known about the phenomenon?
(6) Does the interpretation incorporate prior understandings and interpretations (...) as part of the final interpreted, understood structural totality?
(7) Does the interpretation cohere?
(8) Does the interpretation of emotion produce understanding; that is, do the elements that are interpreted coalesce into a meaningful whole?
(9) Is the interpretation unfinished?

All interpretation is necessarily provisional and incomplete, to begin anew when the investigator returns to the phenomenon (Denzin, 1984, p. 9).

These criteria are included here in case the reader would find it interesting or illuminating to apply them in detail to any of the phenomenological theories. Clearly, though, from a broader perspective they are less pertinent. As will be seen later, it is of little profit to attempt to apply them to behavioural or physiological theories, or even to cognitive theories of emotion.

Even though the phenomenological theories of emotion may fairly be said not to extend much beyond their own obvious boundaries, this does not mean that they are without value in our understanding of emotion. They are useful in that they overlap with everyday theories of emotion and in that they are used at least to make the attempt to explicate the subjective, the experiential side of emotion. Although this aspect of psychological functioning might not sit all that comfortably in the armchair of conventional science, it cannot be denied and should not simply be swept under the chair.

If this somewhat liberal approach is taken, then it is perhaps important to see what of a more general nature can be learned from the phenomenological theories of emotion. Are there any general themes that emerge that might be instructive?

Perhaps it may be fairly said that even though the subjective does not equate with the cognitive, most of the emotion theorists who have chosen to emphasize experience have consistently included mention of cognitive factors in emotion. As will be seen throughout the remainder of this book, at a theoretical level this is almost a necessity. Of course, such theorists have also drawn attention to the importance of an analysis of the role of consciousness in emotion and of the particular functions that emotion might serve for the individual. Again, as will be seen, these are themes that will be returned to time and time again.

Overall, the phenomenological theories of emotion, although interesting, are not the best of the theories to be found. However, they do have a function and they do add to the richness of our understanding of emotion. From the perspective of everyday life,

in considering people at work, at home and at play, in the pursuit of leisure from the arts to extreme sports, it is the subjective experience of emotion that matters most. Returning to the quotation at the start of this chapter, 'Women and men normally associate emotions with feelings' (Heller, 1990). Analysis of such feelings may not accord well with the conventional science approach to psychology. However, it is the very stuff of the arts, from novels to poetry, from drama to dance, from painting to music. It is to these rich areas of human creativity that we have to turn to understand emotional experience. (Psychologists have also turned their methods of investigation to these areas [see Chapter 13 with some success].)

At a more abstract level, a phenomenological analysis of emotion highlights three issues of some difficulty for psychologists (and philosophers): the subject/object distinction, the self and consciousness. Psychologists have constantly to do battle with the problem of subjectivity and objectivity. Is it possible to be objective, particularly about the subjective? Is the objectivity that is demanded by positivistic science even possible? Does the distinction between objective and subjective make any sense at all, particularly when one takes into account human value systems?

Similar questions arise when considering the status of 'the self'. The self is an integral part of our language (myself, herself, himself) and hence of folk psychological understanding. But does it help to account for the complexities of emotion and its experience? Does it add to our understanding to argue that the phenomenonological side of emotion happens in the self? Or is this simply a comfortable descriptive metaphor that leads to the nowhere of a *reductio ad absurdum*?

Any consideration of the self also prompts early consideration of consciousness (Blackmore, 2001; Gallagher & Shear, 1999). As Blackmore points out, consciousness is back in psychology in spite of its banishment by behaviourists. If we think of subjectivity then this is consciousness in another guise; if we consider the subjective side of emotion then it is emotional consciousness that concerns us. This puts us squarely onto the shaky ground of mind–body issues. And then we are back into the questions of whether there really is a self inside the self, watching. These are knotty problems that may seem far removed from a practical understanding of emotional life, but they are always lurking there in any discussion of emotional experience.

Our starting point in this chapter might have been the thoughts of ourselves lying there at night, unable to sleep, with the myriad of emotional experiences keeping Morpheus at bay. Or the picture of the young woman, keen for her potential lover to telephone, buffeted about by her conflicting feelings. These subjective experiences that can vary from the merest flicker to the most intense turmoil are the very stuff of emotion in everyday experience. This chapter has been concerned with some of the ways in which psychologists have attempted to think about and describe what exactly is going on when we have such experiences and what the mechanisms might be that underlie them.

Summary

- Phenomenological psychologists are concerned with experience, frequently stressing the inner structure or subjective experience of emotions.
- Some phenomenological theorists see emotion as a way of apprehending or transforming the world, giving it a new quality to help in coping with it.
- Phenomenological analysis is concerned with the meaning of emotion, whether this meaning lies within the person or in the surrounding social atmosphere.
- Any analysis of emotional experience leads to consideration of identity and the self, of consciousness and whether it is necessary to emotion, and of the problems involved in subjectivity and objectivity.

A question of application

- When members of your family or people whom you work with become emotional, do you think that they are trying to find meaning in their lives?
- When people that you work with become 'emotional', is it always conscious? How can you tell?
- Can emotion seem magical in daily life?
- How important is character in our emotional reactions?
- Words involving self are built into our language (myself, yourself, etc.). Is the idea of self needed when considering the emotions of other people?

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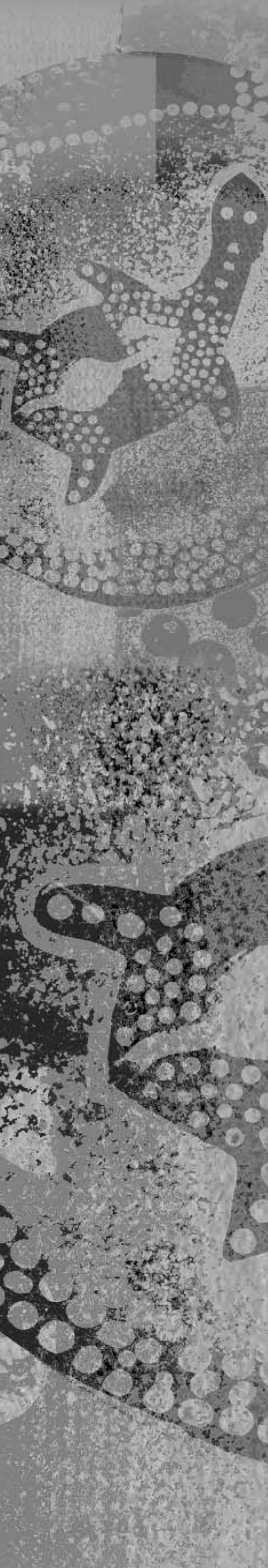

Chapter 4
Behavioural theory

An emotion is an hereditary 'pattern-reaction' involving profound changes of the bodily mechanism as a whole . . .

J. B. WATSON, 1929

If reinforcement is not presented following behaviour that is customarily reinforced, the young child typically cries or displays other 'emotional' behaviour.

A. W. STAATS & C. K. STAATS, 1963

. . . the adult is usually conditioned to emit socially approved responses in lieu of 'emotional' behaviour.

A. W. STAATS & C. K. STAATS, 1963

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Some real life

You are out with your partner, at a party where you don't know the other guests very well. They all seem very sophisticated and you feel slightly out of your depth. Your partner seems much more at ease and is talking animatedly to a particularly attractive woman, leaving you alone. He obviously finds her very engaging and seems to be more vivacious than usual. You begin to feel even less adequate than you were and try to concentrate on other things, but you can't stop glancing over at them. Jealousy is beginning to strike. You feel a strong urge to *do* something and fantasies run wild. You want to walk over and with a few perfectly chosen words cut 'the other woman' down to size. Or you want to throw yourself irresistibly at the (next) most handsome man in the room. Or you want to walk out quietly and unseen, go home and destroy your partner's collection of World War II cigarette cards. The point is that the power of your feelings of jealousy is pushing you to act. Emotion makes us ready to behave.

An elderly man, who has been proud and capable for most of his life, no longer has the same confidence in his physical prowess. He and his wife have been married for as long as each of them can remember, but she is dying. She has a tumour, it is inoperable and she has come home so that they can be together at the end. He is feeling very sad, already beginning to grieve as he watches his wife slip in and out of consciousness. He remembers all the good times. He has flickers of anxiety about what he will do when he is alone. He hears the shouts of young people in the street and resents their youth and exuberance and vitality as he sees his wife's life ebbing away and his so much reduced. He sits in the loneliness of these emotions, but above all agitated at his own lack of ability to *do* anything. He is used to dealing with his emotions, expressing his emotion by doing things. Emotions prompt action, but he is caught in the ultimate frustration of there simply being nothing to do.

For the most part, research and theory into emotional behaviour have been focused on what is directly observable and measurable. Those who have taken this approach usually regard emotion as a response, or a large class of responses, basic to life and survival, rather than as a state of the organism. They sometimes bracket emotion with motivation. Their aim does not appear to be to say that emotional states of feelings do not exist, but simply to take the emphasis from these and put it instead on what is most readily (in their terms) open to empirical investigation. When viewed in this way, emotion can be defined in terms of the operations believed necessary to bring it about, an approach traditionally of importance to science, but which may seem somewhat restricted when applied to a concept such as emotion.

Looking at the development of the behavioural approach to emotion, its oddest aspect is that it has never embraced facial expression, although this is obviously behaviour. Facial expression, bodily movement and posture have become highly significant in attempts to understand emotion, but they have been taken into account by social psychologists working within a cognitive framework.

Those who have taken a behavioural approach to emotion have sometimes used some remarkably non-behavioural concepts such as emotionality and frustration and then attempted to give them respectability by the rigour of the empirical studies they

have made of them. In so doing, they have taken away some of their meaning and unwittingly ensured that they no longer seem to be as pertinent to human emotion.

Times have moved on and the behaviourally inspired investigations of emotion and hence behavioural theories of emotion have become relatively quiescent in recent years. However, as with all approaches to emotion there is something to be learned from an overview of the major theories. Also, as will be seen later, there is a move to bring behaviour back into consideration through the idea of action tendency or potential.

Watson

Watson (1929, 1930) put forward the first of the clearly behavioural theories of emotion, although he stressed things physiological as well:

An emotion is an hereditary 'pattern-reaction' involving profound changes of the bodily mechanism as a whole, but particularly of the visceral and glandular systems.

J. B. WATSON, 1929, p. 225, italics his

Watson went on to distinguish between emotional and instinctive reactions, by suggesting that an emotional stimulus shocks an organism into a temporary state of chaos, whereas an instinctive reaction is not chaotic. For Watson, emotions are disorganizing.

On the basis of his well-known although not particularly well-conducted work with children, Watson postulated that there are three types of fundamental emotional reaction – fear, rage and love (to use approximate words). He maintained that because of verbal confusion it would be better to label the three reactions *X*, *Y* and *Z*. *X* is caused by sudden removal of support from an infant, loud sounds and mild but sudden stimuli just as the infant is falling asleep or awakening. The result is breath-catching, hand-clutching, eye-closing, lip-puckering and crying. The *Y* reaction is caused by hampering movements and includes screaming, crying, body-stiffening, limb-thrashing and breath-holding. The smiling, gurgling and cooing that characterize the *Z* reaction is caused by gentle manipulation, especially of the erogenous zones.

Watson's main contribution to emotion theory was to offer this three-factor view, which was to have later influence, and to emphasize behaviour rather than feelings or internal states. The three-factor theory and the much quoted study with Raynor (1920) on the fear-conditioning of Little Albert laid the foundation for the building of later behavioural theories of emotion.

Harlow and Stagner

Harlow and Stagner's (1933) theory owes much to Watson, but also owes something to Cannon; it is behaviouristic and yet makes a distinction between feelings and emotions. They suggested that emotions are based on unconditioned affective responses (also seen as central physiological traits experienced as feelings). Any emotions then occur

through becoming conditioned to these responses. The original, unconditioned affective state is then modified in two ways: the range of eliciting stimuli is widened and the force of the original response is dampened.

Harlow and Stagner develop their theory in four ways:

(1) They suggest that emotions may reflect conscious states other than simply feelings.
(2) Feelings are controlled thalamically and sensations cortically.
(3) They argue that emotions are not innate, rather that there are unconditioned responses from which emotions develop. The innate part is the 'four fundamental feelings tones, pleasure, unpleasantness, excitement and depression.'
(4) They distinguish between emotion and feeling in a way that was a precursor to much more recent thought, by suggesting that in emotion there is cognition about the outside situation. Thus we are born with the capacity to feel, but have to learn the various emotions.

Again, presaging later thought, they argue that the emotion labels that we attach to various experiences simply reflect our cognitions of the external situation and the meanings that these might have for us. Any name that comes to stand for an emotional state arises from social-conditioning. So, for example, they viewed fear and rage as basically the same state. But if the situation that causes the state is one of threat and it is appropriate to attack we call it rage, whereas if it is appropriate to run we call it fear.

In summary, Harlow and Stagner suggest that there are innate, undifferentiated, basic feelings, emotions being the conditioned form of these, which we learn to refer to in particular ways. The feelings, the emotional conditioning and the social learning of labels are mediated both cortically and subcortically. So, although their theory was essentially behavioural and based on conditioning, they had room for feeling, for physiological mechanisms and, of particular interest, for cognition.

Millenson

Millenson's (1967) model (rather than theory) of emotion owes much to Watson and is also predicated on the technique of conditioned emotional responding (CER). He takes Watson's X, Y and Z factors and puts them within a CER context. For example, a conditioned stimulus (CS) leading to an unconditioned negative stimulus (S−) leads to anxiety, which suppresses positively maintained operant behaviour and sometimes facilitates that which is negatively maintained. A CS leading to an S+ or to the removal of an S− invokes some form of elation, which may enhance some operants. And a CS leading to the removal of an S+ produces anger, which can increase both the strength of some operants and the frequency of aggressive behaviour.

Realizing that anxiety, elation and anger do not exhaust the possibilities for human emotion, Millenson extends his behavioural analysis by making two assumptions:

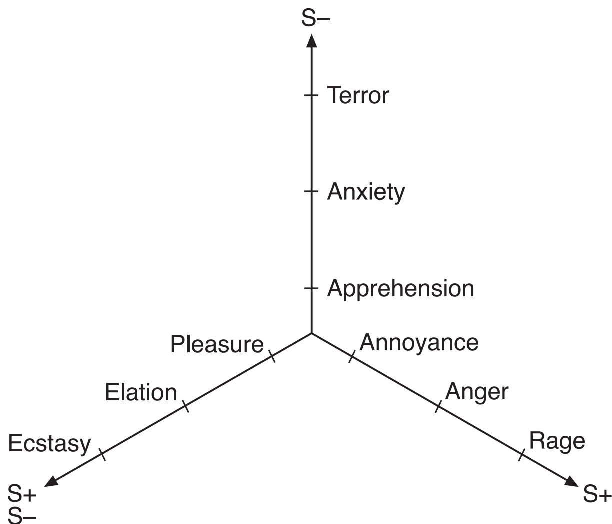

Figure 3. Millenson's three-dimensional model of emotional intensity.

(1) some emotions differ from one another only in intensity, joy and ecstasy, for example;
(2) some emotions are basic (anxiety, elation and anger) and others are compounds of these.

His reason for giving pride of place to these three emotions is that they cover all the logical possibilities for the presentation and removal of positive and negative reinforcers, this setting the occasion for emotion. Moreover, in their conditioned form they cover all the conceivable, simple, classical conditioning procedures.

From this, Millenson developed a three-dimensional emotional coordinate system, as shown in Figure 3. The three primary emotions are seen as vectors, and any other emotions depend on different intensities of the reinforcer that forms their basis. The emotions at the extremes represent extremes, and the fact that the vectors come together at one point suggests that as emotions become less intense or extreme so they become more difficult to distinguish behaviourally.

Millenson was aware that his model does not include all the human emotions, but argues that those excluded are simply mixtures of the primary emotions. A neutral stimulus can become paired with two or more primary emotions or with an unconditioned stimulus (US) that embraces more than one primary reinforcer. He gives the example of a child stealing a cookie. The cookie is a CS for the S+ of eating it, plus a CS for the S– of punishment. In Millenson's terms, this combination is usually called guilt. As another example, a CS paired with a US that has both positive and negative characteristics produces conflict, of the sort that can lead to experimental neurosis. Or what we would normally term sorrow or despair or depression is the result of removing a generalized reinforcer, such as would be involved in the death of someone close or in the loss of one's job.

Finally, Millenson extends his ideas by commenting on emotional control and pathological emotion. From the behavioural viewpoint, he proposes that we use three methods of controlling our emotions:

(1) adaptation to the continual presentations of emotion-producing stimuli – this leads to the building of frustration tolerance and to 'good' things losing their efficacy;
(2) masking respondents with opposed operants, keeping a poker face or a stiff upper lip, for example;
(3) the avoidance of emotion-producing situations.

Millenson's view of pathological emotion is straightforward, but definitely oversimplified. He regards prolonged anxiety-producing situations as leading to neurosis, and psychosis as due to the more extreme, normal positive reinforcers being either drastically disrupted or absent altogether. Would that it all were so simple!

Weiskrantz

Weiskrantz's (1968) basic behavioural view of emotion is that if reinforcers can be defined as stimuli that are consequent to responses, then emotion can be defined as responses that are consequent to reinforcers. This neat perspective draws together a number of other behavioural approaches to emotion. Because reinforcers can be positive or negative and because it is often difficult to distinguish the effects of the onset of one from the offset of another, Weiskrantz defines responses widely and speaks of emotion as a *state* that includes many responses. He also regards respondents (in the Skinnerian sense) as the stuff of emotion.

Weiskrantz does not accept autonomic activity (including electroencephalograms [EEGs]) as indicants of emotion for three reasons:

(1) Autonomic activity may not be a sufficient condition to infer emotional states – cognition may be necessary. Note that this is yet another emotion theorist of behavioural persuasion who brings cognition into things.
(2) There are many problems and opposed viewpoints on the relevance of autonomic responding to emotion.
(3) Autonomic and EEG changes cannot yet be well enough differentiated to discriminate between different emotional states.

Instead of autonomic activity, Weiskrantz argues that in emotion respondents in general should be studied. He believes that in an everyday sense emotion often refers to alterations in characteristic *patterns* of behaviour. This implies, as do other behaviourally oriented theories, that the effects of emotion-producing stimuli are to make ongoing behaviour more or less vigorous.

In summary, Weiskrantz regards emotion as respondent behaviour and suggests that emotional states are reflected in changes in large classes of behaviour. He argues that to speak of emotional states has heuristic value as long as the situational context is

not forgotten. Weiskrantz's view of emotion is clear, simple, based on few assumptions and draws together most other behavioural perspectives. One obvious difficulty with it, however, is that it does not give a clear indication as to how any behaviour or set of responses can be definitely labelled as emotional rather than non-emotional. This is particularly so since emotion almost always occurs in a social context. Here any one behaviour can act simultaneously as an operant, a respondent and a discriminative stimulus that sets the occasion for further behaviour.

Hammond

There is a sense in which Hammond (1970) provides one of the better syntheses of behavioural ideas on emotion, bringing together the Hullian and the Skinnerian traditions. Hammond regards emotion as a central state (CES) of the organism, which is elicited both by learned and unlearned stimuli. Both the unlearned and the learned stimuli may be the presence or absence of rewards and punishments. The learned stimuli signal the unlearned and acquire similar properties through classical conditioning.

Hammond's thesis, which is very much within a motivational framework, draws on Mowrer's (1960a, b) idea that rewarding events lead to drive reduction and punishing events lead to drive induction. These are correlated with pleasure and pain and represent unlearned, motivating states. If a neutral stimulus occurs just before an incremental event it is a danger signal, and if it precedes a decremental event it is a safe signal. Further, the nature of the emotional state that results depends on whether the signal is turned on or off:

- Danger signal: on – fear; off – relief.
- Safety signal: on – hope; off – disappointment.

A scheme such as this allows a straightforward way of specifying the development of the signals, with behaviour being measured simply as approach or withdrawal. Hammond altered Mowrer's conceptualisation somewhat:

(1) stimuli predicting an increase in the occurrence of an aversive event lead to fear – excitatory;
(2) stimuli predicting a decrease in the occurrence of an aversive event lead to relief – inhibitory;
(3) stimuli predicting a decrease in the occurrence of a rewarding event lead to hope – excitatory;
(4) stimuli predicting a decrease in the occurrence of a rewarding event lead to disappointment.

The obvious question to ask at this point, the type of question that clearly has to be asked of all the rather limited behavioural theories of emotion, is whether or not fear, relief, hope and disappointment, singly or in combination, exhaust the possibilities for human emotion?

Gray

Gray (1971, 1987) puts forward a searching theory of emotion in the behavioural tradition. He views emotion as made up of three distinct systems, each of which is grounded in relationships between reinforcing stimuli and response systems:

(1) when *approach* predominates, the reinforcing stimulus is a conditioned stimulus for reinforcement of non-punishment;
(2) when *behavioural inhibition* predominates, the reinforcing stimulus is a conditioned stimulus for punishment or non-reward;
(3) when the *fight/flight* system predominates, the reinforcing stimulus is unconditioned punishment or non-reward.

Gray produced this view of emotion through an analysis of innate fears and early conditioning and an initial distinction of emotional states in the everyday language. He takes the position that emotions are internal states that are mainly caused by external events and distinguishes them from drives. Further, when the relationships between external events and emotional states become confused then pathological reactions result, including anxiety, neurosis, psychosis and depression.

When considering fear in more detail, Gray gives a detailed analysis of the degree to which fears might be innate or acquired. He suggests that the stimuli that promote fears might be classed under four headings: those that are intense, those that are novel, those that stem from social interaction and those that indicate special evolutionary dangers.

Gray's general behavioural theory of emotion then, rather like Watson's and Millenson's, is based on three systems that vary according to the type of reinforcing stimuli involved. It has relevance to both emotional development and to pathological emotion (see Chapters 8 and 11 for further discussion of Gray's ideas).

Staats and Eifert

Other than Gray, Staats and Eifert (1990) are the only psychologists recently espousing a behavioural theoretical approach to understanding emotion (although see discussion of Frijda's views, below). They rest their ideas on the need to establish a *framework* for a theory of emotion that can encompass a wide range of aspects of the subject. Their aim is to produce a theory/framework that unifies existing knowledge, resolves conflicts and includes consideration of biology, behaviour, human learning, personality, psychological measurement, and abnormal and clinical psychology.

They define emotion in a number of ways, the first being as central nervous system responses that have been localized in particular parts of the brain. They distinguish such responses from peripheral arousal. However, they also define emotion in terms of its stimulus properties '. . . when a stimulus elicits an emotional response in the brain, this produces at the same time a stimulus event in the brain . . .' (1990, p. 544). Through this they see the central emotional response as mediating overt behaviour. They argue that there are both innate and learned aspects to the emotion–behaviour relationship.

Moreover, they lump emotional experience – subjective, phenomenological and cognitive facets of emotion – together with the idea that they are in some sense the experience of the stimulus aspects of emotion.

Staats and Eifert spend some time in their framework making links between emotion and reinforcement, perhaps not surprisingly, since in some form or another it is this that is stressed by behavioural theorists of emotion. In their view '. . . *the stimuli that serve as emotion elicitors in basic classical conditioning are the same stimuli that serve as reinforcers in instrumental conditioning*' (1990, p. 545, italics theirs). In this respect, their conceptualisation is very similar to Weiskrantz's. However, extending this to the learned rather than the unlearned side of matters, they argue that any stimulus, as well as having emotional and reinforcing aspects, may also function as a directive (incentive) stimulus that promotes either approach or avoidance behaviour.

While recognizing that much of human emotional behaviour and learning is mediated through language, they argue that this is achieved mainly through classical conditioning. The acquisition of language-based emotion then makes it possible for emotions to be aroused and acquired *cognitively*. They go on to make a thorough analysis of how emotion words can then function as reinforcers, particularly via the concept of self-reinforcement. They extend this further by discussing the incentive function of language, but also extend their range to emotional stimuli other than words, music and pictures, for example. For present purposes the details of this part of Staats and Eifert's framework for emotions is not important. What matters is that here is the most recent behavioural theory of emotion, relying on both a Hullian and a Skinnerian background, stressing what are essentially cognitive concepts. For behaviourists, Staats and Eifert have constructed a decidedly cognitive framework.

In detail, Staats and Eifert's theory leaves many questions unasked and unanswered and, although purporting to be behavioural, relies heavily on a cognitive analysis. They term the theory the 'paradigmatic behaviourism theory of emotion', but it is hard to see how it can live up to this name.

Conclusions

Most of the behavioural accounts of emotion are deceptively simple, their problem being that they do not go far enough. They are far removed from the subjective experience of emotion, and their proponents try, although they do not always succeed, to keep cognitions out of the action. This both detracts from the qualitative richness of emotion and simply does not do it justice. It is clear that there have been a few theorists who have sought to bring behavioural analyses of emotion to the present. A number of the theories in this chapter seem curiously dated, and, yet, interestingly, it is those theorists who toy with more cognitive concepts who seem to have more to offer.

As should be clear by now, one purpose of the concluding section in each chapter of this book is to consider the extent to which the theories summarized in the chapter might be considered to be good theories. Relatedly, the aim is to abstract the significant common threads from the various theories. Furthermore, it is hoped to consider possible new developments.

In general terms, the power of the behavioural theories of emotion is that they provide straightforward (perhaps too straightforward) definitions and lead to clearly testable predictions. Their weaknesses, however, are that their relatively narrow focus does not allow them to explain all that there is to explain and does not leave them with much in the way of heuristic value. Exceptions to this to some extent are the theories of Gray (1971, 1987) and of Staats and Eifert (1990), which are clearly the most far-reaching of the behavioural theories.

With respect to the broad criteria suggested by Lazarus (1991a, b) in the evaluation of emotion theories, the behavioural ones do well in suggesting the causes of emotion and in considering emotion as a dependent variable. However, again, the area across which they do so is quite strictly limited, the complex human emotions such as guilt or shame or envy being dealt with summarily, if at all.

More particularly, the behavioural theorists do well in characterizing discrete emotions, in giving emotion a motivational framework, in dealing with the generation of emotion, with emotional development, with its effects on general functioning and even to some extent with therapeutic ramifications. However, they are wanting with respect to considering the links between the biological and the sociocultural (although Gray might be an exception here), at distinguishing between emotion and non-emotion. Although this latter criticism might seem odd given that such theories score well on definition, the problem comes when attempting to distinguish emotion from non-emotion behaviourally, in practice.

The strangest aspect of the behavioural theorists of emotion is that, although to begin with they apparently eschew matters cognitive, most of them bring cognition into consideration at some time in some way. Sometimes this is via a consideration of the role of emotional state and sometimes it is more directly. What such theorists do not do, however, is to describe the nature of any such cognitive involvement.

Thinking of Oatley's (1992) prescriptions for emotion theory, although the behavioural theories are clearly concerned with the functions and goals of emotions, and to some extent the basic emotions, they are severely limited in other ways. For example, they have little to say, perhaps almost by definition, about the possible unconscious aspects of emotion.

Similarly, they are not much concerned with any links between science and the everyday folk–psychological approach and rarely, if ever, consider the interpersonal facets of emotion. The latter point is particularly surprising, considering that emotion is predominantly a social phenomenon, even though, according to some theories, it has its origins in biology. It is also surprising in that the social aspects of emotion could be readily investigated from a behavioural perspective.

Moving to Oatley's more general questions about theory, the behavioural theories of emotion are not noteworthy for their capacity to deal with more evidence, unless it is obviously of a behavioural nature. On the other hand, specific predictions can be derived from them straightforwardly. It should be noted though that such predictions tend to be very limited. When the behavioural theories become extended enough to suggest the making of broader predictions, or at least predictions across a broader area (as with the Staats and Eifert theory, for example), then the predictions become more difficult to derive.

Much as with phenomenological theories, behavioural theories of emotion are quite restrictive and therefore do not fulfil many of the criteria for good theory, even

when considered en masse. However, it is possible to derive from them a number of general points that at least act as pointers to what might be possible and to what should be taken into account within a theory of emotion.

Behavioural theories tend to stress the view that emotion has something to do with a change in the vigour of behaviour. Moreover, although they are concerned primarily with behaviour, they frequently make mention of the state side of emotion. Finally, and to some extent ironically, a number of them find room for cognitive issues. It seems almost as if the theorists set out to provide *entirely* behavioural accounts of emotion, but, along the way and with some exceptions, find that this is impossible and somehow drop into the cognitive in spite of their better judgement. As will be seen later, and often, they are not alone in this.

As will be seen in the next chapter, underpinning much of recent emotion theory is an evolutionary–functionalist argument. Through this, emotions are seen as adaptive response patterns that have evolved to deal with basic issues of survival. As Consedine (1999) points out, it is surprising, in this context, that little attention has been paid to how survival-based emotions are reflected in behaviour. In general, it seems that any experience of emotion can result in any behaviour. Perhaps this comment is slightly too extreme, but it is certain that we have very wide choices about how to behave when in any particular emotional state.

It is clear that behaviour-based theories of emotion are among the least significant or influential in the field. It follows from this that the links between emotion and behaviour are very poorly understood. This is again surprising because there are very obvious patterns of emotional behaviour in everyday life. A child in school or an adult in the workplace, if thwarted in some way and therefore angry, might in theory have many possible ways to behave. In fact, though, in such circumstances there are relatively few typical reactions. If emotions are evolutionarily based, they must result in reasonably standard patterns of behaviour in order to have survival value. To give the simplest example, to be useful, the fear produced by danger should lead to a set of behaviours that allow escape or avoidance. Any alternatives might have limited survival value.

Arguably, the most promising recent analysis of behavioural aspects of emotion (although it cannot be called a behavioural theory) has come from Frijda (e.g., 1986, 1992a, b, 1996; Mesquita & Frijda, 1992). He views emotion as always linked to changes in *action readiness*. Action readiness is a preparedness for engaging (or not) with the environment. Frijda (1986) lists 17 modes of action tendency, each of which corresponds to what he believes to be a basic emotion: approach, avoidance, being with, attending, rejection, non-attending, agnostic, interrupting, dominating, submitting, deactivation, bound activation, excitement, free activation, inactivity, inhibition and surrender.

It should be emphasized that Frijda is linking emotions to action tendencies, not to specific, unvarying behaviours. In any case, an action tendency might be suppressed or hidden, for social reasons, under the cloak of some other behaviour. So, behavioural differences in emotions could result from different repertoires, differing abilities to access behaviour, environmental differences and differential regulation.

Frijda has clearly made a useful attempt to bring behaviour back to emotion theory. He has done so in a manner that is not distasteful to current theorists, by emphasizing *potential* behaviour rather than behaviour itself. In this sense, any

lingering anti-behaviourist feelings among recent emotion theorists might be assuaged. Since a brief look around makes it obvious that some fairly standard behaviour patterns are part of emotion, this is just as well. Returning to the start of this chapter, remember the young woman, maybe you, at the party, being driven by her jealousy to do something; remember the old man sitting at home burning up with sadness, grief, resentment and the sheer frustration of being helpless to actually do anything about his dying wife and his own failing capacities. Psychologists have not done all that well in theorizing about the behavioural aspects of emotion, but they certainly exist.

Summary

- The major behavioural tradition of emotion theory began with Watson and developed through to Millenson. Within this tradition, three or four fundamental emotions are seen as built-in, with emotional complexities developing through learning and conditioning.
- Running through these theories is the idea that emotions are essentially respondent behaviours (as distinct from operant or instrumental).
- More recent behavioural theories of emotion also stress physiological mechanisms that not only interplay with behaviour but also occur within the motivational framework of reinforcement and inhibition.
- Some behavioural theories of emotion have a place for cognition, in spite of which the behavioural approach to emotion has fallen somewhat into disuse.
- The most promising recent attempt (by Frijda) to bring behaviour back into emotion emphasizes action potential or behavioural readiness. This is not only plausible but allows the behaviour involved in emotion to be as flexible as it obviously appears in daily life as well.

A question of application

- When people you know start to show emotion, do you think that this is getting them ready for action, ready to do something?
- How easy is it to tell what someone is feeling from what they are doing?
- Is it possible to experience emotion without showing it in your behaviour?
- Does emotion *always* involve behaviour?
- What happens if circumstances prevent you from doing whatever your emotion is urging you to do?

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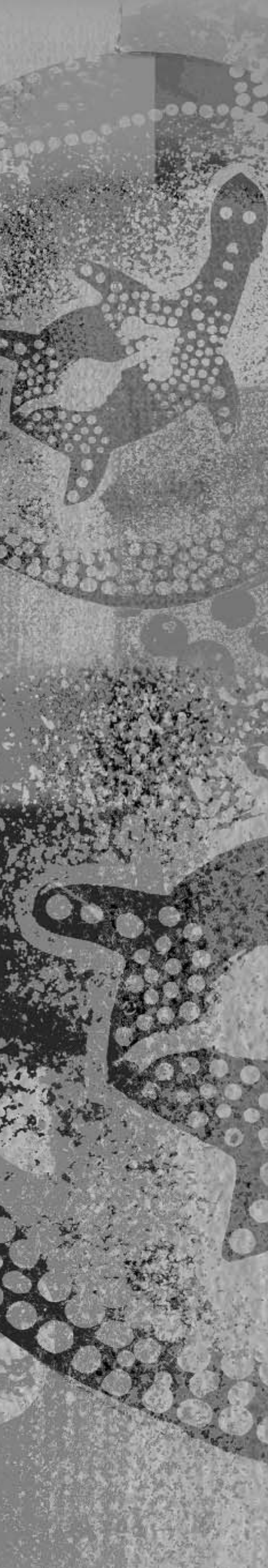

Chapter 5
Physiological theory

We are thus in the unfortunate position of trying to study the physiological basis of hypothetical concepts which are so poorly defined that we have no assurance of their correspondence to specific psychological or physiological functions.

S. P. GROSSMAN, 1967

It is becoming increasingly apparent that major progress in understanding the nature of emotions will require attempts to correlate various forms of experience and behaviour with the underlying brain substrates.

J. PANKSEPP, 1992

Our emotions are adaptation shaped by natural selection.

R. M. NESSE & G. C. WILLIAMS, 1994

. . . successful adaptation implies the ability to feel and express all emotions in appropriate settings.

R. PLUTCHIK, 2001

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Some real life

Imagine that a heated discussion has developed at work. You are feeling slightly uneasy because you have not quite finished a job that everyone had expected you to have finished. Things have gone badly wrong, the discussion becomes increasingly intemperate, and suddenly the focus is directed at you. Someone you had believed that you could rely on turns on you and starts a nasty public attack, laying at your feet the blame for all of the current difficulties. All eyes are on you, and the atmosphere is hostile. You are consumed with a mixture of indignation, anger, loneliness, guilt and even shame, but can find no words to express any of it. You can feel your heart pounding and your face flushing. You become very hot and the sweat is running down your back. Your legs are shaking, and, as you begin to speak, your lips tremble and the words are indistinct. You seem to be losing control of your body. Emotion can have a physiological life that is seemingly of its own.

Imagine an underpaid nurse. She trained as a nurse, driven by a somewhat old-fashioned sense of vocation, and mostly enjoys what she does. She likes to help people in distress and understands it when they become ratty. She goes home at the end of each shift tired, but reasonably content. But now she is resentful. Pay parity has slipped far behind other sectors and even behind nurses in other parts of the country. She supports unionism, and the union has urged its members to strike. So she stands in a picket line outside her hospital helping to hold a placard that is urging passing motorists to hoot in support. She has never done such a thing before and is very concerned about the patients just a few metres away. As she stands holding the placard, she can feel the flush in her face and knows that it is spreading down her neck and across her chest. Her stomach is twisted and angry, and she can feel the muscles behind her shoulder blades gradually knotting themselves into hard little balls. Every movement of her back becomes painful. She sees television cameras arrive and an interviewer approaching. Her legs start to feel wobbly and her knees seem to be bouncing up and down quite independently of her ability to control them. She can even feel her feet sweaty in her shoes. Bodily reactions in emotion can be very powerful.

There is an enormous amount of empirical research into the physiology of emotion. The role and status of physiology in accounts of emotion has been of significance since William James onward, and perhaps before that to be fair on earlier philosophers. The major aim has been to find the substrates of emotion in both the central nervous system (CNS), the peripheral nervous system and the endocrine system. However, the search was mounted early to find what was assumed to be the physiological patterns that might underlie each discrete emotion, and the search continues.

Both to support such research and as a background from which to derive hypotheses and predictions, physiological theories of emotion have existed for an equal length of time. Or, when the theories are not solely physiological, they are at least about the role of physiology in emotion. It is difficult to get away from bodily perturbations; we feel them in ourselves and perceive them in others. They *must* be involved.

Of course, it is not surprising that any of the physiological theories of emotion rest on the belief that emotions have a biological base. At the complex human level, they might have socially constructed aspects, but even these are only additions to a physical/biological foundation. Similarly, it is also not surprising, given these introductory comments, that most of the physiological theories are also based on the belief that there are discreet emotions.

From a theoretical rather than an empirical viewpoint, the most significant considerations that have grown, largely although not solely, from the bodily approach to emotion have concerned evolution. It is assumed by many psychologists that emotion has its roots deep in evolutionary history; in other words, that emotions serve functions. This is not merely saying that if you feel apprehension bordering on fear as you walk in for a root canal operation that this is functioning as a warning sign of danger ahead. Rather, it is implying that fear has evolved through the usual forms of adaptation and survival, as an important protective mechanism. In like way, so the other emotions can be seen to serve functions based on survival.

The theories described in this chapter, then, are divided into three sections. Some earlier theories are included in brief in order to help trace the background of more recent theories. The latter are then grouped according to whether their major thrust is the search for physiological mechanisms underlying emotion or an emphasis on the evolutionary functions of the emotions.

Earlier physiologically based views

Wenger

Following William James, Wenger (1950) equates visceral responses with emotion, but also describes how these might function in a 'hypothetical robot'. He concentrates on behaviour, but views emotional states as emotional complexes, which he saw as 'explaining' why we have no language that is adequate to describe emotion, a point that might be debated. Wenger suggests further that perception of emotional stimuli depends on the pairing of conditioned and unconditioned stimuli, following which the arousal of the autonomic nervous system (ANS) leads to visceral responses. These in turn lead to drive stimuli that Wenger regards as perceptions of visceral action. The end point in the chain is overt, muscular response and verbal report.

Although this is a very brief description of Wenger's theory, it was thought worth including because of its simplicity. It was put forward at a time when there was a dearth of psychological publications about emotion and helped to form a basis for subsequent physiological theories.

Young

Young's (1961) theory of emotion is decidedly idiosyncratic and as such rather difficult to categorize. However, because it relies heavily on arousal it has been included in this chapter.

Rather than speak of emotion, Young speaks of affective processes and a *hedonic* continuum, being primarily concerned with pleasantness and unpleasantness. He sees affective processes as varying in sign, intensity and duration. So, if naive organisms show approach behaviour, an underlying positive central affective process must be at work. Similarly, a negative affective process underlies withdrawal. These affective processes can vary from maximal positive intensity to maximal negative intensity, shown by differences in choice and that they can also differ in duration.

Young views affective processes as ranged along a hedonic continuum. Hedonic changes can occur in either direction, positive or negative, and from time to time may be in opposition. This way of looking at things led Young to suggest four types of possible affective change: increasing positive, decreasing positive, increasing negative and decreasing negative. Each of these, however, has a motivational, regulatory role in behaviour, including its activation, sustainability and termination.

Lindsley

Lindsley's (1950, 1951, 1957, 1970) theory of emotion is similar to Duffy's (e.g., 1962) in that it has arousal/motivation mechanisms underlying emotion, although it is expressed in neurophysiological rather than behavioural terms. The suggested mechanisms of arousal are the brainstem reticular formation interacting with the diencephalic and limbic systems via the ascending reticular activating system. Lindsley also maintains that the limbic systems control emotional expression and emotional and motivational behaviour.

Lindsley regards emotion as being expressed in three ways: through cortical channels, visceral channels and somatomotor channels. Also, as with many primarily physiological theories of emotion, Lindsley's depends very much on the empirical research of the time, mainly concerned with electroencephalogram (EEG) mechanisms of arousal.

Lindsley is a wide-ranging, neural arousal theorist, his ideas embracing far more than emotion. He is also concerned with phenomena such as sleep and wakefulness, alertness, attention, vigilance and motivation. At the time he was first writing, the descending and ascending reticular formations were in the theoretical ascendancy, and in the 1950s there were few other competitive theories of emotion. Like Wenger's theory of the same era, Lindsley's is simple, although nevertheless pointing to obvious CNS areas of involvement in emotion.

Gellhorn

Gellhorn (1964) and Gellhorn and Loufbourrow (1963) begin by suggesting that the basis of emotion is the integration of somatic and autonomic activities, modified by neurohumours and hormones, into what they term 'ergotropic and trophotropic activities'. The former are work-directed and the latter are rest-directed. When one of the two systems is excited the other is diminished. Ergotropic and trophotropic effects can be brought about by manipulation of the thalamic reticular system, septum, anterior hypothalamus and medulla, the continuous balance between the two supposedly reflecting emotional reactivity.

Gellhorn regards emotional arousal and modification of the ergotropic/trophotropic balance as coming about through afferent impulses, internal environmental changes that act on visceral receptors or the brainstem, and by direct stimulation of the brainstem, the limbic system and some subcortical structures. All the relevant physiological mechanisms are in with a fighting chance, including the possibility that similar effects may be brought about by hormonal change. He suggests in fact that when emotions are aroused, the ergotropic/trophotropic balance must be altered by both neurogenic and hormonal processes. In general, Gellhorn engages in considerable, not well-supported physiologizing, but nevertheless does so in a stimulating way.

Fehr and Stern

Fehr and Stern (1970) emphasize the periphery in accounting for emotion physiologically, also arguing that the original James–Lange theory has much to commend it. James spoke of 'primary feelings', 'immediate reflexes' and 'secondary feelings'. Fehr and Stern maintain that primary feelings and immediate reflexes should be seen as hypothalamic discharges that inhibit the cortex and excite the ANS. It might be thought that secondary feelings are perhaps given by afferent feedback from the periphery. However, Fehr and Stern argue that this does not occur, suggesting that behaviour can be produced that looks like emotion, but without visceral mechanisms being involved. Even so, afferent feedback may still occur in 'real' emotion.

Via considerable evidence concerning the effects of stressors, Fehr and Stern argue that the periphery should not be ignored when considering the physiology of emotion and that the James–Lange theory was sound in its emphasis on the viscera. Although this is not a far-reaching theory, these are valuable points.

The neuroscience approach

The following five theoretical standpoints represent the best of what is current among what should perhaps be termed the 'neuroscience approach' to emotion. Each of the theorists is primarily concerned to account for emotions by explicating the physiological mechanisms on which they depend. It would be wrong to assume, however, that these theorists regard emotion as *entirely* a physiological matter. Also, it should be noted that there is some overlap between the theories in this section and the next. If a neuroscience approach is taken to emotion then it is hard not to have an evolutionary bent as well. Similarly, an evolutionary approach suggests a concern with the bodily or physiological. It is a question of emphasis.

Bindra

Bindra (1968, 1969) has a neurophysiological theory of emotion and motivation, suggesting that both types of phenomena can be accounted for with one construct, the central motive state (CMS).

Rather than distinguishing between emotion and motivation, Bindra subsumes them under 'species-typical', biologically useful actions. He suggests that such actions

are the result of an interaction between environmental stimuli (incentives in his terms) and physiological change, a change that occurs in a common group of CNS neurons. This change produces a CMS, which is a functional change in neurons, needing both an environmental stimulus and a physiological change before it will occur. For example, for a hunger CMS to happen there must be internal, physiological changes plus external stimuli such as the sight and smell of food.

In Bindra's terms, a CMS is thought to increase the probability of a response to certain environmental stimuli by altering the effectiveness of the sensory input, which Bindra refers to as 'selective attention'. Or a CMS may alter the likelihood of a particular action by altering neural discharge to appropriate autonomic and somatic motor sites – 'motor facilitation' or 'response bias'. Believing that this scheme is equally apposite to considerations of both emotion and motivation leads Bindra to suggest that many of the words of these areas can be replaced by common terms. The obvious one in this context is a CMS to replace emotion or emotional state, or motive and motivational state.

Bindra also believes that CMSs can be classically conditioned, their particular nature depending on factors such as the physical state of the organism and the conditioned and unconditioned stimuli that might be involved. Furthermore, Bindra asserts that the idea of the CMS is useful in resolving some enduring problems in the study of emotion. For example, at the time Bindra was writing it was reasonable to say that many theorists had suggested that emotion is disorganizing and motivation is organizing. Bindra argues that both emotion and motivation can be organized or disorganized, depending on when they are observed during individual development. A lack of experience with an environmental stimulus will lead to disorganized responding, for example. However, he also suggests that motivational patterns start early in development and occur frequently, whereas emotional patterns occur less frequently and involve more unusual situations. In this sense, he views motivation as organized and emotion as disorganized, although there seems to be little justification for this in terms of the CMS.

MacLean

Papez (1937, 1939) suggested that emotional expression and emotional experience may be dissociated and that the experiential aspects require cortical mediation. From this starting point, MacLean (1970) argues that the limbic system integrates emotional experience, although the effector system is probably the hypothalamus. His reasons for this are that the limbic system has extensive subcortical connections and is the one part of the cortex that has visceral representation. This also accords with the extensive olfactory functions of the limbic system. MacLean argues that olfaction is of prime importance in lower animals, from their food-seeking to their obtaining of sexual partners. He suggests that, although the sense of smell may no longer be involved to the same extent in more advanced organisms, their emotional behaviour may be mediated by similar mechanisms.

So MacLean regards the hippocampus and amygdala as having special significance for the subjective, experiential side of emotion. He views all the structures in the limbic system as in some way involved in emotion, but without stressing any specific mechanisms that might mediate particular emotional patterns.

More recently, MacLean (e.g., 1993) has developed his thinking a little further, although still basing his ideas on the view that factors related to the evolutionary development of the limbic system helped to refine the emotional feelings that guide self-preservatory behaviour.

Although MacLean's is primarily a physiologically based view of emotion, interestingly he lays great stress on subjectivity or the experiential side of emotion. He argues in fact that subjective phenomena are not only capable of being studied but are also essential to study in order to gain a proper understanding of emotion. He links six forms of behaviour (in humans and animals) with six affects:

- searching/desire;
- aggressive/anger;
- protective/fear;
- dejected/dejection;
- gratulant (triumphant)/joy; and
- caressive/affection.

Panksepp

Panksepp's theory of emotion is among the best and most thorough in the neurophysiological or neuroscience domain (e.g., 1981, 1989, 1991, 1992, 1993). His original aims, which are extending year by year, were to produce a neurobehaviourally derived taxonomy of emotions, to outline a scheme of how the emotions are organized in the brain and to explore the implications of this type of theory.

The theory springs from the likelihood that mammals share emotional circuits in the limbic system that provide what he terms 'obligatory internal dynamics'. It rests on five assumptions:

(1) distinct emotional processes are reflected in hard-wired brain circuits;
(2) humans and animals share primitive emotion processes;
(3) although there a limited number of basic emotional circuits, mixtures of these plus social learning allow much more;
(4) neurotaxonomy can be considered through introspection;
(5) the scientific understanding of emotion can be gained through the study of brain organization.

Panksepp also makes a number of proposals:

(1) there are genetically hard-wired, unconditioned responses made to life-challenging circumstances;
(2) there is adaptive activation of inhibition of classes of related actions;
(3) emotion circuits change their sensitivities through feedback;
(4) neural activity can go on longer than the activities that give rise to it;

(5) activity in the emotion circuits can be conditioned to environmental stimuli through reinforcement;
(6) the emotion circuits interact with the brain mechanisms of consciousness.

Panksepp suggests that there are four emotion-mediating circuits that pass between the midbrain, limbic system and basal ganglia. They are labelled according to the extremes of emotional experience they are presumed to mediate in humans – expectancy, fear, rage and panic.

Take the example of expectancy: this is thought to be mediated in the medial forebrain bundle of the lateral hypothalamus. It is sensitized by homeostatic imbalances and linked, environmental incentives and produces motor arousal for explorations and investigation for survival. Fear is mediated in the sites for flight and escape and occurs in response to potential harm. Rage sites elicit angry, emotional displays and invigorate irritable or restrained behaviour. Panic sites bring about distressed calls and explosive behaviour.

Panksepp puts forward a convincing case for a neurophysiological basis for these four command systems. Anatomically, he suggests that they run from the mesencephalon through the reticular fields of the hypothalamus and thalamus to the basal ganglia and the higher limbic areas. Neurochemically, Panksepp believes the circuits to depend on single or multiple command transmitters. He argues for dopamine and acetylcholine having key functions in expectancy and rage and for the involvement of the benzodiazepine receptor and endorphin systems in panic and fear. The major brain amines – serotonin and norepinephrine – are likely to be involved as well.

Psychologically, Panksepp stresses learning and reinforcement, with the view that emotionally neutral stimuli can gradually influence emotion circuits. The higher brain circuits may well assimilate some of the functions of the lower circuits, which may help to account for cognitive appraisal as having an important influence in the development of adult emotions. He also speculates a little about possible imbalances in the visceral brain underpinning various psychiatric disorders. For example, schizophrenia and depression would be found on the expectancy dimension and personality disorders and psychopathy on the rage dimension. Anxiety neuroses would be on the fear dimension, and autism and obsession–compulsion on the panic dimension.

It is refreshing that, given the dependence of Panksepp's theory on neuroscience, he also stresses the importance of introspection. He argues that the conscious mind can see the dynamics of its subcortical heritage. Two possibilities for looking at the brain are as a generalized arousal state that promotes individual emotion through social learning, or as a system of hard-wired representations for every emotional nuance. Panksepp takes a middle course with classes of behaviour going together, the basic control of each being in common circuits. These are genetically based, but modulated by experience, perceptions and homeostasis, all of which would result in numerous specific behavioural expressions.

To summarize, Panksepp's theory of emotion suggests that there are brain emotion systems in the form of a limited number of translimbic command systems (in his more recent formulations [e.g., 1991] he includes a ludic system and speculates about other emotions). That such states exist in animals is an assumption based on self-recognition and similarities in mammalian limbic systems. Panksepp believes that

subjective experience provides a useful guide for categorizing and analysing emotive brain states.

Panksepp terms his preferred approach to emotion 'comparative psychoneuro-phenomenology'. This mixture reflects the way in which he would like to liberalize the manner in which emotion is studied – a view that is thoroughly endorsed here and that will be extended later. Panksepp argues for an 'as if' approach that should free an investigator to use words in a comfortable way:

> In the absence of comprehensive knowledge of how such an emotional system (a brain system) operates, it should still be permissible to discuss the observed behaviours theoretically in terms of the operation of the putative underlying circuitries.
>
> J. PANKSEPP, 1991, p. 90

In what might be seen as an illustration of, or even a vindication of, this view, Panksepp (1992) writes compellingly concerning the relevance of what he terms the neuro-behavioural data to recent discussion of the nature of basic emotions. Addressing Ortony and Turner's (1990) significant concern with this issue, he persuades convincingly that in the matter of basic emotions consideration *must* be given to brain research. He does not gainsay the conceptual analysis made by Ortony and Turner (discussed at length in Chapter 7), but implies that it would be foolish to leave brain research out of the analysis.

Scherer

Strictly speaking, Scherer's (1993) cogent discussion does not offer a physiologically based theory of emotion. However, within his own definition and the general *component process theory* of emotion (see Chapter 7), he puts forward some penetrating suggestions for the relevance of what he prefers to term 'neuroscience' to our understanding of emotion:

> Yet, although the study of the neural substratum of psychological processes does not necessarily resolve functional questions, one can argue that more detailed knowledge of the *biological constraints*, concerning both structures and mechanisms, can help to select between different theoretical alternatives and to direct psychological research toward areas or topics that are crucial for our understanding of the phenomenon of emotion.
>
> K. SCHERER, 1993, p. 2

Scherer emphasizes six important theoretical matters that he uses as the basis of evaluating the implications of neuroscience for understanding emotion: definition, emotion–cognition relationships, appraisal, sequential and parallel processing, patterning, and what he terms 'entry points and intersystem feedback'.

In his component process theory, Scherer defines emotion as what happens when the five components of all the subsystems of the organism's functioning are synchronized in reaction to some event (internal or external) that is of central concern. The components are cognition, physiological regulation, motivation, motor expression and

monitoring/feeling. His first aim then is to explore how a neuroscience approach might help to evaluate the worth of this or any other definition and theory.

Two possibilities are, first, to see different emotions as reflected in particular patterns of brain activity and appraisal, and, second, to look at dissociations between different components of emotional and non-emotional states through pathology. Further, there might be developed techniques in neuroscience that would allow demonstration of various central subsystems in emotional arousal. Part of the neuroscientist's task would also be to attempt to demonstrate whether different emotions rest on the same or different substrate systems.

As Scherer rightly views it (and see Chapter 6) the emotion–cognition debate depends very much on the definition of cognition. Scherer's synchronization perspective allows him to consider cognitive processes very much as a part of the emotion process and, as it is involved in subjective feeling, another component of emotion. He suggests that the neuroscience approach to these matters might move in the direction of attempting to find (i.e., define) various central indicators that are involved in the processing of the different subsystems. If these could be defined, then there might be more precision about how cognitive processes and emotion interact.

Scherer's component process theory of emotion analyses the appraisal process through what he terms stimulus evaluation checks (again, see Chapter 6) and pays particular attention to whether such checks are made in parallel or sequentially. He argues that the neuroscience approach could help in this area in four possible ways. First, there are neural network theory and parallel distributed processing models. Second, there is what is sometimes termed 'brain architecture', which as the name implies is concerned with the particular structure of features of the CNS. Here, Scherer draws attention to Le Doux's (e.g., 1987, 1989, 1992) work on identifying pathways involved in emotional learning.

Third, there is multi-layered processing, which points to the significance of the appraisal system depending on different levels of evaluation being available. Processing can then be changed according to the stimulus and the interpretative needs of the organism. CNS evidence can help here by showing what the biological constraints might be. Finally, there is the possibility of monitoring evoked potentials. This would give direct measures of what processing is going on centrally.

Scherer's component process definition/theory of emotion suggests that all the various modalities are involved in a highly integrated way in producing differential patterns for the various emotions. He argues that not only are there patterns but that the patterns of changes in the various subsystems should also be closely linked. He points to most biologically/physiologically oriented emotion theorists espousing this type of view.

As a final matter of concern to emotion theorists that the neuroscience approach might shed some light on, Scherer points to the question of feedback between systems. He believes that the subsystems are all interconnected and are feeding back and forward all the time. In his view this helps the establishing of synchronicity during an emotional episode or experience. To understand this he argues for a neural network modelling approach, tempered by whatever constraints are imposed by neural architecture.

In what is a very thoughtful and informative exposition, then, Scherer considers his own theory of emotion (almost as representative of others) within the approaches that might be taken by neuroscientists. He believes that the sort of evidence that would

accrue from neuroscience would even help in the consideration of whether emotion is best seen from a universalist or a relativist perspective. To allow Scherer his own final word, he believes that emotion psychology should be involved in:

> Conceptualising the sequential multi-componential process that constitutes emotion episodes and operationalising the bonding of specific emotional experiences in the flow of consciousness. The neurosciences are well equipped to contribute to this daunting exercise.
>
> K. SCHERER, 1993, p. 35

Cacioppo

The history of ideas about the psychophysiology of emotion began with James. There followed a plethora of research that was driven largely by the view that each discrete emotion would have its corresponding psychophysiological pattern of responses. Given that the ANS was clearly involved in emotion and that an individual's *experience* clearly allows the various emotions to be distinguished, response-patterning seemed likely. However, the search was largely fruitless, the view being that individual differences in emotional reactivity swamped any trans-person patterns.

Cacioppo, Klein, Berntson and Hatfield (1993) provide a useful recent summary of the ideas on the *psychophysiology* of emotion. They place previous theories of emotion that have a role for peripheral physiological change into one of two categories. There are theories that suggest that discrete emotions stem from discrete, somatovisceral patterns and theories that suggest that such emotional experiences come from cognitive appraisals that arise from undifferentiated physiological arousal.

Consideration of the inconclusive and somewhat ambiguous nature of the evidence on the psychophysiological patterning in emotion leads Cacioppo et al. (1993) to put forward what they term an organizing framework and a model of emotion. Various considerations lead them to suggest that it is more important to look for conditions and emotions in which there is differential physiological activity, rather than to look for invariant patterns.

Their *somatovisceral afference* model of emotions lists psychophysiological conditions in which '(1) the *same* pattern of somatovisceral afference leads to discrete emotional experiences, and (2) quite different patterns of somatovisceral afference lead to the *same* emotional experience' (1993, p. 137).

A stimulus undergoes a primitive evaluation; this determines approach/withdrawal and leads to physiological changes. Somatovisceral responses, although not necessarily occurring in this initial appraisal, may vary along a continuum from emotion-specific activation to undifferentiated activation. This is paralleled by somatovisceral sensory input to the brain. Then, in adults, there is further cognitive evaluation of the somatovisceral changes. This leads to discrete emotional experiences. This second stage of cognitive elaboration ranges, again on a continuum, from simple pattern recognition through to complex attributions and hypothesis-testing. There is a timescale involved with greater cognitive elaboration requiring longer time periods.

The model has it that different patterns of somatovisceral afference can lead to the same emotional experience through pattern recognition, perceptual priming and pattern recognition or evaluative need plus cognitive labelling (Cacioppo et al. 1993 see these as three distinct psychophysiological mechanisms). By contrast, they describe the same pattern of somatovisceral afference as leading to discrete emotions through two psychophysiological mechanisms: (1) somatovisceral illusions involving ambiguous afference and a primed emotion schema, and (2) cognitive labelling in which there is an emotionally undifferentiated perception of afference and an evaluative need.

Cacioppo et al. (1993) regard their suggested framework as of heuristic value only at present. For the future they believe it to be important to find the variables that help to determine whether discrete, ambiguous or undifferentiated somatovisceral responses come from an emotional stimulus. Then it might be possible to begin to specify how discrete emotions are linked to particular ANS changes. This approach may be regarded as doing something toward bringing together the central and peripheral, physiological–theoretical approaches to emotion.

The evolutionary approach

The following four theories stress that our understanding of emotion would progress most expeditiously in a functional, evolutionary context. These theories differ from one another slightly with respect to whether they emphasize emotion in general or, in the most recent approaches, also concentrate on specific emotions.

Rolls

Rolls (1990) offers a theory of emotion that is concerned with its neural basis, although rests it on a definition of emotion from the behavioural tradition – emotions being seen as states produced by instrumental reinforcing stimuli. He describes and classifies emotions in a way that is very reminiscent of Millenson (1967) and Weiskrantz (1968) and makes his initial analysis very much dependent on the presentation or removal of positive and negative reinforcers.

In refining this view, Rolls suggests that not all states produced by reinforcing stimuli are emotional. Emotional states are those that are normally produced by external reinforcing stimuli. He brings cognition into the matter by suggesting that *remembered* external stimuli that are associated with reinforcers can also lead to emotional states. Moreover, he gives cognitive processes the role of determining whether or not an environmental event is reinforcing. So an emotion is made up of a cognition that some event is reinforcing plus the mood state that results.

Rolls argues from this conditioning/reinforcement-based, but nevertheless cognitive viewpoint that the type of brain mechanisms that underlie this type of learning are crucial to emotion. In particular, it is important to find brain mechanisms that are implicated in disconnecting inappropriate stimulus-reinforcement associations.

Before elucidating the neurophysiological part of his theory, Rolls suggests that emotion has particular functions that have obvious survival value:

(1) Emotion elicits autonomic and endocrine responses.
(2) Emotion allows behaviours made in response to reinforcing stimuli to be flexible.
(3) Emotion is motivating.
(4) Emotion is capable of being communicated.
(5) Emotion allows social-bonding.
(6) Anything that is positively reinforcing (i.e., that allows pleasant feelings so that there are actions made to obtain it) has survival value. Similarly, from an evolutionary viewpoint, natural selection is likely to militate against the survival value of behaviour that is associated with unpleasant feelings and negative reinforcement.
(7) Mood can affect the cognitive evaluation of either events or memories.
(8) Emotion may help in the storage of memories. This may be through episodic memory being facilitated by emotional states, or an emotional state being stored with episodic memories, or by emotion guiding the cerebral cortex in setting up representations of the world.

The neural part of Rolls' theory of emotion, which he seems to view as basic, gives pride of place to the amygdala, the orbitofrontal cortex and the hypothalamus. He argues that the amygdala is concerned with the learning of stimulus-reinforcement associations. From Rolls' previous line of argument this means that the amygdala must be involved in emotional-learning. By contrast, he argues that the evidence suggests that the orbitofrontal cortex is involved in *disconnecting* stimulus-reinforcement associations. He sees this part of the CNS as being implicated in emotion by correcting inappropriate stimulus-reinforcement associations. Furthermore, the hypothalamus is involved through its connections with these two regions. This allows only particular types of emotional (and motivational) information to be dealt with there.

Rolls completes his neural theory of emotion by suggesting ways in which the CNS basis of emotional states might possibly affect cognitive processing. In this context, he draws attention in particular to the hippocampus and goes into some detail about how it might function in this capacity. In summary, he suggests the three possibilities that emotional states may affect whether (or how firmly) memories are stored: they may be stored as part of memory; they may have an effect on the recall of memories; or they may have an effect on whatever cognitive processing is associated with them.

Although dependent on a behaviourally based definition of emotion, Rolls' theory is squarely based on the neurophysiology of brain mechanisms, but also gives significant consideration to cognitive involvement. Fundamentally, however, it stems from an evolutionary perspective.

Plutchik

Plutchik's psychoevolutionary theory of emotion has been developed over 40 years (e.g., 1962, 1980, 1989, 1991, 1993, 2001). It could appear in many chapters of the present book, but seems most appropriately centred here since its evolutionary

emphasis gives it a clear biological basis. Plutchik defines emotion as an inferred, complex sequence of reactions, including cognitive evaluation, subjective change, and autonomic and neural arousal impulses to action. The resulting behaviour affects the precipitating stimulus.

For Plutchik, emotion is multidimensional, the dimensions being intensity, similarity and polarity. Any emotion can vary in intensity (e.g., between pensiveness and grief), in its similarity to any other emotion (e.g., joy and anticipation are more similar than loathing and surprise) and in its polarity (e.g., disgust is the opposite of acceptance).

The typical way of showing Plutchik's model of emotion is via the two diagrams shown in Figure 4. Intensity is represented on the vertical dimension of the cone, whereas each section portrays a primary emotion. The cross-sectional view shows in particular the central area in which there is the conflict of mixed emotions.

Plutchik discusses the importance of the language used in any analysis of emotion. Normally, we use everyday language to consider emotion, but it is also possible to use a purely descriptive language based on behavioural observation and a language based on the adaptive function of whatever the organism is doing. So, for example, we may experience joy or ecstasy, while behaviourally we are mating and functionally we are reproducing.

Taking his usual evolutionary perspective, Plutchik regards the functional/adaptive language as the best for emotion, since adaptation varies along the same three dimensions as emotion. Adaptively speaking, an organism can protect, destroy; reproduce, deprive; incorporate, reject; explore or orient – four pairs of what Plutchik regards as opposites that can vary in intensity and similarity to one another. Plutchik prefers to see emotion simply as a bodily reaction of one of these types.

Plutchik regards subjective feelings as sufficient conditions for emotion, but not as necessary; so a person may have an emotion, but remain unaware of it. Similarly, physiological changes are necessary, but not sufficient for emotion to occur. Physiological change may come about through exercise, for example, in which emotion may not be involved.

Emotion to Plutchik is a patterned bodily reaction that has its correspondent, underlying, adaptive processes that are common to living organisms. Primary emotions are short-lived and usually triggered by external stimuli, and there are often mixtures of physiological and expressive patterns. It is therefore only possible to infer discrete patterns of emotion approximately.

Plutchik develops this structural model of emotion into what he terms 'a sequential and a derivatives model'. The sequential model suggests that events occur that are cognitively appraised with respect to their importance to well-being. Feelings and physiological changes follow this, the physiological aspects being primitive or anticipatory reactions to do with a range of functional impulses. There will be a final overt action. The result of all of this is to feed back into the system to maintain a homeostatic balance.

From Plutchik's perspective, some emotions are primary and others are derived; this implies that emotions are 'related to a number of derivative conceptual domains' (1991, p. 53). So the language of mixed emotions appears to be similar to the language used in speaking of personality traits, and this in turn is related to the language of diagnostic traits and even ego defences.

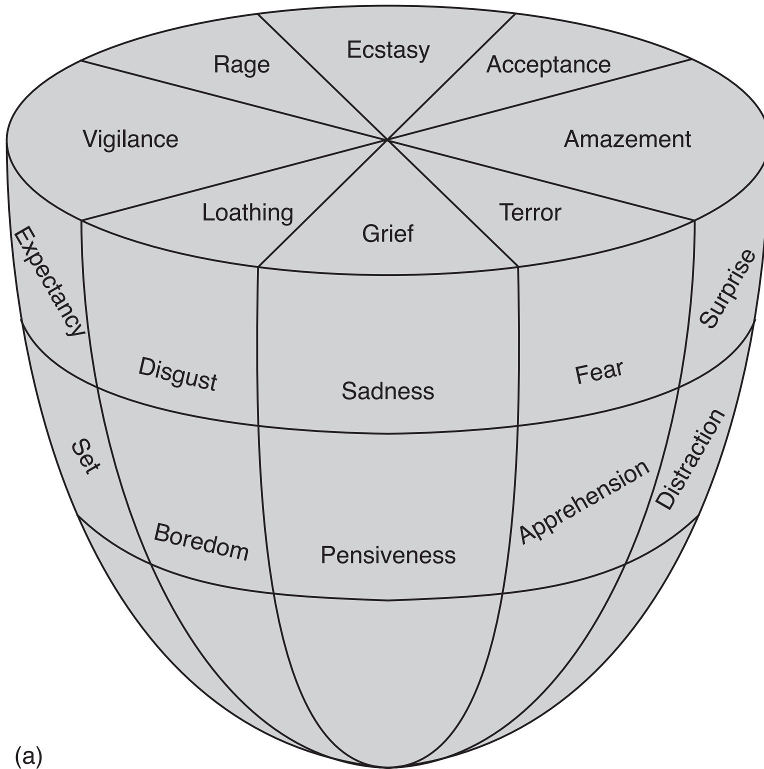

Figure 4. (a) Plutchik's three-dimensional model of emotion. (b) A cross-section through Plutchik's emotional solid (taken from Arnold, 1970a).

From Plutchik's psychoevolutionary perspective, emotion has two functions: (1) to communicate information about intentions or probable behaviour, and (2) to increase the chances of survival when faced with emergencies. Emotion can be modified by learning, emotion finally being seen as mediating a form of behavioural homeostasis.

McGuire

Via an analysis of the history of research and ideas on animal emotion, including invertebrate emotion, McGuire (1993) makes some interesting observations on the future of biologically based views of emotion. He characterizes many researchers and theorists as taking the process of evolution for granted and then attempting to fit the biological control of emotion into a linear model. Such researchers are keen to find the brain circuitry of emotion. The basis of this view is that certain, perhaps primary emotions are hard-wired in the brain (i.e., they are genetically determined) and they occur when life is threatened. McGuire argues that simply because there are biological correlates of emotion does not mean that emotions are hard-wired. And in a similar vein, because an emotion has evolutionary advantage does not mean that it will necessarily be reflected in short-term actions.

McGuire argues for a wider definition of emotion than is typical in this area: '. . . a change in the internal system of an animal such that it is more likely to perform a particular behaviour' (1993, p. 163). He regards this definition as promoting the study of neural circuits plus their modulation and genetic control mechanisms for emotions.

Neuromodulation is important in McGuire's view because, for example, not all emotions can be localized in specific neural circuits. Think, for instance, of the many functions that might be served by anger, or the difference between an emotional reaction and a mood. McGuire believes that neuromodulators can account for these differences. So, although specific neural circuits may be at the basis of particular behaviour, these circuits may be modulated by emotions. From this perspective, neuromodulators, prompted by emotions and moods, might increase or decrease the probability of behaviour, this certainly being a role that many theorists have given to emotion.

In the end, McGuire adopts the rather strong position that the biologically based study of emotion should proceed through the modelling of *invertebrate* systems. He believes that this will lead to the finding of the neural circuits that underlie emotion, and to ascertaining the neuromodulation and genetics of emotion. After the invertebrates come the mammals. While McGuire's argument is compelling, most theorists would probably not be able to resist extending their ideas to human emotion, which is of course their starting point.

Nesse

Nesse is at the forefront of those psychologists who are taking an evolutionary perspective on psychology in general. In fact, it is he, among others, who is developing evolutionary psychology as a subdiscipline, in which he turns his attention to emotion (e.g., Nesse, 1990; Nesse & Berridge, 1997; Nesse & Williams, 1994).

Nesse (1990) states that '. . . emotions are coordinated systems of response that were shaped by natural selection because they increased fitness in certain situations.' He bases his analysis on a prescription for making evolutionary explanations first put forward by Tinbergen (1963). Four matters have to be covered:

(1) proximate explanations of physiological and psychological mechanisms;
(2) the ontogeny of such mechanisms;

(3) an evolutionary account of how an emotion, or an emotional capacity, came to be that way through natural selection; and
(4) the phylogeny of the emotion.

Any such analysis has to be based on the *belief* that emotions *can* be explained in evolutionary terms; that is, they are directly shaped by natural selection. This viewpoint rests on the idea that for each of the 'basic' emotions (and Nesse is prepared to agree to such a list) there should be a set of conditions that bring about fitness in an evolutionary sense. Although he illustrates this with a number of emotions, for present purposes just the social emotions will be considered.

Nesse bases his analysis of the social emotions on reciprocity theory. This has two aspects. The first is the selfish gene that helps to account for behaving altruistically toward kin. Relationships with non-kin are accounted for by the idea that cooperation allows many tasks to be accomplished more efficiently than competition, although competition might well benefit the individual who wins. These ideas allow the possibility of a number of emotions. For example, if cooperation is repeated, emotions based on positive feelings such as those that arise from trust and liking will develop. Opportunities also develop from experiencing pride (that one has done one's duty, or has given more than one has received and so on) or humiliation and obligation (if one had received more than one has given). Such feelings promote a push toward balance in relationships. Of course, if one is treated unfairly then anger might result. Nesse's adaptive view of anger is interesting. He suggests that it is of evolutionary value because it both protects a person against being exploited and points to the value of continued, cooperative, balanced relationships. Similarly, an emotion such as guilt helps to bring back a relationship after some transgression or defection from it.

Nesse sees the apparent universality of some emotions and even the culture-bound form of their particular characteristics. He regards natural selection as the mechanism that brought about both the consistencies and their particular patterns.

This type of analysis is also applied to emotional problems or disorders. Nesse argues that the evolutionary view suggests that there are three types of emotional problem:

(1) where there is something wrong with the mechanisms;
(2) where the emotion is itself maladaptive;
(3) where the emotion is painful.

Moreover, from this perspective, he believes that a particular class of disorder has been underplayed: those in which what might be described as a *normal* experience of a painful emotion (say, guilt or anxiety) is lacking.

As is often the case with accounts of psychological functions that are based on evolutionary considerations, there is a pleasing neatness and consistency to Nesse's analysis. The problem as he sees it is to find the best ways of explicating the details of an adaptive account. Thus, any theory of emotion should take into account the notion that emotions give adaptive advantages in particular situations, the forces of natural selection applying to emotions as well as to non-emotional functions.

Nesse argues that the more significant implications of this view are within the clinical area. For example, he suggests that clinicians have to realize that we '... have

bad feelings for good reasons.' As he puts it, more formally, 'Fear, anger, sadness and loneliness are not abnormal, they are defences that help us to deal with situations that increase fitness.'

Following this evolutionary approach, Nesse and Williams (1994) define emotion as:

> . . . a specialised state that simultaneously adjusts cognition, physiology, subjective experience, and behaviour, so that the organism can respond effectively in a particular kind of situation. . . . Emotional capacities are shaped by situations that occur repeatedly in the course of evolution and were important to fitness.
>
> R. M. NESSE & G. C. WILLIAMS, 1994

Conclusions

The physiologically based theories of emotion, particularly the more recent ones, are very broad. Some of the earlier theories are simply inadequate, doing little more than suggesting that emotion cannot and should not be conceptualized without recourse to its physiological aspects.

Again, as a whole, these theories do fulfil many of the general criteria believed to be useful in assessing 'good' theory. They summarize the existing knowledge, at least that which has a (neuro)physiological or biological base. They provide explanations, in some cases intricate explanations, of emotional phenomena, although naturally this is mainly at a physiological level. They lead to testable predictions at both the physiological and the behavioural levels. They are certainly focused and in some of their more speculative forms (say, Plutchik, Panksepp and Scherer) they have reasonable heuristic value.

Moving on to the more specific matter of emotion theory rather than theory in general, it is clear that the theories considered in this chapter paint a clear picture of the causes of emotion. These are placed squarely in the physical domain, largely although not wholly in the CNS. So, from this perspective, emotion is seen as having a neurophysiological basis. Also, it is either implied or in some cases made explicit in these types of theory that emotion has a *biological* foundation and is of significance in evolutionary history.

With respect to emotion viewed as either an independent or dependent variable, theorists who stress physiology are not so clear. On which side of the equation is it reasonable to place general physiological arousal, or the more specific actions of the limbic system, or the peripheral psychophysiological responses? Are these the emotion itself, are they dependent measures of something else or are they events that lead to other types of change that might be regarded as *the* emotion? Even in a well-conceived theory such as Panksepp's such questions are not easy to answer. Perhaps the complexities of emotion would suggest that from a physiological perspective emotion is all of these things.

Working through the elements of what should be included in a theory of emotion according to Lazarus (1991a, b), again the physiological theories fare reasonably well.

The best of them are good on definition, on dealing with issues of specific emotions, on distinguishing between and exploring the links between behaviour and physiology, and at looking at the possible interdependence of emotions. As might be expected, and almost by definition, they have a firm place for the biological, they have something to say about the generation of emotion although less about its development. And some of them consider the effects of emotion on general functioning, although not often straying into possible implications for therapy. However, an obvious exception to this among the better physiological theorists is Plutchik. His ideas on emotion both derive from and have implications for therapy in equal proportions to their derivation from 'normal' everyday life.

The physiological theories are less cogent in dealing with the distinction between emotion and non-emotion, having particular problems with the concept of arousal. Although they bring other aspects of emotion into consideration (or perhaps it would be better to say, although they explore some of the links between emotion and other types of phenomena, such as those of cognition and motivation), they do not go far in these directions. Relatedly, they are wanting in the areas of appraisal and consciousness, although it is again Panksepp who makes the best efforts in these directions. In particular, of course, the physiologically based theories of emotion are particularly lacking in sociocultural matters, but this is hardly surprising.

Considering the adequacy of the physiological theories of emotion from the suggestions about theory made by Oatley (1992), they are reasonably impressive on about half the criteria. For example, they tend to be clear on the functions (biological, evolutionary) of emotion, about the matter of whether or not they are discrete (although they rarely stray into their folk psychological aspects) and about whether or not there are basic emotions.

Turning the coin over, rarely is there mention of the possible unconscious causes of emotion, and discussion about evaluations to do with possible goals is sketchy. More particularly, there is almost never mention made of anything interpersonal (even though it is obvious that emotions, however conceived, occur mainly in interpersonal contexts), and relatedly they make little reference to the simulated plans of other people.

More general though, from the broad Lakatos or Popper approaches mentioned by Oatley, the physiological theories do very well. The best of them are couched in terms that can definitely deal with more evidence. Also, the recent ones spring so obviously from a welter of empirically based data that they are expressed in such a way that specific predictions can be readily made from them. However, this is more obviously so when particular CNS functions or structures are under consideration than when they become more speculative about, say, the role and functions of experience.

Within the context then of the physiological theories, or at least the more recent ones being judged to be relatively 'good' theories, in what directions do they lead our understanding of emotion? Of course, there is the obvious direction of the particular areas of the nervous systems that are involved and the exact mechanisms of this involvement.

Interestingly, almost all physiological theories seem to have a place for cognition. Again, even though the theorists might set out to explicate emotion from a physiological perspective, sometimes, although not always, in spite of themselves, they end up speculating about the possible role of cognition. Sometimes, this cognition is considered

directly as a part of emotion and sometimes indirectly as necessarily interacting with emotion as conceived physiologically.

Clearly, the physiology of emotion has been with us for as long as psychologists have been grappling with the nature of emotion. Somehow, it has been obvious from the start that bodily and hence neurophysiological reactions are involved in some basic way. Probably this is because psychologists are folk psychologists as well, and they experience their own bodily perturbations. So, theories of emotion that can be described as primarily physiological have been frequent and influential. Which, then, is the best of them? In answer, attention has to be drawn to the enormous contribution to understanding made by Plutchik, and by Scherer (1993), admittedly in a theory that is broader than the physiological one alone. But, in particular, a debt is owed to Panksepp, who has gone farthest in a quite formal way to further our understanding of emotion physiologically conceived. His work displays an admirable blend of the empirical and the theoretical and he shows himself to well aware of aspects of emotion that lie beyond the physiological, but which nevertheless should be considered.

However, arguably the potentially most far-reaching development from the physiological/biological approach to emotion is the rapprochement between evolution theory and emotion. This is based on the view that emotions serve functions; that is, they are adaptive reactions to matters of survival, both physical and social (see Parrott, 1999; Keltner & Gross, 1999; Levenson, 1999; Keltner & Haidt, 1999).

The problems that emotions developed (and continue to develop) in order to solve are those of attachment, cooperation and harm-avoidance, at the broadest level. This functional approach also provides a structure that accounts for the changing dynamics of the many aspects of emotion, from action tendency to perception and experience, all dependent on feedback mechanisms between response systems and environmental change.

As Keltner and Gross (1999) point out, functional accounts of emotion imply: a grouping of emotions by function (not by response patterns); treating emotion as a dynamic process; a concentration on the consequences of emotion; and a linking of the biological and cultural approaches to emotion. This highly significant suggestion will be returned to in the final chapter.

Perhaps the final point to make comes with a return to the examples at the start of the chapter in which the power of physiological, bodily reactions in emotions were so evident. Our bodily emotional reactions seem to go on almost independently of our thoughts, or even of our better judgement. If this is looked at from an evolutionary point of view, it becomes clear why this might be. We have a built-in emotion mechanism that is there to help us survive. Our bodily reactions are not only part of that but they also prompt us to behave in ways that are consistent with that.

Summary

- Bodily reactions have formed an integral part of the psychology of emotion since the time of William James.
- Recent theories that come from this tradition have stressed either the physiological (neuroscience) or the biological (evolutionary) approach.
- Neuroscience theories of emotion are largely attempts to account for brain mechanisms underlying emotion, although some also deal more with peripheral mechanisms.
- Evolutionary emotion theorists take a functional approach and see emotions as adaptive reactions based on survival.
- Both the neuroscience and evolutionary approaches offer some of the most far-reaching and exciting ways of understanding emotion.

A question of application

- As you see emotion in the world around, does it seem to have a survival value?
- When you see someone at work or in your family in an obvious state of physiological arousal, are they necessarily emotional?
- If you concentrate on altering your heart rate or the amount that you are sweating, can you control an emotional reaction?
- How does emotion function in your work or school or family? Does it appear to have survival value? Does it seem primitive in that sense or does it seem to be dependent on social conventions?

Further reading

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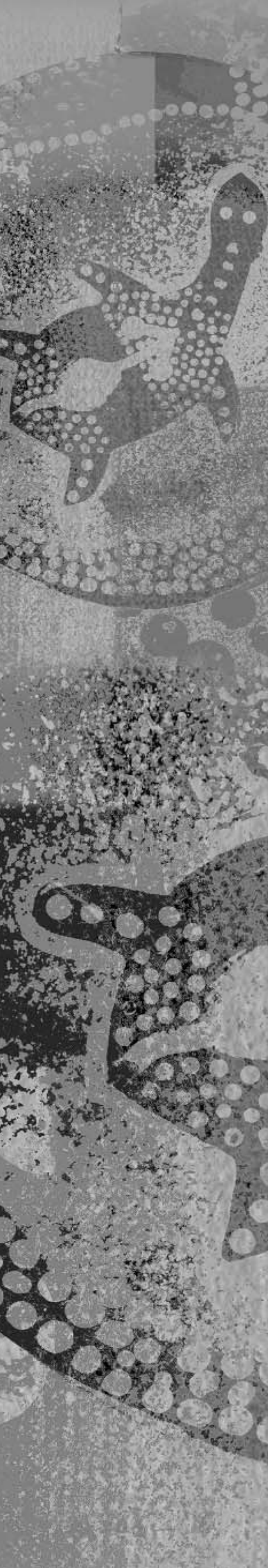

Chapter 6
Cognitive theory

This world is a comedy to those that think, a tragedy to those that feel.

H. WALPOLE, 1776

The emotions I am considering here . . . are connected with the anticipation of behaviour rather than its execution.

U. NEISSER, 1976

It is assumed that evaluative cognitions are central to a psychological understanding of emotional experience.

G. MANDLER, 1982

The ongoing business of an encounter and of life itself is appraised by the individual, which is the basis for emotions experienced.

R. S. LAZARUS, 1991

Emotion would not be emotion without some evaluation at its heart.

B. PARKINSON, 1997

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Some real life

Imagine that you are walking along the street and you see coming toward you a close friend. All other things being equal, you would go through the awkward business of looking, then pretending to be interested in something else or to be deep in thought, until you were closer. Then you would look up again, smile, stop and probably have a conversation. But all other things are rarely equal.

In this description you have recognized the person coming toward you as your friend, evaluated this in a mildly positive way and stopped for what you expect to be a relatively pleasant chat. Imagine, though, on the last occasion you had seen your friend that you had had an argument that had turned in an unpleasant direction and you had both become very annoyed. Now your judgement would be different. You might begin to feel uneasy, perhaps still somewhat annoyed, perhaps embarrassed at what had happened, perhaps anxious at not knowing what to expect.

Or perhaps you and your friend had both been vying to be picked for something, such as a place on a sports team or for a minor promotion where you both work, and you had heard that morning that your friend had been successful, but you had not. Now the sight of your friend might lead to slight irritation or envy. Or perhaps you had learned that you had been successful, but your friend not. Now, seeing your friend might lead to an alternation between pride and embarrassment, or you might simply feel sad and empathetic.

These types of example could go on and on. The point is that in each of them the stimulus is the same, your friend walking toward you in the street. However, each occasion is unique; we bring to it a history of remote and recent events and memories, and these lead us to evaluate or appraise the friend differently in each case. From this perspective, it seems that our cognitions determine our emotions. And this is merely the initial appraisal. When we stop to talk, then what is said, how it is said and how we ourselves want to appear will lead us to reappraise the situation and the friend and so alter our emotional reactions.

Picture an eight-year-old girl sitting in the classroom. It is the time of day when she and her classmates are working at their individual pace on their individual projects.

The general theme is space, a topic that interests her moderately well. There is the usual constrained hubbub around her, but she is putting together some thoughts about astronauts and how they are trained. She needs more information, walks to the resource table to find a book that she knows has something on astronauts. Just before she arrives at the table she sees a boy pick up the very book, glance at her and walk off with it. She searches for alternative material, can find none and returns to her desk, frustrated and slightly dejected and just a little anxious.

Think of the same situation, but when the girl arrives at the table and sees the boy walking off with 'her' book, she interpreted his look as malevolently mischievous. She knew that he had taken it on purpose – she had been talking to him earlier about the book. Now she would return to her seat perhaps feeling angry or even very anxious.

Or perhaps when she saw the boy take the book, she knew that his glance at her was one of triumph. She had been talking to him about what she had been planning to do on her space project and knew that he would now be doing it first. He had the book. Now she would be walking back very frustrated, perhaps envious of him at having found the book before she did, and perhaps unable to think clearly about what to do next.

Again, what can be seen in this example is that, at face value, one situation is like the next. As the girl starts to look for the book, so the boy takes it and glances at her. Her precise emotional reaction to this, however, will depend on the exact circumstances of her appraisal – the way the book was taken, the manner of the glance, plus anything relevant that had happened previously.

As the present book progresses through the types of theory that represent various approaches or starting points to emotion, so the number of theories involved increases. With the cognitive approach, the complexity of the theories also increases. From the frequent mention of cognition in the theories so far covered, which have quite different and even seemingly opposed starting points, this should come as no surprise. This is a point that will be returned to with steady, not to say monotonous, regularity throughout this book.

As the examples above show, perhaps it is because psychology begins in everyday life that it seems hard for a theorist to deal with emotion without making some mention of cognition. Perhaps it is simply obvious from a personal point of view that cognition is involved. Perhaps the recent upsurge in theories of emotion parallels the ascendancy of cognition within psychology and the two have come to be linked. Whatever the reason, it is certainly the case that, when discussing emotion, cognition is the most frequently mentioned 'other area' of psychology.

However, the particular point about the theories to be summarized in this chapter is that those who have created them have given pride of place to cognition and in some cases have almost left out other aspects of emotion entirely. Some have gone into the actual cognitive processes that might be involved in considerable detail. And some have become heavily involved in elucidating the nature of the relationship between emotion and cognition.

Even within the cognitive approach, the theories themselves, as will be seen, have taken a number of viewpoints. Some have regarded the basic problem as a study of whatever cues, either internal or external, allow us to identify and name our own emotional states. If our heart starts pounding do we look around us to find out why or do we delve further within? These are among the simpler cognitive theories. Some have assumed that cognitions cause physiological and behavioural change, it being important to study the one in order to gain knowledge of the others. The appraisal theorists fit into this mould.

Some cognitive theorists have considered emotion within a cognitive framework or have looked at emotion from a very broad perspective, which nevertheless gives an integral part to cognition and to subjective experience (see Chapter 8). Finally, the most profound theoretical discussions in this area have been led by those who have simply addressed the nature of the relationship between emotion and cognition.

Maranon

It is likely that a number of those who have studied emotion over the last few decades have thought in passing that it is possible that Maranon has had a slightly raw deal in the history of emotion theory. He is always quoted as the person who did the rather simple adrenaline study that, among other considerations, led Schachter to propose his two-factor theory of emotion, which in turn was instrumental in the upsurge of work on the links between emotion and cognition. Fortunately, Cornelius (1991) did not merely think this in passing, but has attempted to set the record straight.

Cornelius points out that not only did Maranon (1924) conduct the 'adrenaline study', he also proposed a two-part theory of emotion. For him, the two parts were to do with (1) the physical, mainly consisting of the more obvious aspects of sympathetic arousal, and (2) the psychological, made up of the subjective experience appropriate to the situation that associates the bodily changes with a particular emotion. The experience of the emotion comes from the psychological state that is the context for the experience. As Cornelius points out, this would now be referred to as cognition. Maranon believed that true emotion will only be experienced when both components are present.

The similarities between Maranon's theory and Schachter's are self-evident: two factors, one concerned with arousal and the other with cognition, the cognitive allowing the person to understand the arousal. Cornelius points out further than Maranon also criticized James concerning his ordering of the processes involved in the experience of emotion. Maranon's suggestion was that an event evokes emotion, which leads to perception, which leads to sympathetic arousal, of which the person may become aware. Emotion ensues when the perceived arousal is joined with the initial perception.

The sole reason for including this brief section on Maranon is simply in accord with the spirit of Cornelius's (1991) article. Maranon should have his due and rightful place in the history of the links between emotion and cognition, not just for his adrenaline investigation but also for putting forward a two-factor theory of emotion rather sooner than Schachter.

Arnold

Arnold's (e.g., 1945, 1960, 1968, 1970a, 1970b) theory of emotion is a mixture of phenomenology, cognition and physiology. It rests on the assumption that we can gain most understanding of brain function in emotion through cognitive analysis. Such analysis allows the identification of the physiological mediation of the process that runs from perception to emotion and action, as Arnold sees it.

It is with Arnold that the concept of *appraisal* took hold so firmly in the cognitive conceptualization of emotion. She suggests that we immediately, automatically and almost involuntarily evaluate, with respect to ourselves, anything that we encounter. This leads us to approach anything we appraise as 'good', to avoid what is 'bad' and to ignore what is 'indifferent', unless some other appraisal intervenes. Of course, we may well reappraise objects about which we have already made a judgement. Appraisal then is a process that complements perception and produces in us a tendency to *do* something. If this tendency is strong then it is called emotion, although from Arnold's perspective all appraisals have the status of affective experiences.

In most new experiences, memory underpins our appraisals. The exceptions to this come from 'simple' experiences such as taste or pleasure/pain. Anything new is evaluated in terms of past experiences, the new object or situation evoking a memory of the affect associated with the previous experience. Such affective memories are the relivings of our past appraisals, experiences that continually distort our judgements.

Arnold suggests that the final link in the appraisal chain is *imagination*. Before we act, the situation plus any relevant affective memories lead us to make guesses about the future. We *imagine* whether what will happen will be good or bad for us. So our appraisal then becomes dependent on memory plus expectation. Then we devise a plan of action that will allow us to cope with the situation; we choose what it is best to do. Remember that Arnold suggests that this whole, rather complex, process of appraisal may occur almost instantaneously.

Much of Arnold's theory is concerned with tracing hypothetical neural pathways that may mediate the hypothetical cognitive appraisal processes. However, she also distinguishes between feelings and emotions. Emotional action patterns arise from positive or negative appraisal of perceived or imagined objects, whereas feeling action patterns result from appraisals of something that may be beneficial or harmful for our functioning. Arnold nevertheless regards the hypothetical sequence of events involved in feeling as much the same as that involved in emotion. In a sense, to Arnold feeling is a lesser form of emotion.

Arnold also attempted to distinguish between emotion and deliberate actions. To take an example of deliberate action, I might sit writing this summary of Arnold's views without much desire to do so. Any pleasure comes when it is finished, or perhaps from the particular stringing together of words, not from the rather mechanical progression of word-processing. This has no special attraction. If I were to express any emotion at all in this situation it would be because I had had a period of difficulty in expressing myself, or had just completed a fluid 2000 words, or had something else nagging at me that I would prefer to be doing.

Deliberate action of this sort, Arnold believes, comprises most of our everyday behaviour, involves so-called rational judgement and distinguishes us from animals. We judge situations both in terms of short-term, emotional consequences or possibilities and long-term, more abstract goals. She also states that we often relinquish the former, although they are more immediately attractive, for the latter, which are better for us in the long run. However, the extent to which we do this probably depends on factors such as our background and personality. Animals do not have this capacity at all, only being able to make immediate, emotional appraisals. Arnold argues that in distinguishing between emotional and deliberate action patterns, she is separating emotion and will. This may be, but she is also maintaining the traditional rationalist doctrine, much as many people continue to maintain it in everyday life. If my will is 'strong', I don't have to 'give in to' my emotions.

Schachter

No coverage of cognitive theories of emotion would be complete without mention of Schachter. However, it is perhaps fair to say that his major contribution to our understanding of emotion came from a series of cunningly devised experiments and the

interpretations they have led to, and their general heuristic value. Schachter (1959, 1964, 1970) has a cognitive/physiological view of emotion, suggesting that emotional states are determined mainly by cognitive factors. This rather simply put theory suggests that emotional states are characterized by general arousal of the sympathetic nervous system and that from state to state this arousal may vary slightly in its pattern. We interpret and classify these states from the situation that we believe has brought them about and from our typical mode of perception. In short, physiological arousal occurs and is given its precise direction by our cognitions of what brought it about. We search our beliefs in an attempt to understand the emotional aspects of our bodily reactions.

This view led Schachter to put forward the three propositions for which he is perhaps best known:

(1) If we are physiologically aroused but cannot explain why or what caused the arousal, then we will give this state a name and react to it in whatever cognitive way is open. Thus, any *one* state could be labelled in many ways depending on the individual and the situation.
(2) If we are physiologically aroused and have an entirely reasonable explanation of this available, it is improbable that we will entertain any alternative cognitive accounts.
(3) The third proposition involves approaching the theory from the opposite direction. If from time to time we experience the same cognition, we will only describe our feelings as emotions if we are also in some state of physiological arousal.

Schachter's basic view then is that emotions are controlled through a very close interrelationship with and interaction between physiological arousal and cognitive appraisal – now usually known as the two-factor theory of emotion.

As mentioned earlier, Schachter devoted some time to a series of empirical investigations designed to test the three propositions that give form to his two-factor theory. Schachter's studies have been analysed and criticized extensively, and it is not the present purpose to review this literature. However, it is worth making some points that devolve from it.

For example, Leventhal (1974) (see also Leventhal & Tomarken, 1986) sees it as a problem of *how* arousal and cognition combine in emotion. Schachter does not, for example, say when or how arousal contributes to particular states of feeling. His conceptualization of emotion allows cognition three possible functions in emotional experience. They permit the interpretation of emotional stimuli, the recognition of arousal and the labelling of emotion.

Leventhal regards expectations as important determinants of emotional states. The more accurate the expectations, the more likely we are to become emotional. He also considers whether or not cognitions label arousal and so create subjective feelings. If this is so, then, he argues, feelings must be learned. He argues against this possibility by questioning how a young child can be capable of feeling anything before he or she knows the label for the feeling, if it is the label that promotes the feeling. This would only be possible if the situations are similar in meaning to those for which the child already has labels.

Leventhal turns the argument round, in fact, and suggests that situations might be

construed as similar because they generate similar feelings. An innate set of feelings generates meaning. This leads to a position in which cognitions can be seen as leading to particular reactions of the central nervous system (CNS) and to distinctive bodily reactions, the latter being integral to feeling.

Cotton (1981) and Reisenzein (1983) make a very thorough analysis of Schachter's theory of emotion. From their critiques it is clear that only one of the propositions that derive from the theory is adequately supported. If an emotional state has an arousal attributed to it from an irrelevant source, it will be intensified. But there has been no study demonstrating that peripheral arousal is a *necessary* condition for an emotional state.

There appears to be support for a less powerful form of Schachter's theory. This is that feedback from arousal can have an intensifying effect on emotional states and this arousal–emotion relationship is mediated and/or modified by causal attributions about the source of arousal.

Generally, Schachter's theory of emotion has been very influential and has definitely focused attention on the cognitive aspects of emotion. It also may be said to have overstated the role of peripheral arousal and the links between arousal and emotion. As yet, however, the theory has not been entirely disproved, and may perhaps be one of those theories that can never be entirely disproved.

Leventhal

Leventhal's (1974) theory of emotion is based on information processing (but also see the discussion of Leventhal and Scherer under the cognition–emotion relationship elsewhere in this chapter; Leventhal, 1982; Leventhal & Tomarken, 1986). Considerably extending Siminov's (1970) information theory approach, he argues that what he describes as this type of model of emotion must integrate four systems:

(1) an interpreting system that turns on emotional reactions;
(2) an expressive system, feedback from which defines the subjective quality of emotion;
(3) an instrumental action system; and
(4) a bodily reaction system that maintains the instrumental system.

So, Leventhal is simply emphasizing what many other emotion theorists have emphasized, that a theory of emotion must deal with how emotion is instigated and must deal with its subjective, behavioural and physiological aspects. But he does this in information processing terminology.

Leventhal proposes a two-phase model of emotion. In the *perceptual/motor phase* the cognitions that promote emotion and expressive reactions are necessary for feedback to occur; in its turn, this feedback is necessary for subjective feelings. The process must involve the appraisal of meaning, something that is achieved by two types of decoder. The first is automatic and built-in and the second sorts out discrepancies from a person's experience.

In this first phase of the model then, Leventhal is arguing for innate perceptual mechanisms that are sensitive to particular features of stimuli, the usual feature analysers of information processing models. These instigate feelings *before* expressive reactions can occur. These feelings are simply positive or negative rather than representing more precise categories of emotion. Later, more specific emotional discriminations occur and involve feedback from the expressive and autonomic systems. All of this can occur automatically or deliberately, but contributes to subjective feeling only when automatic.

The second component of the model is concerned with *action*. The overactivity involved and any associated autonomic and visceral activity are clearly separated from feeling states. The action system might even detract from feeling – if one is aware of one's actions then one will be less aware, or even unaware, of one's feelings. However, his final point in this quarter is that if action and the feeling state that precedes it are closely associated then the action may enhance the feeling.

In a more recent form of the theory, Leventhal and Tomarken (1986) makes seven assumptions:

(1) the study of emotion is best begun with the verbal report of subjective experience;
(2) emotional states are a form of meaning, so if cognition is meaning, emotion is a form of cognition;
(3) there are several types of cognitive process;
(4) meanings develop in the perceptual processing system;
(5) emotion can interact with both perceptual and abstract cognition;
(6) meaning systems develop and change;
(7) to understand mechanisms underlying emotion and cognition it is necessary to study specific meaning systems.

Following these assumptions, Leventhal outlines a hierarchy of three levels of processing:

(1) expressive motor;
(2) schematic or perceptual memory in which there is a record of emotional situations, experiences and reactions;
(3) a conceptual or abstract memory for processing emotional experience and volitional behaviour.

For Leventhal then, emotion is above all integrated with meaning systems. His perceptual–motor, cognitive theory is compatible with Bower's (1981, see below) views of the links between emotion and memory. Both Leventhal and Bower assume that there is an emotion generator with emotion connected to specific cognitions. They also both suggest that emotion is experienced as a reaction to an object and as a reaction within the experience.

Within this framework, emotion acts as a meter of the internal condition and provides a capacity for particular types of action, awareness of which establishes new goals. It informs us of our state and the impact of this on the environment by telling us about our feelings, which are attached to perceptions and thought.

Bower

Bower's network theory of affect is best described in Gilligan and Bower (1984) and best evaluated in Singer and Salovey (1988). It is concerned with only one aspect of emotion, namely mood, and its relationship with cognitive processes.

It rests in a theoretically formal way on seven postulates:

(1) Emotions are centrally placed in a network of meaning and are connected to everything relevant, from related ideas, autonomic activity, muscular patterns, expressive patterns and events. These units of emotion are *nodes* and are similar to cognitive nodes.
(2) Emotion matters are encoded propositionally with relevant events taking the form of subject–response–object.
(3) Activation of semantic network nodes promotes thought. Activation can spread from a stimulated node through to other associated nodes, be they conceptual, emotional or propositional.
(4) Nodes can be activated by internal or external stimuli.
(5) Activation described in (3) spreads selectively.
(6) Learning brings about new associations between nodes.
(7) When a network of nodes is activated together above threshold the result is consciousness.

Again, continuing the formal exposition of the theory, four hypotheses stem from the postulates:

(1) recall is state-dependent (i.e., memory is better when there is a match between the moods of learning and recall);
(2) there is thought congruity (i.e., there is a match between people's cognitions and moods, thematically);
(3) mood congruity is important (i.e., learning is better when the emotional tone of what is to be learned matches the person's mood);
(4) mood intensity is important (i.e., intensity of mood and learning show a positive correlation).

Singer and Salovey (1988) mention a number of qualifications to and expansions of these hypotheses. According to the network theory, state-dependent recall is facilitated by the discriminatory cues provided by context, the ideal being a match between learning and recall contexts. More particularly, *emotion* can function as a contextual cue, but is only of importance when contextual cues compete.

Sometimes, a mood will bias a search for memory of related material. This leads mood-congruent memories to become more available and leads to recall, or thought congruency. Further, on occasions when mood assists the learning of new material that happens to be congruent with whatever is already associated with the affect, there is mood, or encoding, congruency. This is accounted for by the idea of elaboration. If information is mood-congruent then its connections to various nodes is more elaborate than if it is not congruent. This makes it easier to retrieve.

Increase in mood strength leads to more associated nodes being activated. In turn, this leads to an increase in consciousness of what is mood-relevant. Interestingly, this proposed effect differs from positive to negative moods. A positive mood pushes attention away from negative and toward positive material, whereas a negative mood pushes in the direction of memories of failure, fatigue and the like and so gets in the way of dealing with any kind of external stimuli.

This is sufficient description to give an idea of the network theory of affect, dealing specifically as it does with links between mood and memory. For present purposes an evaluation of the evidence about the theory is not pertinent. Since the theory is expressed in terms that are so clearly linked to empirical prediction, it has generated a great deal of research, which is well reviewed by Singer and Salovey (1988). They conclude that, although there is considerable support for the theory, this support is not straightforward. For example, congruency in encoding has been consistently demonstrated, but it has been shown that the theory works better for happy moods and positive memories than for sad moods and negative memories. The theory may need some elaboration to deal with this, perhaps in the direction of considering motivation.

Oatley and Johnson-Laird

Oatley and Johnson-Laird (e.g., 1987) put forward a conflict theory in which emotions are seen as serving important cognitive functions. A significant part of their theory rests on the ideas of goals and plans. In this context, goals are symbolic representations of something in the environment that the organism is trying to achieve, and plans transform representations in sequences, so making links between the environment and goals. Their aim is to offer a theory that relates to theories of language and perception that are based on cognitive science.

They also regard emotions as essentially social affairs. Emotions do not only coordinate an *individual*'s plans and goals but are also concerned with mutual plans. In putting forward their theory they want to account for subjective experience, bodily and facial changes, resultant courses of actions, diversity, variation and links with other parts of mental life.

The Oatley and Johnson-Laird theory depends on the human cognitive system being both modular and asynchronous. Within such a system, emotions depend on two types of communication, propositional and non-propositional, the former being symbolic and denotative and the latter being simple and causal. Emotion signals that are non-propositional set the system into a particular mode and maintain it there – emotion mode: '. . . the functions of emotion modes are both to enable one priority to be exchanged for another in the system of multiple goals, and to maintain this priority until it is satisfied or abandoned' (1987, p. 33). Where Bower has nodes, they have modes.

Oatley and Johnson-Laird list five basic, universal, human emotion modes: happiness, sadness, anxiety (or fear), anger and disgust. They argue that each of these emotional modes has an inhibiting influence on the others. They believe that the cognitive system has to be in one emotion mode or oscillating between two for an emotion to occur. Moreover, although an emotion mode is necessary for emotion, it

is not sufficient. For adults, at least, a conscious evaluation of planning is also usually involved. This is based on whatever propositional signals arrive at the operating system. This in turn gives a meaning to the emotion mode, the result being the possibility of scheduling voluntary action. To take an example, you might be watching a favourite television drama quite happily. Suddenly, you begin to feel sad and realize that someone's death on the screen has reminded you of your own father's death. You might then drift into a reflective sadness, ignoring the television, or you might give yourself a mental shake and concentrate on the screen in order to regulate your sadness. Or you might be prompted to talk about it to your partner.

Oatley and Johnson-Laird (1987) draw distinctions between emotions and enduring predispositions to emotion (temperaments), temporary predispositions and instinctual actions.

So, the first prong of Oatley and Johnson-Laird's theory is that emotions coordinate a modular nervous system; they have evolved to do this. Their other prong is akin to Mandler's (e.g., 1976) major point; namely, that emotion occurs when plans are interrupted. They argue that there are distinctive and recurring junctures in plans when their likely success is evaluated. At these points, the emotion modes function to allow transitions to new aspects of planned behaviour. The importance of this is that emotion organizes plans of action to be made in complex and somewhat unpredictable environments. This capacity has developed as a biologically based answer to this type of problem.

The two prongs of the theory – that emotions are concerned with coordinating modular systems and signalling junctures of plans – combine in Oatley and Johnson-Laird's placing of emotions into the social world rather than leaving them in the biological world that determined them. Via a consideration of evolution and individual development, they stress the importance of the development of mutuality. From this perspective, social interaction depends on dealing with mutual plans in which cognitive systems can cooperate. This, they argue, depends on each person having a 'model of the self'.

Oatley and Johnson-Laird argue that the cognitive system has evolved in such a way that the mind is aware of itself. Further, this model has evolved from a mixture of language and culture. Only when this reflexive self is fully developed can the full set of complex human emotions develop as well. This development depends to some extent on the way in which we experience other people's reactions to us, the idea of a social mirror. So adult emotion has as an integral part the generation of self-consciousness when a social plan becomes problematic. Inner debates occur about the ambiguities that are inevitably involved. Everything becomes more complex because many of our plans are mutual and hence dependent on the complexities of language to set them up. They argue that much of this mutual planning is based on promise.

Finally, Oatley and Johnson-Laird turn their attention to complex emotions. Here, there may be a sequence of emotional states with one mode leading to another as various appraisals are made. Also, the start of any complex emotion may be quite undeveloped. Only after considerable reasoning might the fully complex emotion emerge. They believe that the basic emotions develop from universal biological mechanisms and that complex emotions develop from these. However, at this level there is great variation across cultures and persons.

Lazarus

Lazarus (1966, 1968) and Lazarus, Averill and Opton (1970) began their analysis of emotion by stressing the importance of cognitive factors, and more recently Lazarus (1991a), in something of a *tour de force*, produced a fully fledged theory of emotion.

Beginning with the earlier ideas, Lazarus also considers the significance of biological and cultural perspectives. He suggests that, although concepts of emotion are important in describing and classifying behaviour, they are not necessarily of use in its explanation. There is an obvious comparison to be made here with the views of Duffy and Leeper. Lazarus argues that the concept of emotion has been hindered in its development by awkwardnesses of description and classification. He terms emotion a 'response syndrome' because there is no one thing to which it obviously refers. This is a clear medical analogy.

Although Lazarus dwells on biological and cultural aspects of emotion, he finds them lacking. Biologically, he suggests that in attempting to account for emotion, there has been a move away from the periphery to the CNS and within this to the evolutionarily more primitive structures. Like cortical structures, these have undergone evolutionary change and they also have an important part to play in cognition.

Lazarus also argues that culture can affect emotion in four ways:

(1) through the manner in which we perceive emotional stimuli;
(2) by directly altering emotional expression;
(3) by determining social relationships and judgements;
(4) by highly ritualized behaviour (e.g., grief).

Rather than deciding whether to stress the biological or the cultural in accounting for emotion, Lazarus suggests that we can resolve the problem by taking an individual, cognitive perspective.

Appraisal is a core concept in Lazarus's view. We are evaluators: we evaluate each stimulus that we encounter with respect to its personal relevance and significance. This is cognitive activity with emotion as part of it:

> . . . each emotional reaction . . . is a function of a particular kind of cognition or *appraisal.*
>
> R. S. LAZARUS, J. R. AVERILL & E. M. OPTON, 1970, p. 218, italics theirs

They recognize emotion at the three levels of behavioural, physiological or cognitive (subjective), see each as important and believe that the pattern that might exist between them is a distinguishing feature of emotion.

Coping has also been an important part of Lazarus's views on emotion from the start. He argues that we have dispositions to search for and respond to particular stimuli, such dispositions shaping our interaction with the environment. Cognitive appraisal of these stimuli produces emotional responses. The stimuli constantly change and we continually cope with them; thus both our cognitions and our emotional reactions alter.

Lazarus suggests that there are two sorts of coping process. We may deal with threat or harm by direct action, the urge to which is an important part of emotion. Our

success or failure in this fluctuates, which means that our cognitions and emotions also fluctuate. Then there is reappraisal, this being solely cognitive with no direct action involved. We reappraise from positive to negative or negative to positive, realistically or unrealistically. All information is appraised and reappraised, and so we have intricate twists and turns in our emotional lives.

In putting forward his theory of emotion in more formal terms and then explicating it with some style, Lazarus (1991a) suggests that the best way to express the theory is via five metatheoretical themes:

(1) It is a *system theory*, suggesting that the process of emotion involves many variables that are organized interdependently into a configuration. The system variables consist of causal antecedents, mediating processes, immediate emotional effects and long-term effects.
(2) There are two independent principles reflected in emotion. The *process principle* is concerned with change and the *structure principle* refers to stable relationships between person and environment that produce consistent emotional patterns within an individual.
(3) The *developmental principle* implies that emotion alters throughout life, from birth to later years. This is determined by both biological and social variables.
(4) The *specificity principle* points to the emotion process being distinctive for each emotion.
(5) The theory depends most heavily on what Lazarus terms the *relational meaning principle*. This suggests that 'each emotion is defined by a unique and specifiable relational meaning' (Lazarus, 1991, p. 39). For each emotion there is a core relational theme that is to do with the harms and benefits that accrue to each person–environment relationship. The theory rests centrally on the process of *appraisal*, through which the meaning of the person–environment relationships is constructed.

According to the theory, decisions occur through appraisal, which allows evaluations to be made of the various emotions. Lazarus believes there to be three primary appraisals, concerned with goal relevance, goal congruency and the type of ego-involvement; in other words, they are concerned with motivation. There follow three secondary appraisals concerned with blame or credit, the potential to cope and future expectations. The particular pattern of primary and secondary appraisals allows distinctions to be made between the various emotions. In its turn, coping feeds back and influences both appraisal and the emotion through its personal significance.

The relationship between the person and the environment promotes both appraisal and coping, a view that leads Lazarus to suggest that a new level of theory – relational meaning – becomes involved: 'The task of appraisal is to integrate the two sets of antecedent variables – personality and environmental – into a relational meaning based on the relevance of what is happening for the person's well-being' (1991, p. 39). So personal interest and adaptation become crucial to emotion.

Lazarus goes further to suggest that if personal harm or benefit is implicated, then the emotion that results will include an innate action tendency. This, in its turn, provides each emotion with its unique physiological aspect. The coping process may

be in accord with the action tendency, or may conflict with or even dominate it, but will also influence it and the physiological pattern.

Generally, it is instructive to follow Lazarus's theory of emotion over the 30 years of its development. Rather like the development of a person, it is possible to see the importance of certain core elements (such as appraisal and coping) as unchanging, but in the end they have matured into a substantial and complex theory that is likely to have a lasting influence.

Ellsworth

In an engaging article, Ellsworth (1991) not only summarizes her own theory of emotion, squarely based on appraisal, but also has some interesting points to make about the cognitive approach to emotion in general. The importance of Ellsworth's work is, among other things, that she attempts to unpack the appraisal process, to say what is involved in it, what it is made up of. In their original exposition, Smith and Ellsworth (1985) suggest that there are six dimensions of appraisal that distinguish between the emotions: attention, pleasantness, certainty, anticipated effort, human agency and situational control. Ellsworth's (1991) concern, however, is not with whether or not these are the correct or final dimensions of appraisal, but rather with the heuristic value and implications of the appraisal approach in general.

An appraisal approach to emotion has at its core the simple view that emotions result from sets of appraisals: we *feel* the result of a combination of appraisals. So, for example, this would suggest that even fundamental facial expressions might come about through elements that correspond to the dimensions of appraisal. She emphasizes the lack of identity in emotional expressions; similarity, yes, but identity, no. The same elements may appear in different emotions and the same emotion may be the result of a different range of elements. From an appraisal viewpoint, the expressions of a particular emotion resemble one another because they result from similar appraisals, but differ because the appraisals are always slightly different.

Ellsworth also makes mention of cultural and individual differences. From a cultural viewpoint, appraisals could be the universal aspects of emotion. Moreover, appraisal theories also suggest ways in which any differences in interpretations of events or stimuli (i.e., differences in appraisal) may lead to individual differences in emotional reaction. There may also be differences in appraisal style and individual differences in appraisal may also be affected by other individual differences in, say, self-concept.

A further implication of appraisal theory, as Ellsworth sees it, is the drawing of attention to possible ways in which *emotion might affect cognition* rather than cognition affecting emotion. As well as appraisals leading to emotions, emotions in their turn might affect future appraisals. For example, people who are typically angry might well be predisposed to judge situations in ways quite differently from those who are typically sad.

Ellsworth considers in some detail the sequencing of emotion, and manages to put this in a very clear perspective with respect to the implications of appraisal theory. She distils the three main approaches to the sequencing of emotion as follows:

(1) stimulus – interpretation – affect – behaviour (common sense);
(2) stimulus – affect – interpretation – behaviour (affective primacy);
(3) stimulus – behaviour – affect – interpretation (motor feedback).

She points out that, although in their details theories are of course more complex than this, they do nevertheless suggest a rather stark view of sequencing. By contrast, appraisal theories by unpacking the interpretation phase suggest that the sequencing may not be as sequential as has been thought: 'As each appraisal is made, the body and the affective experience change. The sequence may be so rapid as to be perceived as instantaneous or it may be considerably more drawn out' (1991, p. 157). There are many more possible complexities depending on the nature of the appraisals, say from clear to ambiguous or variable. Moreover, very few events are entirely discrete, they alter and develop over time, and so therefore do the appraisals. Through all this complexity, Ellsworth's view is that feelings come both first and last. Furthermore, and interestingly, Ellsworth makes the point that if a person cannot make a particular appraisal or type of appraisal through a lack in cognitive capacity, then the emotions that would result from it cannot be experienced. This view has considerable implications for potential lack in emotional life of anyone who has a limited cognitive capacity. To put it directly, it suggests that a low intelligence quotient (IQ) presupposes a low emotion quotient (EQ). That this is not necessarily the case will be seen in a later chapter.

In the end, Ellsworth points out that she does not argue that emotion can occur only with appraisal, or that appraisal theories of emotion are necessarily true. But she does say that they have heuristic value and that they prompt ways of looking at emotion and questions to ask about emotion that would not otherwise occur.

Frijda

Although Frijda's theory of emotion has already been touched on and will also be described in Chapter 7, for any consideration of the relationship between emotion and cognition it is important to consider the theoretical views he puts forward on appraisal (1993). He bases his discussion firmly on the view that all emotions involve appraisal of two possible types. Primary appraisal is concerned with judging the emotional meaning of an event, and secondary appraisal is concerned with evaluating the resulting emotion.

Frijda's strong point is that emotional appraisals can be very elementary, so much so that they can be said to be barely cognitive. They are merely concerned with what Frijda terms information uptake and the monitoring of action. Such elementary appraisals are not only germane to simple emotions but may be relevant to complex ones as well. Frijda sees this as occurring only sometimes; for the most part, most emotions are preceded by complex cognitions. This is very much concerned with whatever is the prior learning by which events have acquired their emotional significance. Frijda views appraisals in emotion to be automatic and therefore non-conscious, although some antecedents of emotion may involve conscious deliberation and reasoning:

> . . . emotion can be seen to result from an automatic, essentially simple basic appraisal process that may subsequently be cognitively elaborated. The basic process is sufficient for emotion arousal, and for instigating elaboration.
>
> N. H. FRIJDA, 1993, p. 382

However, Frijda points out that appraisal and emotion usually occur within a far more complex sequence of cognitions. On the antecedent side, whatever brings about the basic appraisal process itself comes from previous and perhaps long-lived cognitive complexities. On the consequent side, processes of elaboration follow emotion, which in turn might lead to new emotions or to modifications of the previous ones. In short, emotions occur over time, in episodic form rather than starting and finishing rapidly.

Frijda takes this further, by arguing that all these previous cognitions and emotional reactions themselves help to produce a cognitive structure that has its effect on the generation of new appraisals. He sees emotion-relevant stimuli and their meanings as having accumulated over time, as resulting from previous aspects of the interaction, as dependent on context and so forth. Everything is constantly being modified. This suggests that emotional experiences can contain appraisals that are themselves part of the emotion *response*, rather than its cause. These might then become elaborated *after* the emotional experience.

The cognition–emotion relationship

Zajonc and Lazarus

Of considerable import to the cognitive understanding of emotion in recent years is the matter of the nature of the links between cognition and emotion. Although many theorists have enjoined this debate, it is Zajonc and Lazarus who sharpened the issues most dramatically.

However, as an aside, it is worth noting that the issues involved can be seen as far removed from everyday life. Assume for the moment that appraisals occur in some form in many emotional experiences, leaving aside the question of whether or not they are necessary to them. In practice, any emotional experience is a flickering, intricate mixture of thoughts, memories, feelings, bodily perturbations and behaviour. The cognitions (mainly appraisals) interweave and become part of the emotions, and so the questions of what comes first or of whether emotion can occur without an appraisal almost seems redundant. Of course, it is pertinent to a full theoretical understanding of emotion, but it is less relevant to a practical understanding of emotion in daily life or to helping people analyse and regulate their emotional reactions.

The central matter of the Zajonc (1980, 1984)–Lazarus (1982, 1984) debate is whether or not it is reasonable to regard the systems of cognition and emotion as independent. Zajonc argues that not only does cognition *not* precede emotion, but that emotion and cognition are independent, with emotion preceding cognition.

Lazarus argues that Zajonc's view stems from seeing people as computer-like information processors, instead of sources of meaning. He believes that personal factors colour the processing of experiences and that we do not have to have complete

information before reacting emotionally to meaning. For Lazarus there are no exceptions to the cognitive appraisal of meaning underlying all emotional states, even though the appraisal process might be very rapid with thoughts and feelings being almost instantaneous.

Part of the problem in this debate is clearly definitional. Push the idea of emotion far enough and it seems to bang up against cognition. Similarly, if cognitive processes are followed far enough they seem to arrive at emotion. If, finally, either one is defined partly in terms of the other, then which precedes the other becomes a trivial question.

Kiesler

Kiesler (1982) suggests that one of the difficulties in the debate is that the empirical areas involved in emotion and cognition overlap, but not exactly. He argues that there is such a large range of emotional reactions that, although the simple ones might be without cognitive content or instigation, the more complex ones must involve them. He argues in support of both sides of the debate, suggesting that the data provided by Zajonc fit with the notion of two partly independent systems, but without ruling out the possibility that there is only one. In the end, Lazarus's view seems to be the more compelling. As seems to be the constant message of almost all relatively recent theories of emotion, it is difficult to conceive of emotion without cognition, even though the two systems might be independent as well as interacting.

Leventhal and Scherer

Leventhal and Scherer (1987) offer a penetrating discussion of the cognition–emotion debate but, interestingly, from the viewpoint of once again expressing their own theory of emotion (see Scherer in Chapter 5 for its most recent exposition). They see the debate as dependent on two major issues: the extent to which whatever generates emotion and cognition are separate, and whether or not emotion can occur before cognition.

Like a number of other researchers, they regard the debate as a matter of definition, particularly of what exactly should be termed 'cognitive'. Can cognition be pre-perceptual, for example? Their point is that it does not much matter. There is a similar problem when defining emotion. Should, for example, a simple reflex be regarded as emotional? Leventhal and Scherer prefer to see emotion as far more complex than this, as the result of what they term a multi-component mechanism:

> The terms emotion and cognition refer to complex, behavioural compounds whose make-up changes over the organism's life-span and these behavioural compounds are the product of a changing multi-component processing system.
>
> H LEVENTHAL & K SCHERER, 1987, p. 7

Leventhal and Scherer believe that if emotion is seen as the result of a multi-component processing system then the precise definitions of terms such as 'cognition' and 'emotion' become irrelevant. Other matters become more important, such as how particular processing influences particular emotional experiences or emotional behaviour.

As described earlier, Leventhal's model proposes that emotions are processed by hierarchically arranged components that work at three levels – sensorimotor, schematic and conceptual – the two higher levels of which allow emotional learning to occur and thus permit complex cognitive–emotional interactions.

Leventhal and Scherer (1987) argue that this type of model makes it necessary to reconsider the Zajonc–Lazarus debate. They offer five main arguments for this:

(1) The early sensorimotor level of processing allows distinctions to be made both between emotional and non-emotional reactions and between emotional and cognitive behaviour. This is in line with Zajonc's suggestion to separate the two types of process.
(2) Even in the earliest perceptual-motor phase of emotional reactions, there is complex cognitive involvement. Through appraisals, emotion and cognition seem to be linked in whatever process underlies them, as Lazarus suggests.
(3) Various mismatches between the components of an adult emotion lead to distorted emotional reactions. There may be a mismatch, for example, between perceptual memory and ongoing experience. This suggests to Leventhal and Scherer that emotion and cognition are independent.
(4) They argue that a schema can be aroused by any of its attributes. A stimulus is likely to activate more or less simultaneously the cognitive, perceptual and emotional aspects of the schema, thus denying Zajonc's suggestion that emotion precedes cognition.
(5) Leventhal and Scherer's model suggests that large changes occur over the individual's lifespan in emotional expression and experience. These changes alter the meaning of perceptual events. So there is a continual interaction of the cognitive and the emotional throughout life.

Leventhal and Scherer fit their multi-component model and analysis of the cognition–emotion links into Scherer's (e.g., 1993) component process model of emotion, particularly with respect to the analysis of appraisal. Emphasis is placed on the arousal of specific emotions by the series of stimulus evaluation checks (SECs) that are crucial to Scherer's model. SECs are carried out by mechanisms that scan the perceptual field, the analysis of which gives some insight into the appraisal process that usually precedes emotion.

Scherer (e.g., 1986) proposes that the organism makes five types of check: for novelty, intrinsic pleasantness, relevance to meeting plans, ability to cope with perceived event and compatibility of the event with self-concept and social norms. He believes that organisms need the information that such checks afford in order to choose how to respond. The process of SEC develops in three ways: the checks are used sequentially, they increase in complexity and differentiation up the evolutionary scale and they increase in complexity over the individual's life.

Leventhal and Scherer argue for a rapprochement between the processing that occurs in the perceptual-motor model and the SEC process. They describe ways in which the five types of SEC can be made at the sensorimotor, schematic and conceptual levels of the perceptual-motor model. To take just one example of the relevance of this view to the Zajonc–Lazarus debate, Leventhal and Scherer would account for

emotional evaluation occurring without conscious stimulus recognition as one form of schematic processing.

They argue that the perceptual-motor model implies that there are two types of confusion in the emotion–cognition debate: the question of response elicitation and timing, and that of how the components in a response system are organized. They feel that what precedes what at the micro-level is irrelevant to emotion theory, and also that it will be rare indeed to find human emotions separate from perceptions or cognitions. Cognitions and emotions are simply interwoven. Which comes first is irrelevant if one believes, as Leventhal and Scherer believe, that schemas are aroused, because this implies the simultaneous arousal of cognitions and emotions.

Generally, Leventhal and Scherer believe that looking at the emotion–cognition question within the framework of an emotion theory, such as theirs, renders it all more complex than is suggested by the Zajonc–Lazarus debate.

Lazarus and Smith

In 1988, Lazarus joins the emotion–cognition question once more in an analysis, with Smith, of the relevance of the distinction between knowledge and appraisal. Clearly, these are both types of cognition, but they are not interchangeable, even though appraisal and attribution (a form of knowledge) are often treated as synonymous.

They make the distinction thus:

> In a nutshell, *knowledge*, whether concrete and primitive or abstract and symbolic, consists of cognitions about the way things are and how they work. In contrast, *appraisal* is a form of personal meaning consisting of evaluations of the significance of this knowledge for well-being.
>
> R. S. LAZARUS & C. A. SMITH, 1988, p. 282, italics theirs

Obviously, there are many forms of knowledge, not all of them relevant to emotion. Some are, however; for example, we can only appraise the significance of something if we know about how things work in general and in a particular context. But this type of knowledge in itself does not lead to emotion; appraisal must intervene. Knowledge is necessary but not sufficient for emotion; appraisal is both necessary and sufficient, according to this view.

Lazarus and Smith point out that most of the cognitive dimensions considered by emotion researchers are concerned with causal attributions, or about contextual knowledge. They do not involve appraisals. The exception might be Scherer's SEC, novelty, which according to Lazarus works at a very low level of functioning and is similar to the orienting response. This might enable appraisal to then occur rather than being a dimension of appraisal, as Scherer sees it.

According to Lazarus and Smith, the two major dimensions of primary appraisal are motivational relevance and motivational congruence. Respectively, these refer to (1) how significant the event is for personal goals and concerns and (2) how consistent the event is with personal wants. The cognitive components of secondary appraisal are accountability, problem-focused coping potential, emotion-focused coping potential and future expectancy.

These dimensions of appraisal cannot by themselves determine everything about personal meaning; in other words, there is more to appraisal than is given by them. Lazarus and Smith suggest that more cognitive constructs are needed to finish the job of determining what is of emotional significance between the person and the environment. They term these *core relational themes*, each of which implies a particular type of harm or benefit that comes from the environment. So, for example, sadness has the theme of loss, and happiness that of secure personal gain.

Generally, from the standpoint taken by Lazarus and Smith, appraisal is quite close to emotion, whereas knowledge is at some distance and has less obvious links. By contrast, they regard the links between appraisal and emotion as invariant. In the end, for Lazarus emotion is always concerned with personal meaning and appraisal is crucial to that. Perhaps it is reasonable to think of knowledge as forming a background to this. Again, this distinction between knowledge and appraisal puts more flesh on the bones of the relationship between emotion and cognition.

Parrott and Sabini

Parrott and Sabini (1989) look at the emotion–cognition debate in an applied setting and begin with an analysis of Zajonc's case for the primacy of emotion. They review Zajonc's five ways of affirming that emotion is primary over cognition and find them all wanting. Instead, they argue that cognition is an integral part of emotion. However, they point out that emotion can also be influenced by non-cognitive factors. For example, there may be emotional reactions to simple stimulation, a change in brightness, say. Also there may be changes in the state of arousal for non-cognitive reasons, which may in turn influence emotion (running up the stairs, for instance).

They argue further that emotional phenomena result from many cognitive processes. Sometimes, these processes may be 'unconscious, automatic and habitual', even though the resulting emotion might become conscious without the person knowing what led to it. Cognitive processing in emotion might be controlled or might be automatic.

Parrott and Sabini (1989) regard the strength of their approach as lying in its implications for therapy. They provide several examples of the way in which different types of cognitive processing are reflected in therapy. For example, cognitive therapy for depression does not consider the person's cognitions as though they were conscious beliefs. Cognitive therapists assume that the person probably does not know what led to the feelings of depression, even though the experiences of the depression itself are readily available. Therapists also teach people to attempt to break 'bad' cognitive habits and replace them with others, even though they might be seen as automatic and uncontrolled.

Like Leventhal and Scherer, Parrott and Sabini also believe that their analysis suggests that the question of whether emotion or cognition comes first should be abandoned. They argue for a concentration on fine-grained analyses of what types of cognition lead to what types of emotion. In the end, they are drawing attention to the importance of distinguishing between at least these two types of cognition and the role that they play in emotion. It is enough to say that cognition plays its important role in producing various properties of emotion.

Parkinson

In analysing the appraisal–emotion connection, Parkinson (1997) finds: '... little support for empirical rather than conceptual relations or for necessary as opposed to contingent ones.' Furthermore, '... there is little direct evidence that a specific cognitive process of appraisal always precedes and determines emotional reactions.'

Parkinson (1997) offers an interpersonal alternative. Consider a smile. It can certainly occur in reaction to something interpersonal, but it also carries a message. For example, it might be saying, 'I like you, I like what you've just said and I'd like you to say more.' Such a message might be conveyed unwittingly, but it also might be deliberate.

This, then, refers to the possible social significance of emotion. Similarly, its *personal* significance might depend on an adopted role – mother, friend, salesperson, lawyer, say. Such intricacies might or might not be perceived by the other person and if they are perceived then this might be in various ways.

Such possibilities can be seen all around us in daily life, but are wonderfully characterized in Edmunds and Eidinow's (2001) book about the famous incident when Ludwig Wittgenstein brandished a poker in Karl Popper's presence in Cambridge on the one and only occasion of their meeting. By those who saw the incident and by many who did not, it has been interpreted in multiple ways, perceptually and emotionally.

Parkinson (1997) argues that many emotions begin as interpersonal actions or communications, emotion being used in the service of strategic interpersonal goals. In this sense, then, any appraisal or evaluation becomes part of the *experience* of the emotion rather than being its cause. From Parkinson's perspective, such appraisals, as expressed, serve interpersonal functions.

Conclusions

There is a relatively large number of cognitively based theories of emotion, ranging from the quite simple to the highly complex. Some of them, although expressed in broad terms, deal in particular with the nature of appraisal, Arnold and Ellsworth providing the obvious examples. In the extreme, they have led to a continuing debate about the nature of the relationship between emotion and cognition. It is worth noting that, although it has been suggested that the specific debate between Zajonc and Lazarus has run its natural course, perhaps wasting away in the arid desert of definition, the general matter of the relationship between emotion and cognition is still very much alive. And it looks likely to be so for some time.

In evaluating the cognitive theories, the comments that follow will be concerned with the best, and as it happens the most recent, of them. These are the more complex theories to have been put forward during the 1980s and 1990s, paralleling the ascendancy of cognitive psychology.

In general terms, the best of the cognitive theories provide good summaries of some of the empirical foundations of emotion. Not surprisingly, they are rather light on the behavioural and physiological sides, although they have some overlap with the

phenomenological. This obvious concentration on the cognitive does of course mean that they are well focused. They give good accounts of emotion; in other words, they genuinely purport to *explain* it. Also, they tend to be most stimulating of thought; they have good heuristic value. However, the extent to which they lead to testable predictions is less obvious. They do, but often the type of investigation that will test the prediction needs to be devised with considerable ingenuity.

Moving on to Lazarus's (1991a, b) prescriptions for good theory in emotion, it is not surprising that his own theory meets these most readily. Perhaps to an extent they derive from it. However, not all the cognitive theories fare so well. For example, many of them have little to say about behaviour and the physiology of how emotions develop, or even about the distinction between emotion and non-emotion. Even more surprisingly, they tend to have little to say about the biological or sociocultural provenance of emotion. It is surprising since it might be expected that they would come down on the sociocultural side.

Although most cognitive theories are not concerned directly with emotion considered as an independent or a dependent variable, they do deal with this indirectly. However, they do not particularly consider the causes of emotion, other than to suggest that these might lie somewhere in cognitive processes.

Using Oatley's suggestions for emotion theory as a framework, again it will come as no surprise that it is Oatley and Johnson-Laird's theory that meets these most adequately. Putting this theory to one side, the others score reasonably well on the functions of emotion, on the question of basic emotions, on the unconscious causes of emotion, on the extent to which emotions are to do with evaluations (this is almost the *sine qua non* of the cognitive theories) and on the discrete nature of emotions. It is also relatively easy to put cognitive theories within the context of science versus folk psychology.

On the other hand, cognitive theories are not much concerned in general with the interpersonal communication aspects of emotion, nor with the extent to which emotion simulates the plans of others. However, Parkinson's (1997) views about the interpersonal functions of emotional experience and appraisal are an exception to this. Certainly, though, in Oatley's characterization of the Lakatos approach to theory, cognitive theories can deal with more evidence about emotion, particularly that which is germane to cognitive matters. In the Popperian sense, certainly specific predictions can be derived from cognitive theories, but they do not always cover all aspects of emotion. Moreover, some cognitive theories, such as those of Schachter and Frijda, although they might be stimulating, are not easy to disprove.

Reviewing the cognitive theories of emotion is a little like skimming a recent text in cognitive psychology: many of the same topics are canvassed, from information processing to network theory, from considerations of goals and plans to speculation about the modular nature of the nervous system. However, there are certain themes that run through most of the theories. In particular, cognitive theories of emotion are concerned with the nature and detailed functioning of the process of appraisal. And of course most of them assume not only that appraisal exists but that it is integral to emotion.

Relatively important to the earlier cognitive theories in particular is the two-factor view that emotion is best seen as an interaction between physiology and cognition. Some of the earlier theories also drew attention to possible links between perception

and action in their accounts of emotion. More recent theories, as well as increasing the emphasis on appraisal, also added in discussion of meaning. This is an aspect of human functioning that appears more and more frequently in some of the more recent and rather large-scale theories of emotion (see Chapter 7) and in some of the theories that come from related disciplines such as Sociology.

In the concluding sections of the preceding chapters, mention has consistently been made of cognition finding its way into many of the theories, no matter what their starting point or orientation might be. This will also be the case in succeeding chapters. However, in the present chapter the cognitive approach plays an obvious central role. This is in two senses: one that gives a central role to cognition in accounts of emotion and the other that almost sees emotion as a kind of cognition in its own right.

A comment might be made on which of the rather well-worked theories considered in this chapter might be the best. Schachter's rather early theory has had tremendous heuristic value, but it has also received much criticism and does not hold up well as a theory in other regards. Also starting some years ago, Arnold deserves special mention, her theory in some ways being rather before its time. She has done more than anyone to explore the place of appraisal in emotion, a tradition that has been carried on in most interesting ways by Ellsworth.

Bower has been stimulating in his cognitive accounts of mood, and Frijda and Leventhal have made cogent contributions. However, if one applies any of the 'good theory' criteria strictly, then it is the theories of Oatley and Johnson-Laird and Lazarus that stand tallest. They are the most complete, most thoughtful and the most far-reaching. It is interesting that it is these theorists who have also paid considerable attention to what makes good theory. Final pride of place for cognitive theory, in my view, should go to Lazarus, however. His theory covers so much ground that it should really appear later, in what I have termed 'the grand approach'. But it is so squarely concerned with cognition and the appraisal process that it rests most comfortably here.

Finally, even though Griffiths' (1993, 1997) critique of cognitive emotion theory is aimed at philosophers, it is worth mentioning here the six major problems he sees with this approach:

(1) Some emotions seem objectless (e.g., depression, elation, anxiety), so how can they be based on appraisals?
(2) There seem to be reflex emotions. For example, I have a mild, apparently reflexive, fear of moths even though I *know* they are harmless.
(3) There are non-emotional appraisals. This chair on which I am sitting looks better and is more comfortable than the one over there.
(4) There is the problem of not being able to predict emotions accurately from appraisals.
(5) Any cognitive theory of emotion must have room for the physiological aspects of things since the body is clearly involved in emotion.
(6) It is possible to experience emotion simply from imagining things.

These are not insoluble problems for a cognitive theory of emotion, but they do raise important issues.

To round things off, think again of the examples at the start of this chapter. One involved you walking along the street and meeting a friend. The other featured a young schoolgirl seeking a book for her project. In each case, the emotional reactions were shown to depend on the particular appraisals that were made of the circumstances, these appraisals depending on memory and beliefs as well as an immediate evaluation. The theories and discussion in this chapter have been concerned with the elucidation of this process of appraisal in emotion and with exploring the general links between emotion and cognition.

Summary

- Emotion and cognition are integrally related, it being almost (but not quite) impossible to conceive of emotion without considering cognition.
- Some cognitive theories of emotion are among the best to have appeared in recent times. Some stress links with physiology, some stress appraisal and some stress interpersonal matters.
- Appraisal theory is crucial to an understanding of emotion–cognition links, although other cognitions such as memories and beliefs also have a role to play in emotion.
- There has been lengthy debate about whether it is necessary for appraisal to precede emotion in order for the emotion to occur, or that emotion might occur without it in some cases.
- Although the links between emotion and cognition make good sense in an everyday setting, the details of the argument about the necessity or otherwise of appraisal to emotion can seem to be a long way from the practicalities of daily life or of emotion regulation.

A question of application

- Emotions sometimes seem to just erupt. Think of instances that you have seen of this. Is cognition involved? In a practical sense, does it matter if cognition is involved or not?
- What types of appraisal seem most important in the emotions of those people around you?
- Do you always appraise things before experiencing emotion? Are there some situations where this might be less likely?
- When circumstances demand, is it possible to make an emotional appraisal and then *not* react emotionally? How could this be achieved?

- In work or classroom situations, how important is it to set up conditions in which people are likely to make positive appraisals? Or are thoughts and feelings of other people at work outside one's control?
- Are there circumstances in everyday life in which it matters whether or not emotions and cognition are necessarily linked or are distinct systems?
- At home or at work what might be the effects of any of the cognitive *consequences* of emotion?

Further reading

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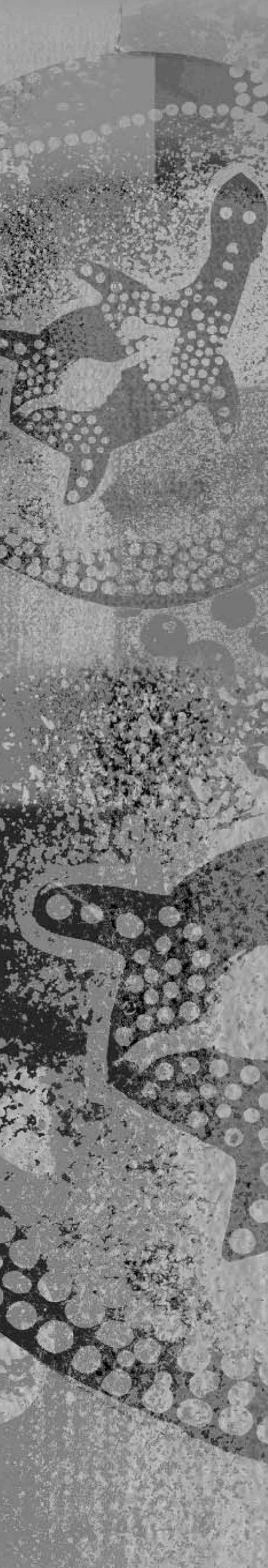

Chapter 7
Ambitious theory

A complex definition of emotion must take into account physiological, expressive, and experiential components. The emotions occur as a result of changes in the nervous system, and these changes can be brought about by either internal or external events. When emotions become linked to mental image, symbol, or thought, the result is a thought-feeling bond, or an affective–cognitive structure. Affective–cognitive structures can also involve drive–cognition or drive–emotion–cognition combinations.

C. E. IZARD, 1991

A major functional value of both basic and non-basic emotions is to switch resources from one concern to another, to organize the system into a configuration broadly appropriate to the event that has occurred. Emotions enable the system to function in unstable situations where such disturbances are likely to occur.

A. BEN ZE'EV & K. OATLEY, 1996

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Some real life

Out of the blue, you start to tremble, shake and feel dizzy. Your heart is palpitating, speeding up and slowing down uncontrollably. There are pains in your chest. You are searching your mind for what has happened, what has brought this on. You can only imagine the worst, some dreadful physical condition has overtaken you. You try to let your partner know what is happening, how you are feeling, but cannot seem to say much or gain any control over what is happening to you or to your emotional expression.

You are dimly aware, almost as though seen through the wrong end of a telescope, of your partner's worried expression. You begin to break out in a sweat and to feel overwhelmingly hot and then start shivering with cold. Your hands and feet start to tingle and you feel that you are losing touch with reality. Your head is full of 'Am I having a breakdown? Is this a heart attack? Am I going off my head? Am I going to blow up and die?' Fleeting thoughts of what will happen to your family, of your own funeral, of the world without you flicker through your mind. Your anxiety level is through the roof.

This dreadful state goes on and on for an hour or two and you can see your partner becoming more and more frantic, although you feel strangely distant from it, so caught up are you in your own terrors. Gradually, though, everything subsides and you are left feeling drained and exhausted. You then begin to react to what has happened, which is in fact a panic attack. You search your life for what has prompted it, for something surely has. You flick about from feeling relief to feeling very anxious, from feeling apprehensive about the future to ashamed at yourself without quite knowing why. Meanwhile, it is difficult to control your facial expressions, to communicate anything that is emotionally coherent to your partner.

The emotional reverberations of this experience go on for days, if not weeks, and the memory of it never leaves you. A fully blown theory of emotion has to be able to account for all of this.

Imagine a teenaged boy. It is early evening, and three things are on his mind (or on his emotions, so to speak). In decreasing order of importance they are: will I get to see Lucy tonight (he is besotted with Lucy, but has little idea of her feelings toward him)?; will the new spots on my chin be noticeable?; can I get away without doing this homework? He is desperate to go out and have the evening begin, feeling a mixture of anxious anticipation and stomach-knotting excitement.

As he is about to slip out of the house, his mother calls to him and tells him that something very important has come up , that she and his father have to go out and want him to look after his six-year old sister for the evening. His stomach unknots and drops instead. He has a flash of anger and resentment and then argues. It is to no avail – he has to stay in and does so, burning with resentment at his parents, his sister, life and the world in general. And his spots feel worse.

After his parents leave – 'we'll be back at elevenish' – he settles down a little and is captivated, as he often is, by the bubbliness of his sister. He plays with her for a while and then settles her down in bed for the night. Once she is asleep and he is alone with his thoughts, so the resentment starts to build up again. He burns with jealousy at the thought of Lucy and who she might be with. His anger flares at his parents and at the unfairness of the world. He can settle to nothing, not even the television.

Suddenly, he has the idea to go out anyway. His sister is asleep, she never wakes up, she'll be fine. His parents will never know. No sooner thought than done. He's out, bursting with excitement. An hour later, he has been to all the usual places and can find no sign of Lucy or the others. He is becoming more and more agitated, but another feeling is also coming over him. He thinks of his sister, left alone and what he has done. Anything could happen to her. And his parents might come back early. And, and . . .

He runs home as fast as he can, bursts in and pounds up the stairs to check on his sister. All is well and she is soundly asleep. His parents are not yet home. He goes to his room and throws himself on the bed, hunched with guilt, which, as he lets it wash over him, turns into shame. He sees himself as a thoroughly bad person, useless and untrustworthy. As the feeling deepens, so he starts to cry and curls up on the bed, more and more depressed.

Suddenly, it is morning and his mother is banging on the door in her usual way, 'Come on, shake a leg. Everything alright last night? Thanks for looking after your sister?' 'Yeah, fine, thanks,' he grunts from his bed and reaches up to feel if there are any new spots.

A grand theory of emotion would also have to be able to characterize all the twists and turns of this sort of experience.

'Ambitious theory' is not the most auspicious term that has ever been devised to head a chapter. However, there is no better word than 'ambitious' to describe the theories that will be discussed below. So far, each of the chapters has been concerned with theories of emotion taken (largely) from a single perspective. There will also be more of that in some of the chapters that follow. However, not surprisingly, some theorists have attempted to go further. They have attempted to incorporate a number of perspectives or to consider emotion at a number of different levels. In this sense, these theories are rather more complete than most of those that have been summarized so far.

There are two reasons for including them at this point. In general, they follow on from the more individual approaches already dealt with, and, in particular, they follow on readily from some of the more recent cognitive theories. Indeed, one cognitive theory is also included in this chapter, although discussed in a rather different way. It simply seemed impossible to exclude it from either chapter. There is nothing more to say in introduction, other than the theories that follow are in their various ways impressive in what they have been aimed at achieving. First, two earlier theories are briefly described: Leeper's theory was very much of its time, while Tomkins's continues to be influential, as will be seen in later chapters.

Leeper

Leeper's (1948) original concerns were against the then-prevailing view that emotions have a disorganizing influence on behaviour. Later, he refined and extended this view (e.g., 1970).

He suggests that emotions act as motives because they are mildly aroused most of the time, controlling our behaviour without our awareness. In this motivational theory of emotion, he argues that emotions give behaviour (and mental activity) its goal-directedness, allowing us to choose between alternatives, for example, or to solve problems, or to endure sanctions in order to gain a reward.

Leeper (1970) extends his view that emotions function as motives into seeing them also functioning as perceptions. This is Leeper's foray into the cognitive world, since by perception he means that emotions function as conveyers of information. They represent long-standing perceptions of situations. He is suggesting that there is a strong link between motivation and perception. He develops his ideas with the assertion that emotional motives depend on mechanisms that are similar to those of the more obviously physiologically based motives. He believes that there are 'emotional mechanisms' that function through signals that indicate the favourability of environmental circumstances; such mechanisms act like reflexes.

Leeper's views, although presented in unsophisticated theoretical terms, nevertheless are of significance. They sprang from an attempt to dispel the view that emotion is disorganizing, chaotic and interfering. He regards emotion as an active force, involving motivation and perception, that organizes, sustains and directs behaviour.

Leeper's contribution, then, is important in suggesting that emotion exists as a driving force in our lives. Rather than seeing it as something that acts as a hindrance to existence, we should use and develop it.

Tomkins

Tomkins' (1962, 1963) theory of what he prefers to call 'affect' is both ingenious and idiosyncratic. It provided some of the impetus for Izard's theorizing, but other than this does not relate all that obviously to other theories. However, it is interesting enough to merit brief discussion, particularly as it rests on strong links between emotion and motivation. Moreover, as will be seen in Chapter 8 on specific emotions, Tomkins' theory has had a large influence on our understanding of the self-reflective, self-conscious emotions, such as shame.

Tomkins argues that the affect system is innately determined and as a primary system interacts with the secondary or learned drive system. It gives urgency to drive. He also characterizes affect as changeable and insatiable, without constraints in time or intensity. Tomkins regards affects as being mainly reflected in facial responses, feedback from which can be rewarding or punishing, but only if it is self-conscious. Innate patterns of facial response are triggered by subcortical central nervous system (CNS) mechanisms. He does not wish to deny that emotion is also reflected in bodily responses, but simply to affirm the greater significance of facial responses.

Tomkins believes, as do a number of the other more broadly based emotion

theorists, that there are a number of basic (innate) primary affects: interest/excitement, enjoyment/joy, surprise/startle, distress/anguish, disgust/contempt, anger/rage, shame/humiliation and fear/terror. He believes that which of these primary emotions is instigated depends on the rate of neural firing in the CNS, such rate changes actually promoting emotion as well as being either rewarding or punishing.

Clearly, Tomkins' theory of affect is very widely based and draws on a number of areas of psychological discourse. He ranges from a conceptual analysis of motivation through possible physiological mechanisms to innate factors. Although it is an interesting theory and certainly forms an important background to Izard's theory, it is highly speculative and does not relate particularly well to other theories. However, it is conceptually rich and in spite of being infuriating to read (not unlike Piaget, say) has interesting and far-reaching implications concerning the links between emotion and personality, for example.

Averill

Averill's (1982) views on emotion will also be dealt with in Chapter 8, in which theories concerning specific emotions are considered. He has developed his theories in unusual ways, not the least of which is via an extended analysis of anger. Moreover, since he takes very much of a social constructionist approach, mention will also be made of his ideas in the final chapter.

Averill regards emotions as social syndromes or transitory rules, as well as short-term dispositions to respond in particular ways and to interpret such responses as emotional. He distinguishes between conflictive emotions, impulsive emotions (inclinations and aversions) and transcendental emotions, all of which involve a breakdown in the boundaries of the ego.

From his perspective, some emotions can have all three of these characteristics, but complex behaviour usually involves conflicts. Such conflicts lead to emotions that are compromises, but which nevertheless help to resolve the conflict. For example, at the biological level, aggression is linked to anger, but is not equated with it. Averill believes that there is a biologically based tendency in humans to formulate rules and follow them. Similarly, there is a tendency to become angry and upset when the rules are broken. All of which means that, from Averill's viewpoint, emotions are highly symbolic and although biologically based depend very much on appraisals. To continue with the example of anger, at the psychological level it is to do with the correction of a perceived wrong. Any emotion has its object, part of which is instigation, the other parts being a target and an aim. In the case of anger, the instigation is an appraised wrong.

Any emotion is concerned with the upholding of accepted standards of conduct, even though this might be achieved unwittingly. These are rules that guide behaviour, some of them being to do with appraisal. Other rules relevant to emotion concern its expression, its course, its outcome and the way in which it might be causally attributed. For example, a fairly self-evident rule of anger in our society is that it should be spontaneous rather than deliberate.

From a broad perspective, Averill argues that any theory of emotion should be unrestricted and should relate to all the relevant phenomena, however complex, as long as they are part of emotion in everyday language. So, for Averill emotion is both a phenomenon of everyday life and should be studied as such, and is also particularly human. The aim is to attempt to uncover what Averill terms the prototypic attributes of various emotions and to determine the rules that guide them. Averill views emotion as a social construction based on a mixture of biologically determined aspects and a number of levels of cognition, from perception through appraisal to symbolic rules and standards. On the one hand, his views bear close comparison with those of a neurophysiologist such as Panksepp and, on the other, with those of a social constructionist such as Harré.

In a fascinating extension of his theory, Averill (Averill & Thomas-Knowles, 1991) makes links between emotion and creativity. His aim in this is to broaden the way in which we think about emotion. Or, to put it more precisely, to broaden the way we 'talk' about emotion, for Averill works within the context of Wittgenstein's (1953) language games. He believes these links to be important because the modern world and its vicissitudes demand us to be emotionally creative.

From their research, Averill and Thomas-Knowles (1991) describe emotionally creative people to have seven major characteristics in comparison with the less emotionally creative:

(1) they are better at integrating their emotions and expressing them symbolically (e.g., going out for a pounding run in the rain after a day of frustrations at work);
(2) they have more complex appraisals and don't jump to conclusions (e.g., a man who flicks about between anger, anxiety, calm and envy as he sees his highly successful, competitive brother);
(3) they are very concerned to explore the meaning of their emotions;
(4) they are thoughtful about other people's feelings (and behaviour);
(5) they are less bound by standards and more tolerant of conflicting traits (e.g., being accepting if and when your friend's feelings, say of pleasure at his father's death, go against society's standards);
(6) they experience less prototypical features of standard emotions (e.g., feeling serene rather than angry when slighted);
(7) they find challenging what others find threatening.

In general, Averill's interesting analysis of emotional creativity is not unlike and perhaps even overlaps with emotional intelligence and emotion regulation (see Chapters 9 and 11). However, Averill sees it very much as something that is worked at and achieved through struggle. Such an idea might or might not apply to emotional intelligence.

Mandler

In a series of well-argued books and papers, Mandler (1976, 1984, 1990, 1992) puts forward his constructivist system of emotion. He regards emotion as resting on arousal,

cognitive interpretation and consciousness. Undifferentiated arousal is the perception of activity in the sympathetic nervous system (SNS), conditions for its presence depending on cognitive interpretation, particularly with respect to interruption and blocking. It functions to maintain homeostasis and allows the seeking of information.

Mandler sees cognitive interpretations as involving structures that promote innate reactions to events and evaluations of perceptions of the self. He argues that expressive movements lead to automatic cognitive reactions that are altered by reinterpretation. An interaction between arousal and cognitive interpretation (appraisal) leads to the experience of emotion and emotional behaviour. Arousal gives emotion its visceral quality and its intensity, whereas cognitive interpretation provides a category for the experience. Importantly, Mandler also argues that emotional experience occurs in consciousness, outputs from which are coded into conventional language. Links between emotion and consciousness will be returned to later.

The general thesis that Mandler offers is that autonomic nervous system (ANS) arousal necessarily sets the stage for emotional behaviour and experience and allows for its intensity. The quality of the emotion then comes from the meaning analysis that is engendered by the arousal, the general situation and the cognitive state. Thereafter there are outputs to consciousness and to action.

Mandler suggests that arousal comes about in two ways: by a pre-programmed release from the ANS and following a mediation by meaning analysis, which converts mental stimuli into ANS releasers. He is speaking of a continuum that runs from innate to experiential factors. A perceived input from arousal leads to automatic meaning analysis, which in turn generates a search for structures that can assimilate the input, its analysis and the perception of arousal. A successful search leads to the structure being placed into consciousness.

The complex general process that Mandler describes involves continuous feedback. Environmental stimuli lead to cognitive interpretations, which lead to perception of arousal, which leads to emotional experience, which leads to perception and evaluation of the experience, which changes the original cognitive interpretation. And so it goes on. For example, at work you might smile at a friend as you pass in the corridor. She does not react, looking right through you. You immediately interpret this as her being cold to you and wonder what you have done to offend. Your physiological arousal goes up and you become anxious. This pushes you to think more about her reaction and you remember that she is going through domestic problems at the moment. She was probably just absorbed in her own world. Your arousal drops and the emotional experience changes.

Central to Mandler's analysis of emotion is *meaning*. He argues that the complexity of inputs in emotion makes emotion very rich, the meaning of this richness being given by the structure of the input and its relation to other inputs and existing mental structures. Meaning analysis tells us where we are and what our surroundings are. If there are discrepancies between available evidence and expectations from existing schemata, the result leads to arousal and some emotional synthesis. Some meaning analyses are automatic and others require deliberate evaluation.

In meaning analysis, Mandler makes two interpretations of the interaction between cognition and arousal. In the *passive* view emotion comes from the total relational network from the two sets of structures. For example, an interaction between the perception of autonomic arousal and the evaluation of a situation as

positive and joyful gives the feeling of joy. In the *active* view, which Mandler believes to be more appropriate, the inputs from either system are fed into existing structures based on past experiences and innate factors. Both systems may operate and the same set of events may act as arousal releasers and have to be cognitively evaluated.

In more detail, Mandler suggests that structures give analyses of inputs and initial identification of emotion. These are stored, then meaning analysis provides further interpretation, and this is followed by the production of arousal, which, with cognitive appraisal of the situation, leads to a specific emotional reaction. He suggests further that a hierarchy of meaning nodes could give various effects, from repression to almost any emotional experience, all of which depends on past experience. So, whether or not an input leads to emotional experience depends on whether or not an arousal switch is triggered, which in turn depends on a particular meaning analysis of the input.

In much of his writing, Mandler emphasizes the importance of consciousness; he also gives it a prominent role in emotion. He suggests that some emotions may *only* be experienced in consciousness and that many of the determining functions of emotion may occur in consciousness. He argues, as might be expected from the foregoing, that emotional consciousness develops from basic processes that involve both arousal and cognition.

Mandler emphasizes consciousness for a number of reasons, not least of which is that arousal and consciousness seem to arise from similar mental conditions: the need to select and alter the current stream of action. Emotional states push for priority and occur at significant choice points in our lives and intentions. Mandler goes so far as to describe these as guideposts of human existence.

Generally, then, Mandler has what he rightly terms a constructivist view of both emotion and consciousness: 'Holistic conscious events are constructed out of activated underlying representation, and represent the best "sense" that can be made out of currently important concerns' (1992, p. 103).

Mandler assumes a modest position for his theory, which he terms a discrepancy/ evaluation theory, averring that it is only pertinent to some aspects of emotional experience. In summary, and similarly to a number of other theories, Mandler suggests that emotion is dependent on the underlying processes of ANS arousal and evaluative cognitions. Moreover, it is discrepancies in perception, action and thought that occasion SNS arousal. Interestingly, Mandler maintains a distinction between body (arousal) and mind (evaluation of things social) in emotion. And, quite simply, he assumes that the subjective states of emotion have motivating properties, leading to approach and avoidance.

Mandler (1992) points out that he does not consider interruptions or discrepancies to be emotions, but rather than these *neutral* events set the scene for emotion to occur. He also points out that interruptions/discrepancies are but one route to emotion, albeit an important one, others coming, for example, from effort and exercise.

Generally, Mandler's theory of emotion is based on evolutionary considerations, viewing the detection of discrepancies or differences as of fundamental importance to survival. The detection of difference is what, in Mandler's view, gives emotion its intensity. In addition, evaluative cognitions give emotion its qualitative aspects. He sees these evaluations as biologically based, as are all cognitions, and yet as socially constructed. Mandler argues that this way of looking at emotions sidesteps the matter of whether or not there are basic emotions from which others are derived. In other

words, Mandler's is to a considerable extent a constructivist or social constructionist theory of emotion and as such has much in common with theories that will be discussed in Chapters 14 and 15.

Buck

Buck (e.g., 1985, 1988, 1991) puts forward what he terms a developmental–interactionist theory of emotion in which his aim is to find a place for motivation and cognition. He sees his theory as being grounded in the traditional Schachter and Singer type of interactional theory, but notes four major differences:

(1) evolution has provided us with innate knowledge systems;
(2) that the 'cognitive factors' of other theories should be replaced with processing systems of associative and instrumental learning that change with individual experience;
(3) that emphasis should be placed on individual development in attempting to understand the relationship between general and specific processing systems; and
(4) that there is a third system of behaviour control – linguistic competence.

Primes are the name given by Buck to a hierarchically arranged set of motivational/emotional systems. In obvious order these are: reflexes, instincts, primary drives, acquired drives, primary affects, effectance motivation, and linguistically based motives and emotions. As the hierarchy is ascended so the newer brain structures and learning become more important.

For present purposes, the primary affects are of most significance, although in Buck's theory they simply form one element. They include happiness, sadness, fear, anger, surprise and disgust, a list which places Buck among those who believe that primary emotions exist. He states that 'The capacity to experience and express the affects is innate and unlearned, but the circumstances under which they are experienced, and the ways in which they are expressed, are learned' (1991, p. 103). He associates the affects with the limbic system in the CNS and suggests that they promote general response tendencies rather than specific behaviours.

Although primary affects have an obvious relevance to emotion and might indeed be termed primary emotions by other theorists, Buck argues that *all* the primes have motivational, emotional and cognitive aspects. Buck defines motivation as the behaviour potential that is built into a behaviour control system, and emotion as what he terms the 'read-out' of motivational potential when prompted by a challenging stimulus. If motivation is biological, then it is built in to biological primes, with biological emotion taking one of three forms, or one of three types of read-out: Emotion 1 is adaptation homeostasis, Emotion 2 is social expression and Emotion 3 is subjective experience. In general, emotion is motivation's manifestation, and all of what Buck refers to as the classic primary affects have all three types of read-out. Moreover, in general the read-outs of the primes interact with general-purpose processing systems that are to do with conditioning and learning. These are structured into experience.

Moving onto cognition, Buck defines this within his theory as 'knowledge' rather than 'knowledge about' something. As such he believes that it subsumes subjective experience, as a kind of knowledge. In other terms, these are knowledge-by-acquaintance (direct sensory awareness) and knowledge-by-description (knowledge *about* sense data).

Buck believes that this distinction is important for a consideration of the emotion–cognition, Zajonc–Lazarus debate (see Chapter 6). He characterizes the debate as pivoting on what is viewed as being cognition, in that those on both sides regard some form of sensory information as necessary for emotion to occur. He sees Lazarus as defining cognition as knowledge-by-acquaintance and Zajonc as knowledge-by-description. He argues that developmental–interactionist theory suggests that knowledge-by-acquaintance is in and of itself an affective process that leads on to and in fact determines knowledge-by-description. Buck defines the process that accomplishes this transformation as *appraisal*.

Buck's analysis of appraisal rests on the direct perception ideas of Gibson (e.g., 1979) and a consideration of brain physiology. He argues that appraisals are the result of attention being educated to be more concerned with some aspects of the environment than others because of the affordances they provide. This rapidly occurring concern with picking out the value of an event or stimulus for the organism's well-being Buck refers to as a *filter*, in his characteristic way of using slightly different terms than other theorists of emotion. He regards these filters as the earliest stage in the organism's picking up of events (i.e., they occur at subcortical and palaeocortical levels).

Without going into the possible CNS mechanisms, Buck's emotional filter system can be summarized as follows. Initial filters exist at subcortical and palaeocortical levels and determine what goes in to the appraisal process. In its turn, the appraisal is an integration of this initial information (knowledge-by-acquaintance) with any relevant motivations/emotions and memories, leading into knowledge-by-description.

So Buck's analysis of appraisal follows very much from Gibson's ecological theory of perception in which the perceptual system has evolved to pick up affordances from the environment because they are critical for survival. Buck goes further by suggesting that the perceptual systems have also evolved to pick up events in the internal body environment – this is information and provides the basis for subjective feelings and desires. He includes in this pain and temperature, hunger, thirst and sexual arousal, and all the primary affects.

Although subjective experience, characterized in this way, is always with us, Buck argues that we often filter it out. For example, sexual arousal or feeling in a depressed mood might be in evidence frequently, but we filter them out in favour of ongoing work. Buck regards these subjective states as always functioning, perhaps weakly, whether or not we are aware of them. By the same token, it is possible to dredge up the feeling of these emotional states, just as we are able to conjure up the feel of sitting in our car, say. Of course, the states tend to strengthen when we become conscious of them.

Interestingly, Buck also has something to say about what he terms 'emotional education'. Although his might be called a 'direct perception' theory of emotion (i.e., the brain 'knows' directly the experience of motivational/emotional states), we also learn things about these states. This is emotional education, which begins in childhood and involves learning to attend to some things in the internal environment rather than

others, then to understand the events and finally to respond to them. The result of this in general is the individual's level of emotional competence. Again, this is akin, in Buck's view, to perceptual learning (after Gibson).

The second major facet of Buck's theory is *communication*, much of which is concerned with empirical studies. This would take up too much space to discuss here. However, theoretically, he distinguishes between spontaneous and symbolic communication. He defines communication in general as what occurs when one organism's behaviour influences another's. Within this, spontaneous communication is biologically (innately) based, has external signs, is not intentional (although it can be inhibited intentionally) and has a non-propositional content (i.e., it cannot be false). Above all, spontaneous motivational/emotional communication has evolved because it is adaptive.

By contrast, symbolic communication is learned, dependent on culture, based on arbitrary symbols, and is intentional and propositional. Buck is saying that there are two forms of motivational/emotional communication that proceed together: one biological and non-voluntary, the other intentional and learned. Although they often, if not usually, occur together, spontaneous communication can happen without symbolic communication, but symbolic cannot occur without spontaneous.

Buck argues within the terms of his theory that spontaneous communication rests on special-purpose systems, although, of course, there is an interaction with general-purpose systems. Spontaneous communication might have evolved to transmit adaptively important messages, but in humans there is the possibility of learning and the influence of language. Moreover, there is a difference in accessibility between subjective experiences and expressive behaviours, the former not being available to another person. Learning about these internal events is at the core of emotional education for the child.

Buck goes on to draw attention to social biofeedback in the process of emotional education, suggesting that we come to understand our feelings partly by the effect that their expression has on other people. Of course, we learn not only to control our facial and bodily expressions in this way but also our own feelings and desires, and do so via spontaneous communication. Through a constant process of this type of feedback so the individual learns to respond differently in social contexts; this may be more or less effectively. This process is made richer and more complex in humans by their use of language.

Emotional competence is defined by Buck as, '. . . the ability to deal with the internal environment of one's feelings and desires.' It interacts with social competence in obvious ways. To some extent emotional and social competences are concerned with specific relationships. Furthermore, a change in the social environment provides a difficulty for emotional education. Think of what happens, for example, during adolescence or if a significant relationship ends.

According to developmental–interactionist theory, coping is a further stage in the process of emotional education. This is reasoning about emotion. If the body changes (as in illness, say) or the social environment changes, then coping is an effort to restore social and emotional competence to its previous level. Buck suggests that the three sources of rules that are used in bringing about competences of these sorts are the body, the self and the external environment. The learning of these rules in childhood also leads to the development of the self-image.

One of Buck's final and most interesting points concerns the problem of other minds. How can we ever know what another person is experiencing? He argues that since spontaneous communication is direct (i.e., it is biologically based), it gives a way in which the receiver has direct information about the motivational/emotional state of the sender. Others are simply constructed to send such information, and we are simply constructed to receive it. We know its meaning directly, through phylogeny and inheritance.

Buck's developmental–interactionist theory of emotion then reaches far beyond emotion, being also a theory of motivation, to some extent of cognition, and being describable as a systems theory. It is a two-factor theory that emphasizes both the physiological and the cognitive, as a good two-factor theory of emotion should. But it fits emotion into a context of the innate and the learned, ranging from simple reflexes through to the sophistication of human language. It has a specific place for two types of communication, spontaneous and symbolic, and extends to consideration of emotional coping and emotional education. Buck finishes his 1991 paper disarmingly, 'Everything that is real is emotional; the rational is our subsequently linguistically structured elaboration of that reality' (1991, p. 136).

Oatley and Johnson-Laird

Oatley and Johnson-Laird (1987; see also Oatley, 1992) put forward a theory of emotion as communication that has been as far-reaching as any in recent times; it has a fine heuristic value. It has prompted a great deal of discussion (see Ortony, later in this chapter, for example). Their *communicative theory* of emotion rests on the view that emotions communicate among the various parts of the cognitive system and among people socially.

They regard the cognitive system as made up of relatively autonomous parts, which therefore have limited access to and control of one another. Only what they term the topmost level of the system has a sort of integrating function, receiving relevant messages from below and assessing them within a model of goals and knowledge. Consciousness occurs only at this top level of cognitions, which is also concerned with the construction of a model of the self.

Oatley and Johnson-Laird (1987) clearly subscribe to the modularity theory of mind in which the various parts of the cognitive system have their specific functions to perform. They offer two arguments in support of this way of looking at mind or cognition. The first is an appeal to good sense of any such system needing to be elaborated in this way simply in order for any procedures to begin and end. Second, it is clear from everyday experience that often one part (the conscious part) of human cognition does not always know what is going on elsewhere in the system. Such dissociation suggests a modular system.

Some parts of this system are innate or evolutionarily determined, but new procedures are also capable of being learned by the human mind. This means that new things can go wrong constantly as the system constructs new parts of itself. Against this background, emotions are seen as 'inserting problems into consciousness', which allows integration to occur with the rest of the system.

In a way it is reasonable to set Oatley and Johnson-Laird's theory of emotion against the background of Mandler's (see earlier in this chapter). They characterize it as a conflict-and-evaluation theory that suggests that emotion occurs following the interruption of a psychological process. Emotion is also dependent on a process of appraisal. The problem with conflict-and-interruption theories of emotion and perhaps the reason that their history is chequered is their possible difficulty with positive emotions.

The usual way of dealing with positive emotions within this type of theoretical framework is to suggest that they arise because of the interruptions and delays that are an inevitable part of them. Clearly, though, some positive emotional experiences are not like this, they do not involve interruptions. Oatley and Johnson-Laird embrace this possible difficulty by suggesting that positive emotions occur when a goal is achieved or when subgoals are achieved because a plan is progressing well. In particular, they consider enjoyment and happiness. Enjoyment follows the achievement of an especially significant goal, or when the mind is full of activities such as listening to music or being creative. So enjoyment happens when we are fully engaged in something and when there are no interruptive re-evaluations of the situation.

Within Oatley and Johnson-Laird's theory, negative emotions follow problems with which it is difficult to cope: the inability to deal with a new goal, a new conflict or a threat. Such negative emotions are not necessarily unpleasant or even avoided, but may simply provide some useful information: that one's cognitive structures or habits need to be changed in some way. They believe that there are two types of distinctive conscious consequences of negative emotions. Restrictions prompt old plans and actions to be used, and there is also often an inner debate taking place.

Oatley and Johnson-Laird (1987) argue that their theory has an advantage over other cognitive theories in that it concentrates on goals rather than behaviour. Moreover, the evaluation part of the theory posits that the evaluations are of events as they relate to these goals and thus distinguishes the content of emotional evaluations from other types of evaluation.

To cut to the chase, the central postulate of Oatley and Johnson-Laird's (1987) theory of emotion is:

Each goal and plan has a monitoring mechanism that evaluates events relevant to it. When a substantial change of probability occurs of achieving an important goal or subgoal, the monitoring mechanism broadcasts to the whole cognitive system a signal that can set it into readiness to respond to this change. Humans experience these signals and the states of readiness they induce as emotions.

K. OATLEY, 1992, p. 50, italics his

In this context, emotions function as alarms that something needs to be dealt with, without saying what exactly has happened or what exactly to do about it. This is a non-propositional message and contrasts with the usual sorts of cognitive propositional messages. Oatley (1992) terms these messages *control* (to do with the control structure of cognition; they are without meaning) and *semantic* (messages that make reference).

Oatley suggests that semantic messages need interpretation and can invoke cognitive procedures usually in a hierarchical sequence. They allow the control of

organized plans. By contrast, non-semantic control signals allow non-hierarchically arranged cognitive modules to be organized to avoid pathological conflicts. This is a much simpler and older (evolutionarily speaking) part of the system. There is no information involved, merely a warning that turns some modules on and allows a sort of propagation through the system.

Some of these sorts of signal are arranged specifically such that they may promote vigilance or readiness to attack, for example. Although Oatley argues that this system is much more primitive than the semantic communication system, he nevertheless believes that since it has survived throughout evolution it must still be of some value to the organism. He sees these sorts of signal as having two particular advantages: they allow a fast coherent sort of response that overrides whatever else is happening, and they permit a sort of endurance, allowing the system to stay in a mood that resists any other changes.

Oatley and Johnson-Laird (1987) suggest that particular control signals are associated with five basic emotions:

- *happiness* occurs when subgoals are being achieved and suggests that the plan is to be continued;
- *sadness* follows a plan failing or an active goal being lost and suggests either doing nothing or searching for a new plan;
- *fear* follows either threat to a self-preservation goal or goal conflict and suggests stopping, being vigilant, freezing or escaping;
- *anger* occurs when an active plan is frustrated and suggests trying harder or being aggressive; and
- *disgust* follows the violation of a gustatory goal and suggests rejection or withdrawal.

To support the idea that these five basic emotions exist (rather fewer than other basic emotion theorists list), Oatley draws on three types of evidence: eliciting conditions, physiological specificity and cross-cultural emotional expression.

Oatley lists five junctures concerned with goal evaluation (in birds and mammals) that correspond to the five basic emotions that are integral to this theory. Three of these junctures are to do with attachment: establishment, interruption and loss of a relationship, associated with happiness, fear and sadness; aggression and anger are part of competition; and disgust follows from the rejection of food that might be contaminated. Communicative emotion theory suggests then that the other complexities of emotion can be built up from the basic five. Oatley also quotes evidence to suggest that there are specific autonomic effects that go with the facial expressions of these five emotions and that the emotions are also expressed in a similar way pan-culturally.

Although Oatley and Johnson-Laird (1987) suggest that there are five basic emotions, they also acknowledge that the jury is out on exactly how many this number should be. They believe that most researchers believe that happiness, sadness, anger and fear are certainly separable for research purposes, although not all such researchers would believe these four emotions to be *basic*. They also suggest that the relevant evidence is not yet available on the status of surprise, disgust, hatred, contempt and desire/interest, although they themselves are convinced about disgust.

Oatley (1992), unlike Buck, argues that emotions allow transitions to be made between various motivational states and perhaps enhancing motivations, but that emotions are not in themselves motivations. He regards emotions as mental states that might, among other things, allow motivations to be managed.

Within the terms of this theory, usually semantic and control signals combine to lead to an emotion, the semantic part indicating to us the cause of the emotion, and the control part allowing the emotion to spread through the system with its particular tone and mode. However, emotions sometimes occur with no obvious reason. As should be obvious from the theory, this occurs when a control emotion is established without any conscious semantic information that would give a clue to its cause.

In this context, Oatley and Johnson-Laird (1987) also give an account of moods, which are maintained states rather than states involving transition. The maintenance is made by control signals and is beyond any external events or immediate memories. Crucial here is the breaking of any links between control emotion signals and semantic information. If this type of dissociation and the resultant mood goes on for a long time, say a week, with little change, then they come to be regarded as psychopathological.

The final broad consideration of Oatley and Johnson-Laird's communicative theory of emotion concerns communication itself. Their theory depends on a detailed analysis of the sort of communication that goes on within the cognitive system, but as Oatley (1992) points out there are interpersonal equivalents of this. Our verbal behaviour, which of course has both semantic and syntactic aspects, affects the cognitions of other people. The equivalent of control comes from non-verbal behaviour such as emotional expression.

Furthermore, emotions are regarded within this theory as communications to oneself about changed evaluations. They allow us to deal with our various goals and plans, and they also act communicatively to others. Oatley (1992) argues that it is through emotions becoming conscious that we actually come to know some facets of our goals and plans that we might not otherwise know about. In its turn, this allows us to further modify our cognitive structure in appropriate ways.

Finally, Oatley and Johnson-Laird (1987) suggest that basic emotions have three types of function in communication:

(1) they constrain actions by communicating directly to us, thus continuing some states or helping a change in others;
(2) they communicate to other people, producing similar states and changes in those with whom we interact;
(3) we talk about emotions to ourselves and others and thus communicate semantically.

This has its effects.

Izard

Izard has made an enormous contribution to our understanding of emotion. What follows is a summary of his *Differential Emotions Theory* as it is elegantly expressed

in three books (1972, 1977, 1991) as well as a long series of articles. The theory has broad aims:

(1) to account for the great complexity of emotion;
(2) to deal with all aspects of emotion (i.e., neural activity, glandular, visceral and psychophysiological responses, subjective experience, expressive behaviour and instrumental responses);
(3) to provide a framework within which to look at innate and learned aspects of emotion and patterns of emotional–cognitive–motor responses;
(4) to accord with a general theory of behaviour.

As its name suggests, differential emotions theory derives from a premise that there are discrete emotions that function as distinct experiences, which also happen to have motivational characteristics. It rests on five assumptions:

(1) there are 10 fundamental emotions that make up the human motivational system;
(2) each of these emotions is unique organizationally, motivationally and experientially;
(3) the fundamental emotions lead to distinct inner experiences that have particular effects on both cognition and action;
(4) the processes of emotion interact with homeostasis, drive, perception and cognition;
(5) homeostasis, drive, perception and cognition also have influences on emotion.

Izard views emotion as a motivational system, a process of personality that gives meaning to human existence and that determines behaviours that may range from rape to human sacrifice. It is one of six interrelated subsystems of personality, the others being the systems of homeostasis, drive, perception, cognition and motor behaviour. And the 10 fundamental emotions that provide us with our main motivational system are: interest, enjoyment, surprise, sadness, anger, disgust, contempt, fear, shame and shyness. Although these emotions are fundamental and discrete, they interact, and although Izard believes them to be discrete in neurochemistry, behaviour and subjective experience, in particular they are discrete in the feedback that comes from their facial and bodily expression.

In Izard's view, the emotional elements of personality themselves form an interrelated system that through innate influences may be organized hierarchically. There are regular relationships between some emotions, even extending as far as polarities. The result of a combination of these complex relationships is similar to traits or personality patterns. Moreover, *all* emotions have elements in common. They are non-cyclical, have unlimited generality and flexibility as motivators, and influence drives and other personality subsystems.

Izard defines emotion '. . . as a complex process with neural, neuromuscular/expressive, and experiential aspects' (1991, p. 42). So the meaning of emotion comes from an interplay between neurophysiological activity, facial–postural activity and subjective experience. However, there are two auxiliary systems that are also important to emotion: the reticular arousal system that amplifies and attenuates emotion, and the visceral system that helps both to prepare the ground for emotion and to sustain it.

The general emotion system tends to function in an integrated way with the cognitive and motor systems, personality depending on the balance between the three.

Izard gives discrete significance to three sets of processes as causes of emotion: neurotransmitters and brain mechanisms, sensory–perceptual processes and thought processes. He lists four types of cause within each of these types of process. Neural and neuromuscular activators include hormones and neurotransmitters, drugs, expressive behaviour and changes in cerebral blood temperature. Affective (sensory–perceptual) activators include pain, sex, fatigue and any other emotion. Cognitive activators include appraisal, attribution, memory and anticipation. Izard emphasizes the importance of there being both cognitive and *non-cognitive* activators of emotion, as he sees it. In this, he stands out from most cognitive theorists.

Once emotion has been instigated, its further phases depend on the site and nature of the original activity. Izard sees no fixed number or order to these phases. He believes that many possible mechanisms and interactions are involved, from perception, through neurophysiological reaction to subjective experience and emotion–cognition–motor interaction.

Furthermore, Izard suggests that for any emotion there are three levels:

(1) electrochemical or neural activity, which for fundamental emotions is innate;
(2) efferent aspects of emotional activity innervate the striate muscles involved in facial–postural patterning, patterning that normally gives cues and information to the individual and to the observer;
(3) for cues to be useful there must also be feedback to the association areas of the brain; although an awareness of this process is not inevitable, it can be interfered with in many ways.

However, if it is normal, then it generates the subjective experience of emotion, an experience that is itself independent of cognition. Unlike many other current theorists, Izard believes that the emotion process can operate independently of any cognitive process, even though there is usually constant interaction between them. For Izard, cognition is *not* a necessary part of emotion, even though it is very important to it.

Izard discusses at some length the difference between theorists such as himself who believe that there are certain basic emotions and those who do not. He characterizes the latter as usually not distinguishing between emotion/feeling and perception/cognition and as believing that we construct emotions socially and culturally.

By contrast, he lists five criteria that some theorists have used to sort out the so-called fundamental emotions:

(1) they have distinct neural substrates;
(2) they have distinct facial movements and expression;
(3) they have distinct feelings that promote awareness;
(4) they come about through evolution;
(5) they have adaptive, organizing and motivational properties.

He considers the 10 emotions listed previously to meet most of these criteria.

Izard's differential emotions theory is well worked and far-reaching, with enormous heuristic value. It has even led to the production of other, more specific

theories of emotion (emotional development, for example; see Chapter 9). The theory has numerous implications (it is instructive to read them in Izard's original words). However, it would also be helpful to mention a few of these now. Each level of emotion has particular functions that should be taken into account. If feedback is distorted, then so will be awareness. A given emotion is a subsystem of the whole system and so has the same qualities as the whole. The emotional system has changed with evolution and changes within individual development. Emotion is continually present in consciousness. Once an emotion is activated, the life systems are involved, and we eventually become aware of the facial expressions *as* the subjective experience of emotion. Autonomic or visceral arousal can occur without emotion. Emotion can be initiated even though facial expression is inhibited, and there can be facial expression without emotional experience reaching consciousness. As is obvious from this brief list, Izard's theory of emotion has interesting implications. It is a far-reaching theory with a fine provenance, and it rather stands out from those (many) theories that give cognition a necessary role to play in emotion.

In an erudite extension to the theory, Izard (1993) puts forward an argument that, because emotions are clearly significant in evolution and adaptation, there must be more than one way for them to be generated. However, as he rightly points out and as this book demonstrates, much recent theory has been concerned with the role of cognitive processes, particularly appraisal, in the generation of emotion.

As an alternative, Izard describes four types of information processing, all of which can activate emotion, but only one of which is cognitive:

(1) *Cellular* information processing occurs in enzymes and genes and is clearly not linked to sensory input or to cognitive processes that derive from sensory input. The information that comes from this root is based on natural selection and helps to determine both emotional thresholds and the organism's likelihood of experiencing particular emotions. Izard regards this type of background as an important determinant of mood and individual differences.

(2) *Organismic* information processing is also biologically based and hence genetically coded. It can involve sense data from interoceptors and is based on physiological drives. An example of emotion being activated in this way is the anger that can come from pain.

(3) *Biopsychological* information processing depends on links between biological and learned (cognitive) information processing. This may be referring to interaction between unconscious and conscious information, and certainly between genetically coded material and that which comes from cognitive processes. In Izard's view, this depends very much on the biological information.

(4) *Cognitive* information processing is concerned with the acquired or learned side of matters. For Izard, as his emotion theory makes clear, cognition starts where learning and experience generate mental representations that allow comparisons and discriminations to be made. At this point, according to this view, cognition can begin to play its role in activating emotion.

As well as elucidating evidence for these four types of emotion-activating processes, Izard argues that they operate continuously not only to activate emotion but also to maintain background emotionality that is pertinent to personality. Izard's core argu-

ment appears consistently throughout his work. It is that, although cognition and emotion interact, they are also distinct, and the study of emotion will not progress at its optimum if it is swamped by or subsumed under the study of cognition.

Ortony

During the last 15 years or so, Ortony has made an interesting contribution to our understanding of emotion. Presently, however, it is the intention not to deal specifically with his theory of emotion (Ortony, Clore & Collins, 1988), but instead to consider his analysis of the question of *basic emotions* (Ortony & Clore, 1989; Ortony & Turner, 1990; Turner & Ortony, 1992). In passing, it should be noted, however, that the debate about basic emotions does establish Ortony as what might be termed 'a componential emotion theorist'. As will become clear, a number of other prominent emotion theorists have enjoined this debate, including, for example, Ekman, Izard and Oatley.

Ortony and Turner (1990) begin their seminal paper by listing the considerable range of emotion theorists who have proposed that there are basic, or fundamental or primary emotions. They point out, however, that the lists of basic emotions vary considerably and that there is little agreement about why they should be basic or what makes them basic.

To list basic emotions is not a surprising endeavour since at the everyday level of discourse they appear to exist. Moreover, some emotions appear to be universal, appear to have recognizable facial expressions and appear to have obvious adaptive value. The idea of basic emotions perhaps helps to account for these regularities. The notion is used in two major ways: to suggest that they are biologically given, or to suggest that they are psychologically primitive.

Ortony and Turner (1990) suggest that our myriad emotions or emotion states cannot be accounted for in terms of what they describe as a chemical or colour metaphor in which new emotions result from a combination of basic emotions. They argue that a more appropriate account would be in terms of the suggestion that various emotions arise from particular sets of appraisals and the like rather than their stemming from basic emotions. They do, however, allow new emotions to arise from old ones by the processes of generalization and specialization.

They believe that emotion research would progress better by identifying the processes that underlie emotion, particularly the generalization and specialization of its construals, plus the various physiological and behavioural responses evoked.

Ortony and Turner (1990) regard the core problem with the idea of basic emotion as being the lack of a set of criteria for deciding what is and what is not basic. However, they argue that there might be a class of appraisals that could be viewed as basic that happen to be associated with particular sets of behaviour. For example, perceived threat might be commonly associated with running or freezing. But they feel that it is a group of such components that might make up an emotion, once again doing away with the idea of something simple and basic. Furthermore, they do not deny that there might be basic elements from which emotions are built; this idea is not precluded by doing away with the basic emotion view. These elements though are likely, from Ortony

and Turner's perspective, to be components of cognitions, of feeling states and even of emotions, rather than to be emotions themselves.

Particular critiques of Ortony and Turner's (1990) basic view were made by Ekman (1992a), Izard (1992) and Panksepp (1992). The criticisms concerned the apparent universality and uniqueness of some emotions suggesting that they are basic, physiological differentiation in emotions, emotions being mediated by integrated brain systems, and basic emotions having their specific and unchanging feeling states.

In one sense, Turner and Ortony (1992) regard the ideas of these three researchers and theorists as helping to make their points, because the three of them provide different lists of what they regard as the basic emotions, and there is no obvious way to choose between them. They put this down to Ekman's preference to study the face in emotion, Izard's to study things biosocial and Panksepp's preference for the brain.

Ortony and Turner (1990) concede that the idea of basic emotions has had considerable heuristic value in generating a great deal of pertinent research. However, they maintain that the idea that there are basic emotions does not account for emotional diversity and does not allow study of emotions that do not have particular facial expressions. Their argument is that the idea of basic emotions simply detracts from our ability to deal with the richness and diversity of emotions.

Taking a very different approach, Johnson-Laird and Oatley (1992) make a firm case for emotion being founded on a small set of emotions, consisting, not surprisingly, of those that form an integral part of their communicative theory of emotions. In their view, each of the basic emotions has an innate, universal mental signal that comes from appraisals or cognitive evaluations concerning progress toward a goal. Such signals lead to subjective experience, bodily change and action plans, and the communicative signals of facial expression.

Part of their argument rests on the idea that if there are not common subjective components to particular emotions, then the folk psychology of emotion must be rejected. This folk psychology is of course very much predicated on the idea that there exists a series of basic emotions. Johnson-Laird and Oatley (1992) can see no grounds for rejecting folk psychology and indeed argue that Ortony and Turner's (1990) componential theory seems to be no more than a variant of the basic emotion view.

Of course, it is perhaps worth pointing out that Johnson-Laird and Oatley's (1992) argument can be seen as an extension of an ongoing debate between themselves and Ortony (Johnson-Laird & Oatley, 1989; Oatley & Johnson-Laird, 1990; Ortony & Clore, 1989). This debate concerns a semantic analysis of English language emotion terms that, as might be expected from the foregoing, Johnson-Laird and Oatley regard as providing support for their basic emotions view and Ortony does not.

However, Ben Ze'ev and Oatley (1996) develop the matter a stage further in an attempt to distinguish between basic and non-basic emotions. They argue that non-basic emotions differ from basic emotions in that the former are intentional. They term this 'second-order intentionality': 'We feel emotions which have as their objects what we imagine people feel toward us, rather than merely what they are doing with us.'

They also suggest that the non-basic emotions depend on the making of social comparisons. In daily life, we constantly compare ourselves with others, using our imagination. We view our present situation of work, home, relationships, lifestyle and so on and compare this with better and worse alternatives. If something unpleasant

is happening to us we might think, 'this will end, life will pick up' or 'things could be worse, look at *X*.' Or if something pleasant is happening, it might be, 'hang on to this, enjoy it now; it won't last.' They categorize the non-basic emotions as involving:

(1) the fortunes of agents – happiness, hope, sadness, fear, envy, pity;
(2) the actions of agents – gratitude, regret, guilt, anger, embarrassment, jealousy;
(3) agents as a whole – love, affection, pride, shame, hate, repulsion.

These emotions may be directed either at the self or the other. Finally, they argue that, other than with respect to second-order intentionality and social comparison, the basic and non-basic emotions do not differ. The debate is still alive.

Frijda

In recent years, Frijda has written an enormous amount on emotion and has contributed a substantial theory (e.g., 1986, 1988, 1992; see also Averill, 1988 for comment). He has already featured on two occasions in this book. From the outset, it should be said that this is not an easy theory to grasp. It is thoroughly researched, has vast ramifications and has been constructed in such a way that it has so much flesh that its bones are difficult to discern. However, it repays the effort.

The background

Averill (1988) puts the background to the theory with his usual pithy succinctness. He states that Frijda's theory of emotion rests on three principles: there is a biological basis, this is modified by things social and cognitive, and regulation is an integral aspect of emotion.

Frijda begins by describing what he terms 'the emotion process', which contains a core running from stimulus to response, a regulation line (processes intervening in the core) and a line of other inputs. At the end, of course, there are outputs. The core consists of seven phases:

(1) the *analyser* codes the event, which comes from outside or inside;
(2) the *comparator* appraises the event, leading to pleasure, pain, wonder, desire or irrelevance;
(3) the *diagnoser* appraises the event in terms of what can be done about it;
(4) the *evaluator* determines urgency, difficulty and seriousness, and produces a signal for control;
(5) the *action proposer* produces a plan of action;
(6) the *physiological change generator* generates physiological change;
(7) the *actor* determines action.

These phases are all sometimes influenced by or regulated by mechanisms, outcome-control processes or by voluntary self-control. The nature of the stimulus events that initiate the core process is also relevant, as are various cognitive dispositional inputs.

Frijda goes into some detail about how the various phases of the core emotion process work and points out that matters like mood, state of arousal, previous experiences, other people, social definitions and the like all have an influence. He sees these as the side processes of emotion that operate by 'situational meaning structure'.

The emotion process, according to Frijda, does not occur in isolation. There is a continuous monitoring of the environment and a continuous tendency to action and changes in physiological arousal. Moreover, the events of emotion take place over time, a point that applies to each of the subprocesses. Everything is constantly changing as the situational meaning structure is revised and reviews are made of the future: the possibilities of coping, of how controllable the events are and so on. There is a constant feedback mechanism in play. All of this requires some sort of central monitoring, a structure that can integrate and constantly update all the information that is flowing in. This is accounted for by Frijda's situational meaning structure.

The final point that follows from the emotion process not occurring in isolation is that it relates to other processes. Mainly, it does this by blocking action control for other goals or other stimuli, or it does so by enhancing or energizing action.

Unlike many other emotion theorists, Frijda does not see an easy link between emotion and motivation, largely because he sees motivation referring to several different things at once, including emotion; for example, hunger suggests feeling and action readiness among other things. Instead, Frijda contrasts emotion with *desires plus enjoyment*. He views emotion as concerned with keeping an eye on whether or not events will allow satisfaction. Via changes in action readiness, it facilitates or impedes or generally regulates action belonging to other goals or programmes.

The contrast is with desires, which Frijda regards as promoting new courses of action and establishing goals. Certainly, they are to do with satisfaction, but they are more to do with the recognition of objects that are appropriate for satisfaction. And the action readiness of desire does not impinge on other programmes, only on its own. Then, enjoyments result from the realization that the objects of desire are within reach.

Frijda also points out that the process, although described in a linear fashion, does not always ensue in that way. From time to time parts of it may precede in different orders, sometimes it may stop short of the entire process and sometimes the 'emotional' aspect of the emotion process disappears altogether when any urgency and seriousness go. What Frijda refers to as foresight, rationality and habit can preclude emotion, leading instead to cool, instrumental, goal-directed action. He points out that emotion and goal-directed action have much in common, being concerned with satisfaction, for example. The difference between them hinges on the appraisal process (for Frijda is yet another appraisal theorist, albeit of a different order from many) and in the 'control precedence signals' and resulting processes.

Frijda goes into some detail as to how emotional experience fits within his scheme of the emotion process. He characterizes it as outputs from various phases of the process that come into awareness, plus pleasure or pain. There is also an awareness of the control process. However, as well as being an output, emotional experience is essential to the emotion process.

The awareness that Frijda speaks of in the context of emotional experience is partly awareness of being aware, but not solely this. He suggests that when it is simply a matter of awareness or knowing something – or, as he calls it, irreflexive awareness – then a better term than 'experience' might be 'unconsciousness'. For example, the

appraisal process that generates the situational meaning structure goes on unconsciously. So, to the extent that emotional experience is in this form, it may be said to be an unconscious process:

> One knows, generally, that one has an emotion; one does not always know why, and what exactly makes one have it; and if one does know, it is a construction, a hypothesis, like those one makes about the emotions of someone else.
>
> N. H. FRIJDA, 1986, p. 464

In the context of emotional experience, Frijda naturally speaks of feelings. These are an awareness of the situational meaning structure and of any changes in action readiness. He sees feelings as monitors, as bringing about analysis and evaluation, and planning and regulation. In the end, then, awareness of one's feelings feeds back into the situational meaning structure and so has its influence on the ongoing emotion process.

Frijda's theory

The foregoing is by way of preamble to Frijda's theory of emotion proper. In a more formal sense, there are eight areas that he considers of significance in producing the theory:

(1) Frijda defines emotions as *changes in readiness for action*, which can take the form of changes in activation, in cognitive readiness, in action tendencies and in desires and enjoyments.

(2) Underlying emotions are what Frijda calls *concerns*. At the human level are surface concerns about things such as other people, particular environments and particular goals. But these follow from a biological basis that endows us in particular ways with behaviour systems. Moreover, emotions are interrelated with all our major functions and the way in which we perform them. Some concerns are linked in fact to the general mode of functioning of the individual. And all this is to some extent dependent on the individual's level of activation, which is variable and in itself is one source of emotions.

(3) Frijda points out that only some *stimuli* elicit emotion. They have to be relevant to concerns in such a way that they indicate a match or a mismatch with them. Even when they satisfy these conditions, though, stimuli will not necessarily lead to emotion. Inputs have to have the proper format as well, which Frijda sees as being dependent on links between imagery, sensory stimulation and action outcomes. His point here is that, even though emotion elicitation is mainly cognitive, there are constraints. There has to be a sort of cooperation between the stimuli and the concern, otherwise it is only possible say, to get rid of an emotion partially or really find out what is important emotionally at a particular time.

(4) Emotion is elicited after *appraisal* has turned events into the situational meaning structure. At the simplest level, the coding principles that Frijda believes to be relevant to appraisal are built in to the system, they are part of information

uptake. Pleasure, for example, is prewired into matches and mismatches between events. He regards appraisal as being partly conscious, but other parts cannot be penetrated cognitively, to use Frijda's language.

(5) For Frijda the defining feature of emotion is *action readiness change*. Included here are activation tendencies and activation modes, and their absence. Which emotions a person experiences depend in turn on action readiness modes, which depend in turn on the availability of action programmes, behaviour systems and activation/deactivation mechanisms. Basic emotions come from what is provided by biological constitution. But action tendencies can also come whatever general modes of relational change might be available (e.g., approach, turning toward, withdrawal, turning away and so on).

(6) Frijda addresses the matter of the link between situational meaning structures and action readiness change. He views most links as innately prepared or pre-established by the structure of the organism. For example, 'promised and actual goal achievement are innate elicitors of joy, of activation increases' (Frijda, 1986, p. 470).

(7) *Regulation* is important at all phases of the emotion process and over many levels of control. So there are inhibitions and restraints, the enhancing of emotion, and even voluntary self-control from on high in the CNS.

(8) Finally, Frijda suggests that the most obvious aspect of things emotional is *control precedence*. This separates emotional impulses from other types of action. Control precedence gives a sort of urgency to an action mode rather than simply prioritizing it. He sees this as implying dual control, two action control processes working in parallel. Furthermore, control precedence comes about through the persistent and insistent signals relevant to pleasure and pain. There are other signals to do with desire and curiosity (interestingness), but they do not pertain to control precedence.

Frijda's concept of emotion

Explication of his theory of emotion allows Frijda finally to say something of the concept of emotion as he sees it. For him, emotion is a 'substantive psychological category'. Emotion *is* a set of mechanisms: for generating pleasure and pain by turning stimuli into rewards and punishments, for generating reward/punishment expectancies; for dictating relevant actions; and for controlling these actions.

What he terms 'emotion proper' depends on a mechanism that monitors whether or not any events help or hinder concerns that are currently being satisfied or help or hinder expectancies and actions that are relevant to such concerns. He sees this as a dual control mechanism. This leads Frijda to three definitions of emotion:

(1) emotion is action readiness change;

(2) emotion proper is relational action tendency and change in relational action tendency generally (activation);

(3) emotion is action readiness change in response to emergencies or interruptions.

In defining emotion, Frijda goes further and suggests that *abeyance and flexibility* are essential to it. So, there need to be flexible programmes that can nevertheless be held in abeyance, or inhibited.

Frijda avers that his account of emotion is functionalist. Emotions are seen as serving satisfaction by monitoring events and promoting relevant action. In a sense, he brooks no argument with this point of view, even in the face of apparently harmful emotions, pointing out that it is simply a given, an assumption that at least has heuristic value.

He makes four points in support of a functionalist account of the apparent non-functionalities of emotion:

(1) much apparent non-functionality of emotions comes from the non-functionality of the concerns that underlie them, but Frijda does not go on to discuss why people espouse non-functional concerns;
(2) he draws attention to the non-functionalities that come from apparent concern with short-term gains over long-term gains;
(3) part of the problem stems from the fact that humans have not been well enough designed to cope with everything that comes their way – non-functional emotional reactions can come from the organism reaching the limits of what it can do;
(4) because some emotions enable fast action in difficult circumstances it is not surprising that emotion can go wrong or be less than optimal on occasion.

In the end, although Frijda is expressing a functionalist view of emotions, this does not mean that all emotions are functional all the time. Some emotional reactions simply *are*. To allow Frijda his own final word in this context:

> The most general statements regarding emotions therefore are: Emotions are the manifestations of the individual's concern satisfaction system; and: Emotions express the individual's concerns and the satisfaction state of these concerns.
>
> N. H. FRIJDA, 1986, p. 478

In 1988 Frijda took his analysis of emotion a stage further by proposing that emotions can be described in terms of a set of 12 laws. By laws, Frijda means empirical regularities that have underlying causal mechanisms. As much as anything, he is offering these laws as a heuristic device for the establishment of research programmes, since some of them do not already rest on firm empirical foundations:

(1) *Situational meaning*. This refers to emotions being elicited by particular types of event; in other words, they relate to the meaning structure of events. If the meaning changes then so does the emotion. This is an overriding cognitive law that clearly has to do with appraisals. It is worth pointing out that, among the detail into which Frijda goes concerning this law, he makes the point that for emotions to be experienced people do not necessarily have to be aware of the relevant meaning structures. To use the language of Frijda's theory

more directly, 'meaning structures are lawfully connected to forms of action readiness.'

(2) *Concern*. Underlying (almost) every emotion is a concern – in other words, something of importance to an individual's goals or motives – or of course concerns. This gives meaning.

(3) *Apparent reality*. By this law, Frijda suggests that appraisals are particularly concerned with reality. Events have to be appraised as real to lead to emotion, and the extent to which they are determines the intensity of the emotion. Perhaps unusually, Frijda includes vivid imagination within his idea of reality, although it is obvious why he does so.

(4)–(6) *Change, habituation and comparative feeling*. Emotions come about through changes. These might be expected or unexpected and in favourable or unfavourable conditions, with the greater change leading to the stronger emotion. The background to this law comes from two further laws: the habituation of the effects of both pleasures and hardships, and the relationship between an event and whatever might be its comparative frame of reference.

(7) *Hedonic asymmetry*. The positive and negative sides of emotion are not equivalent. Pleasure soon disappears without change, but pain can sometimes persist. Frijda believes that a functional, adaptational view of emotion makes the evolution of this law self-evident.

(8) *Conservation of emotional momentum*. Events will continue to produce emotion unless the process is stopped through habituation or extinction.

(9) *Closure*. Emotional responses are not relative; they have an absolute quality that makes them concerned only with their own ends. They go straight ahead and control the action system.

(10) *Care for consequence*. Against the previous law, each emotional impulse produces a secondary impulse that takes into account its consequences and pushes in the direction of possible modification.

(11)–(12) *Lightest load and greatest gain*. There is a tendency through the situational meaning to minimize the load of negative emotion, and there is a similar tendency to maximize positive emotion or emotional gain.

With his 12 laws of emotion, Frijda is attempting to say, among many other things, that emotions are not only based on natural laws but their study has also advanced sufficiently to make a stab at such laws possible. This brings with it a maturity with respect to thinking about emotion, both theoretically and personally. This approach also suggests that the long-held distinction between emotion and reason is not so much a distinction as a complex relationship in which the laws of both meet and lead to decisions.

Briefly, it should be pointed out that Smedslund (1992) mounts a case against Frijda's laws of emotion on the grounds that they are non-empirical and tautological. Frijda (1992b) disputes Smedslund's conclusions particularly on the grounds of the latter's belief that Frijda's laws can be proven wrong, or unproductive, and therefore untrue. The laws might appear contradictory, but Frijda's point is that humans are contradictory and there must be something underlying contradiction.

Conclusions

It should be apparent now that 'ambitious' was a reasonable descriptor to use in heading this chapter. The theories that have been summarized have been constructed around grand aims. In one sense a number of them are theories not just of emotion but almost of psychology more generally as well. They are predicated on an attempt to fit emotion into a broad theoretical perspective. Do they succeed?

In the appraisal that follows, it is mainly the more recent large-scale theories that will be considered. Leeper and Tomkins have an important place in the recent history of emotion research in that they have stimulated both further ideas and empirical investigation. This comment applies particularly to Tomkins. However, they have been essentially replaced by more recent theories that have been put forward with the advantage of being built on far more data (of all types) than were available a few years ago.

At the broad level of evaluation, the theories considered in this chapter are based on extremely thorough summaries of existing knowledge about emotion. Each of them offers cogent and penetrating explanatory accounts and they are all so extensively explicated that many possible testable predictions can be derived from them. By design, their focus is broad (although Averill's theory may partly be excepted from this; it stems from an analysis of anger, but does, however, have broad implications). Also, all the theories considered in this chapter score very highly on heuristic value. Even when they are rather obscurely expressed, as with Frijda's, they stimulate further thought and ideas almost effortlessly.

Moving to the more particular: if one evaluates each of these theories through a step-by-step analysis of Lazarus's (1991a, b) 12 criteria, most of the theories fare well on all of them. Of course, they have their individual strengths and weaknesses, their points of special emphasis. For example, since Buck's theory is of motivation and emotion, it does well on its consideration of motivation. Similarly, since Izard's theory is about differential emotions, it does particularly well on the question of discrete emotions.

Interestingly, most of the theories have a strong cognitive component; indeed, many of them deal in particular with appraisal. Here again, Izard's theory deserves mention because it is the only one that makes a clear distinction between emotion and cognition. To Izard, emotion and cognition might interrelate, but emotion also exists in its own right.

Not surprisingly with such broad-based theories, the ambitious ones usually have a place for both the biological and the sociocultural. Even Averill, who is avowedly social constructionist (again, see Chapter 15), takes the weaker form of social constructionism and gives emotion a biological foundation.

In any event, perhaps it suffices to say that the theories dealt with in this chapter meet most of the criteria suggested by Lazarus. In his more general terms, they explicate the possible causes of emotion and they have a place for emotion both as an independent and a dependent variable.

Moving on to the criteria espoused by Oatley (1992), as was stated in the last chapter, it is not surprising that the Oatley and Johnson-Laird theory meets these criteria most readily. However, again most of the recent grand theories of emotion

meet most of the criteria. They deal with the functions of emotion, they all consider the question of whether or not there are discrete emotions and they flirt with the notion of the role of the unconscious. They have a place for physiology, and they all have a central role for evaluation or appraisal. Some of them are also concerned with the interpersonal communication side of emotion. Finally, some of them even meet Oatley's last and perhaps most controversial criterion: that emotions enable us to simulate the emotional plans of other people.

Again, more generally, these more ambitious theories are certainly couched in terms that they can easily deal with the addition of more evidence. Moreover, specific predictions can be derived from them, although with some difficulty in a few cases, Frijda providing the obvious example. Frijda's theory is a bit of an oddity in that in some sense it is the most formally expressed of them all, having a statement about 'laws' of emotion. The problem is that, like some other aspects of the theory, the laws are a little difficult to pin down.

Overall, the more ambitious theories of emotion are the best to have been described so far in this text. Because they are so wide-ranging it is a little more difficult than it has been in previous chapters to abstract from them the most important themes. Nevertheless, it is reasonable to say that most of them have a place for both a biological substrate and a sociocultural aspect. They all stress the importance of cognition, particularly appraisal, although Izard does make a clear and, in his view, important distinction between it and emotion.

Interestingly, a number of these theories develop almost into systems theories. It is then hardly surprising that they tend to place emphasis on other broad 'systems' that might interact with emotion: motivation and personality being the most significant examples. They also stress broad concepts such as communication and function in general. Some even have a place for a consideration of the importance of meaning to emotion, Mandler providing the most cogent example of this. This is significant in that it not only provides an important link with phenomenological theories but also squarely engages the difficult matter of consciousness.

In general, then, what have been termed here the 'ambitious theories of emotion' are good value as theories and as theories of emotion. Which is the best of them? This is hard to say since they all have their relative strengths. However, the erudition and thoroughness of Mandler's theory takes some beating, and, again, the breadth and depth of Oatley and Johnson-Laird's is compelling. However, both Frijda and Ortony have made splendid contributions, and Izard has a special place. His theory is characterized by the taking of a definite standpoint and an impressive intellectual honesty. This gives it simultaneously some very practical implications (for emotion measurement, testing and even therapy) and a stimulating heuristic value.

In the end, it remains an open question whether or not the major theories of emotion considered in this chapter can do justice to accounting for the complexities of the two examples of emotion in daily life presented at the beginning of the chapter. Can they account for a panic attack and its emotional sequelae? Can they account for teenage angst? The best of them probably can.

Summary

- The ambitious theories of emotion take the broad view and have grand aims. In their various ways, they provide good summaries of the state of knowledge about emotion.
- In general, the ambitious theories are so broad as to touch much of psychology, although each of them emphasizes links between emotion and cognition.
- Frijda's theory of emotion is in many ways the most far-reaching and most formally expressed of the large-scale theories.
- Izard's theory is the most singular of the ambitious theories in the definite stand taken in distinguishing between emotion and cognition and following this through with impressive dedication to its implications.
- In general, the ambitious theories of emotion score well on the various criteria that can be applied to what makes a good theory of emotion. Just as importantly, they also account well for the intricacies of emotion in daily life.

A question of application

- Do the complexities of the ambitious, broadly based theories of emotion improve our understanding of emotion in daily life?
- When dealing with the emotional reactions of others in the family or at work, does it help to think of all the facets of emotion or to concentrate on just one or two?

Further reading

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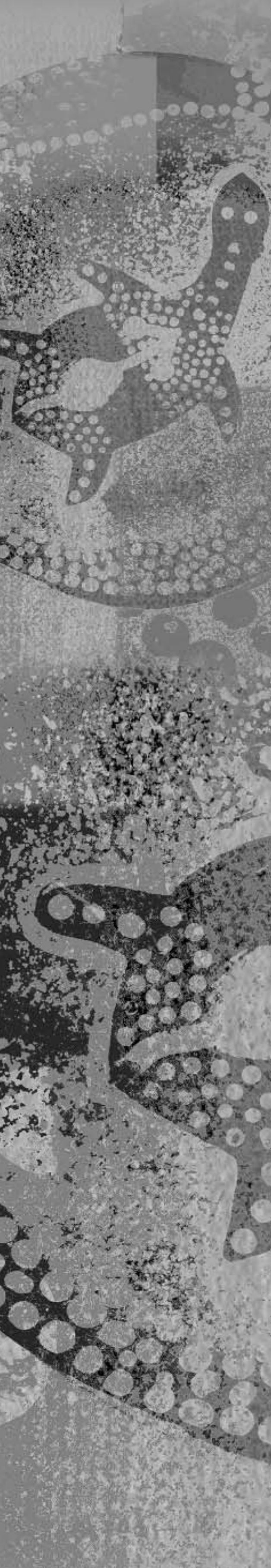

Chapter 8

Specific emotions theory

Emotions have always had to compete against each other.

T. ZELDIN, 1995

Emotions affect the whole person, and each emotion affects the person differently.

C. E. IZARD, 1991

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Introduction

Most chapters in this book start with examples of the everyday experience of emotion. In this chapter these examples are saved to introduce each of the specific emotions discussed.

The purpose of this chapter is not to present an exhaustive summary of everything theoretical that has been written about each of the specific emotions. Rather, it is to take some of the more obvious of these emotions and to describe some of the major theoretical contributions to which they have given rise. The point of so doing is to attempt to abstract any common themes or principles that emerge that might in their turn add to an understanding of emotion more generally.

Whether or not it is useful and/or reasonable to conceive of specific emotions at all is considered elsewhere in this text (see Chapter 7, for example). For the purposes of the present chapter, it is assumed, much as it is in everyday life, that specific emotions exist and that it is perfectly reasonable to distinguish between them. For example, in day-to-day interactions there is no difficulty in distinguishing between anger and happiness, or between shame and anxiety. Indeed, it makes communication and therefore life in general easier to do so.

One emotion theorist in particular has been concerned for many years with the development of a theory that relies very much on distinguishing between specific emotions. Consequently, Izard's differential emotions theory (e.g., 1972, 1977, 1991) will be referred to frequently in this chapter as well as having been considered in Chapter 7.

In a recent summary of his theoretical position, Izard (1993) points out that it rests on five assumptions:

(1) emotion systems are motivational;
(2) each discrete emotion organizes perception, cognition and behaviour for adaptation, coping and creativity;
(3) relations between emotion and behaviour develop early and remain stable, even though repertoires of specific responses develop;
(4) emotional development contributes to personality development;
(5) particular personality traits and dimensions stem from individual differences in thresholds of emotion activation and in the experience of particular emotions.

Generally, Izard's standpoint is that there are discrete emotions and that there are basic dimensions of emotion that are complementary to these discrete emotions. There is considerable overlap in the approaches taken by those who espouse these apparently opposed viewpoints, and Izard argues that two issues need to be dealt with concerning specific emotions. Can discrete emotions be shown to have functions that are adaptationally useful? And do specific emotions facilitate development, coping and adaptation? Above all, though, from Izard's perspective, if discrete emotions exist they must be shown to serve motivational functions.

Not all the specific emotions will be considered in this chapter. This is because not all of them can be reasonably said to have attracted their own theory or theories. However, the majority will be covered, although not from every theoretical perspective.

For example, there are a number of theories of specific emotions, such as jealousy and envy, that come from the everyday world, or from a fictional background. Even for a fairly eclectic book such as this, it was thought that this would be stretching things too far. It should also be noted that some specific emotions, such as anxiety and depression, are discussed in more detail in Chapter 11, which is concerned with emotion theory from a clinical perspective.

Finally, the discussion of self-conscious or self-reflexive emotions is accorded more space than the others. This is particularly because of the social significance of shame, in this writer's view. Shame seems to be of increasing importance in the modern world, a matter with which, to some extent, psychologists have not caught up.

Anger

You are shopping in the supermarket, quietly making your way through the aisles and through your list. Suddenly, you hear screams and shouts and see a red-faced woman yelling at her four-year-old and slapping him time and time again. He is hunched up and crying with pain and fear.

Imagine a young woman who works in a team of health professionals who have daily meetings about the procedures they are following with the patients. She knows that she is doing her job well and she speaks up whenever there is something pertinent to say about a patient for whom she has some responsibility. Whenever she does, one of her colleagues immediately speaks over her, loudly interrupting what she is saying. This happens day after day, meeting after meeting.

Anger is always included in lists of discrete emotions and it is usually categorized as negative. The likely reason for this is that it is an integral part of aggression, hostility and violence, which are so negative for society. However, the experience of anger is not always negative. Izard (1991) places it alongside disgust and contempt, describing the three emotions as often interacting in human experience.

From an evolutionary perspective, Izard sees anger as having the rather obvious function of energizing the person for defence. Such defence and feelings of physical empowerment, which often attend it, might lead to aggression, either physical or verbal, but not necessarily. In passing, it is also worth mentioning that there are causes of aggression other than anger, some of them emotional. Interestingly, Izard also points out that both the experience and the expression of anger can be positive. He mentions, for example, the possibility that the controlled expression of anger that is seen as justified might strengthen the relationship between the two people involved.

A number of psychologists have written about anger, but none so cogently as Averill (1982) with his usual social constructionist view. In his treatise on anger, Averill not only shows that it is possible to undertake a penetrating analysis of a single emotion but also that in so doing it is possible to gain a much improved understanding of emotion in general.

Averill characterizes anger as a conflictive emotion that is biologically related to aggressive systems and to social living, symbolization and self-awareness.

Psychologically, it is aimed at the correction of a perceived wrong and, socioculturally, at upholding accepted standards of conduct.

Averill regards emotions as social syndromes or transitory rules, as well as short-term dispositions to respond in particular ways and to interpret such responses as emotional. He distinguishes between conflictive emotions (of which anger is one), impulsive emotions (inclinations and aversions) and transcendental emotions, which involve a breakdown in the boundaries of the ego.

The theory suggests that, although some emotions have all three of these characteristics, complex behaviour usually involves conflicts. These result in emotions that are compromises, which help to resolve the conflict. Biologically, aggression is linked to anger, but is not equated with it. Furthermore, Averill has it that there is a biological tendency in humans to follow rules as well as to formulate them. There is also a biologically based tendency to become upset if the rules are broken. Against this theoretical background, anger (and other emotions), although biologically based, become highly symbolic and reliant on appraisals in humans. Psychologically, anger then is seen as concerned with the correction of a perceived wrong. So, like other emotions, it will have its object, which is partly its instigation, and its target and an aim.

Socioculturally, Averill suggests that anger is about upholding accepted standards of conduct, perhaps unwittingly. Any emotion is concerned with such standards (rules that guide behaviour). Other rules relevant to emotion concern its expression, its course and outcome and the way in which it is causally attributed. As Averill suggests, a self-evident rule of anger is, for example, that it should be spontaneous rather than deliberate.

From this analysis of anger (to which the present brief discussion does not do justice – the original rewards close study) Averill argues that any theory of emotion should not be restrictive and should relate to all pertinent phenomena, if they are seen as part of emotion in everyday language. The important implication here is that everyday emotion, or folk concepts of emotion, can be scientifically useful. The aim would be to uncover what Averill terms the prototypic attributes of various emotions and to determine the rules that guide them. As mentioned elsewhere, Averill's view of emotion is that although biologically based it is largely socially constructed in humans.

In their analysis of anger and hostility from a developmental viewpoint, Lemerise and Dodge (1993) emphasize the functional significance of anger. More broadly than Izard, they see anger as serving a number of functions, including the organization and regulation of physiological and psychological processes related to self-defence and mastery, plus the regulation of social and interpersonal behaviours. They regard anger as functioning as an energizer, an organizer and as a social signal.

Lemerise and Dodge are particularly concerned with how anger develops and is caused. They make the point that the cognitive ability of young children is important in their developing anger, although the basic, original causes of anger seem to be to do with physical restraints and interference with activity. The development of anger becomes closely entwined with the processes of socialization, one general rule of which appears to be the encouragement of positive emotion and the control of negative emotion (which includes anger).

Of importance in this context is the manner in which parents respond to angry expressions in their children. There are large-scale individual differences here, which are dependent on the child, the parents and the circumstances. However, for present

purposes these details do not matter. Of importance is that, although anger appears very early in life, as Averill suggests and Lemerise and Dodge endorse, its development is best understood in interpersonal terms.

Anxiety and fear

Picture an elderly man, slowly crossing the road, apparently absorbed in his own thoughts. There is a sudden screech of brakes and the blast of a horn. He jumps out of the way, shaken.

You have had something slightly wrong with your health for months, dizzy spells, occasional loss of balance and confusion. It has puzzled the medics and you have finally had an extensive series of tests carried out. This morning you received a phone call from the specialist, calling you in to discuss the results. You are waiting in his rooms and he is late.

For an extended discussion of theories of anxiety and fear see Chapter 11 and Strongman (1995). For the present these two closely related emotions should receive brief mention because they always appear in lists of the basic emotions. There has been a proliferation of theories of anxiety and fear, their starting points being very similar to those for general theories of emotion. There have been psychoanalytic, behavioural, physiological, experiential/phenomenological and cognitive perspectives.

What is clear from these theories is that anxiety can only be understood by taking into account some of its cognitive aspects, particularly because a basic aspect of anxiety appears to be uncertainty. Also, it is reasonable to conclude that anxiety can be distinguished from fear in that the object of fear is 'real' or 'external' or 'known' or 'objective'. The origins of anxiety are unclear or uncertain to the person. However, anxiety can be motivating and appears to be an inevitable part of the human condition. Anxiety and fear are definitely negative emotions and can be very distressing. Inasmuch as specific emotions can be said to exist, the constellation of anxiety and fear has a definite place among them.

Happiness

It is Christmas day and a middle-aged woman is surrounded by all her children and grandchildren. The meal she has cooked for them all is a great success and everyone is sitting round the table laughing and smiling. She looks across at her husband at the other end of the table and there he is as usual smiling at her with the same genuine affection she has known through all these years.

Imagine that you have just spent several hours writing a report. You tap the final sentence into the word processor and look up. You have no idea of the time and have been completely absorbed in your work, which has been quite difficult but to

which you are more than equal. You stretch, yawn, remember to save your work on the screen and then think of the evening to come.

Before considering happiness, it should be said that specific positive emotions have not, in general, been dealt with as well as specific negative emotions. This is not the place to offer possible explanations for this other than to say that negative emotions have to be coped with; the aim is to regulate them, to get rid of them or at least to reduce their impact. Positive emotions are simply to be enjoyed rather than endured. It is therefore not surprising that psychologists and others have spent more time in an attempt to understand the negative than the positive emotions. However, with increasing attention being paid to emotion regulation (see Chapters 9 and 11), the matter of the maintenance of positive emotions becomes of greater moment.

One result of this bias is that, although there are some empirical investigations of the positive emotions and considerable attempts made to theorize about love (see later), other positive emotions have not received much theoretical attention. For example, it is hard to find clear distinctions between happiness, joy and elation.

From the viewpoint of differential emotions theory, Izard (1991) concentrates on what he calls enjoyment and joy and distinguishes between the experience of joy and the experience of satisfaction or sensory pleasure. He characterizes joy as involving a sense of confidence and contentment, and often as including a feeling of either being lovable or, more specifically, loved.

Izard sees joy as a state that follows various experiences rather than as a direct result of action. So, we are likely to experience joy after stress or negative emotion has finished, or following creativity, for example. From an evolutionary perspective its effect is to help in maintaining us as social beings. Izard believes that joy and other emotions interact and can affect perception and cognition. It can not only slow down behaviour but can also induce a sort of open creativity.

In one of his typically cogent analyses, Averill (Averill & More, 1993) considers happiness in general and argues that ideas about it have remained obdurately fuzzy because its scope is so broad. He believes that it does not help to deal with more circumscribed concepts such as joy, this merely substituting the part for the whole. Furthermore, Averill and More argue that happiness defies understanding because of its depths of meaning. For example, if happiness in its own right is considered the greatest good then it may well involve pain and suffering, which might seem anomalous. Anyway, in short, happiness is more difficult to conceptualize than many specific emotions because of both its breadth and its depth.

Averill and More distinguish between three approaches to understanding happiness, emphasizing, respectively, systems of behaviour, enabling mechanisms and personality characteristics. They argue that an understanding of happiness must take into account social/psychological as well as biological systems of behaviour. The psychological systems are those that help the development (or actualization) of self.

From this perspective there are five matters that Averill and More believe must be considered:

(1) Happiness is associated with the optimal functioning of behavioural systems. So, although people might seek happiness it is not simply for its own sake.

(2) Systems are hierarchically ordered, and happiness at one level is informed by higher levels and given substance by lower levels. So, the levels interact.
(3) Happiness is closely linked to systems that are concerned with social order, systems that clearly involve values. So, in this sense happiness is related to values.
(4) Happiness often involves compromise in the sense that one system (say, the biological) may have to be sacrificed at the expense of another (the social or psychological). When this occurs, happiness cannot be associated with tranquillity, as is sometimes thought.
(5) Happiness is an individual matter, each person having a distinct propensity or capacity for it. It might be capable of relatively objective measurement, but it remains a subjective or individual construct.

From Averill's perspective, enabling mechanisms are concerned with the inner workings of happiness, or whatever the emotion might be, rather than its origins and functions. Again, any analysis can be made from a biological, psychological or social viewpoint.

There has been recent emphasis on 'gap' theories that derive from extrinsic mechanisms of happiness. Michalos (1985, 1986) describes the gaps as between what one wants and what one has, actual and ideal; actual and expected conditions; actual and best previous conditions; what one has and what others have; and personal and environmental attributes. Although they have an appeal to common sense, such gap theories are in fact rather weak on explanatory power.

The final account of happiness is via personality mechanisms or, more properly, traits. Here, according to Averill and More the important theoretical questions concern the conditions under which happiness is related to specific personality traits. Their final position is that happiness is dynamic, it is never complete and is perhaps best seen as the optimal functioning of behavioural systems.

Sadness

A family sit watching a television documentary on Afghanistan. It shows sequence after sequence of the terrible deprivations suffered by the children as a consequence of the war.

Your father is a good man, who has worked hard all his life in a position of middling responsibility for the one company. He is in his mid-fifties and perfectly happy, looking forward to a further 10 years or so until his retirement. He has two or three years remaining to clear the mortgage and is beginning to develop several new interests in midlife. One evening, your mother phones you and says that with no prior warning your father has been targeted for redundancy and has to leave work at the end of the month. The prospects of finding another job in his line of work at his age are remote.

Although at face value sadness would be thought of as a negative emotion and it does have obvious negative aspects, it also has its positive side. A life without sadness would have less colour to it than one in which it is not possible to experience, say, mourning,

even though it is painful to do so. Surely, sadness can only occur after the experience of positive emotion.

From Izard's (1991) differential emotions theory view, sadness is less tense than many of the other negative emotions. It is also somehow purer as an experience. Experientially, it is made up of downheartedness, discouragement, loneliness and isolation. Typical causes are the commonplace circumstances of everyday life, but especially those that usually involve loss. It seems to have the effect of slowing down the system and prompts reflection. Izard argues that sadness is so commonplace that it frequently interacts with other emotions, such as anger, fear and shame.

Stearns (1993a) makes an interesting analysis of the psychological approaches to sadness. One of the most promising of these is that of seeing emotions, including sadness, as *enabling* and motivating adaptive responses. Sadness is an emotion that concentrates attention on the self and is an indication that the person (the self) needs help. It can be distinguished from fear and guilt in that they have something anticipatory about them, whereas in sadness the self is usually not responsible for what has happened. Also, it has been argued that sadness occurs when a situation that is bad for the person is nevertheless reversible or can be changed in some way.

Stearns also discusses anthropological and historical approaches to sadness. Some anthropological work, for example (Lutz, 1988), points to sadness not being regarded as negative in some societies. Also, although psychologists have suggested that a distinction between sadness and anger, say, comes from agency or cause, anthropologists suggest that it is a matter of knowing when, to what audience and in what language it is apposite to feel sadness or anger. Also, sadness does not always involve turning inward, Stearns viewing its expression in modern America as turning outward, for help.

From a theoretical viewpoint, perhaps the most important point to emerge from considerations of sadness is that it is not always a negative emotion. As ever with human emotions, judgements about this are mixed up with the surrounding moral order, or values, or individual versus collective responsibility and so on.

Disgust

You are running along the street, late for an important appointment, a bit worried about being dressed up and getting too sweaty. You round a corner, slip and fall. You put out your hands to save yourself and they slide straight through a mound of dog poo, pushing it up your sleeve.

It is lunchtime and while you are talking you fork some lettuce into your mouth. You bite into something soft and succulent that you realize shouldn't be there. You spit out a half-eaten slug.

Disgust is about rejection: rejection of what might be contaminated or might be distasteful, either physically or psychologically. At its basic level it seems to occur without cognition, although of course we also learn to be disgusted at many things. From a differential emotions perspective, Izard (1991) discusses disgust as fundamentally

related to the expulsion of contaminated food, the experience of which only develops when the cognitions necessary to appreciate/understand it have developed.

Usually associated with disgust is contempt (characterized by Tomkins, 1963, as dismell – compare the facial expressions of the two emotions), which, as Izard puts it, is '. . . associated with feelings of superiority' (1991, p. 279). He characterizes it as a truly negative emotion, predominating as it does in a range of endeavours from prejudice to murder.

In a cogent analysis, Rozin, Haidt and McCauley (1993) describe disgust as one of a few uniquely human emotions. They argue that, assuming that there are basic emotions, then it is clear that disgust should be included among their number, viewing it as similar to guilt, shame and embarrassment (see later). They see disgust as satisfying Ekman's (1992) criteria for emotions – it has a universal signal, comparable expression in lower animals, a specific physiology, universal preceding events, a coherent response system, a rapid onset, a brief duration, an automatic appraisal mechanism and an unbidden occurrence.

After discussing various ways of looking at disgust, Rozin et al. conclude that its cultural evolution suggests that it is concerned with essential humanness. Clearly, disgust began (in evolutionary history) as a very useful rejection of bad or contaminated tastes. But it has developed in humans far beyond this to a much more abstract type of rejection of potential foods, with a particular concern with body products. They consider that a fear of animal products and mortality and their associated decay has replaced the original condition of the more simple avoidance of bad taste.

Jones (2000) takes the argument further, making the point that, although disgust appears to be universal, it does not seem to be innate, in that, for example, many young children will put almost anything into their mouths, to their parents' consternation. Jones also argues that since disgust is clearly bound up with taste and that taste is considerably broader than a purely gustatory matter, then disgust is also associated with aesthetics and moral judgements. To some extent, a similar argument can be made about all the specific emotions; they are partly concerned with the moral order.

Jealousy and envy

Trifles light as air are to the jealous confirmations strong as proof of holy writ.

SHAKESPEARE, *Othello*

For it reminds me that envy is the prime emotion in life.

O. PARNUK, 2001

Envy presents a paradox: unique among the emotions in its smouldering, subterranean character, it is a strong feeling that often induces no action.

J. ELSTER, 1991

Imagine a young lad, 11 years old. For the six years that he has been at school he has done consistently well at his work and at sport. In a quiet way, he has been the star

of the class, but has remained popular with the other children. This term, a new boy has joined the class, his family having moved into the district. It has quickly become clear that he is just slightly better than the previous best at everything. He is even bigger and taller. The previous leader has been toppled from his social position.

Your wife asks you to drop some clothes in for dry cleaning on your way to work. You get to the shop and quickly search through to make sure the pockets are empty. You find a few scraps of paper and put them in your pocket, leave the cleaning and drive to work. Later, sitting at your desk you feel the paper in your pocket and start to throw it away. You notice some writing and idly look at it. It is a love letter from someone your wife works with.

Although jealousy and envy form a reasonably important part of everyday life, they have not often drawn the attention of psychologists. They tend to receive passing attention in discussion of the negative side of loving and liking and there are attempts made to distinguish between them. However, a useful discussion is made by Smith, Kim and Parrott (1988).

Jealousy is the reaction to the threat that we might lose the affections of someone important to us and that these affections be directed toward someone else. Envy is more simply a desire to have what someone else has, whether this be a possession or a personal attribute or characteristic. So jealousy is based on the possibility of losing an existing relationship and envy is based on the possibility of possessing some *thing* that another person has. Generally, jealousy is more powerful and more intense than envy.

Smith et al. draw attention to the fact that although these distinctions are reasonable, in everyday life there is considerable overlap between these two emotions. Their research and theory show that the overlap is due to the ambiguity of the word jealousy, which is used to mean both envy and jealousy, envy meanwhile being more restricted. Moreover, the feelings associated with the two are different. Jealousy is linked to feelings of suspiciousness, rejection, hostility, anger, fear of loss, hurt and so on. Envy is linked to feelings of inferiority, dissatisfaction, wishfulness, longing and self-criticism. They argue that envy should be used as a useful label for discontented feelings that stem from social comparisons, whereas jealousy remains ambiguous in its use, sometimes referring to what more properly should be termed envy.

Elster (1991) makes a penetrating analysis of envy from a part psychological, part economic perspective. He distinguishes between envy about transferable and non-transferable goods; for example, envying people either for what they have or for what they are. He also points out that we tend to envy those who are close to us rather than those who are more remote, perhaps because any sense of unfairness or injustice is more obvious close up. Generally, envy seems to increase with equality, which is perhaps also to do with closeness.

From Elster's perspective, envy can be controlled by either destroying or setting aside the object of envy, or by choosing one's associates carefully, by expressing sour grapes, or, most interestingly, by devaluing *other* things. For example, to end on a light note, it may be that it is those who envy blondes who characterize them as dumb.

Grief

You have had your cat for 12 years, since you were eight years old. She is ill and the vet says that it is an inoperable tumour. You sit with her while the vet gives her the final injection. You go home and look around, seeing her familiar feeding bowl and bed.

You are on the way home from your mother's funeral. She lived a good life, but at age 50 died too young. The eulogies were profound and did her justice. You don't know whether you feel angry or sad or frustrated at the unfairness of life, or anxious about how you can manage life without her.

There are obvious links between sadness and grief, grief being what most people experience at some time over the loss of something highly valued, usually of course a loved person. Theoretically, the problem with grief is that, although it might be seen as a discrete emotion, it might also be seen as more than an emotion. The predominant emotion in the experience of grief is sadness, but other emotions are also generated by grief: anger, for example, and fear and shame.

In parallel with the predominant emotion in grief being sadness, the most common psychological problem associated with it is depression. From the differential emotions theory perspective, depression is a pattern of basic emotions, including sadness, anger, disgust, contempt, fear, guilt and shyness. Here though is not the place to consider theories of depression (see Chapter 11).

Interestingly, as with happiness and anger, Averill (Averill & Nunley, 1988) has made a cogent social constructionist analysis of grief. In brief, this rests on the assumptions that:

(1) emotions are made up of cognitive appraisals, intervening processes and behavioural expression;
(2) all three of these are partly determined by the beliefs and values of the culture; and
(3) emotional syndromes reinforce these same beliefs.

Averill and Nunley describe grief as involving shock, protest, despair and reorganization, sometimes seen as stages, but with considerable overlap and the possibility of occurring in other orders. Within the terms of a systems approach to emotion, they regard grief as a biological system that is related to attachment. It is as though the purpose of grief is to help maintain social bonds. So, it seems to have to work through its course even though it is so full of anguish – in the case of bereavement, for example.

However, from this perspective grief is not simply biological, separation (bereavement) having societal implications as well. So, most societies have developed ritualized mourning practices. As well as having a place in biological and social systems, grief also is involved in the psychological system. Some symptoms of grief are related to the disruption to behavioural possibilities, cognitions and so on that result from the loss. Moreover, grief has its own rewards, people often assuming some of its more public aspects for the effects this might have. In other words, the outward expression of grief can be socially useful.

Typically, Averill breaks down emotional roles in the way in which he would also break down social roles. First, the *privileges* of grief act to allow some feelings to be displayed publicly and to permit the person not to undertake a wide range of social roles that would normally have to be assumed. Second, grief puts certain *restrictions* on a person: not to laugh too soon or not to grieve for too long, for example. Third, usually a bereaved person has *obligations*: to mourn in particular ways, for example. And, finally, the manner in which grief can be expressed varies according to age, sex, and the nature of the prior relationship with the deceased person. Formally, the emotional role of grief has certain *entry requirements*.

Averill and Nunley also offer an alternative account of grief: as a disease. In their turn, diseases can be conceptualized via biological, social and psychological systems, and grief fits all the criteria to be included as a disease. Why then, asks Averill, should it be viewed as an emotion? He sees the essential difference as the emotion of grief being part of the moral order of whatever systems (political, religious, etc.) that help to define a society, whereas disease concepts lie within the system of health care. He judges that, eventually, grief will come to be treated like other diseases.

In the end, Averill is concerned to ensure that emotions are treated in relation to social as well as biological and psychological systems of behaviour. Grief considered either as an emotion or as a disease illustrates this.

Love

. . . love is an important part of the emotional landscape.

P. R. SHAVER, H. J. MORGAN & S. WU, 1996

You and your husband have been playing with your daughter, who is just under a year old. She is your first child. She has been delightful. She looks up at you and very clearly says "mum", her first word. You look at her and at your grinning husband.

Imagine a young man of 17. He has just met a new girl. She is beautiful, charming and talented and he has placed her straight away on a pedestal. He cannot believe that she will glance down from up there and see him. He plucks up all of his callow courage and asks her out. She agrees enthusiastically. He is waiting for her on the first date and sees her coming toward him. She looks absolutely stunning.

The quotation at the start of this section is a considerable understatement. If love is an emotion it is probably the most complex of all. If it is some state of being that includes various emotions, some of them decidedly positive, then it is a very complex state of being.

Love has a distinct place in Izard's (1991) scheme of things, but he does not characterize it as a discrete emotion. He views love as basic to the human condition, as involving strong, affectionally based social attachments, to be full of interest and joy but also to '. . . run the full gamut of emotions' (1991, p. 407). Like many psychologists who have written about love, Izard distinguishes between various types: love for parents, love for siblings and love in a romantic sense, for example. He views all

types of love as having certain elements in common; he lists attachment, loyalty, devotion, protectiveness and nurturance. However, romantic love is special because it involves sexual expression, whereas the other types normally do not.

In recent years, psychologists have turned their attention to love rather than putting it aside as too hard or regarding it as better left to the poets. Among the most interesting of these expositions has been Sternberg's (1986, 1987), who reviews theories of love and then attempts to provide his own. He suggests a triangular model of liking and loving, the three aspects being intimacy, passion and decision-commitment. Various weightings in this triangle allow Sternberg to provide a place for the eight types of love or, more properly, love relationships that he has distinguished:

- non-love (casual);
- liking (intimacy only);
- infatuation (passion only);
- empty love (decision-commitment only, from only one person);
- romantic love (intimacy and passion);
- fatuous love (passion and decision-commitment);
- companionate love (intimacy and decision-commitment); and
- consummate love (intimacy, passion and decision-commitment).

Of this typology, Lazarus (1991a) makes the interesting point that it appears to be treating love as social relationships rather than as an emotion. He further points out that love can also be a momentary state.

Shaver, Morgan and Wu (1996) ask the basic question, 'is love a basic emotion?' They point out that, although it is clearly recognized as a basic emotion in everyday life, it rarely, if ever, appears in psychologists' lists. The reasons that psychologists give for this is that love has too much social context to be regarded as a basic emotion, it is too long-lasting (and thus more like an attitude or a sentiment than an emotion) or it is a mixture of basic emotions.

Shaver et al. argue that love is universal, both throughout history and across cultures, and agree with Lazarus (1991a) that it can take the form of a social relationship or of a momentary state. They view love as being attachment, caregiving or sexual attraction, again making the point also made by many others: that there is more than one form of love.

From a philosophical perspective, in a most stimulating book, Solomon (1994) has produced a genuine theory rather than a model of love. His account is simultaneously hard-headed and sympathetic and begins with the view that a theory of love is essentially a theory of self; however, it emphasizes a shared self. With this theory he is harking back to the platonic view of love as a joining of two souls.

This notion began with Aristophanes, who suggested that love is an attempt to find the other half of the self. Bringing this to the present in Solomon's terms, love becomes a matter of defining oneself in terms of another person. He makes the point that romantic love is a very modern notion, indicating a set of relationships that have

only existed for a relatively short time. It is a notion that is based on the idea of two separate and autonomous persons who are free to make choices.

A further core aspect of this theory is that any of the concepts involved in love only work when they are in tension with their opposite. To make this clear, the seeking for union with someone else in these terms is exciting because it is in tension with the notion of the autonomous self. So, and most importantly, Solomon is here describing love as a process and not a state: it comes from movement.

As already mentioned, Solomon is a philosopher rather than a psychologist, but rests his theory of love not just on both these disciplines but also on history, literature and anthropology, and especially on personal experience. A theory of love has to make sense personally as well as within more rarefied academic discourse, a point that might be made about emotions in general. All these complexities suggest to Solomon that love is something that should be seen as taking time rather than being instant and it is something that develops and grows. In the end, he argues with this deceptively simple theory that it is time to 'reinvent' love along the lines that he describes, but within the framework of the contemporary world.

Although Solomon's theory of love has been given pride of place in this brief account, it remains to be seen whether or not it generates empirical research. It looks likely to, as well as having obvious heuristic value. It has particular importance in that it deals with the topic of love irrespective of disciplinary boundaries. It is becomingly increasingly evident that to understand emotion in general this should be the approach of first choice (see Chapter 14 for further discussion of this).

Shame and other self-conscious, self-reflexive emotions

You are attending the funeral service of a friend who died unexpectedly a few days ago. The church is full and the congregation is silent in contemplation of your friend's life. Your cell phone shatters the silence.

A 13-year-old boy is in a shop with friends. He gives way to a moment's temptation and slips a packet of cigarettes into his pocket. He stays in the shop for a few more minutes, feeling very self-conscious. As he leaves with his friends, he feels a hand come down on his shoulder.

A man in his late twenties has newly begun his academic career. He had completed what he regards as some interesting, even seminal research. He is at his first conference to present the work. All the researchers that he admires are there. He gives his talk and gives it well and is feeling a mixture of relief and beginnings of a quiet pride. The doyen in the field asks the first question. Very gently, he points out a fundamental flaw in the design of the research, the implications of which the young man sees instantly.

You are eight years old and your aunt, uncle and cousin have come to visit. You cannot stand your cousin – he is an aggressive, sneaky, toy-stealing pain. Finally, you can take no more and push him into the pond. The next thing you are aware of is

being surrounded by adults blasting you with: 'God knows what will become of you', 'You are a thoroughly bad child', 'There is no excuse for that behaviour – what on earth is wrong with you?'

A woman works in an open-plan office. A colleague of hers has recently produced a very creative solution to an enduring problem. One of the directors of the company visits unannounced and, clearly mistaken, starts talking to the young woman as though it had been she who had made the breakthrough. Believing no-one else to be in the office, she allowed him to continue in the mistake. After he leaves, two of her colleagues appear from behind their partition and look at her.

Some emotions are self-reflective or self-conscious; that is, they are to do with our own evaluations and judgements of ourselves. They include embarrassment, guilt, shame, empathy, pride, hubris and perhaps shyness. Of these self-conscious emotions, the first three – embarrassment, guilt and shame – are also emotions of social control. They give us and others information and feedback about the degree to which we conform to various standards and rules, and pursue various goals. It is these three emotions that will be dealt with in this section, with particular emphasis on shame. The reason for this is that much attention is being given to shame across a wide range of disciplines. It can be argued that it is by far the most important of the 'social' emotions, that its importance as a mechanism of social control is growing and yet people in everyday life are less and less consciously aware of it.

Harré and Parrott (1996) argue that embarrassment 'provides disincentive for violating the social consensus and a means of repairing that consensus once it is violated.' There are three major ways of looking at it:

- dramaturgical, where it helps in performing a role and maintaining social identity;
- self-esteem (or rather its loss) in some situation; and
- negative social evaluation, which allows others to form an unfavourable social impression of one.

These three can interact, so providing some of the most embarrassing moments of all. For example, by chance, accompanied by your partner you run into some people whom it is important that you impress and, then, in making the introductions you forget one of their names or, even worse, get it wrong. You have played your role poorly, disrupted the interaction, created unfavourable impressions and lost self-esteem.

Guilt, according to Harré and Parrott is the result of transgressing some rule from authority. To *feel* guilty, however, one has to accept the authority. If, as a teenager, you believed that your parents had no right to say that you have to be home by 11 o'clock, you would not feel guilty if you came home at midnight. Guilt is to do with harm being done to someone through one's omission of commission. It involves responsibility and reparation is possible. One can do something about feelings of guilt by attempting to put things right.

From the Harré and Parrott analysis, shame concerns the sort of person one believes oneself to be, rather than to do with something that one has done or not done. With shame it is not possible to make reparation – one can only hide or slink

away. Shame can occur over things that are entirely outside one's control. One might be ashamed of a disfigurement, for example, or of some physical characteristic such as being too short, or ashamed of one's Alf Garnett sort of father or one's apparently deranged mother.

In some very interesting historical research, Demos (1996) looked at the change from social control based on shame to social control based on guilt in New England. Before the American revolution, social control was through shame. A puritan morality led to exposure to public criticism, with religion based on self-abasement and the general culture based on reputation, derision and the opinions of others. Lawsuits were about slander and defamation, with massive concern about damage to reputation. There were stocks, pillories, badges of infamy – all to do with public exposure. Punishment was believed to be useful only if it led to self-abasement and shame.

In the first half of the 19th century, religion shifted away from the idea of inherent sinfulness and toward the idea of the sacrifices and sufferings of Christ. Religious shortcomings would result in the suffering of others being in vain – the result was guilt. Upbringing no longer involved public exposure and censure, but the emphasis shifted to punishing children by isolating them so that they would be punished by their own consciences. So, control shifted from external sources to being dependent on inner morality.

Here then there are two types of social control. The shamed person has to demonstrate self-abasement and attempt to escape from public exposure. The guilty person must right a wrong by making reparation or by incarceration or some other form of punishment.

Lewis (1993), in his cognitive theory of the self-conscious emotions, emphasizes standards, rules and goals and points out that our beliefs and what is and is not acceptable vary across time and culture and subculture. He also stresses a second cognitive process, evaluation, in which we are concerned with whether behaviours or circumstances are to do with internal or external influences, whether the self or another can be blamed for success or failure and whether or not an act is unique, unusual or pathological. Also important is the matter of self-attribution. In the self-conscious emotions, the self is both subject and object, it is evaluating itself. So, one's actions can be seen as global or specific and as involving the whole self or part of the self.

From this perspective, shame involves an evaluation of one's actions in relation to a global self and transgressions of standards, rules and goals. It is negative, painful, and disruptive of thought and behaviour. There is a massive motivation to be rid of it, but this is hard to achieve; shame is to do with failure.

In guilt, the focus according to Lewis is on specific features of the self that might have led to failure. This is painful, but the pain is directed toward the cause of the failure or of the object harmed in order to put things right. There is always the impetus to put things right, so guilt is not as negative as shame. Shamed people hunch up with nowhere to go, whereas guilty people move about. In shame the self and the object (again the self, but from a different perspective) are melded. In guilt the self is differentiated from the object. One can be ashamed of one's guilt, but not guilty over one's shame.

Embarrassment from the Lewis angle is similar to shame, but less intense and more transitory. It is less disruptive to thought and behaviour. Embarrassment is an odd mixture of approach and avoidance, of looking and looking away. For further

detailed analyses of these emotions, again particularly shame, see Nathanson (1987, 1994), Tangney (Tangney & Fischer, 1995) and Helen Lewis (1971).

To return briefly to Lewis (1993), shame is 'The feeling we have when we evaluate our actions, feelings or behaviour and conclude that we have done something wrong.' It is about character, involves the whole person and prompts hiding, disappearing or even dying. Lewis regards it as species-specific and central to humans and believes that the final attempt to avoid shame is narcissism.

To experience shame there has to be a comparison with some standard. Shame is distinguished from the other self-conscious emotions at the level of conscious awareness and by what elicits it. The elicitors are internal rather than external: '... it is the focus of the self on the self's failure and an evaluation of that failure that leads to shame ...' (Lewis, 1993). This can be a failure to adhere to some standards (cleanliness, intelligence, etc.), physical appearance or even loss of a significant other.

Phenomenologically, shame seems to have distinctive features. These are a huge desire to hide or disappear, intense pain, discomfort and anger, a feeling that one is entirely no good, unworthy or inadequate, and the fusion of subject and object in which ongoing activity is disrupted – the focus is entirely on the self, leaving thinking, talking and acting in a confused state. In shame, the internal command is to stop whatever you are doing because you are no good, you are a bad person. The whole being is stopped rather than merely some behaviour. So, from a functional viewpoint shame is a signal to us that we should avoid any actions that lead to it – it is very unpleasant. This argument demonstrates the extent to which shame can be seen as a mechanism of social control.

Shame can be acknowledged or unacknowledged. If it is unacknowledged it means that we do not understand what is happening in our lives – we start to behave in ways for which we cannot account. So, in the extreme, the very concept of shame is not available to us as an explanation for our behaviour.

Crozier (1998) stresses the experience of the self by the self in shame. He regards it as dependent on three important factors: attribution to the other, a correspondence between one's own judgement of behaviour and one's perception of the judgement of others, and the aspect (the core) of the self being judged. From this perspective, shame is experienced when core aspects of the self are called into question, but for this to occur one has to take a perspective of 'the other' outside oneself.

Scheff (2000) analyses many sociological approaches to shame, sociological approaches being particularly important as shame is so significant to social control. From this he defines shame as a large family of emotions (embarrassment, humiliation, shyness, failure, inadequacy) that are united by a 'threat to the social bond'. This makes shame the most *social* emotion, pervasive in all aspects of social interaction. From this perspective, we are seen as constantly anticipating possible shame even if it does not eventuate. If shame goes unacknowledged, and there seems to be increasing evidence that this is the case in recent times in Western society, then the result can be hatred, resentment and envy.

Shame, then, whatever perspective one takes on it, is an extremely debilitating emotion and seems to be an integral part of the human condition, even though no obvious neurophysiological substrate has yet been found for it and the conditions that precipitate it do not have a prototypical form. Moreover, what is regarded as shameful

changes from place to place and from time to time. This is not surprising since shame is integral to social control.

Shame is a self-reflexive emotion and so relies on self-consciousness. Self-consciousness has its pros and cons. It leads to apparent freedom and choice, but brings with it the possibility of anxiety and shame. Freedom brings isolation from others, and lack of freedom brings belonging, so there is a cost to individuation and freedom – an increased likelihood of shame.

Conclusions

Mostly, the theories included in this chapter are not as ambitious or as far-reaching as the others in this book. Their aims are restricted to providing an account of a single emotion or at best a group of emotions, as with the so-called self-conscious ones. The exception, of course, comes with Averill's treatment of anger and to an extent his treatment of happiness, which he uses as a vehicle in his social constructionist theory of emotion in general. Also, some of the theoretical analyses of shame could provide a template to analyse other specific emotions.

So, the theories should be judged within this relatively restricted framework. However, even with this limitation, they do not stand up very well to scrutiny. Mostly, they provide definitions of the particular emotion with which they are concerned. Although this is useful enough it does not go very far. They do provide summaries of the existing knowledge, knowledge that is relatively sparse. However, with the possible exception of Sternberg and Solomon on love, they do not provide good explanations, nor lead to much in the way of readily testable predictions. They do of course have a clear focus, but somehow they lack in heuristic value.

Apart from Averill and from some of the recent work on shame, the general exception to these critical points comes from Izard and his differential emotions theory. More than anyone, Izard has attempted to do what the layperson might expect to be done in writings on emotion, and that is to provide an account of the specific emotions. It follows naturally from his theory that he should do this. Even Izard's accounts go little further than being definitional and descriptive.

Thinking of Lazarus's (1991a, b) criteria that should be met by theories of emotion, the 'specific' theories score well on definition and obviously on the matter of the discrete nature of emotions. They also do rather well on consideration of the biological or sociocultural background to emotion. However, they are somewhat wanting with respect to the remaining criteria. They tend either not to be formally expressed or to be in the form of models. Either way, this means that it is hard to find what they might imply about the causes of emotion and of emotion considered as an independent or a dependent variable.

From Oatley's (1992) perspective, the specific theories have useful things to say about the functions of emotion and of the emotions as discrete entities. Relatedly, they are also clearly grounded in the folk psychology of emotion. In some cases, they are also clearly concerned with the interpersonal communication aspects of emotion and by definition with the basic emotions. It is almost entirely the so-called basic emotions that the specific emotion theorists are concerned with. However, they do not fare well with respect to the unconscious causes of emotion, nor with the question of evaluations, nor

with the extent to which a specific emotion might be concerned with simulating the plans of other people.

Some of the theories can deal with more evidence in Oatley's characterization of the Lakatos approach. And in some cases, but not many, specific predictions can be derived from them in the sense of Oatley's view of the Popperian tradition.

It is perhaps not surprising that there have been relatively few attempts to theorize about specific emotions and that what there are do not add greatly to our knowledge. However, various themes do emerge from a consideration of them, an important one of which is that it seems reasonably straightforward to differentiate the specific emotions from one another, conceptually, even though it might not be so easy physiologically. In this sense, they both derive from and have something to feed back into the folk psychology of emotion.

Interestingly, and consistently with every conclusion drawn in this book so far, the specific emotion theorists frequently draw attention to the importance of cognition in their accounts. However, they go further than this and often forge a link between emotion (or the specific emotion under consideration) and personality. Moreover, in their concern with the evolutionary functions of the specific emotions plus their possible social construction, the theorists draw on much that is outside psychology. In other words, they imply that an interdisciplinary approach to emotion might serve us well. This position is endorsed strongly here and is explored in some detail in Chapters 13, 14 and 15.

The significance of an interdisciplinary approach to emotion is made clear by a number of the specific emotion theorists who draw attention to the importance of the moral order in their accounts. Much of what they describe is concerned with the nature of rules in human, particularly emotion, conduct. As soon as the idea of social rules comes into play, then other disciplines become of obvious relevance – history, philosophy, sociology and anthropology, for example.

Clearly, some of the theories about specific emotions are somewhat disappointing. The reason for this is not obvious. Clearly, many, if not most emotion theorists believe that specific, discrete, and even basic emotions exist. Why then have they not produced cogent theories of them?

That they have not is particularly surprising given the everyday interest that there would be in such an endeavour. Perhaps this is the reason, everyday interest being a little suspect to good scientists. Or, more charitably, perhaps it is because those who have produced general theories of emotion believe that their theories can simply be used to account for the specific emotions. Or it may be that the individual emotions have proved a little difficult to engage in any depth.

It should be noted that a definite exception to this theoretical desert surrounding the specific emotions comes with anxiety. Vast amounts have been written on anxiety, embracing both empirical and theoretical work. Also, some of the ideas about anxiety have considerable ramifications for the understanding of emotion more broadly. Indeed, the theories of anxiety to some extent reflect the theories of general emotion. As mentioned previously, discussion of anxiety is reserved for Chapter 11 since it is importantly in the domain of abnormal and clinical psychology.

Moreover, shame is beginning to take its place as an emotion that seems to be central to human social interaction as a mechanism of social control and as a fundamental factor in the development of many psychological disorders.

Finally, one of the positive features of theoretical accounts of the specific emotions is that they seem to tie in well with everyday experience. Perhaps this is a further reason why they are also pursued by members of disciplines less concerned with the 'scientific' status of their discipline than psychologists typically tend to be.

Summary

- In an everyday sense, it is obvious that we experience specific emotions and that fear and joy, for example, are quite distinct from each other and from, say, jealousy and guilt, which in turn are quite distinct.
- Theories of the specific emotions are, almost by definition, less far-reaching than theories of emotion more generally, but in some respects can be applied to emotion in general.
- Such theories are well grounded in everyday life and it is probably in this area that there is the most obvious interplay between science-based academic psychology and the more popular sort of fiction and self-help texts.
- Theories pertinent to specific emotions emphasize both an evolutionary perspective and the significance of social constructionism. They also draw attention to the role of emotions in the moral or social order.
- The emotion of shame has received much recent attention across a number of disciplines. It seems to be both integral to the social order and a basic determinant of what can go wrong in people's emotional lives.

A question of application

- What are the most significant emotions encountered in family life or at work? Which emotions are missing from these lists? In what ways are the lists different?
- Are the specific emotions that *you* experience at home and at work different and are they different from those experienced by other people?
- Which emotions are more difficult to deal with in other people? Why are they more difficult?
- Which emotions help in matters of social or moral control?
- Do people have any choice in whether or not they experience particular emotions?
- Which emotions are the most debilitating?
- Which emotions interfere most with (or most enhance) family life or interpersonal relations or in your work environment?
- Shame seems to be a fundamental emotion in both social control and personal

experience. Can you think of instances of this in your life or the lives of others? Do you agree with its importance?

- Is it easier to bring about some emotions than others in your family, friends or workmates? Why might this be?

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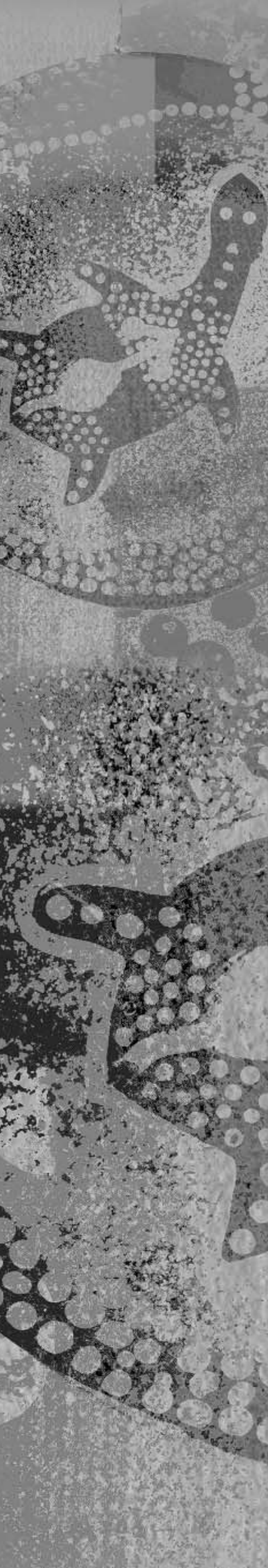

Chapter 9
Developmental theory

Thus the study of emotion as a behavioural regulator of attachment functioning turns to the study of emotion as a developmentally regulated phenomenon.

R. A. THOMPSON, 1990

. . . emotions play a central role in helping the individual achieve developmental milestones and tasks . . .

J. A. ABE & C. E. IZARD, 1999

Indeed, it was their skill at controlling emotion, that, among other things, has earned them their stripes in the first place.

P. FUSSELL, 1996

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Some real life

You are an eight-year-old boy on your first day at a new school. Your parents have just moved into the district. You are excited and anxious at the unknown, in trepidation at how you will fare and vaguely keen to make a favourable impression. Term has been underway for a month, so you have to take your place in a classroom that has already established itself, educationally and socially.

All goes well throughout the morning. You are given a desk and books and find that you can understand the lessons well enough. The children near you don't say much, but you notice interested glances cast in your direction.

At lunchtime, you find the playground, eat your lunch and watch the other children playing. It is summer and the boys are playing a scratch game of cricket. Some of them see you watching and come over to ask if you play and if you are any good. You assure them that you are. They ask if you are a spin bowler, because none of them are very good at it. You are very excited by their interest and tell them that you can turn the ball in either direction, that in your last school you had been the ace spin bowler. You run over to join the game and they give you the ball. You walk back, run up to bowl, slip, and the ball flies sideways from your hand and over the playground wall. Your face is aflame and your ears ringing with the whoops and jeers of laughter.

Imagine a 75-year-old woman. She lives by herself, having been widowed for some years, following a happy marriage. Her children are both married and she has four grandchildren. The family live elsewhere, so she sees them only a couple of times a year.

She has a reasonably full life, socially and with the church, and enjoys whist drives and reading. At a social function she finds herself in the company of a man, just a few years younger than her, who is clearly interested in talking to her. She experiences the sort of flutter inside that she has not felt since she was a young woman and certainly not since her husband died.

A few days later, the man telephones and invites her out to dinner. She accepts, but is flustered. She finds herself worried about where it might lead, what her children might think, but, more particularly, what she will wear to her lunch date. The thoughts that she had been having about getting old, not having much longer to live, if her money was going to last out, when she would have to go into a home, all seem to have disappeared.

Theorizing about emotion from a primarily developmental viewpoint brings with it a particular set of considerations. Some of these might obtain in general theories of emotion, but not necessarily. An obvious and basic example is that emotion has to be dealt with from the viewpoint of change and preferably change throughout the lifespan. In none of the theories so far summarized in this book has there been attention to whether or not the emotional life of the elderly is similar or different from the emotional life of children. Do our emotional reactions change at all throughout life? If so, is this a process of continuous change or does it occur in discrete stages or jumps?

Developmental psychology is inevitably wrapped up with considerations of the influences of nature versus nurture. From the emotion viewpoint, this means that the developmental theorist is likely to pay particular attention to the issue of emotion being biologically or socially based. Or, rather than see this as an all-or-none matter, might be concerned to explore the possible links between the two.

In spite of the specific theoretical considerations that a developmental approach to emotion might bring, any developmental theory is likely to be relevant to a general understanding of emotion. After all, to deal with emotional development it is surely important first to say what emotion is and how it functions. Then, added to this is the obvious question of how it develops, and added to this even further is the possible changing influences of emotion on other aspects of psychological functioning throughout development. For example, see Strongman (1996) for an analysis of the links between emotion and memory from a developmental perspective.

As will become clear, theories of emotional development fall into two fairly distinct groups. Ultimately, they derive from Watson's (1929) work and then that of Bridges (1932), whose description of the course of emotional development still appears in introductory texts. However, their views are not described in detail here. The two categories of theory are distinguishable by time. The first and the simplest appeared in the 1950s and 1960s. In brief, Bousfield and Orbison (1952) emphasized the biological basis (central nervous system [CNS] and hormonal development) of early emotional development. Schneirla (1959) put forward an idiosyncratic theory based on two types of arousal. Aronfreed (1968) suggested that emotional changes mediated by cognitive evaluations form the basis of self-regulatory behaviour through internalization. In turn, internalization follows the experience of some emotional change (say, in anxiety or joy) connected to some behaviour, even through imitation. After these theories, which, it must be said, were not influential, there was a period of quiescence until the late 1970s. Since this time, understanding of emotional development has accelerated. It will be obvious that certain matters run through all the more recent theories, not the least of which being the role of cognition in emotional development. Also, in the last few years, the significance of emotion regulation and how it is learned has become increasingly apparent.

Sroufe

Sroufe (1979) puts forward a theory of socio-emotional development, with differentiation of emotion occurring from original distress/non-distress states (following Bridges) depending on other significant developmental reorganizations. Cognition is central to emotional development from Sroufe's perspective.

Sroufe believes that specific, discrete emotions do not begin to appear until about two to three months. Before this there must be sufficient cognitive ability to allow consciousness, plus the ability to distinguish the self from others. So, emotional experiences come about through recognition and appraisal and are heavily dependent on cognitive development.

From this viewpoint, the socialization of emotion and individual differences in personality development as they link to this are wrapped up with the course of

attachment. So, Sroufe sees social adaptation in late childhood to depend on early affective bonds. The importance of attachment will be returned to in detail shortly.

Giblin

Giblin's (1981) equilibrium theory of emotional development is based on a distinction between feelings and emotions. The first affective responses are feelings, which are unprocessed responses to sensorial qualities and/or physiological changes. They are diffuse and occur in preverbal children. Being overrun by this type of affective life would lead to loss of equilibrium. This is dealt with by the development of emotions, which for Giblin are overt, physiological or behavioural responses directed toward changing the environment. They vary according to the situation and appraisals and represent an attempt to maintain stability.

Giblin believes that there are five stages in the development of emotion:

(1) From 0 to 8 months there is disequilibrium from sudden or intense sensory sensations; reflexive adjustments follow. Expressions represent pleasure/displeasure and sleep/tension.
(2) From 9 to 12 months there also develops disequilibrium brought about by the presence or absence of other people. Equilibrium is achieved by interaction, and a diffused chaos is replaced by more organized responses.
(3) From 2 to 6 years, disequilibrium is caused directly and indirectly by stimuli and equilibrium is regained through representational skills and emotional skills.
(4) From 7 to 12 years, disequilibrium comes through immediate perception and social comparisons, and emotional responses involve characteristic behaviour patterns.
(5) After 13 years, disequilibrium comes through internal comparisons, and emotions start to contribute to the stable conception of the self, particularly through prevailing moods and attitudes.

Although this is an interesting theory and might be said to have some heuristic value, it is difficult to see how it might be developed further.

Attachment theory

Although Sroufe mentioned attachment theory, until the last decade Bowlby (1969, 1973, 1980) has been its best known exponent. While his is not a theory of emotional development *per se*, it is very much concerned with the influence of emotion on developing social relationships and personality.

According to attachment theory, at the earliest opportunity a child is predisposed to attach to the caregiver, many specific behaviours being involved. Caregivers, in their turn, are supposed to be biologically predisposed to respond to this. Emotionally, the attachment is a feeling of security. Four types of pattern of attachment have been

distinguished (see Bretherton, 1985). These are termed avoidant, secure, ambivalent, and a mixture of avoidant and ambivalent.

Bowlby argues that infants between the ages of one and two begin to develop working models of world, self and attachment figures. These models help the child to make sense of the relationships.

While attachment theorists do not suggest that discrete emotions are there from birth, they do suggest that particular types of behaviours designed to produce particular types of response from caregivers are built-in. The process is seen very much from an evolutionary–ethological adaptive point of view. Bowlby's discussion of emotions centred around the appraisal process, affective appraisals being consciously experienced (i.e., felt) or not. So, for Bowlby, emotions can exist without them being consciously experienced.

Bowlby's view of emotional development makes firm links between expression and feeling, and stresses the importance of interpreting the emotional states of others. We need to do this well for his ideas of attachment to have substance. Attachment occurs naturally and does not require particular socialization processes. Any differences in the quality of attachment are heavily dependent on the mother/child or caregiver/child interaction during the early stages of development. Particularly important are maternal sensitivity, maternal acceptance or rejection, maternal cooperation or interference and maternal accessibility.

While attachment theory is not strictly speaking a theory of emotional development, it is a theory of social development that is based very much on the emotional aspects of interaction between the child and the caregiver. As such, it is highly relevant to an understanding of emotional development. Recently, it has also led to more penetrating discussions of emotional development that were part of Bowlby's concern (Thompson, 1999).

In a review of the influence of early attachment on later development, Thompson (1999) makes a number of points relevant to emotional development. The general pattern is that a secure early attachment leads immediately to a relatively harmonious relationship between parents and child. In turn, this leads the child to be more receptive to the influences of socialization, so facilitating the development of conscience, emotional self-regulation and self-control. Secure early attachment also helps to create and maintain close relationships, although the picture is more confused with respect to the longer term consequences. Other variables such as family circumstances and social status also have an influence.

Thompson portrays the influence of early experiences with caregivers succinctly in saying that it answers questions such as: what do others do when I express strong negative emotion? Or, what must I do to maintain good relations with others? The answers that emerge to these questions lead the child to develop either security or uncertainty.

Fischer, Shaver and Carnochan

One of the fullest theories of emotional development to appear in recent years is that of Fischer, Shaver and Carnochan (1988, 1990). They start from the perspective that any

theory of emotional development must deal with both how emotions develop and how they influence the course of development. To construct their theory they draw on skill theory (1988), which is an approach to the organization of behaviour. They believe that basic emotions are elicited by very simple appraisals in infancy, but, later, more complex and more culturally dependent emotions depend on more complex appraisals.

Generally, Fischer et al. concur with most emotion theorists that emotions are meaningful, organized and adaptive, and that primary or basic emotions are there in infancy. However, on top of this are various cognitive processes such as appraisal and judgement. They speak, as have many before them, of the difficulty in defining emotions, because they have so many features and can vary so much in detail. They do however have an overall organization and function. Fischer et al. consider that it is important to explicate three components in understanding emotion:

(1) elicitation through appraisal of functionally organized tendencies to action;
(2) family categories of emotion arranged around basic emotions; and
(3) the definition of each emotion category through a prototypical action script.

They state that emotions begin with appraisal, first of change and then with respect to concerns and coping potential. There follows an action tendency and attempts at self-control that are monitored. Through this it is possible to have an emotion about an emotion. From a developmental viewpoint, there is reorganization of all these processes at different points.

Fischer et al. combine the traditionally opposing views of biological versus social construction, by arguing that emotions are arranged in families with three different levels of categories. The top layer divides into positive and negative, the basic layer includes those emotions that are shared across cultures and the final layer contains the socially constructed emotions.

They use the word *script* to refer both to the way an event is represented generically and to any plan that might be used to enact the event. Further, they suggest that 'the prototype for each basic emotion is a script of behavioural and social events for the best or most typical case of the emotion, the essence of the category' (1990, p. 92). This way of looking at each emotion provides particular behavioural, expressive, experiential and cognitive components.

To summarize the theory so far, the progression is detection of change, appraisals, action tendencies, specific patterns or scripts, which in turn fall into basic emotion families. All this is there, roughly, 'at an early age', but it all develops as well. Furthermore, particular emotional experiences lead to particular developmental pathways and they help to organize development. This organization can be widespread, from facial expressions to personality disorders.

Skill

Of central importance to Fisher et al.'s theory of emotional development is the concept of skill. They argue that in development it is the *organization* of behaviour that changes, and this happens through structured skills that the child comes to construct and

control. Emotions influence this process while changes in the control of skills influence the development of emotion.

'A skill is defined as the child's ability to control variations in his or her own actions and mental processes in a particular context' (1990, p. 99). They argue that charting the course of emotional development should therefore begin with the specific domain of emotional skills. It is possible, in the usual sense of skill, to *control* emotions in just the same way as it is to control riding a bicycle, and the concept also points to the importance of the interaction between the person and the environment.

Their point is that all the complexities of emotional development – appraisals, antecedents, responses, self-control – can be considered through an analysis of the skills involved. They characterize emotional development as involved with successive *tiers* of skills.

They describe four tiers associated roughly with age periods, a different type of unit of skill characterizing each of them. These are reflexes, sensorimotor actions, representations and abstractions. The age bands are approximately: up to four months, four months to two years, two years to about ten years and ten years to adulthood. Within each of these tiers, emotional development progresses through a further four developmental levels, from simple to complex. Much of what Fischer et al. describe are techniques for making skill analyses of emotional development in an empirical way, a matter beyond the scope of this book.

However, Fischer et al. do not stop at adulthood; theirs is a lifespan development approach. They characterize adults with their considerable abstract skills as being involved in extremely complex and subtle, individual emotion scripts. Emotions in adulthood become overextended, so emotional life for the adult can become extraordinarily complex with multiple mixed emotions all moving at different speeds in different directions.

In summary then, Fischer et al. provide a developmental theory of emotion that is heavily dependent on the analysis of skills and that considers not only emotional development *per se* but also the influence of emotion on development more generally. Although it is an idiosyncratic theory in its emphasis on skills, it is based on a combination of the basic elements that appear in most other recent theories of emotional development and of emotion more generally.

Izard and Malatesta (Malatesta-Magai)

A particularly cogent theory of emotional development is put forward by Izard and Malatesta (1987), although, as will be seen later, both Malatesta's (Malatesta-Magai's) and Izard's views have developed since that time. The 1987 theory is presented as sets of postulates with supporting evidence, all of which is based on the assumption that emotions form a system that is independent of, but interrelated to, life-support, behavioural and cognitive systems. They view emotions as discrete motivators of human behaviour, each of which is made up of neurochemical, motoric-expressive and mental processes. They also see emotions as prime movers in development.

The first three of Izard and Malatesta's 12 postulates of emotional development are neurophysiological:

(1) Each of the 10 (according to Izard) basic emotions has its own neural substrates, but share brain structures with others.
(2) Neurobiological growth processes of canalization and plasticity account for invariance and developmental change in the developing emotional system.
(3) The development and organization of the brain allows the independent functioning of the emotion system. This normally interacts with cognition, but at this stage it is not necessary.

Then come three postulates concerning emotional expression:

(4) There are two main developmental changes in expressive behaviour. The kind of events and situations that can elicit emotion change, and there is a shift from reflexive movements to enculturation and learning. This applies at all points in development, including old age.
(5) Expressive behaviour moves from being all-or-none and canalized to a more modulated form.
(6) Instruction in emotional expression begins early in life because its regulation is so important socially. It tends to continue throughout childhood.

The final six postulates are in the domain of emotional experience:

(7) The essential quality of the feeling state of the fundamental emotions is activated when the neuromuscular-expressive pattern is encoded. This is an index of an infant's feelings.
(8) The feeling component of each of the basic emotions has unique adaptive and motivational functions.
(9) Throughout the lifespan, some emotion is always present in consciousness.
(10) The essential quality of an emotion feeling does not vary throughout life.
(11) In late childhood and early adolescence the ability to synthesize emotions is joined with the capacity to deal with them as abstractions. This increases the possibilities for conflict and for the integration of personality.
(12) Emotions retain their motivational and adaptive function even when development is not adaptive or when it is psychopathological.

Izard and Malatesta's is an unusual theory of emotional development in that it is set out so formally. Clearly, it derives from Izard's general theory of emotion and has a good basis in empirical research

Malatesta-Magai

Following Izard and Malatesta's (1987) general lifespan theory of emotional development, Malatesta-Magai, Izard and Camras (1991) consider the more specific problem of infant emotion, again though from the viewpoint of differential emotions theory. Their starting point is the basic one of whether or not infants have feelings and how we can know this. Given the usual problems of the absence of self-report in infants, they argue

that it is a question of asking, first, whether or not infant expressive behaviours occur in the same contexts as adult expressive behaviours. And, second, whether these expressions seem to be functionally adaptive or simply random events. They believe that there is continuity between infant and adult emotional expression.

Malatesta-Magai et al. take it as read that the emotion system is to some extent prewired, a part of an evolved (and presumably evolving) adaptive process, particularly since there appears to be consensus about the conditions that reliably elicit the basic emotions. They move the matter of elicitors on to the question of developmental continuity: do we respond to the same kind of elicitors no matter what our point of development might be? The differential emotions theory position is that expressions in infancy are an index of feeling states. Other theorists suggest that infant expression is more likely to be random or unorganized because, for example, true emotions cannot occur before particular cognitive points have been reached in development or because there seems to be low specificity between elicitors and expressions in infants.

Malatesta and Wilson (1988, see also Malatesta-Magai & Hunziker, 1993) argue that a discrete emotions analysis can deal with these problems. They point to the adaptive functions of the signals associated with Izard's 10 (or 11) primary emotions; these adaptive functions are to do with both the self and with others. For example, anger eliminates barriers for the self and warns others of possible attack. Moreover, both elicitors and emotions are not discrete events, but are complexes or families, so there is no direct correspondence between discrete events and discrete expressions. Emotions are more like instincts than reflexes.

Malatesta-Magai et al. (1991) make a number of cogent theoretical points in arguing against the received wisdom about infant emotion:

(1) Analysis shows that there is an internal coherence with respect to elicitors, rather than there being randomness and no specificity.
(2) They argue that to ask that infants be highly specific in their facial expressions to particular elicitors is asking more of them than of adults. Moreover, there do not need to be sophisticated cognitive processes that might appear later in development for emotional reactions to occur, although in fact infants appear to be capable of relatively sophisticated appraisals in any case.
(3) Malatesta-Magai et al. also argue firmly that discrete emotion signals are in evidence in very early infancy. There is what they term a morphological maturity by two and half months.

To summarize, Malatesta-Magai et al. believe that emotions are well differentiated and connected to internal states very early in life. They believe further that this aspect of development rests on the maturation of a process that is linked to cognition and learning. Their emphasis throughout is on viewing emotions as instinct-like behaviours that are functionally adapted to classes of goals, which are themselves related to classes of stimuli.

Malatesta-Magai and Hunziker (1993) take this theory a stage further – into the lifespan – and bring in the development of personality. The background issue is the usual one that has bedevilled developmental theory for so long, namely that of continuity or discontinuity. They argue that moments of crisis and transition help to prompt an individual's particular emotional organization. There are times in each life

when previously unexperienced strong emotions overwhelm the individual and precipitate crisis. These are moments at which developmental transformation is possible; they are times of discontinuity.

In fitting emotional development into personality development, Malatesta-Magai and Hunziker bring together psychoanalytic, attachment and discrete emotions theory. This leads to a view of personality development relying on affective relationships, emotional biases, life events and the meanings that are developed by individuals. The beginning of this though comes from attachment and the quality of the emotional experience that attends attachment.

Behind the individual life course lie emotions; they provide significant motivational forces. They believe that by attempting to understand affective experiences and their sources and motivating properties, so there will come understanding of the developmental transformations that occur during the lifespan.

Izard, again

In yet another theoretical development from differential emotions theory, Abe and Izard (1999) discuss the role that emotions play in socio-cognitive development. They regard emotions as having adaptive and motivational functions in each of the four stages they believe to characterize socio-cognitive development. They suggest that emotional reactions that appear at particular developmental periods can become linked to maladaptive patterns of thought and action that can then lead to the development of psychological disorders.

Abe and Izard describe various milestones that are associated with the four stages of socio-cognitive development. In *infancy* there are synchronized dyadic interactions between infant and caregiver, the formation of attachment bonds and the emergence of social referencing behaviours.

At the *toddler/pre-school* stage there are an increased sense of self-awareness, an increased ability to understand others (empathy), an increased sensitivity to moral standards and rules, and the beginnings of the self-evaluative emotions (pride, guilt and shame). During *middle and late childhood* there develops the ability to make social comparison, the emergence of trait-like self-concepts, an increase in ability to take a social perspective or understand the thoughts and feelings of others and an ability to conceptualize the self-evaluative emotions. Finally, during *adolescence*, the capacity for abstract thinking increases in association with negative emotional states.

Here, then, Abe and Izard have grounded Izard's and therefore, to some extent, Magai's theories of emotional development through the influence of emotion on socio-cognitive development.

Camras

In an article shared with Malatesta-Magai and Izard, Camras (1991) expresses an alternative, but overlapping theoretical perspective on emotional development. As she puts it:

... affect-related facial expressions are present in early infancy but during the course of development they are both modified and integrated into larger emotional systems such as we conceive of in adults.

L. CAMRAS in Malatesta-Magai et al., 1991, p. 16

She views this as somewhat of a constructivist position and takes a systems analysis approach as well.

Camras espouses the *dynamical systems theory*. She characterizes this in its general form as 'an attempt to account for the organized coordination of complex systems involving a nearly infinite number of possible actions or states' (p. 19). A system such as this requires a control mechanism. It is often assumed by those who take this approach that there are lower order structures that are coordinated to create a synergy among the elements. So if one element is affected by the context of action, so might others be because of their synergistic relationship. This makes the control task or centre or structure simpler than it might have otherwise been.

Emotions may be viewed in this way. Here emotions are seen as self-organizing systems that might have a central programme and will have elements that are synergistically related. So what happens in an episode of emotion might depend as much on the task or context as it does on some central command system.

Within the dynamical systems approach, a change in a single critical component might lead an organism to shift from one major pattern of coordination to another. This might help to account for changes that occur in emotional reactions when the situation changes (e.g., from private to public). Camras sees the advantage of this approach being the relative lack of central controlling programmes. The dynamical systems approach has already been taken up by developmentalists (e.g., Thelen, 1989). They have argued that various structures, such as cognitive abilities, can be seen as organized coordination patterns. They change when the value of the critical components change. This might involve the mere maturation of some physical structure rather than the emergence of a new central control system. Again, some structures might develop/mature before others and therefore not function as part of a coordinated system.

From the viewpoint of emotional development, this would suggest that simply because emotional expression is there in early infancy does not mean that the entire emotion system is functioning. For example, it would not mean that there is subjective experience necessarily behind the expression.

Within this framework, control aspects of a system may change with age. Camras argues that this suggests that any theory of emotional development should not be linked to, say, just cognitive development or instrumental development; various aspects of development might be relevant at different times.

Camras suggests that patterns of facial expression attended by states of attention or distress become linked to the developing emotional system, particularly through labels. There might be central control systems involved, but nevertheless each emotion episode will include particular components depending on the action context. From this perspective there is no priority afforded to, say, facial expression. All emotional responses become recruited as they are apposite to a task rather than simply reflecting a built-in capacity. More radically, dynamical systems theory might also

suggest that emotions develop without the benefit of central control at all. All structure and pattern might come from the environment along with the requirements of any task and the constraints of any context.

The central differences between the dynamical systems theory approach to emotional development and that of differential emotions theory are:

(1) Differential emotions theory suggests that facial expressions are direct ‘read-outs’ of emotion in infants, while dynamical systems theory does not.
(2) Differential emotions theory suggests that various expressions (e.g., distress–pain, anger, sadness and surprise) reflect the same core of experience in infants as they do in adults, whereas Camras suggests that these expressions may change in their emotional status during development.

Lewis

Lewis has contributed an enormous amount to our understanding of emotional development (e.g., Lewis, 1992, 1993; Lewis & Michalson, 1983; Lewis & Saarni, 1985). Perhaps the most succinct description of his views appear in Lewis (1993), and the present exposition is heavily reliant on a chapter in the *Handbook of Emotions*, jointly edited by him.

In working toward his own theory of emotional development, he begins by clearing away some conceptual undergrowth. He views emotion as a term that refers to a general class of elicitors, behaviours, states and experiences, between all of which it is necessary to distinguish. Also, in order to produce a theory of emotional development, in Lewis’s view it is important to consider the matter of the nature or, more basically, the existence of emotional states. He argues that even if there are emotional states, they do not accord with any precision to our emotional lives, either in emotional expression or experience. Emotion is constantly changing, so emotional states have to be seen as transient patterns that occur in bodily and neurophysiological activity. When awake, we are always in some or other emotional ‘state’, although this may not correspond to our emotional expression and we may not be aware of it.

From a developmental perspective, it is necessary to determine the nature and derivation of the various states. As ever from a developmental viewpoint, there are two possibilities:

(1) emotional states might have their genesis in development, either through maturation or through a mixture of nature and the environment; or
(2) emotional states might be innate, with development having no role to play.

The first of these possibilities has led to a model in which emotions gradually become differentiated either from an initial (bipolar) state of generalized excitation or from two (positive and negative) states, a view that began with Bridges (1932). Lewis believes that the most probable account is that emotional development comes about through differentiation of emotional states depending on a mixture of maturation, socialization and cognitive development.

The alternative view (espoused most obviously by Izard & Malatesta, 1987) is that some emotional states are prewired, existing at birth although not necessarily appearing until later. The question of some emotions being genetically pre-programmed or all emotions being dependent on some or other developmental process is clearly crucial for an understanding of emotional development.

Lewis also attends to the question of emotional experience from a developmental perspective. He regards emotional experience as depending on the cognitive processes of evaluation and interpretation, processes that in their turn are somewhat dependent on socialization. Looked at within a developmental context, emotional experience requires that the organism have some cognitive abilities, plus a concept of self. He argues that two processes are necessary:

(1) the knowledge that bodily changes are unique and internal; and
(2) an evaluation of such changes, particularly with respect to the internal/external, awareness/expression distinction.

In general, to *experience* emotion it is necessary to attend to oneself (i.e., to have an idea of 'agency'). In other words, the organism has not only to be able to evaluate the cause of an action but also to consider who is evaluating it (i.e., the self). All of which, to Lewis, does not mean that infants do not have emotional *states* before they have self-awareness, simply that they do not experience them. He believes that the rules that determine how we experience emotional states depend on socialization, which in turn depends on the individual, the family and the culture.

Turning to the development of emotional expression, Lewis points out that the various theories of the development of emotional expression depend on whether or not such expressions are considered to be directly linked to emotional states. This is a question that Lewis believes cannot be answered – there may be innate connections between states and expression or the connections may be made through a developmental process.

In the midst of this undergrowth-clearing is Lewis forming a cognitive path to emotional development or not? In his view, if the focus is on emotional experience then emotion is a cognitive matter and if it is on emotional states then it is not.

Perhaps with a slight tentativeness, Lewis (1993) presents what he terms a *model* of emotional development in the first three years of life. This is based on the conviction that most of the adult emotions have appeared by then, even though others might emerge later, or the existing ones become elaborated. He argues that, although there is not much in the way of language to help the early study of emotion, a mixture of studying the expressions and their context allows reasonable inferences to be made.

Lewis assumes that the child is born with bipolar emotional reactions – distress and pleasure – although he also suggests that a state that intervenes between the two is of interest. By three months, joy, sadness and disgust (in primitive, spitting out, form) appear. Anger appears somewhere between two and four months. Lewis regards this as interesting because it requires sufficient cognitive capacity to distinguish between means and ends in order to overcome frustration caused by a blocked goal.

At about seven to eight months children begin to show fearfulness, which requires even more cognitive involvement, and certainly the ability to compare an existing

stimulus with another – a stranger with a familiar face, for example. Also in the first six months, surprise (e.g., at some change in expected events) begins.

Sometime in the second half-year of life, consciousness (or objective self-awareness) develops and allows the emergence of a new class of emotions – those that are 'self-conscious'. They are embarrassment, empathy and envy.

At approximately two years a further cognitive ability makes an appearance – the capacity for the child to judge its behaviour against some standard, either external or internal. Following from this is what Lewis terms the 'self-conscious evaluative emotions' – pride, shame and guilt, for example. For these emotions, a sense of self has to be compared against other standards.

Lewis's model of emotional development then has most of it completed by the age of three. There may be further elaboration thereafter, but it is based on what is there at that stage. Clearly, his view is that the major stages in the early development of emotions are dependent on cognitive milestones being passed. For Lewis, emotional development and cognitive development are integrally linked, but as a developmentalist he also sees cognitive development as integrally linked with socialization.

Harris

Rather than set out a theory of emotional development, Harris (1993) considers aspects of emotional development that any theorist would do well to consider. They are predicated on two major points. First, that, as is integral to Lewis's theory beyond infancy, we *know* that we are experiencing an emotion. This awareness can be used in a number of ways – to report, anticipate, hide or change an emotional state. Second, we are able both to identify and understand other people's emotions – this is a different sort of awareness. Harris attempts to trace the development of these types of awareness in order to characterize children's understanding of emotion. Early on in life (i.e., in the first year or so) infants start to recognize that emotional states are intentional (i.e., they are directed). Within the next year or two or three, they start to realize that people choose what to do in terms of their beliefs about their desires. Simultaneously, they begin to make sense of emotion (theirs and others) in the same way. According to Harris, this is a universal belief.

At about age six or seven, moral standards begin to play a part in the child's understanding of emotion. For example, although objects might be desirable, pursuing them in socially unacceptable ways might not bring happiness. However, children of this sort of age still do not readily accept mixed emotions.

Another development that occurs between the ages of about four and six is the child's realization that emotional expression might not correspond to or be an exact reflection of emotional state. While it might be difficult to perceive differences between, say, a deliberately manipulated and a spontaneous expression, a child might realize that there does not have to be coincidence between real and apparent emotion.

Finally, there is the question of emotional change, which can be accomplished either by hiding emotional expression or by changing the state itself. With increasing age during childhood so the former gives way to the latter.

In an analysis of the implications of this development in children's understanding

of emotion, Harris emphasizes *emotion scripts* and *the emotional unconscious*. He mentions a body of work that indicates the readiness with which children work out the types of situation that elicit various emotions. From this he regards it as possible that children's understanding of each emotion involves a script that has parts for the eliciting situation, the subjective state, and the physiological, behavioural and expressive aspects.

Harris believes that the idea of a script in children's understanding of emotion is important for three reasons:

(1) it fits children's understanding of emotion into their broader understanding;
(2) it suggests that to understand emotion a child needs to understand sequential causal connections;
(3) it would be useful in looking at the development of the understanding of emotion across various cultures.

From Harris's viewpoint the developmental account of the role of the unconscious in emotion does not stress the traditional significance of repression. Here, a child's lack of awareness is nothing to do with motivation, but rather with cognition. A child may experience an emotion without being able to conceptualize or talk about it. This is a matter of relative cognitive lack rather than anything to do with, say, the repression of something unpleasant.

Finally, Harris's theorizing is not about emotional development in its own right, but is about the development of *understanding* of emotion. As such it is of course relevant to any general theory of emotional development.

Cognition in development

Recent theorists of emotional development, like most other emotion theorists, are making increasing references to cognition. It would not seem possible to have a meaningful non-cognitive account of emotional development, even though Izard and Malatesta (1987) come closer than anyone. The assumption is that cognition underlies the unfolding of the emotions through such processes as recognition, causality, intentionality and meaning. These are regarded as cognitive control systems.

At this point some of Piaget's ideas bear on emotion. They are well described by Cichetti and Hesse (1983). From the Piagetian perspective, certain aspects of emotion do not change in development. His work implies, for example, that almost all emotions and emotional expressions are present at birth. He also had it that the functions of emotions remain constant in the first two years of life, although the situations in which emotions are expressed become increasingly complex.

Emotional change is prompted by motor and cognitive changes, and the emotions of children gradually approximate the meanings that adults give to them. Generally, Piaget implies that infants display more complex sequences of emotion because they become more complex cognitively.

The problem is how exactly are emotion and cognition related as they develop? Piaget's position is one of parallelism, with emotion and cognition developing in a

complementary, non-causally related way; the structure comes from cognition and the energy from emotion. Cichetti and Hesse argue that interactionism is far more likely than parallelism; apart from any other consideration, there is far more to emotion than mere energy.

Buck (1983) also looks at the relationship between cognition and emotion, but within the context of emotional education. He argues that there should be situations that by their nature prompt attempts at emotional understanding and mastery. For example, the novel feelings a child might experience from neurochemical changes might occur when he or she first feels angry with a parent or first encounters sex.

Buck also suggests that the readiness to comprehend these types of experience will depend on cognitive development, a point that he believes has implications for emotional education. Although emotional education is largely ignored in our society, except to urge suppression, the general ambience of a culture may well reflect the emotional education of its young. Buck argues that the various types of emotional responding are associated with the different types of social learning. For example, instrumental responses should be related to a person's expectations about what is the appropriate behaviour. Expressive behaviour and subjective experience would be related to actual emotional states. Reports of subjective experience should reflect labels and interpretations, and physiological responding should reflect the intensity of the prior condition of arousal in similar situations.

Emotion regulation

Keep a stiff upper lip. Don't let your heart rule your head. Big boys don't cry. Don't give way to your emotions. It's important to let off steam occasionally. Unbridled passion. Uncontrollable rage. Emotion is inappropriate in the workplace. Jealousy, the green-eyed monster. Racked with guilt. Consumed by shame. Overcome by embarrassment. Bursting with pride. Riddled with hate. Trembling with fear. And so it goes on.

The power of the emotions and consequently our attempts to regulate and control them are an unthinking, almost automatic part of everyday life. A core task of growing up, of becoming socialized, is to learn to express our emotions differently than we are wont to do in childhood. However, it is only in recent years that emotion regulation has been seen as an important topic of psychological research. This is surprising since, apart from its significance in everyday life as Gross (1998) points out, emotion *dysregulation* is present in half the Axis I disorders and all the Axis II disorders listed in the DSMIVA. The huge research bag of emotion regulation has been opened and its contents will spill out for years to come.

Campos

Some ideas of Campos, Campos and Barrett, 1989 provide a pertinent background against which to begin a consideration of emotion regulation. Campos et al. suggest that:

... emotions are ... *processes of establishing, maintaining, or disrupting the relations between the person and the internal or external environment, when such relations are significant to the individual.*

J. J. CAMPOS, R. G. CAMPOS & K. C. BARRETT, 1989, p. 395, italics theirs

In turn, significance comes from goal relevance, emotional communication from important people and hedonic tone. Cognitions have to fit within this framework to be relevant to emotions.

Moreover, from this perspective, emotions are *relational*, they work between people as well as within the person. Campos et al. describe this view as giving equal status to a person's appreciation of an event's significance, a person's feelings and a person's manner of dealing with the environment. They believe that systems theory, ethology and an organizational approach to emotional development prompt the shift to this relational view.

Campos et al. list five major implications of the relational view of emotions:

(1) It gives four factors a role to play in emotion generation – motivational processes, emotional signals of another, hedonic stimulation and things ecological. They stress, in particular, that an emphasis on emotion generation shows how the *emotional state of the other is regulated by the environment*.
(2) Action and action tendencies are stressed, which means less emphasis on feelings and more on what an individual is doing to *cope* with the environment and to complete goals.
(3) Emotion should be understood against a background in which we interrelate to other people and to physical objects. In other words, emotion and its development is *relational*.
(4) Part of these relational processes are autonomic responses because they have *social communicative import*.
(5) The idea of *hedonic stimulation* fell into relative disuse some years ago, but is somewhat revived by the relational view of emotion, particularly with respect to its role in emotional development. So, for example, pain can be experienced by the neonate without a necessary intervention of anything cognitive.

Campos et al. argue that emotion helps to maintain the continuity of self-development through the lifespan and does so through temperamental dispositions. This view emphasizes individual differences, particularly as they are concerned with irritability and inhibition.

Finally, Campos et al. point out that, to understand emotion regulation, it is important to look at multiple response systems, but nevertheless with emotion seen as a single relational process. So, they believe that attention should settle on emotion elicitation, the social adaptiveness of emotions and how emotions lead to personality dispositions. These points are reflected by those who are further developing the analysis of emotion regulation.

Thompson and others

Thompson (1990) places emotion regulation squarely in a developmental context by suggesting that properties emerge in development that in turn promote the development of emotion self-regulation. In particular, he stresses the growth of cortical inhibition and biological excitatory processes. Moreover, emotion regulation is influenced by the growth of representational and reasoning skills, and a focus by the individual on the analysis of and intervention in emotion. This complex process is further facilitated by the development of a conscious awareness of ways of controlling negative emotion, which is in turn assisted by language discourse that gives the individual access to social influences. All of this heightens consciousness, and so the process continues to develop.

Thompson argues that all these emergent capacities limit emotion regulation and are influenced by social processes. The capacities are shaped largely by caregivers providing explicit and implicit instruction in emotion regulation, as these interweave with the child's own emerging theories of personal emotion. From Thompson's perspective then, the management of emotion develops in childhood as a co-regulatory process between the individual and the social setting.

In a similar developmental vein, Eisenberg (1998, 2000) considers emotion regulation in the context of socio-emotional competence and moral development. She argues that without emotion regulation there is physiological over-arousal and behaviour, for social interaction is poor. This has two possible outcomes: being inhibited and over-controlled, or under controlled and possibly out of control. In either case, socio-emotional competence is compromised.

In general, low levels of emotion regulation are linked to uncontrolled, non-constructive social behaviour, aggression, low prosocial behaviour and susceptibility to the effects of negative emotion and social rejection. High levels of emotion regulation have the opposite effects.

Taking both a biological and a socially constructed perspective, Eisenberg suggests that the effects she discusses depend on a mixture of temperament and the behaviour of caregivers/socializers. These include reactions to children's emotions, the way emotions are displayed and talked about and, of course, the nature of parenting in general, and the presence and type of stress within the family.

Emotion regulation continues to develop across the lifespan, as is discussed by Strongman and Overton (1999) in their consideration of emotion in late adulthood. The elderly tend to regulate their emotions in order to optimize their (social) experiences and, in general, they are better at such regulation than are younger people. Carstensen (1993) accounts for emotion regulation in later life in terms of selectivity. The elderly tend to be selective in their social encounters, restricting them to those people who understand them and with whom they can share intimacy and express their emotions readily. In general, successful ageing depends on social support, with emotion regulation being central to the maintenance of the resilience needed to stay "up" in spite of the stresses associated with later life.

Gross

At the time of writing, the most comprehensive and cogent analysis of emotion regulation has been made by Gross (Barrett, Gross, Christensen & Benvenuto, 2001; Gross, 1998; Richards & Gross, 1999).

Like most recent theorists of emotion, Gross takes an evolutionary perspective, seeing emotion as a response tendency following the perception of a challenge or opportunity. He defines emotion regulation as:

> . . . the processes by which individuals influence which emotions they have, when they have them and how they experience and express these emotions.
>
> J. J. GROSS, 1998, p. 275

Gross characterizes emotion regulation as being automatic or controlled, conscious or unconscious. It involves an increase, decrease or maintenance of negative or positive emotion. There are differences in emotion regulation across different emotions (we might, for example, suppress anger, but avoid frightening situations). It is concerned with the regulation of one's own emotions, not those of others (although this also happens, of course). Emotion regulation is neither good nor bad but runs on a continuum from conscious, effortful and controlled to unconscious, effortless and automatic.

Gross lists five sets of emotion regulation processes:

(1) *Situation selection*. We can approach or avoid people, places or objects.
(2) *Situation modification*. This is akin to problem-focused coping.
(3) *Attentional deployment*. This involves, for example, distraction, concentration and/or rumination.
(4) *Cognitive change*. This involves modifying the evaluations we make and includes the psychological defences and the making of downward social comparisons (she is worse off than me). In general, this is transformation of cognitions to alter the emotional impact of a situation.
(5) *Response modification*. This occurs late in the piece and might involve drugs, alcohol, exercise, therapy, food or suppression In the everyday sense, this is the form of emotion regulation that most people would think of.

Theoretically, some of the many issues that remain to be considered with respect to emotion regulation are, as explicated by Gross (1998): Can emotion regulation be distinguished from emotion generation? What are the goals of emotion regulation? How does the regulation of emotion relate to the regulation of mood? To these might be added: Can a theory of emotion regulation be a theory of emotion in itself? In other words, is emotion regulation an integral part of emotion? Furthermore, from a developmental perspective, is emotion regulation simply a reflection of early attachment (tempered by temperament), and exactly how does it relate to the multitude of negative effects of emotion dysregulation?

Conclusions

The area of emotional development is theoretically rich. In general, earlier theories have not fared well. Generally, they were constructed in an attempt to provide an explanation of emotional development, but their focus tends to be rather blurred and it is difficult to derive testable predictions from them. Even their heuristic value is not high.

This concluding section will therefore be concentrated mainly on the more recent and more formally expressed theories. However, it should be said that the earlier theorists did draw attention to some significant themes in emotional development. All of them, for example, make reference to cognition and the concept of appraisal in some form or another. They make mention of the possible biological origins of emotion and then of its later social development, often via the attachment process. They also tend to refer in passing to the evolution of emotion and to possible links between emotion and personality from a developmental viewpoint.

The more recent theories, notably those of Izard and Malatesta, Fischer et al. and M. Lewis, all fare well on the general characteristics of what makes for good theory. They provide cogent summaries of existing data, they provide particularly good explanations of emotional development, they are well focused, their heuristic value is obvious and in some cases they lead to testable predictions, although this is perhaps less obvious.

The recent developmental theories fare just as well on Lazarus's (1991a, b) criteria for emotion theories. They provide definitions, deal with the matter of discrete emotions and interdependence between emotions. At least Izard and Malatesta are concerned with behaviour and physiology. They all consider the relationship between biological and social foundations and the links with cognition and motivation. They concern themselves with appraisal and consciousness and obviously deal with the generation and development of emotion. They also deal with the influences of emotion on other aspects of general functioning, although not many find room for a consideration of therapy.

Broadly, then, the developmental theories listed above do well on the causes of emotion and with respect to its function as both an independent and a dependent variable. From Lazarus's perspective then they are worthy theories, one of them even being laid out in quite formal terms.

Moving on to Oatley's (1992) criteria, recent developmental theories find room to deal with the functions of emotions and to consider discrete and basic emotions, although not often from a folk psychological viewpoint. They certainly centre on the interpersonal communication side of emotion and reflect on possible unconscious causes. They also tend to be concerned with evaluations to do with goals, but like most emotion theories are not much concerned with the simulation of the plans of others, at least not directly.

From the Lakatos perspective, the developmental theories can certainly assimilate more evidence, the development of the Izard and Malatesta and the M. Lewis theories demonstrating this most clearly. Specific predictions can also be derived from them.

In a similar way to Lazarus and Oatley who provide specific criteria for 'good' theory in emotion (rather than 'good' theory in general), so Malatesta-Magai et al. provide six criteria that should be met by a 'good' theory of emotional development.

Again, their theory and those of Fischer et al., Campos et al. and M. Lewis meet these criteria reasonably well. They deal with the matter of discrete emotions being present at birth or not. They deal with feelings and to some extent with the influence of emotional expression on emotional experience. They certainly look at the socialization of emotion and at the links between emotion and personality. By and large though they do not have much to say about the concordance between emotional expression and feeling (the exception being the obvious one of Malatesta-Magai).

Apart from being relatively well-constructed theories, recent developmental theories tend to have carried on exactly those themes that were there in the earlier theories. They have simply dealt with them in a more cogent, complex and useful manner. Matters such as the importance of attachment, the links between emotional development and other aspects of development, the emergence of consciousness and the relationship between biological foundations and sociocultural developments loom large and are important.

New themes also arise. Fischer et al., for example, emphasize the development of emotional skills, in tiers, with age and in so doing divide emotions into families (of skills). Campos, Thompson and Gross are concerned with emotional regulation in the course of development. Also, the moral order comes into consideration.

One of the more interesting facets of these recent, good-quality theories of emotional development is that, unlike most of the theories so far listed, they divide on the question of cognition. At the outset it should be said that they all mention it. However, both the Izard and Malatesta theory and the Campos theory do not give it pride of place. Campos places the emphasis on relational matters and suggests that cognition has to fit around them. Izard and Malatesta, whose theory evolves from Izard's differential emotions theory, regard emotions as instinct-like prime movers. They might interact with cognition, but they are not bound up with it as most theorists would suggest.

By contrast, other recent developmental theorists of emotion, such as Fischer et al., Harris and M. Lewis give cognition, particularly appraisal, a central role. This is one of the few areas of emotion in which there is a reasonable choice between the cognitively and the non-cognitively based theories. However, it is worth repeating that even the theorists who de-emphasize cognition still mention it in interaction with emotion.

It remains to say which is the best of the developmental theories of emotion. The most useful things to do would probably be to amalgamate all the recent ones and to create a new and all-embracing theory; in some ways it would be hard to give up the good features of any one of them (e.g., Harris's emphasis on awareness). On the other hand, in the end the choice, if it had to be made, would probably have to come down between Izard and Malatesta's theory and M. Lewis's theory. Lewis has a strong role for cognition, is concerned with concepts such as self-awareness, but in a rather pleasingly old-fashioned sense rests his theory on maturation and socialization. Izard and Malatesta set out their formal postulate, give strong consideration to the lifespan and see emotions as prime movers that are somewhat independent of cognitions.

Between these two theories, in the end you probably pays your money and makes your choice. What is certain is that developmental theories of emotion have recently moved on a very long way from Watson and Bridges. What is also certain is that much

of the future theoretical and empirical emphasis will be on emotion regulation. Research and theory in this area is burgeoning, not the least because of its implications for emotion dysregulation and clinical psychology.

Summary

- Emotional development is based, through the usual nature/nurture concerns of developmental psychology, on a mixture of the biological and the social.
- The recent (from the 1970s on) theories of emotional development have moved on immeasurably from the earlier ones. Mostly, they lay emphasis on attachment and cognition and the interplay between emotional development, socio-cognitive development and emotional competence.
- Even though infant attachment is crucial to emotional development, such development occurs throughout the lifespan.
- Recent empirical research and theoretical development has become particularly concerned with the development of emotion self-regulation. This complex topic, untouched for years, is gaining prominence in the field of emotional development, perhaps because of its significance for clinical issues.
- Within the field of emotional development, the theories of Izard, Magai (Malatesta) and Lewis stand out for their thoroughness and their main implications. They divide neatly on the role of cognition. However, other theories stress a dynamic systems analysis, a relational approach or even a concern with children's understanding of emotion, rather than its experience, expression or regulation.

A question of application

- Do children's emotions help or hinder their work?
- How could children's emotions be harnessed to improve their lives?
- Is it possible to see a child's emotion transforming the world for him or her?
- Looking at young children's emotions, do you think that some of them are there from the start?
- Do you think that children can help being emotional?
- From the viewpoint of dealing with emotions in other people, does it matter whether they are innate or learned, biologically or socially based?
- In your lives and the lives of those around you can you see examples of the importance of attachment to emotional experience?

- Do people make attachments at work or children make attachments at school or patients make attachments in hospitals? What effects do such attachments have?
- What changes in emotion have you noticed in yourself and others as you become older? What effects do these changes have on life?
- From an emotional perspective would you treat a 65-year-old similarly to or differently from a 15-year-old? What would the differences and similarities be?
- In what way have you learned to regulate your own emotions? In what ways have you learned to influence or regulate the emotions of others?
- How important is emotional intelligence in the home or in relationships or at work?
- Do your ways of regulating emotion depend on the context, say between home and work?
- Have your ways of regulating your own and others' emotion changed with age? How?
- Do you think that there are some circumstances in which it is important to suppress emotion? What are they and why? What consequences do you think that this might have on yourself and on others?

Further reading

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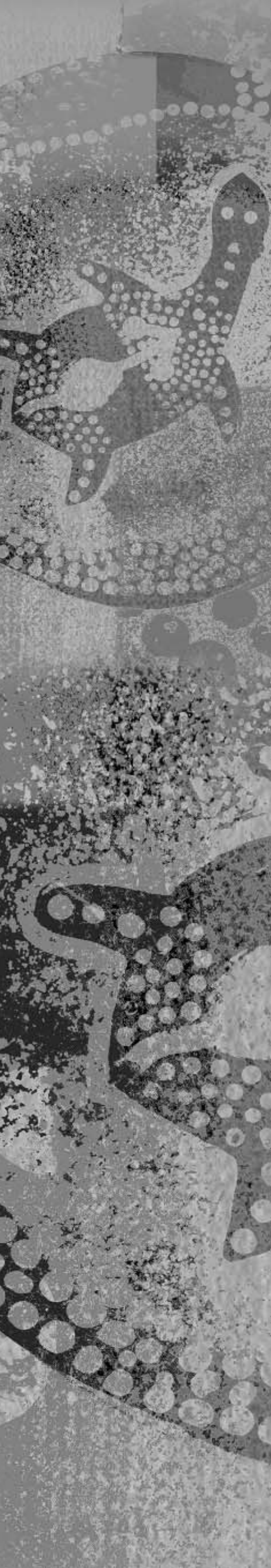

Chapter 10
Social theory

The question of whether the face can provide accurate information about emotion has been the central issue since the beginning of research on the face.

P. EKMAN, W. V. FRIESEN & P. C. ELLSWORTH, 1982

There has been a long and heated controversy over the question of universals in the face and emotion.

P. EKMAN, W. V. FRIESEN & P. C. ELLSWORTH, 1982

In Western academic discourse, emotions have begun to move from their culturally assigned place at the centre of the dark recesses of inner life and are being depicted as cultural, social and linguistic operators.

C. A. LUTZ, 1996

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Some real life

You are 17 years old, living at home with your parents and a younger brother and sister, both in their teens. Yours is an average family, certainly not dysfunctional, with just the usual share of dramas, happiness and tribulation. Generally, the prevailing psychological theme is affection, but, naturally, there are moments of contention, times of dissent and areas of awkwardness.

It is dinner time and you are discussing your future with your parents, your younger siblings looking on with a vaguely amused tolerance. This is a matter that has recently come in for increasing scrutiny and frequent, somewhat intense discussions. Essentially, your parents are keen for you to continue your education, go to university and study a professional subject such as law or medicine that has an almost guaranteed career structure to it. You are quite capable of doing this, but are far more interested in art, at which you are equally talented. So you want to take a year or two off, travel in order to experience other places and then return to art school.

The conversation traverses familiar territory and everybody is being careful to control their emotional expressions. You are feeling very frustrated at your parents' lack of empathy with you and what you want to do and angry at what seems to be their crudely commercial and security conscious approach to your life. But you don't express this, keeping your face carefully neutral and your voice light. You can see that your mother knows that you are doing this.

Meanwhile, your father can barely control his irritation and you can see that your mother keeps ironing out wrinkles of anxiety as she tries to keep the peace and to be 'reasonable'. You know that she is doing this and also know that she knows that you know. She knows what you are feeling but not expressing and knows that you know that she knows.

This is a very complex, but nevertheless quite typical encounter between people who know each other well and are used to the careful regulation of emotion displays. The emotional expressions involved are fleeting in time and on quite a small scale, but the interpersonal intricacies that they reflect are multi-level and highly complex.

Now imagine a day in the life of a woman in her thirties. Things are not going particularly well for her. She is in a job that is unfulfilling and can see no way ahead to change it without a major reconstruction of her life such as retraining or relocating. She has no permanent relationship and has been without one for three years. As she sees it, her prospects of meeting someone are becoming less likely by the month. She is very aware of time ticking past, especially on her biological clock. Although she lives quite well, she lives alone and does not see very much of her family, feeling herself to be quite different from them. She and they treat one another with a sort of detached, but polite indifference.

The day in question begins, as some days do, with everything going slightly wrong. She stubs her little toe on the leg of the bed and yelps with pain. Her hair is out of control. She spills her breakfast coffee on her skirt and has to change it. The car almost

doesn't start, and she knows the battery is beginning to fail. She has a near accident on her way to work and then has to park so far away that she has to walk through the rain.

By the time she sits at her desk she is morose and dejected, feeling isolated, alienated and generally despondent. She goes to coffee and sits slumped in a corner. Nobody speaks to her. Moving to and from her office, she passes people, but no-one stops to speak and she sees no smiles.

At lunchtime she goes out for a walk and tries to think things through. She decides that passively accepting her life as it seems to be at the moment will not help her cause. If she doesn't take action, does not become her own agent, then matters will only become worse. She pulls herself upright, squares her shoulders and starts to look around her, rather than at the ground. She smiles at someone who is walking towards her and gets a smile in return. She feels an immediate lift in spirits.

By the time that she is back at her desk, she has smiled at several people and has had a number of brief conversations, all of which have been very positive. She feels that the world is a quite different place from what it seemed earlier and finishes the day in a much uplifted frame of mind. She no longer feels alienated and is more optimistic about her life in general. She calls a friend and arranges to go to a movie in the evening.

Emotion is often conceptualized as a social phenomenon. For the most part the stimuli for emotional reactions come from other people and emotion occurs in the company of others. Even if emotions are generated by memories these are often of other people or of the impact they have had on us. Perhaps because of this, for many years, social psychologists focused on emotional expression and its recognition. This is of course an integral part of emotion and is interesting in its own right. Also, the problems that beset the study of expression and recognition and the attempts to solve them are instructive for more general analyses of emotion. However, there is far more to the social psychology of emotion than comes from a study of its expression and recognition. More recently, social psychologists have turned their attention to other aspects of emotion and have begun to explore emotion in relationships, in attitudes, in group settings, in social climates and so on.

As the examples above attempt to show, whenever we interact with someone we are experiencing and expressing emotion. Simultaneously, we are monitoring and interpreting the other person's emotional expression. The other is doing the same. It is this complex, subtle and often unconscious process that gives social interaction some of its depth. Our emotional expressions provide stimuli to other people who respond by observing, judging, classifying and sometimes giving an 'answering' expression. We make our responses not just to the expression but also to what we believe the *meaning* to be behind the expression. It is with how we express ourselves emotionally and how well we identify such expressions in others that social psychologists of emotion have typically been concerned.

There is a surprising theoretical gap in the literature on the social psychology of emotion. It is understood, or implicit, that the 'language' of emotion is non-verbal and that this means of communication carries the emotional interplay that continues

beneath or to the side of or in concert with any verbal interchanges. To use another metaphor, non-verbal (emotional) communication is providing the subtext to social interaction. Indeed, it can be argued that it is this subtext that is the major determinant of the outcome of any interaction.

Within social psychology, there is a large literature on non-verbal communication, but it is mainly empirical and descriptive. Such theory as there is largely concerns the details of the balance between various non-verbal behaviours rather than their function and role in the emotional aspects of a social encounter. Nor have these detailed facets of non-verbal communication been much considered by emotion theorists. It is as though, in this area, theorists have not been able to see much beyond the emotional expressions themselves. The complexities of emotion subtexts in human interaction seem often to be left for theoretical consideration at the more popular level.

Clearly, the matter of emotional expression and recognition is but one of many intertwined complexities in social interaction. Emotion theorists in this area therefore have their work cut out more than most. Their theories are sometimes restricted to questions of social interaction and sometimes range more widely. Frequently, they refer to particular types of construct such as the possibility of underlying dimensions or categories of emotional expression. Most of them have to address issues such as the universality of expression and the matter of the significance of social context. Whatever form the theories discussed in this chapter take, such issues will inevitably emerge as common themes. Although, as mentioned previously, there are some thematic possibilities that might have been expected, but that are absent.

Davitz – a dictionary

Davitz (1969, 1970) builds his theory of emotion in answer to a question: What does a person mean when she says someone is happy or angry or sad? Davitz believes that this question should be answered descriptively, the descriptive answer that Davitz himself provides leading him into a dimensionality analysis of expression and recognition.

Davitz suggests that the meaning of the various emotions depends on experience and argues that this should be studied through language. A problem that all psychologists face is that of having to use everyday terms in the more rigorous and restricted context of scientific endeavour. From the precise perspective of scientific method, the everyday connotations of words cause confusion. However, it is worth noting that the views of those who have become interested in folk theory (Oatley, for example) see the connotations of everyday words as a matter of interest rather than confusion. Clearly, they give insight into how people conceptualize the experience of emotion.

In his way of dealing with this issue, Davitz aimed to produce a dictionary of emotional terms, drawn from what he describes as 'commonalities of meaning' – verbal descriptions of emotional states. He suggests that any common ground between the various descriptions might appear in mathematical abstractions.

This is not the place to outline Davitz's technique in detail; it is enough to say that it led him to a dictionary of emotional meaning, which in turn led him to a tentative theory of emotion. This can be reduced to six main propositions:

(1) Emotion is partly concerned with private, experienced events – a phenomenological, subjective viewpoint.
(2) Emotion embraces specific states that are labelled, and each label refers to experiences about which there is reasonable common ground within a culture.
(3) The language of emotion reflects experiences, but is also directly affected by linguistic considerations. People make mistakes in their descriptions of emotion and, in fact, learn to label the emotion from the situation.
(4) Definitions of emotional states fall into 12 clusters that can fit into 4 dimensions of emotional experience: activation, relatedness, hedonic tone and competence.
(5) Labelling emotion depends on experience. Any change in experience will change the label and the state.
(6) Emotional states come about from stimuli that are psychologically relevant to the four dimensions of emotional meaning.

Davitz is aware that these propositions fit neither phenomenology, nor a psychoanalytic approach, nor a behavioural orientation. In fact, as a theory it leaves something to be desired, since it is both lacking in formal properties and is not well anchored to empirical fact. However, the theory has led to some interesting research, the ideas are relevant to cognitive analyses of emotion and the dictionary of emotional meaning in itself is an interesting contribution to the social psychology of emotion.

Eibl-Eibesfeldt – ethology

The ethological approach to emotional expression has its obvious and significant starting point in Darwin. Although described some years ago, Eibl-Eibesfeldt's (e.g., 1970) analyses still give good insights into this type of approach. From an evolutionary perspective, he argues that expressive behaviour often derives from other behaviour that has been associated with frequent arousal or activity. For instance, in many species social grooming has become ritualized into expressive movements that usually mean that social contact may proceed. The lemur, for example, greets other lemurs with its fur-combing movements.

Similarly, Eibl-Eibesfeldt maintains that behaviour that once led to attack has evolved into gestures of threat. An unfortunate aspect of such arguments is that they tend to lead to speculations about similar mechanisms in human beings, speculations that are not very helpful theoretically.

The ethological argument is that ritualization – the modification of behaviour that makes it communicative – is the main process underlying the evolution of expressive movements. The changes it makes to behaviour are important in signalling. Eibl-Eibesfeldt (1970) describes a number of such behavioural changes that accompany ritualization and suggests that such changes go along with the development of conspicuous bodily structures. Although, at the descriptive level, there are many apparent examples of ritualization in the animal world and although the ideas may make good sense from the viewpoint of biological adaptivity, it is hard to see their theoretical force beyond this.

One of the main advantages that has come from the ethological theoretical perspective in emotion is that it has led to some emphasis on the 'naturalistic' approach

in human investigations. This in turn has led to the interesting type of theoretical exposition made by Fridlund (e.g., 1992) on the place of Darwin in current analyses. Fridlund points out that Darwin's notions on emotional expression have been replaced by analyses of signalling that are based on information. From an evolutionary viewpoint, displays that have social intent and the capacity to be vigilant for these are believed to have evolved together. Fridlund argues that if his type of behavioural-ecology account is applied to human as well as infra-human facial expressions, then there can be phylogenetic continuity in the analysis of emotional expression.

Frijda – dimensionality

Any consideration of the theories of emotion that stem from social psychologists must make reference to the idea that underlying the many emotions there are somewhat fewer dimensions that may be used to describe or otherwise account for them. Such ideas have their origin in the difficulty of giving theoretical meaning to the vast range of possible emotional expressions, particularly in the face, as distinct from the less useful approach of simply attempting to describe them.

As a general background, it should be said that there have been three main ways of conceptualizing emotional expression and recognition:

(1) *Categories*. Emotions as expressed could be classed into any number of distinct, unrelated events. So there might be primary emotions under the control of some innate, subcortical programme that result in distinct facial responses. These are unrelated and unordered.
(2) *Dimensions*. Here, expressed emotions are seen as mixtures of pleasantness, activation, etc., each such dimension occupying a theoretical *n*-dimensional space and being orthogonal to the remainder. This type of analysis copes well with similarities and differences between the various emotional expressions, but becomes somewhat unwieldy if many dimensions are proposed.
(3) *Hierarchy*. This is a combination of categories and dimensions. Thus, in a particular region of *n*-dimensional emotional space there may be differentiation between emotions in terms of the dimensions especially pertinent to that region. Emotions may be comparable as regards dimensions both within and between categories, although each category may have its own distinguishable qualities.

The dimension analysis has been the most common in this area and from time to time various researchers have suggested varying numbers of dimensions to account for emotional expression. Rather than attempt to rehearse them all, some of Frijda's earlier views (e.g., 1969) will be used as an example (although see Chapter 7 for a description of Frijda's more recent, and more significant, theory).

Frijda (1969) reduced emotional expression to six main factors (dimensions):

(1) pleasantness/unpleasantness;
(2) activation, which he described as intensity rather than sleep/tension as others had thought of it, its low end being a lack of expression rather than sleep;

(3) interest, which is somewhat like other investigators term ‘attention/rejection’;
(4) social evaluation;
(5) and (6) were described as lesser dimensions and termed ‘surprise’ and ‘simple/complicated’, respectively.

If emotional expressions can be reduced to dimensions, at least two questions need to be addressed. First, do the dimensions delineate the meaning that underlies the emotion, or more simply do they reflect the words used to describe emotional expression? Frijda maintains that his first four dimensions, at least, correspond to emotional meaning. Second, how many dimensions are there? Various investigators have suggested various numbers, although not many have gone as high as Frijda’s six.

Are ideas such as this sufficient to define emotional expression? The answer must be no. Emotions as they are distinguished in language cannot be distinguished in the same way from their expressions. People use different labels for the same expression, and different emotions can produce very similar expressions. This suggests that there is something more to emotional expression than is given by the idea of dimensions (or categories). Any extra such richness could come from cognitive factors.

de Rivera – social relationships

Joseph de Rivera’s views on emotional climate have already been canvassed in Chapter 3. However, de Rivera and Grinkis (1986) also put forward a broadly based consideration of emotion conceived as social relationships rather than internal states (also see de Rivera, 1977).

The basic idea is that our emotion is always relative to another person. So, to use de Rivera’s example anger is not something just of the individual, be it physiological, expressive/behavioural or experiential. Rather, it is a relationship between whoever is angry and whoever is the perceived cause of the anger. In this framework, the feeling of anger must include an awareness of the entire social situation.

de Rivera argues in his structural theory that there are four interpersonal ‘choices’ involved in emotion:

(1) It–me. Is the emotion directed toward the self or to another?
(2) Positive–negative. Is it a matter of attraction or repulsion, either toward another or towards the self?
(3) Extension–contraction. Does the emotion involve giving or wanting to get, pushing away or pulling back, even in the case of self-directed emotion?
(4) Psychological space. Choices 1, 2 and 3 all involve three dimensions of psychological space: (a) belongingness between the two people; (b) social recognition and comparison; and (c) a sense of being. de Rivera is here referring to the material, social and spiritual selves.

The three basic dimensions of it–me, positive–negative and extension–contraction are seen as orthogonal, thus allowing, as in all such structures, any emotion to have its

place in a conceptual three-dimensional space. de Rivera sees all the emotions in dynamic relationships to one another. For example:

> ... love is postulated to transform the relationship between self and other so the value of the other is revealed to the self. Thus, the self extends *toward* the other, wanting to give to him or her. This is quite similar to desire, except that in the latter case the other appears valuable *for* the self who wants the other to belong to him or her.
>
> J. DE RIVERA & C. GRINKIS, 1986, p. 354, italics theirs

Following this, all the other emotions can be seen as dynamically related to love in some way, as they are to one another.

As de Rivera points out, the view that emotions are relationships is in accord with cognitive theories of emotion. However, the emotion becomes a transaction between person and situation rather than simply an internal response to something external. The theoretical problem that he sees, however, comes from viewing emotion as an interaction between a person and *another person*, not merely a situation. Clearly, there are times when our anger or our fear is directed toward some*thing* rather than some*one*. de Rivera suggests however, that when this occurs, either an object or situation is being 'personified' or that the emotion is being displaced from a person to a thing. To be high in the mountains and experience awe, however, is not easy to characterize in this way. Also, de Rivera has a clear place for emotions being self-directed, this being no problem for the theory in that the direction is as though to some *other* self that happens to be occupying the same space. In fact, he goes so far as to suggest that with self-directed emotion there is always also a 'corresponding other-directed emotion held by an implicit other' (de Rivera & Grinkis, 1986, p. 367).

de Rivera sees the strength of this type of structural, but interpersonal theory as allowing good distinctions to be made between emotions that are often confused: confidence, security and self-worth, for example (although not everyone would agree that these are emotions to begin with). While this may be so, it should also be said that there is a broadness to the theory that makes its precise predictive value a little shaky. However, its heuristic value is indisputable.

Berscheid – more social relationships

Some of the most interesting developments in the social psychology of emotion have moved away from expression and its recognition. As already seen to some extent with de Rivera, the emphasis instead is on the nature of emotion as it occurs in human relationships. A seminal analysis of the role of emotions in relationships was made by Berscheid (1983). She characterizes interactions as involving causal connections between the chains of events that make up the interactants' lives. Also, she follows Mandler (1976, 1984) in suggesting that it is the interruption of event sequences that leads to emotion.

Initially, relationships contain a great deal of interruption, and hence emotion, but gradually as the chain of events that exist between two people becomes more meshed, this settles down. The relationship then becomes more tranquil, or

humdrum. If there are awkward, emotion-provoking parts of the relationship that the interactants deal with by severing them, emotional investment decreases and the relationship deadens. Thus there might be separate holidays or separate evenings.

If an emotionally tranquil relationship, which is nevertheless based on some emotional investment, is severed, the extent of the unpleasantness or trauma depends on how rapidly a new way to complete the interrupted sequences can be found. Thus those who have established new relationships before divorce cope more easily with the separation than those who have not.

A difficulty with Berscheid's analysis is to account for positive emotion in relationships, since any interruption of another's sequence would seem likely to produce negative reactions. Mandler though suggests that events that interrupt, but seem controllable can lead to positive emotions. Also, if an event is seen as facilitating rather than interfering with an organized sequence, then it is likely to generate a positive emotion – a sudden windfall, for example.

To take one further example of Berscheid's analysis, the main cause of the breaking up of relationships is a change in the causal conditions that surround them. There are so many possible alternatives in modern Western society that it is relatively easy to disagree with a partner and simply go on to fulfil plans in some other way. Ironically, the most enmeshed relationships are, because of their closeness, the most vulnerable to this type of effect.

The main influential change that can occur outside a relationship comes from the effect of a third person, the breeding ground for jealousy. Berscheid suggests that this occurs under three conditions:

(1) *X*'s plans are interrupted by events in *Y*'s chain;
(2) a partial cause of this is Z, outside the relationship;
(3) the causal source is also perceived to be within the partner *Y*.

Again, the irony is that close relationships are more vulnerable to such effects than are more distant relationships.

Bradbury and Fincham (1987) offer a model of how emotion and cognition interact in marriage, an issue that is also considered in the broader context of close relationships in general by Fitness and Strongman (1991).

There are six points to Bradbury and Fincham's model:

(1) The behaviour of one person of the pair, to which the other has access.
(2) Following partner input, the 'spouse' processes this in a primary way. This is mainly unconscious and is positive, negative or neutral.
(3) Secondary processing involves further extraction of information about such matters as looking for courses of behaviour and areas of responsibility. The tone of primary processing may well affect what happens in secondary processing.
(4) Then there is the spouse's behavioural output, some private and some public. This feeds forward to affect immediate (proximal) and more remote (distal) thoughts and feelings.
(5) So, proximal context is whatever the spouse was thinking or feeling just before processing partner input.

(6) Distal context is made up of more stable factors, such as the usual way in which the spouse processed information, normally seeing it in a positive light, for example.

Clearly, this is very much a model rather than a theory, but it offers a structure for subsequent study. It is interesting in that it relies on integration of cognition and emotion in a reciprocal relationship between two people who are in a close relationship.

Rimé – social sharing

Rimé (Rimé, Philippot, Boca & Mesquita, 1992; Rimé, Finkenamer, Luminet, Zeck & Philippot, 1998) reports a series of empirical studies that give rise to his contention that emotions elicit social sharing. He is speaking here more of extreme emotional experiences, even trauma, than of minor emotional fluctuations. He asks whether such sharing helps in the processing of information from traumatic or negative events, so assisting in the potential resolution of the impact of such events. Does it help to talk about the recent death of someone close, a road accident, a relationship break-up and so on? At face value, it seems obvious that such social sharing not only helps but is also, for many people, an integral part of the experience.

Interestingly, Rimé suggests, on the basis of his research, that the sharing of emotional experiences has positive effects on physical health (endorsing Pennebaker's well-known thesis, see Chapter 11), but has little effect on what might be termed 'emotional recovery'. However, such emotional experiences do seem to have a social effect, bringing about social integration by activating a person's ties to their social network or social support system. Rather than affecting the individual, this may have an impact on collective or group memory through iteration and reiteration of the narratives that grow up around the emotional events.

Certainly, after experiencing an extreme emotional event, there is a strong impulse to 'share'. Theoretically, Rimé agrees that this results from an attempt to generate new meanings for experiences that challenge our expectation, assumption and beliefs (even of the form: this sort of thing happens to other people, not to me). In turn, any new meanings might well have an impact on self-identity and self-esteem. For any such progression to occur, social support and social validation is necessary. Social sharing, then, is yet another way in which emotion integrates with social behaviour and can be seen as an important aspect of the social and moral order.

Heise and O'Brien – group expression

Moving to even broader aspects of the social psychological aspects of emotion than are found in close relationships and social sharing, Heise and O'Brien (1993, see also Chapter 14) make an interesting analysis of emotional expression in groups. Here emotions are looked at almost from a sociological perspective, with the reflection of the culture being of prime importance.

One theoretical approach in this domain comes from social constructionism (see a

much fuller discussion in Chapter 15). In this context, the expression of emotion is seen as a sort of intelligent conduct that is based on cultural rules with the aim of achieving particular outcomes interpersonally. So, emotional expression is seen as a rather sophisticated form of discourse.

By contrast, the social determinist view is that emotions are involuntary responses that are nevertheless an authentic part of social interaction. Whatever social structure there is in a situation allows emotions to emerge, and they in turn allow people to sense the structure. Seen in this light emotions are about status and power in relationships.

By contrast again, the social interactionist approach is that emotions are both constructed and determined; they simply erupt during social interaction. Heise and O'Brien's affect control theory suggests that people gain cultural meaning affirmed by whatever impressions they produce in their behaviour, so they construct and understand social action to bring this about. Emotions are then seen as momentary personal states that reflect how events affect people.

This is sufficient to give the flavour of this type of theory. Sociological theory of emotion will be revisited in Chapter 14, in which there is a general consideration of theories of emotion that come from outside psychology.

Ekman – facial expression

A number of investigators have contributed much to the study of the facial expression of emotion: Izard, Camras and Zajonc, for example. But none has contributed more than Paul Ekman, so it is his name that heads this section. Camras, Holland and Patterson (1993) offer a very useful review of ideas in this area, and some of what follows owes a debt to their analysis.

Although Ekman and Izard do not always agree and their views on the nature of emotion differ, they both (Ekman, 1972; Izard, 1977) began by assuming that the apparently universal recognition of emotion expression depends on an innate programme for each of the primary emotions. However, more recently, they both (Ekman, 1992b; Izard, 1991) suggest that facial expressions do not always go with emotions.

Ekman (e.g., 1982, 1992b) believes that there exist three differentiated, but interrelated systems of emotion: cognition, facial expression and autonomic nervous system (ANS) activity. He admits the possibility that any aspect of emotion might be mediated by cognition, but emphasizes the significance of facial expression. Simply changing facial expression changes how one feels. Ekman stresses pattern changes in expression and physiology, arguing that language is inadequate to account for the boundaries of emotion. A particular emotion, from this perspective, might be highly differentiated in one language and entirely missing in another.

Ekman sees emotion as having 10 major characteristics:

(1) there is a distinctive pan-cultural signal for each emotion;
(2) there are distinctive, universal, facial expressions of emotion that can also be traced phylogenetically;
(3) emotional expression involves multiple signals;

(4) the duration of emotion is limited;
(5) the timing of emotional expression reflects the details of a particular emotional experience;
(6) emotional expressions can be graded in intensity, reflecting variations in the strength of the subjective experience;
(7) emotional expression can be totally inhibited;
(8) emotional expressions can be convincingly simulated;
(9) each emotion has pan-human commonalities in its elicitors;
(10) each emotion has a pan-human pattern of ANS and central nervous system (CNS) change.

These characteristics lead Ekman to rest his facial expression theory of emotion on three assumptions:

(1) emotion has evolved to manage the fundamental tasks of life;
(2) to be adaptive, there must be a distinct pattern for each emotion;
(3) finally, there is a general coherence in that within each emotion an interconnected pattern in expression and physiology is linked to appraisal.

Ultimately, then, Ekman is emphasizing cognition.

In passing, in this consideration of Ekman's contribution, it is worth making brief mention of his work with Friesen. Ekman and Friesen (e.g., 1969) make a very influential analysis of what they termed 'non-verbal leakage' in a discussion of the importance of the body to emotional communication. They suggest that non-verbal behaviour escapes the efforts that we make at social deception (hiding our feelings) and in fact allows our real feelings to leak out. We attempt to deceive others about our feelings and we may attempt to deceive ourselves.

Ekman and Friesen characterize the deceptions as having three dimensions:

(1) Saliency is the degree to which the deception is of obvious importance to the interactants, a function both of the situation and of personality.
(2) The roles adopted by the interactants; for example, whether they are both deceiving and detecting, or adopting complementary roles, or whatever.
(3) Collaboration of antagonism refers to an implicit pact or lack of it about the discovery and/or the continuation of the deception.

Leaving these interesting conjectures aside, the major theoretical hypotheses in this area deal with lateralization, efference and facial feedback. There are two types of lateralization hypothesis. The first is that positive emotions are mediated by the left cortical hemisphere and negative emotions by the right. And the second is that the emotions that go with approach are mediated by the left hemisphere and those that go with withdrawal by the right.

The efference view has it that the programmes for the discrete emotions produce distinct expressions through efference to the facial musculature. Camras (1991, 1992) looks at this in terms of her dynamic systems model (see Chapter 9).

The facial feedback hypothesis suggests that there might be proprioceptive, cutaneous or vascular feedback from facial expressions that influence emotional experience.

The theory urges that the feedback either creates the experience or merely influences it. All these hypotheses have their support, although Camras et al. (1993) conclude that there is particularly strong support for the facial feedback hypothesis.

In their review of facial efference, Adelmann and Zajonc (1989) draw attention to a number of interesting theoretical issues. Their core question concerns *how* facial efference plays a causal role in the experience of emotion. Although there is little theoretical development in this area, Zajonc (1985) himself associates emotional efference to vascular systems, a notion originally put forward by Waynbaum in 1907. This is the vascular theory of emotional efference, which is based on the affect of facial muscles on venous blood flow. Zajonc sees this theory as potentially accounting for a number of apparently disparate matters such as biofeedback, placebo effects, unconscious preferences and aversions, and so on.

Adelmann and Zajonc derive various empirically testable hypotheses from the theory. However, they also conclude that there is insufficient evidence to reject any of the theories of the links between facial efference and emotional experience. In particular, they draw attention to views that point to the importance of sensory processes (e.g., Le Doux, 1987). They also point out that the facial feedback hypothesis does not cope well with why some facial expressions feel 'good' and others feel 'bad'.

In some ways, the most interesting aspect of the vascular theory of emotion that Zajonc and his co-workers espouse (see also, Zajonc, Murphy & Inglehart, 1989) is that it deals with issues that cognitive appraisal theories do not, at least as yet. In particular, the theory has it that facial expressions affect the cavernous sinus, restricting venous blood flow and thereby having an effect on the cooling of the arterial blood supply to the brain. Further, changes in the cerebral temperature could have an effect on the release or blocking of neurotransmitters that are to do with emotion. In general, this theory and some of the evidence to which it has given rise suggest possible mechanisms whereby emotion and cognition could function independently.

Conclusions

The obvious and rather surprising characteristic of the emotion theories that have stemmed from social psychology is that with one or two exceptions they do not stand up to much scrutiny. If one concurs with the view that emotion is primarily a social phenomenon, the relative lack of quality in the social theories is odd.

In general terms, they do not provide adequate summaries of existing knowledge, even when this is restricted to facial expression and recognition. Some social theories have explanatory power, by recourse to the idea of dimensions underlying emotion, for example. However, once the idea of dimensionality has been assumed, there seems little that can be done with it.

With the exception of the Berscheid type of theory and the facial feedback theories that devolve mainly from Ekman, the theories do not lead to testable predictions all that readily. Nor, oddly enough, do they score highly on heuristic value, although a possible exception here is that of de Rivera. However, social theories do have a clear focus, or rather, several clear foci ranging from facial expression and recognition to social relationships. A difficulty is that these varying foci do not then allow the theories to be put together with ease.

Moving to Lazarus's (1991a, b) criteria for emotion theory, the social theorists define what they are looking at quite well although they do not often go so far as to define emotion in general. Some of them are also very good at considering discrete emotions and the interdependence between them. However, they are not impressive at distinguishing between emotion and non-emotion. For example, even in the important area of facial expression, rarely is there discussion of non-emotional facial expression and what this might be expressing or signalling.

Few of the theories, although here again the Ekman type of theory is an exception, deal with the physiological aspects of emotion, or the biological, or indeed with the links between emotion and motivation. However, most of them discuss cognition and, in particular, appraisal. Here again though, interestingly, it is some of the facial feedback type of theories that attempt clear distinctions between emotion and cognition, even though they spend some time dealing with cognition.

Of course, as might be expected, where the socially derived theories of emotion score highly is in considering emotion from a sociocultural perspective – this after all is what a number of them aim to do. Even here though, as will be seen in Chapter 14, in general they do not do so well at this as the theories that come from anthropology and sociology. Social theories also do not have much to add to our understanding of how emotion is generated or develops, although a slight exception to this comes from the Berscheid and Bradbury and Fincham type of theory. Nor do they say much about the effects of emotion on general functioning or consider its implications for therapy.

More generally, social theories place the causes of emotion squarely in the social environment. They also deal rather better with emotion as a dependent variable than as an independent variable.

Applying Oatley's (1992) emotion theory criteria, again social theories do not fare well. Of course, they are splendid about or at least clearly concerned with the interpersonal communication aspects of emotion – indeed, they see emotion as basically about interpersonal communication. As already noted, they also tend to be involved with the idea of discrete and basic emotions, even though they do not take a particularly folk psychological view. They do, however, ground their analyses in everyday life, but there again they place surprisingly little emphasis on non-verbal behaviour (Ekman & Friesen providing the exception) and the emotion communication it embraces.

Social theories are limited with respect to the functions of emotion in that they rarely go beyond the social, and even then are usually quite restricted within this. They have little to say about unconscious causes, although by implication they are concerned with evaluations in the sense of the goals of emotion. Also, by implication they cover simulation of the plans of other people, emotion being seen as essentially social in nature.

In Oatley's summary of the Lakatos approach social theories *can* deal with more evidence, but it is in a fairly restricted domain. And in the Popper sense, only some of them can be used to derive specific predictions (particularly those of Berscheid, Ekman and of course Scherer, although his theoretical contribution has been evaluated in Chapter 5).

In comparison then with the developmental theories of emotion, social theories are not particularly impressive. What do they do for our understanding? For an obvious start, although the idea of dimensions that underlie emotion might be said

to be nearly played out, social theories have been of use as a way of conceptualizing emotions in general. Certainly, they and the various facial feedback notions have been pertinent to an understanding of the highly significant areas of the facial expression and recognition of emotion. It is also in this area that theories have suggested a phylogenetic continuity. This is of importance in the context in which the obvious presence of emotion of some sort in animals other than humans is ignored by many theorists. Some, of course, place emotion within a context of evolutionary history, but they tend not to go into detail.

Other social theories form a useful bridge, as will be seen later, between psychological theory and emotion theory that come from other social sciences. And as has to be expected social theories give us some conceptual insights into emotions as they function in relationships.

The major way in which social theories are similar to those already discussed in this book is in their consideration of the importance of cognition in their accounts. Even those that derive from Ekman (who, by the way, also has a place for a biological foundation for emotion) feel it necessary to give considerable space to the role of cognition, even though they also distinguish between it and emotion.

Which of the socially based theories of emotion is the best? The choice is not easy to make. de Rivera's theory is interesting, Berscheid's broke new ground and put emotion into a new social framework. Assuming that Scherer's theory is only marginally social, all that remains of note is Ekman's, which it must be said is clearly the best of them. Ekman has certainly made an enormous contribution to the emotion field, but this has been more from his empirical work than his theory. As will be seen later, the best of the socially based theories of emotion in fact come from outside psychology. These theories pay more palpable attention to the function of emotion in the social and moral order (see also the discussion of shame in Chapter 8).

Summary

- Emotion is mainly, although not entirely, a social phenomenon. It is therefore surprising that the theories of emotion generated from a social perspective are not more far-reaching.
- Social emotion theories emphasize emotion-meaning, ethology, the possibility of dimension underlying emotion, social relationships, social sharing, group expression, and facial expression and recognition.
- The best of the social theories of emotion is probably that of Ekman, who has done an enormous amount to further understanding of emotional expression and its possible universality.
- Social theories of emotion overlap with those from Sociology and Anthropology and eventually become concerned with the social and moral order.
- There is room for theory development in the area of the non-verbal communication of emotion and of exactly how the subtexts of interaction function in everyday life.

A question of application

- How might studying the emotions of those you live or work with help in your interactions with them?
- How important do you think it is to try and understand the emotional expressions of others? Why is it important?
- Should children be trained in how to interpret emotion?
- Should there be training courses in the workplace in the emotional expression and recognition?
- What differences in emotional expression have you seen in members of different cultures or different social groups? Do you think that this means that they experience emotions differently? How important is it to be aware of such differences?
- How good an observer are you of body language? Do you attempt to control your own body language?
- Should people be trained in the use of body language and its interpretation? What difference would this make to life?

Further reading

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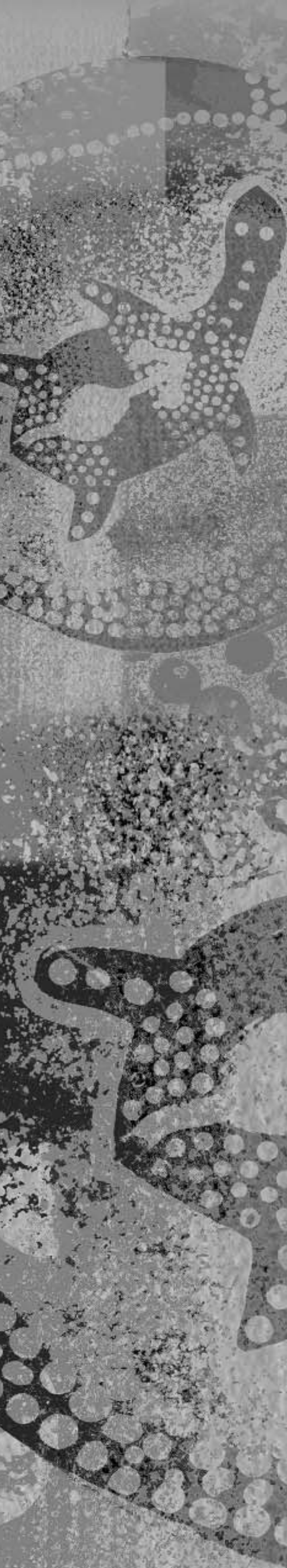

Chapter 11
Clinical theory

This world is a comedy to those that think, a tragedy to those that feel.

H. WALPOLE, 1776

. . . the self-talk of the damaged mind, continuously judging, imagining, predicting – each cognitive process influencing and being influenced by emotional states.

J. M. G. WILLIAMS, F. N. WATTS, C. MACLEOD & A. MATHEWS, 1997

Much therapy then consists of identifying important moments or events in the sessions in which key emotion schemas have been activated, and intervening at these moments in ways most appropriate to the activated states.

L. S. GREENBERG & S. C. PAIVIO, 1997

There are four conceptual formulations: a) emotions shape thought and action; b) actions shape thought and emotion; c) the environment shapes thought, emotion and action; d) thoughts shape emotion and action.

R. S. LAZARUS, 1999

In the final analysis, we are our feelings and how we deal with them

L. S. GREENBERG & S. C. PAIVIO, 1997

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Some real life

You are 45 years old and have been married for 20 years. You have two children in their mid-teens. They are just ordinary teenagers, fine on some days and a painful, tortured mess on others. You are in an apparently settled groove in a safe, but unchallenging job from which ambition has faded. Your day-to-day life at home is comfortable. The house is more than adequate, the mortgage is nearing its completion and your relationship with your wife is calm in that you never argue or raise your voices except sometimes over minor disagreements about the children.

For the last few months, however, you have been waking during the night, usually between 3 and 4 a.m., covered in sweat. This is not merely being too hot, this is sweat running off you. It is impossible to return to sleep, you are much too agitated. You either lie there, heart pounding and thoughts racing obsessionally, or you get up and try to find something to do. Sometimes you manage to fall asleep again and then wake when the alarm goes off, feeling exhausted.

When you get up for the day, you feel lethargic, with no energy. It is as though the life has been drained from you. Any small noise startles you and the mildest frustrations are extremely irritating, although you cannot muster the energy to put them right.

Driving to work, you find the same thoughts going round and round in your head. You smoulder with resentment at things, but without passion, the smouldering giving way to a sort of passive, drab acceptance. Then this is replaced by a feeling of vague apprehension, a slightly panicky feeling that something awful is going to happen.

After all this has gone on for sometime, you stop feeling hungry and begin to lose weight. Your work suffers and when you are at home you barely speak and have no energy to lift yourself from the chair. It seems as though life has slipped away from you and that you are unable to know what will happen next and unable to do anything about what does happen. Occasionally, you begin to toy with the idea of killing yourself. The notion just pops into your head and seems strangely comforting. You don't think that you would actually do it, but the thought of it as a possibility somehow relieves the pressure.

Imagine a woman aged about 22 or 23. She is very slim and good-looking and obsessed with her weight. She has maintained her slimness by years of restricting her food intake and by a daily exercise regime. She is in a state of constant semi-starvation and occasionally indulges in a very minor binge of eating. This makes her feel vaguely bad about herself and somehow out of control, so she purges. Although this doesn't happen often, it does happen. She has a good job, but her health is problematic. Her periods are irregular and she seems prone to catching whatever is going around. She is attractive to men, but has no permanent relationship.

Some of her major difficulties in life are social. She has many conversations that puzzle her. People react to her in their various ways, but she doesn't know why. If someone says to her 'Did you notice how depressed *X* looked?' or 'Wasn't *Y* angry this

morning?', she never knows what to say. She usually doesn't notice this sort of thing, and when she does she is puzzled by it.

She still lives with her family, where there are the usual sorts of ups and downs that go on in family life. But she feels different from the rest of the family and quite isolated. Sometimes she thinks that they say unpleasant things to her but she doesn't know how this really makes her feel, other than making her feel like eating, but, there again, that feeling of gnawing emptiness and hunger is commonplace for her.

When her brothers, sisters and parents talk to her about their lives and what is happening for them, she tries to be interested, but finds it all very difficult. She just can't seem to see things from their perspective. She always has this hollow feeling of confusion and alienation. She does not know if or when she is happy, such feelings seeming quite remote, as though happening at a distance, to someone else whom she does not quite know.

One of the traditional ways of regarding psychopathology is to assume that it is partly a matter of emotional dysfunction. This statement sounds plausible enough, but it reflects a disjointed tradition. Some 25 years ago, the word 'emotion' did not appear in the index of the second edition of Davison and Neale's (1978) text on abnormal psychology. Indeed, emotion is referred to on only seven pages of the seventh edition (1997). However, by definition, emotion is implicated in all the affective disorders. Schizophrenia is described as often involving emotional change. The neuroses are dependent on anxiety. Psychopathy rests on an apparent lack of emotion. General psychiatric disorders and various types of abnormal behaviour are believed to stem from 'emotional problems'. Even the mentally retarded are frequently assumed also to be emotionally retarded.

Emotion then is seen as playing a central role in mental disorder, perhaps because of the long-held view that human beings should aim to be rational and intelligent, the primitive emotions getting in the way of this. As Gross (1998) mentions (see also Chapter 9), emotion dysregulation appears in all the DSM's Axis II disorders and in half of the Axis I disorders. If the emotions become so insistent as to be impossible to ignore or so extreme as to interfere with normal life, then the result is termed 'abnormal'. As part of a scholarly and interdisciplinary, but openly and necessarily biased review of human emotions, Oatley and Jenkins (1992) make a cogent analysis of research that has been concerned with how emotions can dysfunction. They do not assume that emotions are *the* significant psychopathologies or even that they are the most important cause of such psychopathologies, but rather seek to determine how much emotions contribute to psychopathology. They do assume that emotions have a biological basis, that they function to allow us to set goals and in the communication of intentions and interaction, that they are often conscious and that they have an important role to play in our folk theories of ourselves and others. In other words, they assume that emotions rest on the criteria that Oatley (1992) suggests should be met by any theory of emotion.

The basis for Oatley and Jenkin's concerns is that the emotions in psychiatric conditions might be *normal* with respect to what brings them about. Against this background, they point to the evidence that shows that emotional traits are stable over time;

indeed, that temperament may be said to exist. However, changing emotional demands will influence such stability.

The other way of looking at this issue is to begin with psychopathology (in which, of course, particular emotions are associated with particular disorders) and search for continuities. The type of evidence that Oatley and Jenkins consider is that conduct disorders continue from childhood to adulthood, as do emotional problems. Moreover, there is firm support for emotional behaviour even carrying through generations: harshly raised children becoming harsh parents and abused children becoming abusers, for example.

Oatley and Jenkins analyse stress, asking whether or not particular emotions are linked to particular pathologies. The evidence points to severe loss or threat (one definition of stress) leading to depression (with or without anxiety) and that internal stress consisting of certain personality traits relate to particular physical diseases.

A further way in which emotion is linked to psychopathology is through the effects of one person on another. For example, children of depressed mothers are at risk of emotional disorders as are children with angry parents and children surrounded by emotional disharmony. Such dysfunctional emotional effects can also be seen from adult to adult as well as from adult to child.

Clearly, these sets of considerations have therapeutic relevance. For example, recognition that emotions in one person can generate what look like emotional abnormalities in another suggests that whatever the specific form of the problems, family therapy could be useful. Or, to go further, it might be possible to use these effects to employ one member of a family to change the emotional reactions of another. In particular, concentrating on the changing emotional demands in a person's life suggests the usefulness of using behaviour modification techniques or cognitive restructuring to deal with dysfunctions.

A therapeutically driven analysis of potential emotional disorder is made by Greenberg and Paivio (1997). They list five sources of dysfunction for emotion disorder:

(1) *stress* comes from inability to make changes in the relationship with the environment that derive from emotion action tendency;
(2) disorientation or incongruence comes from avoiding or disowning emotion;
(3) poor coping derives from difficulties in regulating emotional intensity;
(4) post-traumatic stress disorder comes from emotional trauma;
(5) maladaptive emotional responses follow the dysfunctional construction of emotional meaning.

This type of analysis and categorization led Greenberg and Paivio to develop their emotion-focused therapy.

Barlow

Continuing this lengthy chapter (at least by way of introduction) it is important to consider the ideas of Barlow (e.g., 1991), who as well as constructing an influential theory of anxiety makes a penetrating analysis of disorders of emotion in general. He emphasizes both anxiety and depression as necessary in any consideration of emotional

dysregulation, seeing them as at the core of emotional disorder. He characterizes anxiety as a cognitive–affective structure involving high negative emotion, uncontrollability, self-focus and self-preoccupation (see later for a fuller exposition of his theory of anxiety). Panic attacks, on the other hand, are clinical manifestations of fear (a primitive emotion that prompts a person to escape from a direct threat). He suggests that many people have panic attacks, but don't worry about it. Those who do worry develop *anxious apprehension* concerning the next possible attack and see the whole process as uncontrollable.

Barlow argues that it is hard to distinguish between anxiety and depression, arguing that the evidence is stronger on the side that they are unitary. Clinically, most depressed patients are also anxious, but not all anxious patients are depressed.

More particularly, Barlow characterizes emotional disorders as coming about when chronic states of dysthymia interact with more transitory states of panic and depression. There can develop what he terms 'double depression and double anxiety'. For example, depressed patients misinterpret symptoms of depression as signs of personal inadequacy. This makes things worse and implies that they are hard to deal with. He also makes links between fear and anger as reactions to stress (see later). So anger disorder, like panic disorder, comes from stress. This type of argument also extends to mania – uncontrolled excitement.

In summary, Barlow is saying that the background conditions of stress, anxiety and dysthymia interact with transitory emotions of excitement, anger, fear and sadness to produce four types of emotional disorder – mania, temper outbursts, panic and depression – if the discrete emotions occur unexpectedly or inappropriately and are experienced as out of control.

The remainder of this chapter is structured a little differently from hitherto. It begins with some discussion of cognitive approaches to emotional dysfunction and then moves, at some length, into consideration of the central topics of anxiety and depression. Following this, attention is focused on theories surrounding the specific issues of stress, psychosomatic disorders, health and alexithymia, since there have been interesting recent theoretical advances in these areas. It should be noted that throughout this chapter, when considering emotion from a clinical perspective, it is difficult to separate theory from therapy.

Cognitive approaches to emotional dysfunction

In recent years, Watts has made a significant contribution to exploring the implications of emotion theory for matters clinical. In particular, he has been concerned with cognitive theories of emotion and in 1992 explicates his views cogently in a paper that dwells solely, but not surprisingly, on negative emotions. Watts begins by stating that emotion is made up of subjective experience and cognitive, behavioural and physiological elements by speaking of 'appraisal processes, affective experience, thoughts and images, physiological state, action tendencies and behaviour'.

Watts first stresses the function of emotion and suggests that therapists put some emphasis on emotion management training. A second matter that Watts regards as

crucial is the extent to which an emotional reaction is seen as appropriate (a question of sociocultural interpretation). An emotion could perfectly well be appropriate even though dysfunctional, such an emotion usually being viewed as not stemming from objective facts. One person might become angry and aggressive at the merest hint of disagreement and react with emotional and physical violence. As Watts points out, it may be necessary for the therapist to recognize that such a reaction is *appropriate for the client* before anything therapeutic is possible.

Watts argues for the importance of distinguishing between different types of cognition as they are linked to emotion. He draws attention to thoughts, already emotion filled, inducing emotional states in contrast to emotions arising because of what people believe about their circumstances. Recognizing this difference, a therapist should then decide whether it would be better to concentrate on restructuring (a current euphemism for changing) thoughts or beliefs. These imply different therapeutic traditions.

In this same context, Watts sets aside the problem of how many emotions there are, one or many, and the distinction between basic emotions and the remainder or between primary and secondary emotion. Instead, he urges that from a therapeutic viewpoint it is important to be aware that emotions differ in how much they are linked by cognitive elaboration. Some emotions may be cognitively simple and others cognitively complex; also, some emotions although dysfunctional may singularly occur in almost pure form or may be part of a complex mixture. They need not also be cognitively complex because of this. In any event, all these issues would have an impact on therapeutic strategy.

Finally, Watts appraises recent views on appraisal, considering in particular the attempts to categorize emotions by linking them with patterns of appraisal (e.g., Smith & Ellsworth, 1985, 1987; Roseman, 1991). He draws attention to three types of dimension of appraisal, each of which has clinical relevance.

For example, appraisals may be based on agency: say, attraction (hate), or event (fear), or attribution (shame). Or appraisals may be based on the degree to which legitimacy is seen as being involved. Or, finally, certainty is important to some appraisals. Any of these appraisal dimensions might have therapeutic implications for emotion change.

To allow Watts (1992) to conclude for himself: 'General cognitive approaches to emotion can provide clinicians with a richer and more precise conceptual framework for understanding emotional disorder.' One might add: . . . and for developing therapeutic strategies in the treatment of emotional dysfunction.

These arguments are developed further by Mathews and MacLeod (1994) and Williams, Watts, MacLeod and Mathews (1997). Their major point is that the large-scale differences in how individuals process information are causative in emotional disorders. Depressed people tend to recall more unhappy events than do non-depressed, so maintaining the depression. This is particularly the case with information that makes negative self-reference. There is a similar circularity with anxiety. The more anxious person attends to more threatening cues and so takes in more information about potential danger.

High levels of anxiety or depression are linked to a reduced ability to perform cognitively complex tasks. This is perhaps due to the working memory being depleted, so leaving fewer resources available. Furthermore, depression may reduce the capacity

for cognitive initiative. In short, through these cognitive mechanisms emotions might deplete the available resources or change the priorities used by people.

They argue further that the current emotional state elicits responses from the individual, depending somewhat on their trait emotionality. For example, an anxious mood (from stressful events) leads people who are high in trait anxiety to encode, selectively, threatening information. It may be that individual differences in selective encoding represent the cognitive aspect of vulnerability to emotional disorder. Continuing failure of efforts to cope can prompt an emotional disorder.

Anxiety

The aim of this section is to give a reasonably thorough overview of theories of anxiety. It is hoped that this will serve a number of purposes simultaneously. Arguably, of the specific emotions anxiety is the most researched and has most theories put forward about it. It is therefore important to cover it in detail. As will be obvious, an overview of theories of anxiety parallels an overview of theories of emotion in general. Moreover, in a chapter concerned with clinically based theories of emotion, it has to have a central place. In fact, as it is weighted here, it will serve to illustrate the best of the thinking in this field. Theories of depression will be dealt with more summarily.

'The characteristics of anxiety as an emotion are that it is distressing, and that its sources are indefinite.' Thus begins the entry on anxiety in *The Oxford Companion to the Mind*, and whatever one's theoretical persuasion it is unlikely that one would disagree. Although there is considerable overlap between the various theories of anxiety, they can be categorized to a degree. They fall into groups that can be most simply labelled as: psychoanalytic, learning/behavioural, physiological, phenomenological/existential, cognitive and, finally and perhaps most importantly, those that are based on the idea of uncertainty, a theoretical concept that to some extent cuts across the other categories.

For the most part, the theories canvassed here stem from a consideration of human anxiety. Nevertheless, some of the empirical investigations that surround the theories have been based on animal subjects. This tradition has derived from ethology (see, for example, the excellent work by Blanchard & Blanchard, 1990) and from laboratory experimentation, especially that which is neurophysiologically based (see, for example, Le Doux, 1994). Also, see McNaughton (1996) and Strongman (1996) for a more detailed analysis of theories of anxiety.

Psychoanalytic theory

Psychoanalytic theories of anxiety began with Freud and have not developed a great deal since his time. However, they remain influential, particularly in applied, clinical settings. Freud had two theories of anxiety (1917, 1926, respectively), in both of which he saw anxiety as an everyday phenomenon and as a way of explaining neuroses. Everyday anxiety is a realistic anxiety that refers to real objects; this has often been referred to as fear rather than anxiety. Neurotic anxiety can take the form of being free-floating, phobic or involved in a panic attack.

In the first formulation, Freud regarded anxiety as being a transformed libido, the transformation coming about through repression. So, if a person is prevented or thwarted from carrying out some instinctive (sexually driven) act through repression, then anxiety is the result. The anxiety generated then acts to produce whatever symptoms that, in their turn, will stop more anxiety from developing.

In his second formulation, Freud reversed the anxiety–repression linkage and viewed repression as occurring because of the experience of anxiety. In this theory, anxiety is a signal from the ego about real (i.e., existing) or potential danger. The unpleasantness of a threat causes anxiety, which in turn leads to repression as a way of getting the person out of danger.

The sort of events that Freud believed to be significant in the development of what he termed 'primary' (i.e., from birth) anxiety are: the birth trauma, the possible loss of or withdrawal of the 'mother', uncontrollable impulses or threats that might occur at about this time and fears of castration (presumably only in males, although this might be a moot point). Because of all this the mental apparatus is flooded and overwhelmed, the person is helpless and passive and the emotional experiences of anxiety follow automatically. So, in Freud's conceptualization, anxiety is either inherited or learned at birth, but with later additions being possible. Other types of anxiety, such as fear (this is Freud's way of looking at it) differ from primary anxiety only in what gives rise to them.

In the psychoanalytic context then anxiety is a significant aspect of handling a threatening environment and is also necessary for the development of neurotic behaviour. Later psychoanalysts such as Sullivan (1953) emphasize the social environment rather than early separation, but otherwise the theory is similar. Sullivan makes anxiety into a social, interpersonal phenomenon rather than an intra-psychic one. However, theorists such as Bowlby (e.g., 1973) compromise and put the emphasis on the significance of the relationship with the mother, arguing that this is based on the apprehension that the mother may *not* be there.

Learning/Behavioural theory

Theories of anxiety whose provenance lies in the learning area derive originally from Pavlov and Watson. Whatever form they take, their main function is to explain punishment. Put simply, the argument is that organisms learn to avoid noxious stimuli through some or other mediating mechanism. This mediating mechanism is normally called 'fear' or 'anxiety'.

The typical post-Pavlov, post-Watson analysis has it that a conditioned stimulus that is paired with (contiguous with) an unconditioned stimulus (which happens to be noxious and to cause pain) will, after several pairings, lead to a conditioned response. The conditioned response is fear or anxiety (they are often used synonymously by theorists of this persuasion) and are seen as secondary or acquired drives that have arisen through a process of classical conditioning.

Generally, these types of theory have it that the threat of discomfort, an increase in primary drives or overstimulation (shades of Freudian theory) lead to anxiety only if they have autonomic components. Once established, fear/anxiety can function as a secondary drive and establish *new* behaviour through drive reduction. Moreover, a

conditioned emotional response may interfere with ongoing behaviour. Again, there is a similarity here with psychoanalytic theory in that anxiety is seen as incompatible with other behaviour (or thoughts).

The theorists who developed this perspective initially were *Mowrer* (1953) and *Dollard and Miller* (1950). Their view of learning suggests that drive reduction follows a response, reinforces it and hence increases its future probability of occurrence. In this context, fear is a significant learned or secondary drive, as already described. For Mowrer, anxiety is a particular form of fear, when the source of the fear is vague or repressed.

Fear is learned because it can become attached to previously neutral stimuli and it can motivate and reinforce. Anxiety can become built into this through neurotic conflict; neurotic fear being anxiety and, by definition, having an obscured (i.e., an unconscious) source. Again with similarities to psychoanalytic theory, these learning theorists view neurotic conflicts as happening in childhood and thus setting the scene for anxiety to develop later in life, although they do not say how repression occurs. In summary though, from this perspective, anxiety is learned and once learned motivates maladaptive behaviour.

Staats and Eifert (1990) have updated this way of thinking to produce what they refer to as a multilevel behavioural theory of anxiety. Although having the same background as the Mowrer and Dollard and Miller theories, it goes further. It rests on two basic premises: that there is a central emotional response at the basis of anxiety, and that anxiety can be acquired through aversive conditioning or, more symbolically, through language.

From Staats and Eifert's viewpoint it is not necessary for someone to have a traumatic experience in order to develop a phobia, say. It can come about through negative emotion simply eliciting words that are associated with situations (e.g., negative thoughts and words might become associated with images of panic). They are describing a sort of self-conditioning. The importance of Staats and Eifert's contribution (which is to emotion theory in general rather than anxiety theory in particular) is that they have made a clear link between conditioning theory and cognitive theory.

The final theorist who should perhaps be considered under the learning/behavioural heading is *Hans Eysenck*, although his approach is a little different from those already described (e.g., 1957). His learning theory of anxiety rests on his more fundamental personality theory. As is well known, this depends on two major dimensions: extroversion/introversion and neuroticism. In this context, the neurotic individual is particularly sensitive to anxiety-provoking stimuli, this sensitivity being based on the autonomic nervous system (ANS). So, from this perspective anxiety-proneness is inherited.

However, anxiety can also be learned. Traumatic events lead to unconditioned fear, but can then become conditioned, resulting in new stimuli producing the original maladaptive anxiety responses. Here, then, anxiety is viewed as conditioned fear.

There is also another possible stage in the anxiety process according to Eysenck. A person inherits an excitation–inhibition imbalance. If this prompts the person to be at the mercy of the influences of social learning (i.e., to be introverted), then that person is more prone to anxiety, as well as to other emotions such as guilt.

From Eysenck's perspective then anxiety is partly inherited and partly learned. The learning part depends, first, on conditioned fear and, second, on the state of the

nervous system. It is interesting to note that Eysenck's theory also provides the basis for Gray's more physiological theory. Eysenck though believes anxiety to be dependent on the visceral brain, consisting of the hippocampus, amygdala, cingulum, septum and hypothalamus, whereas Gray centres anxiety in the behavioural inhibition system of the septo-hippocampal region.

Physiological theory

Physiological and neurophysiological theories of anxiety will be dealt with in brief summary. They are based largely on an exposition of what parts of the central nervous system (CNS) might be involved in emotion in general and fear/panic/anxiety in particular. It is largely through the empirical research that has derived from this beginning that they have added to our understanding of anxiety.

One of the most interesting physiological expositions of emotion comes from Panksepp (e.g., 1981, 1991; see Chapter 5), although he does not stress anxiety in particular. However, as already mentioned, other theorists stress links between learning and physiology in accounting for anxiety (e.g., Eysenck) and others link cognition and physiology very much in a Schachterian mould (e.g., Öhman, 1993). However, from a physiological perspective, Gray (e.g., 1982, 1987) has made the most significant contribution to anxiety.

Gray regards the behavioural inhibition system as underpinning anxiety, unlike Panksepp (e.g., 1981), who places anxiety in the fight/flight system. The contrast between these two views is that of anxiety involving response suppression from the behavioural inhibition system or escape as mediated by hypothalamic circuits.

Gray argues that the behavioural inhibition system suppresses any behaviour that threatens an unwelcome outcome, so it only does this if there is *another* system that is mediating the threat. This is likely to be the fight/flight system, and the outcome is likely to be negative when the system being suppressed is fight/flight.

Gray speaks of a complex septo-hippocampal system as the basis of anxiety (and other emotions) and in particular as acting as an interface between emotion and cognition. However, other parts of the brain are also involved in anxiety, but the septo-hippocampal system is central. He also draws attention to the neocortical projection of the septo-hippocampal system in the frontal lobe and the monoaminergic afferents arising from the brainstem.

Although the present exposition is concerned with theories of anxiety, it is perhaps worth pointing out that Gray's theory depends in part on his analysis of research involving anti-anxiety drugs, especially with respect to finding that lesions in the septo-hippocampal area have similar effects. It is also worth noting that Gray's theory of anxiety is yet another in which attention is drawn to cognition.

Phenomenological/Existential theory

Phenomenological and existential theories of anxiety have their origin in Kirkegaard 150 years ago (1844). Here, anxiety is seen as a naturally occurring state of the person. This way of looking at things pivots on the idea that development and maturity depend on freedom, which in turn depends on being aware of the possibilities that exist in life.

To consider such possibilities means that anxiety must be involved. Growing toward the maturity that freedom brings means dealing with the anxiety that is an integral part of experiencing what is possible. We are presented with, as a natural part of life, a series of choices from birth onward. At every choice point there is anxiety. To become truly actualized we must face this anxiety and deal with it – anxiety is unavoidable.

It is interesting that Kirkegaard made a distinction between fear and anxiety that is very similar to the distinction that is still often made. Fear is of a specific object, whereas anxiety is independent of any object, instead being a necessary condition of choice. Anxiety only develops after the development of self-awareness allows a person also to form a selfhood. A fearful person moves away from a feared object, whereas an anxious person is in conflict and unsure. For the person to develop properly, the anxiety must be faced and dealt with.

Fischer (1970) has done much to bring a phenomenological or experiential approach to understanding anxiety into the 20th century. He does so by attempting to integrate all previous theories. Although this attempt is somewhat wanting, it nevertheless led to a theory.

Fischer brings everything together in terms of *anxious experiencing*. This involves five components:

(1) There is an identity that takes the form of milestones toward a way of living. If any of these milestones are threatened so that they might be lost, then anxiety results.
(2) There is a world that consists of a network of relations and involvements for each milestone. If anything in this world seems insurmountable and the world thus becomes threatened, then again anxiety may result.
(3) There is motivation in which the world and the person's identity is perpetuated.
(4) There is an action that is involved in achieving a milestone and that expresses being.
(5) Finally, there is an evaluation of possible competence.

For Fischer, anxiety is both anxious experiencing and the experiencing of the self or of the other being anxious. As should be obvious from this brief description, Fischer's conceptualization of anxiety is vague, although it is experiential or phenomenological, and he does not really succeed in fitting all the other types of formulation into the theory, even though the vagueness helps.

Cognitive theory

Apart from the uncertainty theories that appear in the next section, two major cognitive theories will be considered here. As will become clear, they also lay emphasis on other matters in their conceptualization of anxiety, but are included because they have an obvious and central place for cognition. They are the theories of *Michael Eysenck* (1988) and *Öhman* (1993).

M. Eysenck argues that the cognitive system acts as a gateway to the physiological system; so, in understanding anxiety it is important to consider both systems. He also

talks of self-schema theories, self-schemas depending on the personal relevance of any particular trait to the individual, and assumes that these self-schemas are part of the cognitive system.

As a background to his theory, M. Eysenck shows that there are differences between people who are high and low in trait anxiety in the information that they have stored in long-term memory. This view is supported by research on mood state-dependent retrieval and mood-congruent learning. People who are high or low in anxiety also vary in their mood states, and so the content of their memory should also vary. Such differences in memory help to account for changes in trait anxiety that occur over time and to deal with the fact that some people are anxious in some stress-producing situations, but not in others. Eysenck also argues that those who are high or low in trait anxiety may also differ in the process side as well as the structure of their cognitive systems.

The theory proper begins with a consideration of why people differ in their susceptibility to stress. M. Eysenck demonstrates that those who are high or low in anxiety do in fact differ in the structure (content) and processes of cognition. Their memory differs both in broad schemata and in specific items, such as the type and amount of specific worries that they might have. He offers two reasons why those who are high in trait anxiety worry more than those who are low. First, they have more frequent and more highly organized sets of worries in long-term memory. Second, the worries of the highly anxious may be more accessible because their more negative mood states assist mood state-dependent retrieval.

According to the theory, it follows from this that high- and low-anxiety people will also differ in cognitive appraisal of ambiguity. Moreover, a person might be more susceptible to stress and anxiety in some stress situations than others. M. Eysenck points out that the evidence about the role of the cognitive system in accounting for differences in susceptibility to stress is unclear, but there are differences in cognitive functioning.

In the end, what is important about M. Eysenck's theory of (trait) anxiety is that it draws attention to the importance of taking into account the cognitive system as well as the physiological and the behavioural.

Öhman (1993) puts forward what he terms an 'information processing theory of anxiety', although he argues that the information processing sources lead to biologically based defences that in turn produce the anxiety. Öhman's theory/model consists of five major aspects:

(1) Stimulus information goes into *feature detectors* that pass the information on to *significance evaluators*. Some stimulus features may be connected directly to the arousal system, which produces alarm. The feature detectors are set to find threat in biologically significant stimuli. Information will also go on from this level to the conscious perception system.

(2) The *significance evaluators* automatically assess the relevance of stimuli, with expectancies setting the system to look for particular inputs. Meaning is analysed at this point and memory has an important part to play. So cognitive resources are necessary at this stage but there does not have to be any conscious access to what is going on. 'The important implication for anxiety is that non-conscious discovery of potential threat through the significance evaluator does not result in

activation of the arousal system unless it results in conscious perception of threat.' (1993, p. 528).

(3) The *arousal system* can 'tune up' the significance evaluator and gives input to the conscious perception system. It is based on emergency reactions of the ANS.

(4) The *expectancy system* is based on emotion being organized into memory. This is a standard cognitive system of networks with nodes. It biases the significance evaluators to react to information that matches active memory nodes, which in turn again gives information to the conscious perception system. All of this maintains the bias to find threat in the environment. So the expectancy system biases the incoming information and makes a context for the interpretation of what goes into the conscious perception system.

(5) The *conscious perception system* is part of a much larger system: the mind, consciousness, cognitive–interpretative system or whatever. It integrates input from the arousal system, the significance evaluators and the expectancy systems and picks out a suitable action to deal with the perceived threat. If avoidance or escape is possible, the result is fear. If not, the result is anxiety. So, again, as with most theories fear is seen as having a tangible object and outcome, and anxiety as not. '. . . responses of fear and anxiety originate in an alarm system shaped by evolution to protect creatures from impending danger' (1993, p. 529).

Öhman sees links between the unconscious aspects of anxiety as suggested by Freud and his own idea of two types of unconscious. Freud had a drive unconscious and a repressed unconscious that are similar to the unconscious effects of feature detectors and significance evaluators in this model. . . . Öhman even makes the feature detector part of his model equivalent to Jung's collective unconscious, a sort of cumulative human experience (with archetypes viewed as biological preparedness). The significance evaluator is more concerned with individual history and so may set the person to respond more to some threat cues than others.

Öhman argues that his theory suggests that there are two types of anxiety, both of which are distinguishable from fear. In his view, fear is an emotion to do with conscious avoidance and escape. If such responses are blocked then anxiety results. However, a more basic type of anxiety than this comes from unconscious input to the conscious perception system from significance evaluators and the arousal system. The result of this is undirected anxiety, the cause of the anxiety being not available to the person.

In this context, phobias and panic disorders are seen as arising from physiological roots, whereas generalized anxiety comes from a cognitive basis. However, the theory cannot say why some people develop one type of disorder and others develop another.

In summary, Öhman's theory or model is very much in the post-Schachter or causal–evaluative (in Lyons, 1992, terms) framework of emotion conceived as a matter of physiological cues and cognitive interpretations. Öhman takes an intermediate position on the emotion/cognition debate. He argues that some anxiety effects occur immediately a relevant stimulus impinges, but cognitions from non-conscious biases also have their role to play in the interpretation of threat. The important question is *how* cognition and emotion interact when considering a state of anxiety.

Öhman's model of anxiety is squarely within one of the recent traditions of theorizing in cognitive psychology. It has some reasonable things to say about anxiety, but in the view of the present author it suffers from the same difficulty that

is usually suffered by those who engage in what might be called 'boxology'. Because some possible function is named and put in a box in some indeterminate space in the brain, it does not mean that it actually exists, nor does it in any strong sense provide an explanatory account. In one sense, then, although this theory seems to be quite rich and well worked out, it tells us less about the nature of anxiety than the ideas of Kirkegaard expressed so long ago.

Uncertainty

There are three current emotion theorists (all dealt with elsewhere in this text) whose theories of emotion in general, and of anxiety in particular, cut across the more traditional divisions. There is a sense in which all the theories so far considered see uncertainty as a core part of anxiety, uncertainty at least as being unsure of the future or of what course of actions to take in the face of threat. However, Izard, Lazarus and Mandler refer more directly to the importance of uncertainty in giving their accounts of anxiety. Clearly, uncertainty is a concept that fits most closely within the cognitive domain.

Izard (1977, 1991) suggests that the feeling state common to any type of anxiety is fear, although he argues that anxiety is linked with various other emotions at different times and in different circumstances (e.g., interest/excitement, sadness, shame and guilt). Through his differential emotions theory he urges that, although anxiety should be treated as a unitary phenomenon, the other discrete emotions that are linked with it from time to time should be taken into account as far as subjective experience is concerned. More importantly, in the present context he views anxiety as being dependent on uncertainty.

The notion of uncertainty is taken further by *Lazarus* (1991a), who brackets anxiety with fright. Fright occurs when there is imminent physical harm, whereas he believes anxiety to be characterized by uncertain, ambiguous, existential threat. His distinction between fright and anxiety is similar to Freud's distinction between objective and neurotic anxiety.

As an appraisal theorist, Lazarus suggests that there are various primary appraisals that might contribute to anxiety. Thus, if there is perceived to be goal relevance, then any emotion might ensue, including anxiety. If there is goal incongruence, then only negative emotions will result, including anxiety. Finally and most importantly, if the ego involvement is protection of personal meaning and the protection of ego identity against existential threat, then anxiety is the only possible emotional reaction.

Uncertainty as the core of anxiety produces a strong drive to objectify it, to make whatever the threat is external and objective in order to reduce the uncertainty. The person's ability to cope is also uncertain. The problem with anxiety, as Lazarus sees it, is that once one objective threat has been coped with another takes its place since the basic problem is existential.

Finally, *Mandler* (1984) offers the most sophisticated explication of anxiety, which is based on uncertainty. He regards previous research on anxiety as being characterized by three main approaches. The causal view has anxiety seen as acquired through learning, distinguishes it from fear and views it as concerned with stimuli that signal threat to the integrity. What Mandler terms the organismic–hypothetical approach sees

anxiety as an observed or hypothesized state, sometimes purely theoretical and sometimes a state of the nervous system. The experiential/behavioural approach is concerned, largely via subjective report, with anxiety, defined via expressive behaviour, general activity and a series of behavioural and physiological symptoms, as it affects a wide range of functions.

Mandler synthesizes previous theories, some of which have just been discussed, as having three common elements. Archetypal anxiety-evoking events exist primitively, innately or congenitally. Responses to these events are transferred to other events that were originally neutral simply through contiguity. This may be externally or through an organism's actions. And events that end or reduce anxiety are related to events that also evoke anxiety (e.g., the danger of overstimulation is reduced by reducing the stimulation).

In his own formulation, Mandler argues for a *non-traumatic theory* of the sources of anxiety that he sees as dependent on the cyclical distress of the human neonate. So anxiety is what he terms 'fundamental distress', the main event in which is '. . . the perception or afferent effect of variable and intense autonomic visceral activity' (1984, p. 234).

Fundamental distress is a state of unease or anxiety that does not have a specific causative event. Mandler points out that discomfort in the newborn may accompany other states such as hunger, thirst, cold and that reducing these states does not necessarily reduce anxiety. Anxiety is reduced by non-nutritive sucking or by the stimuli provided by a 'mother' rocking, nodding, producing regular sounds, etc. These two types of event are inhibitors of fundamental distress and hence of anxiety.

Mandler also assumes that these matters are among the earliest differentiations that a child makes, as are those that are to do with handling distress. At such times, the child learns about the *interruptions* of organized sequences of responses or expectations. And, not surprisingly to those who are familiar with Mandler's general theory of emotion, he regards interruptions as possibly leading to anxiety.

The core of Mandler's theory of anxiety then depends on the link between anxiety and interruption. The important question is how does the arousal that stems from interruption turn into anxiety? It happens when there is no response available to the organism that will stop the interruption. This leads to feelings of helplessness and disorganization: these *are* anxiety.

To summarize Mandler's theory, the cyclical distress of the newborn provides the first experience of anxiety. This fundamental distress bears no relationship to antecedent events, although there are specific inhibitors such as sucking and rocking that bring it under control. The withdrawal of such inhibitors might reinstate the distress. Later on, other organized behaviours might also function to inhibit distress/anxiety.

Furthermore, helplessness turns arousal into anxiety through the unavailability of plans or actions that are relevant to the task or to the situation. The one thing that leads to helplessness is the interruption of plans or behaviour. This may degenerate further into hopelessness if it builds up, goes on for long or if there are repeated failures. This all becomes related to self-esteem and may lead to depression.

In the end, the imperfections of human beings often lead them into situations in which they are helpless (they are *uncertain* what to do). This results in anxiety and this in turn interferes considerably with effective functioning. Because of this, Mandler

argues that it has often been called stress, and so we see the origins of the confusion that exists between anxiety and stress.

Finally, what is arguably the most rigorously researched and carefully constructed theory of anxiety is put forward by Barlow (e.g., 2000). It is included at this point for this reason and because it rests on the basic idea of uncertainty (or unpredictability).

According to Barlow, anxiety is '... a unique and coherent cognitive–affective structure within our defensive motivational system' (2000). At its core is a sense of what he terms 'uncontrollability' about possible threats or danger. By contrast, in fear the danger is here and now. The individual feels helpless through being unable to predict, control or to achieve desired personal results. There is a strong physiological/somatic aspect to anxiety as Barlow sees it, perhaps reflecting distinct brain circuits (e.g., Gray's behavioural inhibition circuits). This perhaps provides a substrate of readiness, a preparedness to deal with any helplessness that might occur. Linked to this might be vigilance or hyper-vigilance. Barlow renames 'anxiety' as 'anxious apprehension', a future-oriented mood state. It is a condition of being prepared to deal with forthcoming negative events.

There are many possible triggering cues to anxious apprehension, but these do not necessarily work through conscious appraisal. An example of one that does not is the anxiety that might come about from a cue that reflects a much earlier trauma. Such cues might be broad or narrow. For example, the cues to test anxiety or sexual anxiety tend to be narrow. Such cues move the person to a self-evaluative focus in which they see themselves as unable to deal with the threat. This increases arousal and so forms a positive feedback loop. This can continue to lead to more distortions and attentional biases that reflect the person's prevailing schema. Then there is more hyper-vigilance and a further decline in concentration and performance.

This type of progression in anxious apprehension leads to (1) a tendency to avoid the state (e.g., to avoid tests or to avoid sex) – this may be through subtle, off-putting rituals or superstitions – and (2) worry, which is an additional, useless attempt to control anxiety. This goes further in that a lack of control over worry also characterizes anxiety, so worry itself can become maladaptive. Chronic anxiety is also associated with nervous system tension or arousal and autonomic inflexibility – it is as though there is a perpetual readiness to confront danger.

Barlow's theory is at its strongest in its consideration of the origins of anxiety, anxious apprehension and related disorders. He sees a three-stage process or, to put it another way, that there are three major sources of influence. Our genetics create a generalized biological vulnerability. Our early life experiences create a psychological vulnerability. These together lead to generalized anxiety disorder and depression. Then, finally, in the third stage early learning can focus anxiety on particular life circumstances. So, for example, because of early experiences social evaluations or somatic sensations might become imbued with threat. This vulnerability added to the biological and psychological vulnerabilities leads to the development of specific anxiety disorders such as social phobias, obsessive–compulsive disorders, panic disorders and so on.

Conclusions

The obvious concluding statement to draw from this consideration of theories of anxiety is that the various approaches set off from a very similar set of starting

points to those of theories of emotion in general. There have been psychoanalytic, behavioural, physiological, experiential/phenomenological and cognitive roads taken. From this theoretical plurality further conclusions can be drawn, conclusions that represent commonalities that can be extracted from the theories.

Perhaps the first and foremost conclusion is that the weight of opinion makes it clear that anxiety cannot be fully understood without taking some account of its cognitive aspects and influences. This again reflects what has happened to emotion theory in general – it has become highly interrelated with cognitive theory. With respect to anxiety, this is particularly the case since a basic aspect of anxiety appears to be uncertainty or unpredictability, whether it be of what the threat is, how to cope, how to deal with the unconscious or how to face a multitude of possible futures.

A further conclusion is that there seems to be general agreement among most theorists that anxiety can be distinguished from fear or fright in that the object of the latter is 'external', 'real', 'known' or 'objective'. Anxiety is characterized by its genesis being, yet again, uncertain to the individual.

Moreover, although anxiety is clearly a negative, unpleasant emotion, it is motivating, can become associated with a wide range of new stimuli or events and appears to be an inevitable or even in some views an essential part of the human condition.

To return to the starting point of this analysis, anxiety is indeed distressing and its sources indefinite, but there is clearly more to it than this, a point with which a wide range of theorists, working from multiple perspectives, would agree. Most theories make some sense of the existing information, some are more internally consistent than others, some are more general than others, some have predictive power and all appear to have reasonable heuristic value. For the future, in my view it is probably Barlow's theory that will be of most note, a theory of anxiety that is broadly conceived, that clearly has a central role for cognitive, genetic and developmental factors and that can embrace the specific issues of behaviour, experience and in particular neurophysiology, which others have deemed important.

Depression

Although anxiety is the main emotion considered in this chapter on emotion theory within a clinical framework, it is also important to have some discussion of depression. Depression is clearly a complex emotional disorder, which, like anxiety, in its milder forms is experienced by most people at some time. It does not usually occur in lists of the major emotions since, much as with love or grief, it is perhaps best regarded as a more general condition that subsumes various emotions. In this case, however, the emotions involved are a mixture of sadness and some of the more self-reflective emotions such as shame.

Depression is commonly regarded as involving five sets of characteristics, although it can be exacerbated by many other emotional conditions and often occurs in concert with anxiety:

(1) a sad, apathetic mood;
(2) a negative self-concept involving self-reproach, self-blame and so on;

(3) a desire to avoid other people;
(4) a loss of sleep, appetite and sexual desire;
(5) a change in activity level, usually in the direction of lethargy, but sometimes in the form of agitation.

Beyond these typical characteristics, a distinction is usually drawn between neurotic and psychotic depression. This is both a matter of degree – psychotic depression is more extreme in all ways than neurotic depression – and kind – psychotic depression is characterized by delusions and neurotic is not.

Theories of depression parallel the types of theory that have been described in detail with respect to anxiety and indeed also run in parallel to the ways in which emotion in general has been viewed.

Psychoanalytic

As might be expected, Freud best exemplifies the psychoanalytic approach to depression. He suggested that if a child's oral needs are over- or under-satisfied then he or she may develop an excessive dependency for self-esteem. Then, if a loved person is lost, the lost person is introjected with full identification. As some of the feelings toward the loved person will have been negative, so now self-hate and self-anger develop. Simultaneously, there develops resentment at the desertion through feeling guilty at the sins committed against the lost person. Then the child mourns in order to separate the self from the lost person. In those who are over-dependent this can lead to self-punishment, self-blame and hence depression. So, Freud saw depression as anger turned against the self.

Many criticisms can be levelled at such a theory. What causes depression in those who have not lost a loved one? Why is love not turned inward as well as anger? How much is too little or too much gratification at the oral stage? And so on. Psychoanalytic theory is problematic at the best of times.

Learning

The various learning theories of depression see it as a condition mainly characterized by a reduction in activity that follows the withdrawal or loss of a large and accustomed reinforcer. Once the depressed behaviour exists, it might itself be reinforced by attention and sympathy.

The most influential learning-based theory of depression is Seligman's (e.g., 1975), which depends on the central idea of learned helplessness. This suggests that anxiety is the initial response to a stressful situation and then if the person comes to believe that the situation is uncontrollable, the anxiety is replaced by depression. Seligman's model came from empirical research with animals, but there seems to be remarkable similarity between this and the relevant human data.

Physiological

There have been two main types of physiological theory of depression. The first is argued on the basis of a disturbance in the electrolyte metabolism of depressed patients.

Sodium and potassium chlorides are particularly important in the maintenance of potential and the control of excitability in the nervous system. Normally, there is more sodium outside the neuron and more potassium inside it, but in depressed patients this distribution is disturbed.

The second physiological theory views depression as resulting from an inhibition of neural transmission. This is thought to occur in the sympathetic nervous system (SNS) and to involve its neural transmitter – norepinephrine.

Problematically, these theories make no mention of theoretical links between psychological and physiological factors in depression.

Cognitive

Beck (e.g., 1967) exemplifies cognitive theories of depression with the starting point that thoughts and beliefs cause emotional states. He argues that people become depressed through making a logical error; they distort events into self-blame. An event that is normally seen as just irritating (say, spilling a drink) is seen as another example of the utter hopelessness of life. So depressed persons draw illogical conclusions about themselves.

Beck refers to such illogicalities as 'schemata'. The depressed person interprets all events from the schema of self-depreciation and self-blame. Four types of logical error are possible here:

(1) arbitrary inference, when there is no evidence for a conclusion drawn (I am useless because the shop was closed when I went to buy something);
(2) selective abstraction, in which a conclusion is drawn from only one element of the many possible (it is my fault that the firm that I work for is full of unintelligent people);
(3) overgeneralization, or the making of a massive conclusion from a trivial starting point (I am completely thick because I did not understand that one point);
(4) magnification and minimization, which simply involve errors in judging performance (I told one white lie and completely lost all integrity).

From Beck's viewpoint then, emotional reactions come from cognitions and the interpretations of the world made by depressed persons do not accord with reality.

Conclusions

This brief overview is sufficient to show that the variety of theories of depression is similar to those of anxiety. It is as apparent in this area as in most other areas of emotion that there has to be a place for cognition and that as anxiety seem to be dependent on uncertainty/unpredictability, so depression is linked to uncontrollability. Moreover, the two conditions, both of which are so integral to emotional dysfunction, are strongly interrelated.

Stress and coping

Stress is a word that has been used quite frequently in this chapter so far, but it has not yet been discussed. Clearly, it is an integral part of emotion dysfunction or dysregulation. Lazarus (e.g., 1993, 1999; Lazarus & Folkman, 1984) has done more than anyone, both theoretically and empirically, to further our understanding of stress. He views it as a sort of subset of emotions and, moreover, makes his far-reaching analysis of emotion itself through an understanding of stress.

Lazarus divides stress into:

(1) *harm* – psychological damage that might come, for example, from loss;
(2) *threat* – the anticipation of harm;
(3) *challenges* – various demands that we feel confident to cope with.

He defines psychological stress as an unfavourable person–environment interaction. It is a process that prompts change. When we are stressed, the aim becomes to alter the circumstances and their interpretation in order to make them more favourable. This is *coping*, the other process that is central to Lazarus's conceptualization of stress and emotion. In general terms, coping can be problem-focused, and/or when this does not work, emotion-focused. For example, if we are stressed by a situation at work, we might see this as a problem of communication, for instance, that can be solved by discussion. However, if the problem is intransigent because it is impossible to communicate with the people involved, perhaps because of a huge power differential, then we are prompted to do something to deal with the emotional impact of this. In general, Lazarus argues that most stressful situations are dealt with by a mixture of problem-focused and emotion-focused coping.

Coping, then, is central to Lazarus's analysis of stress. He makes seven major theoretical points about it:

(1) Coping is always complex, most strategies being used in all stressful encounters.
(2) Coping depends on appraisal, an appraisal that either something can be done about the situation (problem-focused) or that nothing can be done (emotion-focused).
(3) Contrary to popular belief, there are no male–female differences to the same stressors.
(4) Some coping strategies are stable and some are not. For example, the idea of thinking positively appears to be a stable coping strategy.
(5) Coping strategies change at different stages in stressful encounters.
(6) Coping is a powerful mediator of emotional outcomes.
(7) Coping varies according to the stressful encounter, the personality of the individual and the outcome modality (e.g., whether it is to do with the individual's well-being or social functioning, etc.).

To allow Lazarus his own final words, 'Coping shapes emotion, as it does psychological stress, by influencing the person–environment relationship and how it is appraised' (1993).

Psychophysiology, psychosomatics and health

There are possible links between psychophysiological measures, physical symptoms and emotion, pain and hence what has sometimes been termed 'psychosomatic disorder'. A core question has revolved around the search for physiological response specificity in emotion, a search that has never been highly successful. This, in turn, prompts consideration of links between emotion and illness, a topic that has been nicely dealt with by Pennebaker (Pennebaker, 1982; Robinson & Pennebaker, 1991; see also below for a discussion of health and narrative).

If symptoms and emotions are linked, is there then a causal connection? Sensations of symptom-produced arousal may be labelled as a particular emotion, a perceived emotion might precede the sensation, or symptoms and emotion might merely occur together, but be independent. Pennebaker suggests that all such linkages are possible.

There is evidence that shows that emotions and symptoms can be linked independently of underlying physiological processes. It may be then that people infer an emotion–symptom link through a linguistic convention that was originally dependent on a physiological basis. Such issues become most problematic in the area of the relationship between emotion and pain. Common links are fear following unexpected, acute pain, an adaptive increase in vigilance and concern to escape. If pain lasts the emotion appears to be distress, but if the pain is unrelieved the result can be anger and aggression. And there are circumstances in which pain can relieve guilt.

Perhaps most problematic of all is the notion of psychosomatic disorders that have obvious organic symptoms, but an aetiology bound up with psychological variables. Most models of psychosomatic disorder include reference to emotional disturbance (particularly anxiety). However, the extent or form of the emotional involvement is hard to determine and one view is that *every* illness has its psychosomatic components.

There are two major groupings for theories of psychosomatic disorder: biological and psychological. The biological suggests that patterns of autonomic reactivity are inherited (e.g., Lacey, Kagan, Lacey & Moss, 1963). The psychological type of theory suggests, for example, that anxiety or fear prevents the expression of behaviour, and the result is hypertension and the further generation of various physical reactions such as asthma or gastric ulcers.

Lader (e.g., 1972) argues that two main concepts relate psychophysiology and psychosomatics: arousal and response specificity. He suggests that arousal functions as a construct between physiological measures and any concomitant emotions, with heightened arousal being a necessary condition for the experience of emotion. This will be reflected in any psychophysiological measures, but to be meaningful must also be consistent with self-reports and observed changes in behaviour.

The idea of psychophysiological response specificity gives a theoretical base for variation in vulnerability of physiological systems from person to person. The idea is that different somatic processes play different roles in different types of behaviour. This relates to the notion that the particular physiological mechanisms involved in some somatic complaints in some psychiatric patients are especially susceptible to activation by stress.

Lader's model of the psychophysiological basis for psychosomatic disorder suggests that environmental stimulation interacts with individual factors to produce general arousal. Appraisal follows and a specific emotion is experienced. Such interactions may be conscious or unconscious and the emotions may be rational or irrational, in Lader's terms.

Four factors are thought to account for individual response patterns:

(1) Emotion is partly dependent on previous experience, and physiological patterns vary according to the emotion.
(2) Individual differences in responses to emotional neutral stimuli are variable.
(3) There are individual differences in the intensity of physiological responses; bodily systems are differentially involved.
(4) The awareness of peripheral changes varies from bodily system to bodily system, hence there is differential feedback.

Finally, severe or chronic environmental events interact with internal factors and produce high arousal and intense emotion. The physiological changes that accompany this may be morbidly severe in one bodily system. Also with high arousal there is a loss of adaptive responses. This complex set of reactions becomes self-perpetuating, and if it goes on long enough anatomical changes occur and psychosomatic illness results.

Robinson and Pennebaker (1991) in a more general consideration of emotion and health suggest that for emotion to affect health it must occur for long periods. They regard this as being possible in three ways:

(1) If specific emotions affect specific organ systems, there is eventually a wearing effect.
(2) It is possible that the particular belief system held by a person affects both emotions experienced and health. This cognitive approach then is suggesting that although emotion and health may be linked they are not causally related.
(3) If particular emotions are either expressed or repressed, this may affect health.

Their particular theoretical contribution, however, is to suggest that any analysis of emotion and health should take into account time, simply because changes in health are to do with long-term changes usually in multiple organ systems. So the idea of personality and its interactions with emotion and, of course, cognitive linkages remains of theoretical importance.

Leventhal and Patrick-Miller (1993) also make an extended discussion of links between emotion and illness. They draw a number of conclusions:

(1) Linkages between emotion and disease can be clarified by regarding emotions as differentiated sets.
(2) Emotions should be viewed in their social framework since things interpersonal both regulate emotional reactions and moderate the relationship between stress and health. Emotional distress can be moderated by social factors such that the effects on health are ameliorated.
(3) In the health context, emotions should be seen as a multilevel system, including the cognitive, feeling, motor and systemic levels.

(4) Any of these levels of emotions has multiple components that can be affected by neural or by endocrine activity. Again, this is important in considering the emotion–disease links, which in turn can help our understanding of emotion more generally.

Emotion, health and narrative

In recent years, Pennebaker and his co-workers have produced a startling series of research findings and theoretical insights into a fascinating and therapeutically important area: the links between health and narrative (e.g., Pennebaker & Segal, 1999; Esterling, L'Abate, Murray & Pennebaker, 1999).

Pennebaker's ideas are predicated on the view that telling (writing) stories is natural. It helps us to understand, organize, remember and integrate our thoughts and feelings. It improves predictability and control (thereby lessening the possibility of anxiety and depression, presumably), by providing structure and meaning and making the emotional effects of life events more manageable. He regards this as being akin to psychotherapy, which can be characterized as involving the construction of a meaningful story that helps to alleviate emotional distress.

In the basic experimental procedure used throughout a series of studies by Pennebaker and others, participants (usually, but not always, students) are brought into a laboratory and invited to write about a topic for 15 minutes a day for 4 days. The writing is to be anonymous, and they are to receive no feedback about it. The experimental group is asked to write about one or more traumatic experiences, and the controls to write about something non-emotional such as the decor of their living room. The general finding of studies such as these is that, in comparison with the controls, the experimental group has markedly fewer visits to medical services during the succeeding months, their general physical health is improved, their grades are improved and their life is, in general, changed.

This simple procedure seems to benefit a variety of groups. It lowers the use of medication, reduces pain and appears to improve the immune system. The content of the writing is not important; rather, it is important to explore emotions and thoughts in the writing. There is even improvement in self-esteem for members of stigmatized groups.

There are various ways of accounting for these dramatic effects. The first two are rejected by Pennebaker. These are the possibility that writing such narratives makes people more health conscious or enables their self-expressions. He prefers the notion that converting emotions and associated images into words changes the organization of thoughts and feelings into something more coherent. This view is supported by the fact that the more positive emotion words and the more moderate negative emotion words that are used in the narratives, then the greater the improvement in health. Health is also improved by the great use of more causal and insight words.

Delving a little deeper theoretically, Pennebaker asks why such effects should occur. Human beings constantly search for meaning in life. We make such comments and ask such questions as:

- She smiled a little differently from usual . . . .
- Why did he look at me in that way?
- Why did she walk out on me?
- Why do I always feel uneasy at parties?
- Why don't I like to talk about sex?
- Why do I dislike him so much?

Making a story or a narrative of the answers to such questions organizes and simplifies them, and makes them more coherent. Essentially, this helps us to forget them and to move on. The story brings a sense of closure.

Again, theoretically, it is important to consider what mechanisms might be at work here, where writing about emotional experiences might be seen as a powerful therapeutic technique. The benefits of writing on health are mediated by changes in emotion, cognition and behaviour. Although writing about the emotions involved in a stressful event increases short-term negative emotions and decreases positive emotions, it does lead to improved mental health in the long run.

There is increased insight, self-reflection, optimism and an improved sense of control and self-esteem. To put it in Lazarus's terms, it improves the organization and development of adaptive coping. Alternatively, it can be seen as another form of re-exposure to traumatic stimuli, which in itself can be therapeutically effective. In general, interestingly enough, *moving toward* the production of a coherent narrative after trauma seems to be more productive of health than having one from the start of therapy. This, again, is something that needs a theoretical account.

Alexithymia

Alexithymia, literally, is a lack of words for feelings. More generally, it refers to having a limited awareness of emotional states both in oneself and in other people. Those who might be described as alexithymic have only a partial integration of the cognitive and experiential aspects of emotion with its neurophysiological, behavioural and expressive aspects. It becomes associated with dysregulated emotion and ultimately, in some cases, with physical and mental illness. It is Taylor (e.g., Taylor, 2000; Taylor, Bagby & Parker, 1997) who has written most extensively on this topic.

An important theoretical background for understanding alexithymia comes from Lane and Schwartz's (1987) developmental model of emotional experience as it occurs within psychopathology. They describe five stages:

(1) *sensorimotor-reflexive*, in which emotion is experienced as bodily sensation;
(2) *sensorimotor-enactive*, in which emotion is experienced as bodily sensation and action tendency;
(3) *pre-operational*, which begins at about 18 months of age and in which emotions are experienced psychologically as well as bodily, but in a unidimensional and verbally stereotyped way;

(4) *concrete operational*, which begins at about four years of age and in which blends of feelings are experienced and during which the child can describe complex, differentiated emotional states;
(5) *formal operational*, which begins during adolescence and during which blends of emotions are experienced, with more subtlety than previously and in a multidimensional way.

Within this framework, alexithymia is thought to leave the person at the preoperational stage. So an alexithymic person has a limited awareness of blends of feelings, a limited recognition of and ability to describe complex, differentiated emotional states, an inability to see emotional nuances and no awareness that the emotions of others are multidimensional.

Alexithymia is implicated in a wide range of physical and psychiatric illnesses, but it is not an all-or-none condition – it is not that everyone is alexithymic or 'normal'. Rather, alexithymia is continuously distributed across the population or, more properly speaking, across populations because it is cross-cultural.

Essentially, alexithymia refers to the degree to which a person has a dissociated emotional system. It is measured mainly by scales concerned with difficulty in identifying feelings, difficulty describing feelings and externally oriented thinking. Developmentally, it is related to insecure attachment. More specifically, suboptimal parental bonding and insecure attachment tends to be in the developmental backgrounds of those with heightened alexithymia. Through this, interestingly, it also appears to be related to eating disorders.

Theoretically, as Selway (2002) points out, there are number of unanswered questions about alexithymia such as: Does it reflect persistent aspects of psychological functioning? Is it a defence mechanism? Does alexithymia simply follow anxiety and depression? More basically, is alexithymia a clinical state or a more stable aspect of personality functioning? It could of course be both, much in the way that neurosis is a clinical state whereas neuroticism is a personality characteristic. Although Taylor and others have done much recent research on the interesting condition of alexithymia, a condition that is clearly central to emotional dysfunction, much remains to be done, both theoretically and empirically. As Selway (2002) argues in a possible model, the trait components of alexithymia and anxiety might interact to predict state anxiety, depression and the state components of alexithymia itself.

Conclusions

As emotion is central to life and general psychological functioning, so also is it central to mental disorder. It can dysfunction or dysregulate (in other words, it can go wrong), although exactly how it does so will probably vary from place to place (i.e., from culture to culture and from time to time). In spite of this, there are a few general theories of emotional disorder. Greenberg and Paivio list the ways in which emotion can go wrong, so in that sense they may be said to have a model of emotional disorder. However, Barlow (e.g., 1991) has a fully fledged theory of emotional disorder. It is clearly the most far-reaching of any of the general theoretical comments that are made

about emotional disorder. This conclusion includes those theoretical viewpoints that emphasize the links between emotional disorder and cognition (e.g., Mathews & MacLeod, 1994).

Barlow links panic disorders, anxiety (or anxious apprehension), depression, stress and dysthymia to produce a four-part view of emotional disorder (mania, temper outbursts, panic and depression) or, in emotional terms, excitement, anger, fear and sadness. Generally, he argues that if these emotions occur unexpectedly or inappropriately and are experienced as out of control, then emotional disorder may result.

Considering this theory in terms of Lazarus's (1991a, b) criteria for emotion theory, Barlow's theory fares well on definition, on finding a place for the various aspects of emotion and for considering both biological and sociocultural bases. He considers the place of cognition and lays much emphasis on the development of emotional disorder. Barlow's is essentially a causal theory. Certainly, Barlow's theory can form the basis for making specific empirical predictions, but it does not stand up so well against Oatley's (1992) criteria, although it is clearly concerned with function.

It is not only Barlow who stresses the importance of anxiety and depression in considering emotion within a clinical framework. These two emotions, or perhaps it is better to say emotional states, are integral to emotional dysfunction and are viewed by some theorists as inseparable. So, there are many theories of both, particularly of anxiety. In general, most of these theories fare quite well against the criteria put forward by both Lakatos and Oatley; however, again, it is Barlow's (e.g., 2000) theory of anxiety that stands out, although Mandler's (e.g., 1984) theory also has much to offer. What stands out most from these theories, particularly from Barlow's, is the importance of uncertainty or unpredictability in the generation of anxiety and then also, to some extent, uncontrollability.

There are three other major areas relevant to emotional dysfunction that have developed in recent years. The first involves stress and coping, which brings us once again very much into Lazarus's emotional bailiwick. He views stress, coping with stress and emotion as integral to one another. Consequently, all the positive features of his emotion theory may also be applied to his analysis of stress (and coping).

Moving onto analyses of the links between psychophysiological reactivity, psychosomatics and health, the most significant recent ideas (and empirical work) has come from Pennebaker. These ideas point to the practical and theoretical significance of narrative in understanding and dealing with emotional trauma. Interestingly, this parallels the interplay that Lazarus finds between stress and coping. From Pennebaker's perspective an analysis of the importance of narrative is inseparable from its therapeutic import, just as Lazarus's views on stress lead inevitably onto the positive significance of coping with stress.

Finally, a recent upsurge of interest, again both theoretically and empirically, in alexithymia brings us to what might be seen as at the core of emotional dysfunction. The inability to process emotional information, either from oneself or from others, must be seen as basic to emotional inadequacy and therefore at the root of many mental disorders. Although theory in this area is beginning to develop, it is still in its beginning stages.

Theoretical development then in the area of what has been termed here the 'clinical theory of emotion' is relatively recent and relatively spotty. The best theories

in the area (e.g., Barlow, Lazarus, Pennebaker) are far-reaching and have great potential. Arguably, of most interest about them is their inseparability from outcome in the sense of therapy. Theory in the area of abnormal emotion or emotional dysfunction interweaves closely with its therapeutic implications.

Summary

- Emotion is central to most mental disorder, although it has not long been formally recognized as such.
- Of the general theories of emotional disorder or dysfunction, the most profound is Barlow's, in spite of those that place a more obvious emphasis on the links with cognition.
- Anxiety and depression are fundamental to emotional disorder. They are interrelated, there being many theoretical accounts of each of them.
- The best theory of anxiety is, again, that of Barlow, stressing among other things the importance of uncertainty or unpredictability, and uncontrollability.
- Other areas that have shown significant theoretical development are: stress and coping; psychophysiology, psychosomatics, health and narrative; and alexithymia.
- It is impossible not to consider therapeutic implications when making theoretical analyses in the area of emotional disorder. Here, theory and therapy are integrally related.

A question of application

- How important do you believe anxiety and depression to be in daily life? Do you find it easy to recognize them in others? What do you look for?
- Can emotion itself ever be abnormal? Can it lead to dysfunction?
- What examples have you seen of psychosomatic disorders? How do you know that they have an emotional origin?
- Are the stresses of life dependent on circumstances? Are they different in family life and work?
- How do you control your own stress and the stresses of others?
- Should people be trained in coping with stress at school and at work?
- Do you know anyone whom you suspect to be alexithymic?
- What makes you think that they are? What makes emotions so extreme that they interfere with life at work or at home? What can be done to deal with this?

- Have you seen occasions in life in which unpredictability and uncontrollability lead to dysfunction? How important do you think this is in daily life?
- Do you think that it would help people in their lives if they kept emotion journals or diaries?

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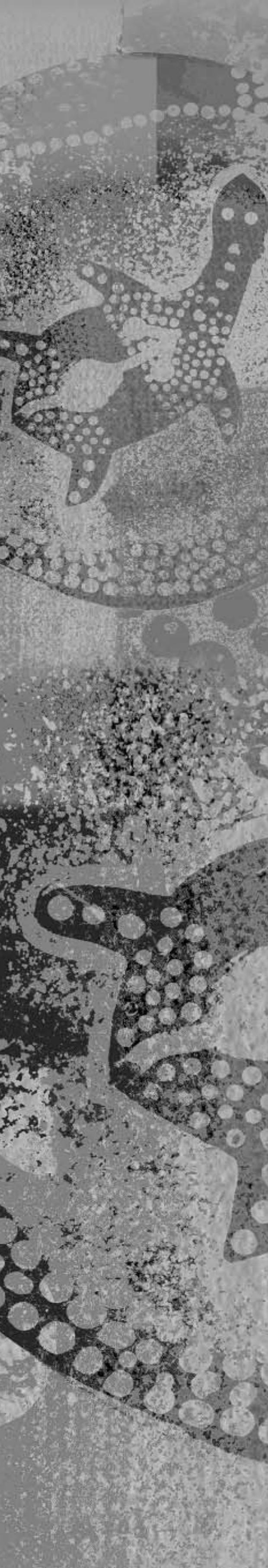

Chapter 12

The individual and the environment

... adult females are more intensely verbally and facially expressive than are adult males ...

L. R. BRODY, 1996

... females are more accurate at recognising emotion facial expressions than are males ...

L. R. BRODY, 1996

People are different from computers in two fundamental ways. People are aware, computers are not. And people experience emotions, computers do not.

D. C. FUNDER, 1997

Thus, an emotion is a set of procedures of the body and mind. It is something you *do*, not merely a set of verbal concepts or a passive experience.

D. C. FUNDER, 1997

... the emotions ultimately serving as a whisper of God in a biological world.

M. J. BOIVIN, 2001

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Some real life

Picture a little girl of about six. Her name is Rosie. She is playing outside with her brother, who is a year younger than her. It's not a particularly pleasant day, but it is after school and they have been sent outside by their mother for a while because she has some work to finish inside. As they went out, she said, 'Look after your brother, Rosie, won't you?'

Rosie and her brother are playing well enough, trying to set up a little shop at the front gate. They are laying out some treasures, special stones and oddly shaped sticks and particularly pretty leaves. They chalk some prices next to them on the concrete and gently try to entice passers-by to be interested. Rosie does the prices but they share the rest of the work.

Occasionally, a passing adult stops, charmed and amused at what they are doing, and chats to them. One woman even buys a stone from them, 'to use as a paperweight'.

There is a lull and then along comes a slightly older boy, who lives a few houses away, shuffling along with his hands in his pockets. He stops and looks at their 'shop' for a minute and then kicks it to pieces, scattering the stones, breaking up the sticks and the leaves and scuffing out the chalk marks. Rosie's brother goes red in the face and runs at the boy, arms flailing. The boy pushes him away roughly, so he falls over and grazes his knees and hands. He starts to cry and the boy strolls away.

Rosie is hurt and bewildered, but immediately goes to her brother, puts her arms round him and helps him up. As she starts to tell him that everything will be alright, their mother comes out, having seen what has happened. She says, 'That's a good girl, Rosie, helping your brother like that. Who did it? Was it that nasty boy up the road? You must really feel upset.' All the while she is cuddling Rosie's brother and making sure that his grazes are not bleeding too badly.

You live in a city and are so caught up in the pressures of work and daily life that you 'don't get out enough'. You decide that you have to take a break and spend some time in the countryside. You are not sure why, but it simply seems to be the right thing to do, to become refreshed and revitalized. Unused to the countryside experience, you don't know what to expect, but know that it will be different from the concrete jungle.

You go off on a three-day trip up into the mountains with a friend who spends much of his spare time in such places. You go for several walks, see a few other people doing the same thing and begin to lose your initial nervousness and to feel invigorated.

On the final morning, your friend suggests a slightly more ambitious hike higher up into the mountains. The weather is superb and you set off enthusiastically. It is still a hike rather than a climb, quite steep at times, but nothing to worry you unduly. There are very few people about and within three hours or so you seem to have gone a long way. Even the air seems to be slightly colder and thinner than around the campsite and the unaccustomed exercise begins to make itself felt.

You reach an obvious resting place, high on a huge rounded part of the mountain. The rock is bare and smooth and the view is wonderful, trees, mountains and even snow in the distance. Once you stop walking, everything is still and very quiet. You sink down, gratefully, lie back and enjoy the moment. Your friend says that if you have had enough, he will go on for a few minutes, maybe half an hour, and then come back and find you. You agree and lie back, thinking about how far away work and the daily grind seems to be.

You drift off into a half-sleep and snap out of it some time later. Some 45 minutes have passed and there is no sign of your friend. You stand up, stretch and decide to walk just to the top of the rise, still within sight of your resting place, just slightly worried about a feeling of sudden aloneness. You walk on and the roundness of the rock starts to fall away steeply. There is still no sign of your friend. You stop and begin to think that it would be so easy to lose your footing. If you slipped, there would be nothing to hang onto, the ground seeming to fall away to nothing.

Your knees start to tremble and you again sink to the ground, pressed back against the rock, trying to dig in your heels. Your surroundings, although still beautiful, begin to take on an air of menace. Exhilaration and awe start to give way to a sense of foreboding and the pressures of the city seem curiously engaging. You have thoughts of God and 'being good', the sort of thoughts that you haven't had since childhood.

Emotion is so integral to the human way of being that it interacts both with other aspects of the person and with the environment. So, a further way in which emotion can be understood is through our own interactions with our personalities and with the natural environment. This chapter concerns the search for the meaning that might lie behind emotion as it has been represented theoretically in possible interactions with personality (and the related matters of sex and gender and even the possibility of computerized emotion – artificial emotion rather than artificial intelligence). After this, the significance of our emotional reactions to the natural environment will be considered, and there will be brief mention of the links between emotion and spirituality. This chapter brackets with the next, in which the links between emotion and the socially constructed rather than the natural environment will be explored through work, sport and the arts.

Personality

Pervin (1993) points out that there is no generally accepted theory about the links between emotion and personality from a psychoanalytic or a phenomenological viewpoint, although of course there are both psychoanalytic and phenomenological theories of emotion. However, almost every theory of personality makes some passing reference to affect or emotion.

Mandler (1984) makes one of the earlier analyses of emotion–personality links. He suggests two relevant approaches to analysing individual differences. The first is to devise personality scales that might characterize individual emotional reactions. The

second is to search for particular cognitive systems within a culture that would allow prediction of individual emotional responses.

Personality tests provide one measure of cognitive interpretation. H. J. Eysenck, for example, discusses extroversion/introversion and neuroticism in terms of conditionability and emotionality. Mandler argues that extroversion/introversion characterizes people according to their tendencies to see events as punishing, threatening or frustrating, and that neuroticism (emotionality) is concerned with the amount of arousal.

Mandler also takes an entirely different perspective to that of traditional personality theory on the question of individual factors in emotion. He considers the matter of a situation becoming emotionally significant when it is recognized as being personally relevant. An example would come from the reaction we have on seeing an accident. It is graded, depending on the extent of our involvement with the victim. Projection of the self into the situation leads to this effect.

Similarly, Mandler argues that emotion might be related to the degree of visual imagery. Generally, visualizers are hypersensitive and verbalizers are calm and equable. Here, he is really beginning to consider cognitive style and emotion.

Bertocci (1988) is one of the few theorists to attempt to describe a close relationship between emotion and personality, although his writing is a little difficult to penetrate. He suggests that the person is a complex unit that both identifies itself and, through interaction with the environment, is constantly moving on. The person is laden with hedonic tones, which are important to survival. These are not in themselves wants or emotions, but they do influence the expression of wants and emotions. Bertocci argues that emotions should be regarded as part of the meaning of the quality of survival. He regards it as important to recognize primary, unlearned emotions.

For Bertocci, primary emotions are identical with motives. They are emotive–conative predispositions, or unlearned urges, or unconsciously experienced purposive thrusts that do not have behavioural or physiological aspects as necessary conditions.

This theory lays great emphasis on the importance of self-conscious experience in understanding primary emotions and suggests that behavioural/physiological accounts are inadequate. Bertocci believes that through conscious experience it is possible to understand the dynamics of unlearned motivation. He employs what he terms *respect–deference* as his main exemplar of primary emotion and uses this to portray emotions as 'conative thrusts'. Crucial to the experience and modification of these primary emotions are cognitive developments. Moreover, primary emotions are determined by the meaning evoked in a situation, and although the emotion, or motivational disposition, is unlearned the meaning may be learned.

Bertocci then goes on to describe what is probably the most singular list of primary emotions to have ever been suggested. They include, for example, tenderness–protection, zest–mastery, sympathy–succour, wonder–curiosity and creativity–enlivenment. This analysis is in terms of the adaptive value of the emotions and is couched very much in terms of what a person can become. In general, there is much wanting about this theory (see Strongman, 1990), but at least it makes an attempt to link emotion and personality.

Writing at much the same time as Bertocci, *Strelau* (1987) considers the links between emotion and temperament, the various roles played by emotion in temperament research depending on emotion being thought of as a trait, a specific process or as a behavioural characteristic. Theoretically, the trait of emotionality can be seen as a

dimension of temperament or *the* structure of temperament. Or emotional behaviour can be seen as one of many types of behaviour that is a reflection of temperament in intensity and time. Or, finally, emotion can be seen as part of a specific affective–motivational process that helps to regulate arousal, thus having an important role in the arousal-oriented dimensions of temperament.

During the last few years, various researchers have begun to pay more specific attention to the links between emotion and personality, rather than simply assuming that they exist and leaving it there. For example, *Rusting* (1998) makes a theoretical analysis of the emotion-congruent processing of affective stimuli in relation to stable personality traits and temporary mood states. She suggests that there are three relevant conceptual frameworks:

(1) *traditional* – mood-congruency and trait-congruency affect emotion-processing separately;
(2) *moderation* – personality traits interact with mood to influence emotion-processing;
(3) *mediation* – personality traits are related to propensities to mood states that in their turn influence emotion-processing.

She also draws three conclusions from her thorough analysis. First, that the literature that puts these areas together is inconsistent. Second, that the moderation and mediation approaches are better for dealing with emotion-congruent processing because they permit a good specification of the relations among traits, moods and emotional experience. Third, that the mood-congruent and trait-congruent literatures when combined begin to show how emotional variables influence everyday information-processing.

Gross, John and Richards (2000) are more specific in their approach. They take a personality viewpoint of the dissociation of emotion expression and emotional experience. They characterize positive emotional experience as a dispositional expressivity related to emotion-expressive behaviour. For negative emotion the situation is more complex. People low in expressivity experience negative emotion differently from those who are high in expressivity. They are more attuned to emotional suppression as a technique of emotion regulation, although this does not necessarily happen consciously.

People low in expressivity dissociate emotional expression from emotional experience, having an internalized emotion regulation pattern that is automatically evoked. This may be because those low in expressivity have unique skills in emotion suppression. The general theoretical point here is that any account of the expression/experience link in emotion must not only look at whether the emotion is positive or negative but also look at it from the perspective of dispositional expressivity. This puts at least this aspect of emotion regulation squarely in the domain of personality.

Taking a broader approach, *Consedine* (1999) regards the emotion–personality link as integral to the manner in which emotion influences behaviour. His model suggests that an activating motive leads to appraisal (which is influenced by environmental affordances). This in turn leads to an innate emotion behaviour attractor (in a systems theory sense), which eventually leads to overt behaviour. Personality processes inevitably come into play during the link between the emotion and the overt behaviour. These processes are: inhibitions, conscious awareness of the emotion behaviour attractors, motives, situations, consequences, learning and habits, beliefs and knowledge of

situations, behaviours and consequences. So, this very broad perspective sees personality as mediating and influencing the link between emotion and behaviour. Or, to put it another way, the link between emotion and behaviour occurs within the domain of personality.

Most recently and most fully, *Carver*, *Sutton and Scheier* (2000) attempt a thorough conceptual integration of behaviour, emotion and personality. They start by arguing that behaviour can be viewed, in a rather old-fashioned sense, as coming down to approach and avoidance. Underlying this are appetitive and aversive motivational systems that regulate behaviour, sometimes called behavioural approach and behavioural inhibition. These systems have distinct neural substrates and are linked, respectively, to positive and negative emotion, which is cortically lateralized. They are also linked to discrepancy-reducing and discrepancy-enlarging feedback processes.

They maintain that there is also a second layer of feedback systems that both monitor and manage how well people move toward goals and away from anti-goals. Success is compared with a criterion and the result is emotion, a low rate leading to negative emotion and a high rate to positive emotions.

Various discrepancies occur that influence emotion-processing. Matters become confused by ‘ideals’ and ‘oughts’. There are desires and hopes versus duties, responsibilities and obligations. If there is a discrepancy between the actual and the ideal self, the result is dysphoria and dejection. If there is a discrepancy between the ideal and the ought self the result is anxiety. So, approach and avoidance underlie the two types of self-regulation, each with its own feeling quality.

Carver et al. also make the point that there are two systems of emotionality: positive and negative. They lie on separate dimensions.

All these processes together combine in personality, which represents the ebb and flow between them. So the core of their argument is that appetitive and aversive self-regulation processes, in which there are huge individual differences, are fundamental to personality. They further suggest that the dimensions of positive and negative emotion in personality relate to extroversion and neuroticism. For example, extroversion is a dimension of individual differences in the tendency to approach incentives, whereas neuroticism is a dimension of individual differences in reactivity to threats and to avoid punishers.

That emotion and personality are intertwined in the broad sense is indisputable. However, it is only with these recent ideas that the nature of the enmeshment is being explored.

Sex

Sex had to be discussed somewhere in this book, and indeed passing reference was made to it in Chapter 8 on love. However, it is also considered presently because it is bound up with so many emotional reactions and for many people affords them what are among their most telling emotional experiences as individuals. And of course it is related to personality. Two of the more illuminating discussions of sex and emotion have been made by Izard (1991) and Mandler (1984), and it is largely their ideas that will be considered here.

Links between sex and emotion are forged both biologically and psychologically. Izard points out that the sex drive can dominate both cognition and action, an effect enhanced by interest or excitement. The result is urgency. In his view, if interest is combined with joy and particular emotion-cognitive structures, a possible result is love (see Chapter 8).

An emotion such as fear is incompatible with sex, leading to various inhibiting physical effects in both males and females. Such fears appear to be socioculturally determined, either being concerned with the fear of being discovered in clandestine sex or the fear of failure in any sort of sex, clandestine or otherwise. Any such reaction depends on self-doubts that in turn rest on a range of stereotypes.

Although attitudes toward sexual behaviour have changed in Western society during the last few decades, guilt concerning sex remains to some extent. Izard suggests that this may not be a learned relationship. He argues that guilt about sex tends to follow from ideas about commitment and responsibility that are adaptively important. However, if sociobiologists are right, then males should feel less guilt than females about sexual encounters that society at large might frown upon since they might well be increasing the chances of spreading their genes.

More generally, Izard sees strong links between sex, emotion and cognitive structures. For example, sexual attitudes show variation with age, perhaps due to socialization and parental modelling. Even more generally, societies change from time to time with respect to their acceptance of sexuality.

Mandler (1984) rests his analysis of sex on emotions being determined by an interplay between sympathetic arousal and cognitive interpretation, although with sex parasympathetic arousal also has a role to play. Interestingly, Mandler argues that strongly aroused (sympathetically) love may well inhibit the early stages of sexual arousal.

Mandler also considers possible cognitive structures that might relate appraisals to lust and love. For example, being pushed to love a person rather than to lust after that person may inhibit the sexual response. Whereas, sexual responses may be related to persons with whom such a relationship is not possible. In his view, if different occasions and persons, and hence different cognitions, produce love and lust, whether this be culturally or individually determined, there will be difficulties. Sexual arousal will be problematic and interpersonal relationships impaired.

Clearly, the emotional aspects of sex are a very significant part of life, although they have been under-researched and are not well understood. However, it does seem as though they may be distinct in their arousal and its interpretation from emotions experienced in other spheres. Whatever theoretical approach is made to an understanding of the emotional aspects of sex it is clear that a major role will have to be given to cognition and to the individual differences that are based on personality.

Gender

At the folk psychology level, differences between women and men seem perennially fascinating. They appear to be among those facets of individual differences that people rarely tire of discussing. From a scholarly perspective, the simple recounting of possible

sex differences in emotion (or indeed anything) is of little account. However, the pervasive stereotype is interesting in its own right. The stereotype has it that in Western society, in comparison with men, women are illogical, emotional and at the whim of their feelings, which they find difficult to hide.

Shields (1991), in an analysis of recent empirical studies in this area, makes the important methodological or terminological point that a distinction should be drawn between sex differences and gender differences. Sex differences are concerned with the biologically based distinctions (say, between primary and secondary sex characteristics) and gender differences refer to matters that are psychologically or culturally determined. She argues cogently for a model that emphasizes gender-in-context rather than sex-differences, and so looks at matters related to social and cognitive influences. This suggests a far more searching theoretical analysis than might be given by a simple rather descriptive account of *sex* differences (i.e., differences listed by reference to biological markers).

Within this type of context, Brody and Hall (1993) and Brody (1996) provide penetrating reviews of gender differences in emotion that deal both with everyday beliefs and the results of empirical research. They make the point that the findings are consistent with a perspective that suggests that gender differences in emotion are adaptive for the differing roles played by men and women in Western culture. It seems as if each sex is socialized to adapt to its own gender roles and that these are reflected in dealing with particular emotions in particular ways.

The general stereotype that seems to hold is that women are more emotionally expressive than men and that they also express sadness and fear more than men, who in turn express anger more readily than women. Females are more expressive than males, are better at the recognition of facial expression and report more intense emotional experiences than males. Such differences are not surprising if emotions are seen from an adaptive perspective. Social goals vary for women and men, depending on age, socialization, socioeconomic status, personal history, culture and of course underlying biological predispositions.

In accounting for gender differences in emotion, Brody and Hall draw attention to a number of factors. For example, peer interaction that is differentiated between the sexes leads to a difference in socialization. Such differences are also enhanced by families and, for example, the amount of encouragement there is to express emotion (for girls) and inhibit its expression (for boys). They argue further that such effects are added to by language differences, girls and boys learning to use language in distinctive ways.

Brody (1996) suggests that gender differences in the quality of the boundaries between mother and child cause gender differences in emotional intensity. In general, mothers are more intrusive with their daughters than with their sons. Such boundary differences might also be due to gender differences in the emotional intensity of children, with the boundaries being used by parents to regulate the child's emotion.

There are two causal directions for this argument. Parental intrusiveness might be an attempt to constrain intense child emotion, or such intrusiveness might stimulate emotional reactions. Parents and children might be reciprocally influencing each other. Actual differences in intrusiveness seem to be dependent on: temperamental differences in emotional intensity, parental expectations about the appropriateness of their children's emotion and the emotional intensity of the parents.

In this context, mothers may be trying to influence more intense emotion in their daughters than their sons through the relative permeability of the mother–daughter boundary. Stereotyped female gender roles may lead to the socialization of emotional expressiveness in daughters being important to mothers.

In general, then, Brody and Hall regard gender differences in emotion to be based on socialization patterns within the family and peer group and to develop through a series of transactional relationships between parents and children. In general, in Western society women *are* held to account more for their feelings in public, whereas men are encouraged to deny emotions, both in themselves and others. It is interesting to note that differences accounted for in this way, via socialization practices, must be mediated by cognition and must in turn be reflected in personality.

Although possibly interesting, what has been said above about gender and emotion does not penetrate very far. To deal properly with this topic it is also appropriate to consider feminist theory, although this book is not the place in which to expand on it at length. However, it is important to point out that it is beginning to have an impact on emotion theory (and research). From a psychological perspective, there have been far more men than women who have studied emotion (although my impression is that there are more women who work in this area than might be found in perception, say). This might be seen as a strange state of affairs since in folk theoretical terms emotion is regarded as more in women's domain than men's. Of course, the history of psychology reflects the development of science, and, traditionally, science is men's work. Women who do it must do it in the same way; science is, after all, science.

Or is it? One of the many things to emerge from feminist scholarship (although this is not its only genesis) is that science can take forms other than that which stemmed from logical positivism. In an extremely stimulating book, *Emotion and Gender*, Crawford, Kippax, Onyx, Gault and Benton (1992) demonstrate this and in so doing provide insights into emotion that fall somewhere between those that come from traditional science and those that come from folk psychology.

The major contribution made by Crawford et al. rests on the methods they used in their research. These centred on memory work that involves a group of researchers who explore and interpret and re-explore and reinterpret their memories in a particular area (anger, for example) in strictly determined ways. The interpretations are not guided by an experimenter, all of the researchers/memory workers playing equal and reiterative parts.

This is a technique in which there is no distinction between experimenter/researcher and subject. A group is formed and memories are recorded under precise instructions, but with no attempts at interpretation at this stage. Then all the memories are read and analysed by the group as a whole, again under strict guidelines such as looking for similarities and differences. Then it is back to more memories. Over some months or years, the memories are theorized about and the theories themselves compared and discussed. In all, it is a sort of collective recursion, both of memory and theory.

Crawford et al. end their book by discussing how emotion is gendered; they make their theoretical as well as their methodological contribution. For example, it is clear that one of the most basic aspects of women's emotion is social responsibility. They grow up to be emotionally self-reliant, but highly responsible for the emotional

well-being of others, both men and women. There also appears to be a huge difference for men and women that depends on where their emotional experiences occur. For the women, inside the house/home is linked with the positive aspects of emotion, such as warmth and happiness, whereas the outside is cold and hostile. For men it is quite different, their interesting emotional challenges being mainly outside. As Crawford et al. point out, these differences are interesting because much of the violence that is perpetrated on women occurs in the home and is done by men.

They also argue that women and men are placed differently with respect to the ethical systems of justice and responsibility, so they construct their emotions differently:

> Men expect and take for granted that they will be looked after and cared for; it is expected of them that they will make the world a just place to live in. Women expect and take for granted that the world is a just place; in turn they are expected to be responsible for the well-being of others. Women have little control over issues of equity and justice, and are forced to rely on others; hence their concern when these expectations are not met.
>
> J. CRAWFORD, S. KIPPAX, J. ONYX, U. GAULT & P. BENTON, 1992, p. 192

From the perspective reached by Crawford et al., not only is morality important in the construction of emotions but so also is power. From the viewpoint of women's emotions the predominant matter is powerlessness and the pain that this causes. Then the socialization of women's emotions is characterized by an increasing sense of power as self-reliance develops. The most significant power of all comes from changing the agenda, changing the way in which emotions are thought about and studied, for example. Crawford et al. have gone a long way toward doing this.

To take just one other and somewhat applied perspective in this area, Shibbles (1991) argues that rational–emotive therapy (RET) (as a particular form of cognitive–behaviour therapy) is particularly suited to feminist therapy. He characterizes RET (and the cognitive philosophical theory of emotion) as resting on seven main points:

(1) emotions are more than feelings;
(2) they are cognitions that lead to feelings;
(3) our emotions stem from our own assessments;
(4) the environment does not just cause emotions passively;
(5) faulty thinking leads to negative emotions;
(6) if we change our assessments then our emotions will change;
(7) emotions only change through a change in assessment, they cannot simply be released.

Within this framework, an emotion such as anger is seen as being non-adaptive. It is harmful and irrational. By contrast, Shibbles characterizes some feminist thinking as being concerned with having women 'get in touch with their anger' and express it as though this were useful. Shibbles suggests that this is counterproductive in that it simply generates more anger and is not based on an appropriate theory of emotion. Shibbles analyses blame and humour in a similar way.

The general message here is that Shibbles believes that RET and the philosophical

cognitive theory of emotion are very similar and contrast with feminist notions about emotions such as anger. The vaguely therapeutically based goals of feminists, and others, might be better realized with a cognitive theory of emotion than with a hydraulic type of theory that is based on an emotion such as anger being something that builds up and has to be released. In passing, it might be noted that this is a curiously 'male' theory.

To conclude this discussion of emotion and gender it might be interesting to return to Shields (1991). She states:

> . . . that the greatest effect of gender lies less in what each sex knows about emotion than in what each sex is likely to do with that knowledge, particularly in contexts in which gender is salient.
>
> S. A. SHIELDS, 1991, p. 238

She argues strongly that beliefs about gender should play a part in emotion research. The matter of particular note concerns links between emotionality and the constructs that underlie expressiveness. For example, there is an expectation that men and women express different kinds of emotion. Is this based on differences in facial expression or not? In general, to study emotion from a gendered viewpoint demonstrates that one of the most significant influences on emotion is sex. Finally, for a current and much deeper discussion of gender and emotion than is possible here, see Shields (2002).

Artificial emotion

One of the quotations at the start of this chapter suggested that computers differ from human beings in that they are neither aware nor do they experience emotions (Funder, 1997). The artificial simulation of emotion is a different matter from the artificial simulation of intelligence or cognition. Not only does it have implications for what it is to *experience* (feel) emotion but also for the matters of individual differences in experience and hence the links between personality and emotion. In that sense, may computers be said to have personalities?

Frijda and Swagerman (1987) ask the question: Can computers feel? And begin their answer by defining emotions, for these purposes, as '. . . the manifestations of a system that realises multiple concerns and operates in an uncertain environment.' This, like so many of the other extant approaches to emotion, is very much an adaptive, survival-oriented scheme of things, with emotions seen as safeguarding our goals.

They go on to list five properties that must be held by a subsystem that is concerned with 'concern' in a larger system:

(1) feelings of pleasure and pain;
(2) the importance of cognitive appraisal;
(3) innate, pre-programmed behaviours;
(4) constructed plans for achieving emotion goals; and
(5) behavioural interruptions, disturbances and the impulse-like priority of emotion goals.

Using these five properties as specifications, Frijda and Swagerman describe a computer programme and argue that the operator–machine interaction on which it is based shows many of the characteristics of emotional behaviour. They even suggest that it can build up emotional experience and even name such experiences. Interestingly, Hille (1999), who believes that emotions can be computer-simulated, also takes a very behavioural approach. She argues that individual emotions can be characterized using the four dimensions: amount of activation, the tendency to be active or passive (which she terms 'externality'), the precision with which things are done (resolution) and the degree of awareness of background. Furthermore, she manages to portray each of these dimensions in the computer display of a number of emotions characterized by moving circles.

Although these are interesting attempts at what might be called artificial emotion, they are not convincing. This may simply be because they do not seem to capture the richness of emotion, but this may also be another way of saying that they are not managing to persuade computers to 'feel'. As emotion is so intimately bound up with personality, it may well be equally difficult to imbue computers with personality, in spite of no doubt being able to create them with individual differences.

The environment

It is indisputable that the environment, be it natural or artificial (see Chapter 13), has an emotional impact on the individual. Even though this has been a relatively neglected area of concern, it is clear from shared personal experience that the environment can have profound emotional effects. These can be extremely difficult to describe when they reach the ineffability of the sublime and even shade into the spiritual (see below).

There have been two theoretical approaches to this area. The first comes from Mehrabian and Russell (1974) from a background of environmental psychology. Their theoretical basis was generated from the development of measures to assess emotional and approach-avoidance reactions to the natural world.

They consider the emotional aspects of the environment–individual reaction to be intervening variables. They further assume that pleasure, arousal and dominance (as measured by semantic differential scales) are the three basic human emotional reactions. They argue further that approach-avoidance reactions to the environment also come from the emotions a person brings to the situation.

Mehrabian and Russell develop and test various hypotheses concerning approach and avoidance. From this work they argue that the pleasant–unpleasant dimension has traditionally been afforded too much importance, whereas arousal has been relatively neglected. In this context, their major point is that in the modern city environment there has been a rapidly accelerating increase in the rate of information that requires processing. Such environments are massively arousing, a condition that is likely to be so stressful as to be maladaptive. Prolonged information overload leads to fatigue and exhaustion; it is too much to cope with. This, of course, contrasts with the relative emotional calm of the natural world.

This type of analysis is supported by the suggestion that high arousal generated by dwelling in crowded, unpleasant places makes interpersonal relationships suffer to the

point of aggression and violence. It is as if the negative feelings generated by the environment are generalized to the people within it.

Coming from a geographical background, Ulrich (e.g., 1983) offers a different type of analysis of emotional responses to the natural environment. He views emotion as being the basis of conscious experience in any environment.

Ulrich bases his theory on the assumption that emotions are adaptive and moves on to the question: What are the adaptive functions of emotional reactions to the landscape? If people respond to parts of the landscape with feelings of aesthetic pleasantness, is this significant for survival? There are three elements to the theory:

(1) internal processes that generate emotion;
(2) adaptive functions of emotions in the natural environment;
(3) emotions in this context are related to behaviour.

The assumption is also made that thought or cognition, as mediated in the neocortex, and emotion, as mediated in the limbic system, are separate systems.

Ulrich's theory assumes that preferences in the natural environment are for gross configurations, gross depths and general classes of things. The process of emotional appreciation occurs very quickly, even before proper identification has occurred, particularly if water or vegetation are involved. There is a constant interplay between emotion and cognition. However, in Ulrich's view it is only elementary cognition that is involved in most natural environments.

Emotional reactions to the environment act as motivators (arousal changes that lead to behaviour). Strong positive emotions sustain behaviour, adaptively. Or they might lead to physiological restoration through feelings of pleasantness, interest or through the inhibition of stressful thoughts. All of which may well lead to an increased sense of competence.

To Ulrich the basic question, perhaps prompted by the work of Izard that has clearly influenced him, is whether or not aesthetic, emotional preferences are culturally determined and hence different between various societies. His studies tend to show similarities across cultures.

Generally, Ulrich's theory is well constructed and could prove to be a useful foundation in this area of research. It is clear that the broad environment has an emotional impact on the individual, something which is an important part of emotion in everyday life. Beyond this, there appears to have been little theoretical development in this area.

Spirituality

Spirituality and religion are traditionally difficult topics for psychologists. There are a number of reasons for this. One is that the assumptions of science are quite different from those of religion and many (perhaps most) of the psychologists of the previous century and what has passed of the present century have been very concerned that their discipline be regarded as a science. Another related reason is that the spiritual

seems too intangible to be able to study empirically, shading into the mystical and the paranormal – the sort of thing that would 'get psychology a bad name'.

It is indisputable, however, that there are emotional experiences such as awe, wonderment, a sense of menace or evil, a feeling of exaltation and so on. Such experiences seem to be to do with our sense of things greater than ourselves, perhaps of the ineffable. And they occur either in the natural environment, often as part of the wilderness experience, or in relation to religious matters. It is with such experiences that emotion overlaps with the spiritual. To ignore this is to ignore an aspect of emotion that is clearly of great significance in the lives of many people. Oddly enough, it appears to be the antithesis of the idea of artificial, computer simulated emotion and yet is linked to it by the interaction of emotion and personality.

In general, theory in the area of emotion and spirituality is hard to come by and potentially could be very loose. However, a recent exposition by Boivin (2001) makes an extraordinarily well-worked thesis that places an evolutionary account of emotion within a theological, and hence spiritual, context.

Stressing the negative emotions in particular, Boivin argues that evolutionary psychology is well able to deal with the three levels or stages of causality that might be seen as crucial to emotion (or indeed to any human experience): the genotypic, phenotypic and cultural or social. He points out that, although there is neuroscientific evidence for brain structures that have developed in response to what might be called an evolutionary imperative, '. . . universal human feelings of moral sensitivity, conscience, awareness of the transcendent (i.e. God) and aesthetic wonder or beauty' are not thought to be easily accounted for in this way. Boivin seeks to make a rapprochement between an evolutionary account of human emotions and an account that places them in the context of a Creator.

His theory is predicated on a biblical account of human negative emotion. This began with shame, guilt and fear that was generated in the fall from grace (i.e., from emotions of harmony and love) by Adam and Eve. God's reaction to this was to inflict emotional pain (and the possibility of pleasure) on human beings thereafter. This is explicable within an evolutionary context. 'Emotional need for one another, in particular, became foundational for the fundamental human adaptive advantage – that of social cooperation in order to assert dominion over creation.' So gender differences leading to optimal reproductive advantage came into being.

Furthermore, Boivin argues that God, through creating Noah's family, gave a new genotypic basis to the developing human brain. Then, God had an effect on language, thus again helping to make conflict and emotions part of the struggle between human social groups.

In short, the biblical story provides a basis in the essential human condition for the human emotions and the brain structures that must necessarily have developed to support them. This gives an origin, meaning and purpose to the biological mechanism of human emotion as they are viewed within an evolutionary framework.

Against this background, Boivin (1991, 2001) proposes what he terms a 'Hebraic model of the person' aimed at integrating scientific and theological accounts of emotions. The particular distinction on which the theory is based between human biological (evolutionary) nature in its '. . . fallen or maladaptive state . . .' and exactly the same processes in God's kingdom where they are complete and whole. Within this model, a person's emotion holistically comes from the social context that is in turn made up of

individual history and the biogenetic history of the group as it has adapted at the genotype, phenotype and cultural levels. This means that human beings are social organisms that exist within a natural order. So, in general, the Hebraic picture of emotion (as but one aspect of being human) places them in a naturalistic context, although viewing God as the creator of this physical order.

To summarize, emotions as they exist are seen as adaptations that have occurred within an evolutionary framework that has been generated by the early conditions that God imposed on humanity after the fall. However, the eventual goal or purpose is that 'Human cognition and emotion will blossom forth fully into what they were intended to be by God in a resurrected state within a restored community and ecosystem' (Boivin, 2001, p. 20).

Finally, it is worth pointing out that this brief theological or spiritual look at emotion is very much from a Judaeo-Christian perspective. It goes beyond present purposes to consider Eastern religious philosophies such as Buddhism. However, within such systems emotion would have to be accounted for in quite different ways. If there is no self, for example, emotion might well be seen as part of a collective consciousness, which might place it entirely within a sort of spiritual realm.

Conclusions

This is perhaps a slightly strange, mixed chapter, although the guiding theme purports to be the way in which the individual and the environment link through emotion. This melding also brings us into the areas of artificial, computer-simulated emotion and the even more intricate question of the spiritual aspects of emotion.

Some of the theoretical contributions made with respect to emotion and aspects of personality are of considerable use and interest. The theories of both Izard and Mandler provide reasonable summaries and explanations of the links between emotion and personality. Their focus is good, and they have a clear heuristic value. They do not, however, lead to obviously testable predictions.

Bertocci's theory, although internally consistent and quite an explanatory tour de force, is so at variance with most of the other theories of emotion as to be difficult to compare. It is also couched in terms from which it is almost impossible to derive predictions. At times it is so difficult to penetrate that even its heuristic value, which on the face of it should be worthy, is not worthy.

More searching than these theories, however, is Carver et al.'s attempt to integrate action, emotion and personality through the appetitive and aversive motivational systems. Their theory is rich and coherent and forges a genuine link between emotion and personality.

The theoretical accounts of emotion and sex have not progressed far enough to add much to our understanding. However, recent analyses, particularly by Brody, of the methodological and conceptual issues surrounding emotion and gender have added considerably to conceptual understanding. For example, her ideas on the influence of parental boundaries and intrusiveness on the gendering of emotion are especially useful.

Perhaps the most interesting theory of all in this area comes from Boivin's unlikely attempt to put together the evolutionary theory of emotion with a theological

account. The result is a rich and interesting theory that nevertheless falls short of 'good' theory in science from almost any perspective. It certainly does not lead to any testable predictions unless a way can be found of gathering data from the hereafter.

Interestingly, the two major concerns that fall out of the theories to do with personality reflect the biological and the social. The concept of adaptivity arises frequently as does cognition, of course, but mainly through the possible effects of socialization.

Moving on to ideas about links between emotion and the environment evaluated at the broad level, the theories give reasonable accounts, but are relatively restricted. Ulrich's, however, certainly has both heuristic value and leads to testable predictions. Again, notions of adaptivity and cognition are given a central role to play, but emotion is also conceived of as integral to conscious experience and is viewed as an intervening variable.

In some ways, Lazarus's (1991a, b) prescriptions for emotion theory do not apply readily to the theories summarized in this chapter. They are not concerned with the causes of emotion, nor particularly with emotion as an independent or a dependent variable. They are more to do with emotion as a variable that might intervene between the person and the natural environment or that might even intervene between the person and him or herself.

So these theories meet very few of the criteria, even in some cases eschewing behaviour and physiology altogether, for example. However, they do consider the bases of emotion in biological adaptivity and as socially constructed, and they do all have an absolutely central place for cognition. Moreover, some of them become concerned with consciousness and with the links between emotion and motivation.

Similarly, Oatley's (1992) criteria for emotion theories are less applicable to the theories under consideration here than they have been in previous chapters. Certainly, they tend to be concerned with the functions of emotion and with the evaluative aspect of emotion as it is to do with goals. They also touch on the possible unconscious causes of emotion. The other criteria are irrelevant, however. Also, as has already been noted, it is difficult to derive specific predictions from these theories, although Ulrich's, Mandler's, Carver et al.'s and Brody's should perhaps be seen as exceptions to this. Moreover, their capacity to deal with more evidence is indeterminate. Mandler's and Izard's clearly can, but many of the others are expressed in such relatively vague terms that they could either be seen as embracing any other evidence at all, or none. Of course, they might nevertheless have good heuristic value at least as far as stimulating new thought is concerned. This clearly applies to Boivin's Hebraic theory.

Summary

- It has long been assumed that emotion and personality are linked, but attempts to explore the links have only recently begun.
- Relevant in this context are emotion, sex, gender, computer simulation of emotion and spirituality.
- Of the theories that look at the engagement between emotion and personality, Carver's, which is couched in terms of appetitive and aversive motivational systems, goes furthest.
- In Western cultures, gender differences in emotion are marked and, as Brody has shown, come about through the processes of socialization.
- Feminist theory has begun to have a significant impact on both theory and empirical research in our understanding of emotion and gender.
- Ulrich's theory of the emotional impact of the environment and Boivin's theory placing an evolutionary analysis of emotion in a theological context are thought-provoking.
- The biological, the social and the cognitive all come through as powerful themes in the person–emotion–environment interphase.

A question of application

- Are the gender differences in emotion obvious in everyday life? Should such differences be taken account of in schools and perhaps taught more formally?
- Do you think that the differences in people's personalities are really differences in emotion? What is there to personality that is more than emotion?
- Do you have different emotional reactions toward women and to men? Do you express your emotions differently to women and to men? Why?
- Do cities prompt different emotional reactions than the countryside or the wilderness? What is the difference and why might it be important?
- List the circumstances in which you have experienced awe, wonderment, menace or a sense of evil? What seems to characterize these circumstances? Can they occur in daily life?
- What are the emotions involved in spiritual experiences? Are such experiences important in daily life or work?
- Have you seen instances of people being intrusive on the emotional life of others? What effects does this have? How can such intrusiveness be dealt with if it is unwelcome?

Further reading

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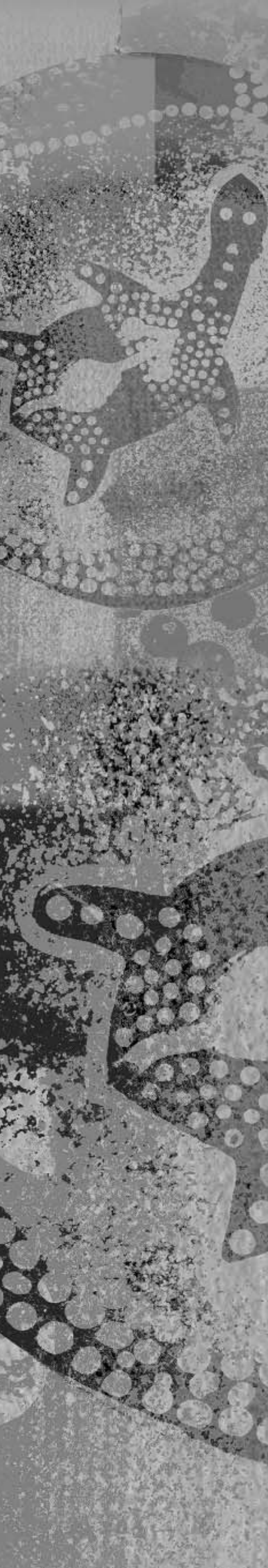

Chapter 13
Emotion and culture

. . . the ability of music to modify mood is a fact of everyday life.

J. PANKSEPP, 1995

It is a fact about many of us that we can be moved by what we know to be fiction.

A. NEILL, 1993

It is generally assumed that art and emotion are inextricably linked, as is shown by even the most cursory account of the history of critical thinking about music, painting, literature, and theatre.

M. HJORT & S. LAVER, 1997

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Some real life

Imagine a man in his late forties. He has been married for 20 years and his three children are in their teens. The house he and his family live in is more than adequate for their needs, but there are still several years to run on the mortgage, the repayments being quite high. He has changed jobs only once, early on in his career and so has been with his present company for about the 20 years of his marriage. Recently, he has felt that life at home is slipping away from him a little. His wife seems less interested in him than she once was, and he is beginning to wonder if she is becoming more concerned with other things. Although uneasy about this, he cannot think of anything to say or do about it. To make matters worse, he does not seem to be able to communicate with his children in the way he used to. They are moody and irritable and are off in their own worlds. His attempts at getting closer to them are repelled, even by his 16-year-old daughter, with whom he had always had a good and satisfying relationship.

His work is a little humdrum after all these years in the job, but he has been trying to do his best and to give good value. The company is being reviewed, with the prospect of restructuring, and he is hopeful that this will mean a promotion for him, greater responsibility and more money.

The day eventually arrives when he is to find out about his promotion. He mentions it at breakfast, but no-one seems much interested. He sets this to one side, dresses a little more carefully than usual and goes off to his appointment with the managing director. As he sits down, he hears, 'Well, I'm afraid the news is not good. We have had to let some people go . . .' He becomes numb and the rest of what is said about redundancy packages, references, a well-earned rest and so on wash over him. His makes his way back to his office and clears his desk, feeling others watching him.

He mentions none of this at home, but for some time follows his usual routine, getting up, leaving and coming home in the evening as if he had spent the day at work. Three weeks later, his daughter finds him hanging in the garage. He had been there for several hours.

You have gone to the movies after a fairly fraught day in what has been a fairly fraught week. You have been somewhat buffeted about emotionally and are looking for a couple of hours of restful escapism. Quite a few people have spoken well of the movie, even saying that it is quite true to the book. You haven't read the book and know little of the movie, but are there in an optimistic mood, hoping for the sort of absorption that helps to forget the matters of everyday life.

The movie turns out to be about the life and very hard times of a housemaid in Dublin in the early part of the 20th century. She is a pleasant, honest, well-meaning young woman, struggling to provide some support for her elderly, ailing father. She is ill-used by her employers, working as a drudge in slave-like conditions and then falls pregnant to the 'young master'. She is blamed for this and finds only shaming abuse from the minister at her catholic church. And so it goes on.

This is just the sort of movie that you did not want to see, but in spite of this you find that you are caught up in the young woman's appalling life. You veer about between feeling enormous sympathy for her and anger about the way she is treated. You feel her pain and at the same time feel contempt for the prejudices of a class-driven society and a morally corrupt church.

This turns out to be a worse emotional buffeting than you have been experiencing in your own life. However much you try to distance yourself from the events on the screen by telling yourself that it is 'just a movie', 'just a story', 'it's not really happening', it doesn't seem to help. It is as though you have been hijacked emotionally and you leave the cinema as though you have been wrung out, certainly feeling far worse than when you went in.

You resolve, in future, to make every effort to find out about the movies you go to see, especially when you want to escape into a world of derring-do rather than take on someone else's emotional turmoil.

For the majority of people in what some refer to as the civilized world, much of their waking life is spent at work or in the pursuit of leisure. Emotion comes into everything that we do, and so it is interesting to see what has been said about its involvement in these areas. Rather than attempt to cover all possible pursuits, this chapter is restricted to work, sport and the arts. It should be mentioned that in the title of this chapter – Emotion and culture – the word 'culture' is being used to refer to a mixture of the customs and achievements of a particular group of people. Work, sport and the arts embrace a great deal of these customs and achievements.

The general aim of this chapter is somewhat similar to that of the previous one; that is, to add to the general search for the meaning that lies behind emotion by exploring how it has been represented theoretically in the more practical domains of work, sport and the arts. Oatley (1992) has a final argument in his book that there should be four bases for understanding emotion. As far as traditional science is concerned, understanding comes from events, measurement and theory. Oatley suggests that it would be useful to add in *verstehen*, a sort of empathetic understanding in which one enters into the lives of other people through the imagination. He sees this as being particularly exemplified by fiction. However, this is a viewpoint that can easily be extended not only to the other arts but also to our emotional interactions in the workplace and through sport, either as player or spectator.

Emotion at work

For all but the last few years, emotion and the workplace have been seen as antithetical. Work, particularly when commercially driven, was seen as being 'rational', not 'emotional', it also being seen as unprofessional to be otherwise. This, of course, was why women were seen to be less adequate in the workplace than men; they simply aren't able to control their emotions in the same way as men, and then there are those hormonal changes. So, in general, the workplace was seen as a place in which to suppress emotions, a place in which any emotional reaction is inappropriate.

It is only during the last decade or so, in spite of Hochschild's excellent work of 20 years ago on workplace manipulation of emotion (Hochschild, 1983), that it has been realized what nonsense this is. Emotions are relevant to the workplace, as they are to every other walk of life, and therefore have to be managed or regulated rather than subdued, for the benefit of everyone. As Scheiberg (1990) puts it, 'There seems to be a connection between positive emotions regarding the workplace, job satisfaction, and increased job performance.' and 'Expressing emotions in the workplace is a vital process for employees.' The best and most recent review of emotions in the workplace appears in a book of that name edited by Ashkanasy, Härtel and Zerbe (2000), to which this section owes a debt. Consideration will be given to some theoretically guiding principles for the study of emotion in the workplace, the links between leadership and emotion management, and the question of the specific emotion of shame and its role in the workplace.

Assuming that emotions actually exist in the workplace, as of course they do, then the basic theoretical questions, as Mastenbroek (2000) sees them, are:

(1) What events in the workplace prompt what emotions?
(2) Are some people more skilled than others at using emotion in the workplace?
(3) What mechanisms do organizations use to control emotions?
(4) What happens to people who show emotions in the workplace?
(5) What impact do displays of emotion have on organizations?
(6) Can the study of emotions in the workplace help in understanding the organizations in which they occur?

Mastenbroek (2000) goes on to provide an interesting theoretical structure in which these questions can be answered. It rests on a number of assumptions, behind which is the idea that, rather than emotions being suppressed in the workplace, directness, openness and spontaneity are important although in a self-controlled way. The assumptions are that:

(1) the management of emotion is related to dependency, which can take many forms in the workplace;
(2) emotions are not fixed personality traits – people deal with their emotions in constantly changing ways;
(3) emotions provide important guides to behaviour;
(4) emotion management and regulation are based on rules;
(5) to be open rather than closed emotionally is effective in the workplace, even with respect to not wasting time; and
(6) to bring about changes in emotion management takes time.

Ashkanasy and Tse (2000) use emotional intelligence as the starting point for their analysis of how transformational leaders manage emotion in the workplace. They regard emotional intelligence as having a pervasive influence throughout organizations. As a brief theoretical aside in order to set the scene, a distinction is usually made between transactional and transformational leaders (see, e.g., Bass & Avolio, 1994). Transactional leaders lead through the use of contingent rewards. Transformational leaders by contrast tend to the charismatic. They lead by non-contingent reward and

internalized motivation. They cause their followers to accept, to be affiliated, to become affectionate to the leader; in other words, to become emotionally involved. This is achieved largely through the self-control of their own emotions and the management of the emotions of others.

Transformational leaders bring about their transformations by enticing their followers into visionary goals. They challenge the status quo, stimulate the intellect and break the norms, being concerned very much with individual needs and giving people feedback. This can have its negative aspects in that the visionary side of a transformational leader can tend to the obsessive, so leading them to be, in the extreme, mercurial, self-serving, destructive despots.

Transformational leaders tend to have a particular set of skills that overlap with those of emotional intelligence, if emotional intelligence is viewed as skilled performance. Transformational leaders have good language skills, telling stories that elicit emotional reactions. They have a positive bias toward life and are highly sensitive to the personal needs of those around them. Their self-esteem and self-belief is high. They are highly intuitive and maintain close relationships with their followers. They create positive effects through the careful management of impressions and generate high emotional commitment among their followers.

To put these characteristics in terms of emotional intelligence, transformational leaders tend to be in touch with their own feelings in an honest way, to show empathy to their followers, to excite others to emotional commitment, to be emotionally stable and to encourage emotional stability in others through the management of moods and stress. Such leaders in general tend to be more pleasant, more emotional, more altruistic and less aggressive than, say, transactional leaders.

The results of what can be described as an engagement with the emotional side of things by transformational leaders lead to a more effective and productive workplace. This occurs through emotional commitment on the part of the employees, encouragement of creativity and innovation, appropriate, conflict-free decision-making and an orientation toward achievement.

As a final consideration of emotion in the workplace, it is fair to say that individual emotions have, as yet, not been much considered in this context. Interestingly, however, one that is starting to appear is shame (see Chapter 8). As Poulson (2000) points out, ‘Shame is an overlooked and misunderstood yet powerful motivator.’ As was seen in the example at the start of this chapter, shame (although it was not named as such there) can be an ultimately destructive emotion. Poulson makes an analysis of the types of circumstances in the workplace that can trigger shame.

The first of these comes from the particular managerial practices used within an organization. For example, exercising control by giving reprimands and warnings emphasizes the power differential between managers and employees. Powerlessness is thought by some shame theorists (e.g., Kaufman, 1989) to be the most fundamental case of shame. Even in the more enlightened workplaces, employees are still employees, and so almost by definition have to relinquish power to their employers when they are at work. The potential for shame is inevitably increased.

Linked to this obvious power differential is the matter of having performance appraised. One of the core sources of shame in life comes through not meeting the expectations of those to whom one answers, such as parents, teachers and, of course, managers. Shame always involves a global evaluation of the self, and it is very difficult

not to do this if one is told that one's performance is not up to scratch in some way. Both employees and employers tend to recognize this difficulty; so, many employers are reluctant to give straightforward feedback because they are then inevitably seen in a poor light. This lack of clarity only adds to the likelihood of shame.

Again related to the question of evaluation is the failure to be promoted or to advance in an organization. Any failure is shameful and even if an organization is structured such that advancement/promotion at a particular time is impossible, the individual might still see this as shameful. And, furthermore, linked to this is the possibility of discrimination. Even if a person knows that discrimination on the basis of race, class, religion, ethnicity, etc. is being practised, it is difficult not to feel shame simply through being obviously seen as 'different'. Probably the most pernicious example of this in the modern workplace is the traditional bias against women in a system in which traditionally men have held the power. Simply to be a woman is to be 'different', inferior, less promotable – a potentially shaming experience.

One of the worst failures and hence most likely shame triggers in the workplace is dismissal, whether it is euphemized into 'redundancy' or not. The sources that can prompt shame on dismissal come from this being known by others – workmates and family – and from one's evaluation of one's own self-worth and self-esteem.

So far, shame in the workplace has been discussed in terms of aspects of the formal structure and function of the organization. However, there are many informal structures in any workplace that in themselves can be sources of shame. Put-downs by workmates can be very difficult to deal with, having to be accepted jokingly, but nevertheless cutting into one's sense of self-worth and hence triggering shame. Very often this is about sexual and social potency, but can involve any characteristic such as wearing glasses, being short, fat, tall, thin or whatever. In the extreme any of these characteristics, physical or behavioural, can lead a person to be excluded from a social group or generally bullied, physically or socially. In all cases this is drawing attention to the person's 'difference' from the rest of the group and is potentially shaming.

This slightly extended discussion of shame is but one example that could be made of the influence of specific emotions in the workplace. It is a particularly poignant example because the effects of shame can be so devastating. However, the recognition that it occurs is important for the more effective management of the workplace, and all the types of example given can be fitted into the theoretical analyses of shame made by Lewis (1992) and Nathanson (1994).

Emotion and sport

As with emotion and work, the link between emotion and sport is obvious. Both for participants and spectators, the highs and lows of sport are matters of emotion. At a superficial level, it is clear that anxiety can either enhance or impede sporting performance. The same can be said of anger, or fear. Embarrassment, guilt or even shame can be involved, as can pride, hubris, joy and sheer exaltation. However, the type of analysis that has been made of these links between emotion and sport have not been highly sophisticated.

The most common and perhaps one of the better theoretical accounts of the role

of emotion in sport is Weiner's (1986) attributional theory of emotion. At the simplest level Weiner sees the win/loss outcome of a sporting encounter being rated as success or failure and this leading to positive or negative emotions. The particular form that these emotions take he sees as being 'outcome dependent'. In other words, people make causal attributions about what has happened based on its locus, its stability and its controllability. In Weiner's view, this then leads to specific emotions such as pride, pessimism (arguably not an emotion), shame and guilt.

Examples of this in sporting contexts are fairly straightforward. Winners are more positive emotionally than losers; losers are more angry, sad, surprised and more likely to feel incompetent than winners. More specifically, if a sportsperson attributes a loss to internal causes, then he or she is likely to experience depression. If those same causes are seen as uncontrollable, an inevitable part of being the person that he or she is, then the result can be shame. Shame is linked to internal, uncontrollable causes. In general, Weiner's point is that the experience of emotion in sport is intense because there is a strong emotional investment in it to begin with.

Willimczik and Rethorst (1995) develop Weiner's views a little, arguing that the particular emotional experiences that people have following some sporting performance are due to cognitions in the form of whatever expectancies they have had about the outcome followed by their evaluation of their success or failure. Attributions come into play, as Weiner suggests, and the ensuing emotional reactions then influence any new expectancies.

It is probably Boutcher's (1993) model of the links between emotion and aerobic exercise that offers the most searching theoretical analysis in this area. He bases the model on some consistent research findings: during exercise, positive emotion decreases as the intensity of work increases; typically, people feel better after they have exercised; there is a decrease in state anxiety with hard exercise, although not with light exercise; and excessive exercise can result in a negative emotional state.

Boutcher's basic model sees exercise as leading to ongoing multiple psychological and physiological change, the psychological effects being to some extent dependent on the physiological adaptation to an exercise programme. There are three phases to this:

(1) *Adoption*. The beginning exerciser (say, when taking up a new sport) experiences physical discomfort during and after the exercise.
(2) *Maintenance*. The physical discomfort is reduced.
(3) *Habituation*. Once the exercising has become extremely habitual then there may be negative emotion either from over-exercise or from missing a session of exercise.

As this adaptation occurs physiologically, so psychological changes may also occur.

Boutcher theorizes that three distinct, although related psychological approaches are relevant to this developing process. The first is *attribution theory*, as described by Weiner, in which an evaluation of the outcome of exercise generates emotion. It could be that exercise generates emotion that is initially assessed through intuitive appraisal, this being mediated by both psychological and physiological mechanisms. However, both reflective and intuitive appraisal might be important in this process.

Boutcher also emphasizes conditioning and learning, with conditioned emotion coming into play during continued exercise, with reciprocal relationships developing between emotion, attraction and self-efficacy. Finally, he mentions the possible

importance of opponent–process mechanisms. Here, the repeated exposure to powerful stimuli during exercise can lead to a rebound pattern of emotional responses. The initial, aversive, emotional reaction decreases (with increasing exercise) and then more positive emotion occurs when the stimuli cease.

Placing these psychological approaches within the framework of the original model leads Boutcher to suggest that, during the adoption phase in exercise, the psychological mechanisms of attribution and self-efficacy are important. Then, during the maintenance phase, both psychological and physiological mechanisms are important, involving attributions, self-efficacy, behavioural conditioning and opponent–processes. Finally, in the habituation phases, physiological mechanisms predominate with behavioural conditioning, opponent–processes, attributions and self-efficacy again being important.

Boutcher's model, then, of the links between emotion and exercise (i.e., sport) point to a steady progression of emotional reactions as exercise develops. For the new exerciser, the key determinants of emotion are attributions and considerations of self-efficacy. During the maintenance phases then emotion is generated from the physiological mechanisms that underlie adaptation. Then perhaps the most interesting of Boucher's points is that during the habituation phase many people may develop exercise behaviours to avoid the unpleasant emotions that come about through *not* exercising.

This is sufficient to give an idea of the way in which some theory has been generated in the area of emotion and sport. There is considerable room for further development, not only in considerations of the emotions involved in sport/exercise participation but also in those who spectate.

Emotion and the arts

The links between emotion and art are simultaneously commonplace, obvious and yet difficult to penetrate. For example, emotional reactions to a work of fiction or to a dance performance are not just to the work itself but also to the characters or to the performers. Sometimes art is abstract or non-representational (this can include music), which makes an analysis of the emotional response to it problematic. Sometimes art can express a very negative emotion, and yet we respond positively to it. Furthermore, the entire matter of emotional reactions to art interweaves in complex ways with art appreciation.

In considering these issues, Levinson (1997) suggests that there are five basic questions that have to be dealt with:

(1) What kinds of emotions are generated by art?
(2) How is it that we can experience emotional reactions to fictional characters?
(3) How can emotions be generated by abstract art and what are they when they are generated?
(4) What makes the experience of negative emotion through art interesting?
(5) What is the relationship between the appreciation of art and emotional reactions to art?

Literature

That prose and poetry are usually concerned with emotion goes without saying. Frequently, fiction is aimed at portraying, describing and analysing individual emotions. It is also manipulative of a reader's emotions. While the psychologist is usually concerned to characterize the average person, the writer of fiction is often concerned to portray the best possible example of a type of person or event or situation.

Frequently, in fiction, emotion is characterized as precipitated by a startling event. Following this, however, it is usually quite clear that the writer is as aware as the psychologist that emotion involves physiological arousal and behavioural, particularly facial, expression. Also, it tends to be almost axiomatic that some process of cognitive evaluation precedes the experience of emotion. And following this, fictional characters are then often shown as having to act on their emotions. So even in sophisticated modern times, fictional characters are gripped by passion and carry on fierce battles between the rational and emotional sides of their make-up. Emotion is also typically seen as an important motivator.

The reader's emotion can be manipulated in a number of ways. It is apparent, for example, that an absorbing work of fiction prompts much vicarious emotional experience for the reader. Also, the experience of emotion through fiction can allow the satisfaction of a temporary escape from the less pleasant aspects of daily life. This is the sense of escapist fiction. From the crudest romance to the most spellbinding tale of high adventure, the reader is invited to suspend reality and to identify with larger-than-life characters whose experiences command great pinnacles of emotional satisfaction.

In fact, it is identification that seems crucial for the experience of vicarious emotion. If a reader can find no grounds for identification then a work of fiction seems curiously flat. Such identification is perhaps allied to the projection and empathy that allows us to gain some understanding of the emotional experiences of those around us in the everyday world. In practice the emotional effects of fiction can be powerful, lasting and even harrowing. Moreover, as Oatley (1992) suggests, it is through fiction that we came to a non-scientific, but important understanding of emotion, through *verstehen*.

An issue that remains and that has been enjoined more by philosophers than psychologists concerns what exactly it is that we are made emotional about when we are made emotional by fiction. If we know that something is a work of fiction, if we know that what is happening to a fictitious character is by definition itself fictitious, then how is it that we react emotionally? As Levinson (1997) puts it: 'we have emotions for fictional characters; we normally believe in the existence of objects for which we have emotions; we don't believe in the existence of fictional objects.'

Neill (1993) makes an interesting analysis of this matter based on the view that our emotional responses are themselves founded on belief. He describes this as representing current philosophical orthodoxy as far as emotions are concerned. In passing it might be noted that if orthodoxy is defined as what is believed by the greatest number, then this view comes close to current psychological orthodoxy as well.

Of course, the problem with respect to the emotional impact of fiction is that since I know that a fictional character does not exist in reality then how, for example, can I have beliefs about events in her fictional life so that I pity her? Neill answers this question with the suggestion that our emotional reactions to fictional characters and

events are based on beliefs, although they are beliefs about what is fictionally so. It then follows that our emotional reactions to fiction are themselves explicable by a cognitive theory of emotion.

Neill makes a convincing case that pity, as a significant emotion that seems to be frequently generated by fiction, can be seen in this way. And he argues that it is reasonable to generalize from this to other emotions. The emotional reactions we have to fictional characters and events may be slightly different from those that we have to events in real life and to actual people, but we do have them nevertheless. We do pity, envy and fear for fictional characters (although we might not fear them), and such reactions can be accounted for cognitively. Of course, to have beliefs about fiction we do have to first do what the novelist and dramatist frequently wishes us to do, and that is to suspend disbelief.

Neill's is but one view. Levinson (1997) lists the entire set of possible accounts:

(1) Our emotional reactions to fiction are not real.
(2) We suspend disbelief, as mentioned above.
(3) Our emotional reactions to fiction take as real things that we know not to exist.
(4) Emotions toward objects do not need to rely on beliefs, but merely on weaker forms of cognitions. It then follows that emotional responses to fiction are like any other emotional responses.
(5) To account for emotional reactions to fiction we might only need the belief that, in the fiction, the character exists. The question then becomes whether or not this means that our particular emotional reaction is also fictional.
(6) It may be that when reading fiction we become irrational and so have emotions directed toward non-existent characters.
(7) Finally, emotion to fiction might only be make-believe emotions (i.e., we are moved by fiction to non-standard emotional reactions).

Levinson makes the point that the answer to the 'paradox of fiction' could well be 'all of the above', but suggests that the best single possibility comes from the idea of 'make-believe' emotions.

Following Radford's (1975) answer to the question, 'How can we be moved by the fate of Anna Karenina?', Hartz (1999) asks 'How can we be moved by Anna Karenina, Green Slime, and a Red Pony?', thereby broadening the matter a little. His general thesis, which somehow does away with the problem altogether, is that brain mechanisms in emotion do not '... abide by preconceived rational strictures.' So, they simply *do* respond to the various circumstances in fiction, and there it is. This is not irrationality or inconsistency. In other words, there is no paradox of fiction.

Music

Much as with literature, it is often assumed that a major way in which music has its effect is through the emotions. To those who listen to music, this effect is indisputable, an integral part of the experience. Moreover, from an observer's perspective, the sight of rows of people with closed eyes rapt in a performance of classical music or of crowds

of young people headbanging at a heavy metal concert makes it obvious that the music is having an emotional impact.

The problem comes when the attempt is made to go further than this and to say how music has its effects. There are many *supposed* effects such as fast rhythms, consonant music and rising melodies leading to happiness and dissonant, descending music with drawn-out notes leading to sadness (see Ostwald, 1966). But such statements seem often to be made almost *ex cathedra*, supporting research and theory being sadly lacking.

Gaver and Mandler (1987) make a constructivist analysis of emotional reactions to music. They base this on evaluative cognitions and arousal that comes mainly from discrepancies in perception and behaviour. Emotional reactions to music then occur when it is discrepant from expectations. Moreover, they suggest that 'We recognise what is familiar and we like what we know (recognise).'

Gaver and Mandler argue that this way of looking at things accounts for some of the emotional impact of music, but suggest that there are also three other possibilities:

(1) Music might have *structural value*. That is, beautiful music might reflect Gestalt laws, implying that musical meaning might follow from the structure of our minds. This emphasizes the significance of the form of the music on emotional reactions rather than of musical knowledge.
(2) Music can be seen as a *language* to express emotions. Perhaps particular melodic elements reliably reflect particular emotions that could be explicable in terms of links of sound to human hearing.
(3) There might be *similarities* between musical events and other events in the world. There might, for example, be similarities in timing, or where music is regarded as a metaphor, or music might vary along dimensions that also characterize emotional experience. This might lead to a direct emotional communication.

Panksepp (1995) deals with the particular emotional effect of 'chills' in music. He points to a paradox, not unlike the paradox of fiction, that chills, although a positive emotional experience, are mostly induced by sad music. As a neuroscientist, Panksepp analyses the manner in which the grief and joy circuits interweave within the brain and suggests that chills occur when the deepest opposing emotional potentials are touched.

He theorizes that chill-inducing music might resonate with ancient (in an evolutionary sense) emotional circuits that have to do with basic social values. These represent an infant's separation call within the context of a potential reunion. Even more fundamentally, he argues that this all might have been based originally on warm and cold, with separation linked to cold.

Levinson (1997) puts it simply that emotional reactions to music come about through direct sensation (tempo, timbre, rhythm, dynamics, etc., as in chills) and through cognition (as Gaver & Mandler suggest). He likens music to representational art in that it can also be heard as a sort of expression of emotion by a generic person, rather than by a specific individual. Put these three possibilities together and there is the overall emotional response to music, but the question remains: at what is the emotion directed? The answer might be that music only induces (directionless) moods, or just the feeling part of emotion, or perhaps even imaginary emotion.

Drama

As with music, the involvement of emotion in drama is obvious to anyone who has ever attended a play. It has two aspects: the emotional reaction of the audience and the emotional involvement of the actors. Although drama rests on emotional manipulation or management or regulation, it is a topic that has largely been ignored by psychologists. However, it is dealt with by writers concerned with theatre.

For example, Stanislawski (1929) discusses what he terms the 'emotion of truth'. He regards the actor as a 'living, complex, emotion' who might on occasion not complete a perfect bodily action or give a proper intonation. This leads to what he terms 'mannerism' or 'awkwardness', the only way to guard against which is for the actor to develop a strong sense of the truth of what he or she does.

Writing at much the same time, Meyerhold (Braun, 1969) suggests ways in which the actor can build into a part physically and so manipulate his or her emotions and hence those of the audience:

> From a sequence of physical positions and situations there arise those 'points of excitation' which are informed with some particular emotion. Throughout this process of rousing the emotions, the actor observes a rigid framework of physical prerequisites.
>
> V. E. MEYERHOLD (in Braun, 1969)

This is sufficient to give the flavour of the types of analysis made by those who write about the theatre. They are speaking in ways that would make the conventional scientifically based psychologist uneasy. They dive into a sea of speculation and swim strongly in apparent ignorance of the depths beneath them. The usual response by psychologists is dismissive. Although understandable, this is short-sighted. It may be possible to couch the ideas of writers such as Meyerhold in theoretical terms that are more acceptable and workable.

One exception to this is a psychological theoretical analysis made by Konin (1995) that is ultimately concerned with emotion regulation. She begins by describing the three major views held about whether or not actors should be experiencing the emotions being portrayed: *involvement* (the emotions should be experienced), *detachment* (the emotions should not be experienced) and *self-expression* (the actor should present an 'inner self' on stage, the character disappearing behind the actor).

Each of these views implies what Konin refers to as 'double consciousness', leading in turn to four major tasks involved in acting: to create an inner model of the intended emotion(s); to portray convincing emotional expressions; to repeat a fixed form of this; and to create an illusion of spontaneity and presence. Thus, at any one time, the actor has to cope with four levels of emotion (an extremely difficult task of emotion regulation): the private person with private emotions; the actor-craftsperson with task emotion; the inner model with intended emotions; and the performed character with the character's emotions.

Through recourse to Frijda's (1986) emotion process model, Konin goes on to consider what might be an actor's primary concerns in performance. Again, these are in four parts. There is a need to be thought-competent, a tendency toward sensation-

seeking and risk, the importance of conveying the 'right' image and not losing face, and the need for aesthetic beauty and creativity.

The final point to Konin's analysis of the emotional involvement in acting is that the central 'emotion' concerned is challenge. From this perspective, the performance of acting is itself a source of powerful emotions, emotions to do with the *task* of acting rather than with the characterization. However, these varying demands merge, the task emotions helping to create spontaneity and presence on stage. All of this places on the actor huge requirements for emotion regulation and, as it happens, provides a fine potential research setting for the psychologist.

Art appreciation and negativity

Two of Levinson's basic questions remain. The first is the paradox of tragedy. Why do we enjoy it if it is negative? Levinson has a number of possible answers to this. There might be other rewards in the work of art that compensate for the negativity of tragedy. The negative emotion involved might be transformed into something more positive by artistic appreciation. The entire work of art is valued, negativity being only a part of it. Negative emotions are not truly emotionally unpleasant and/or might not truly be aroused in us by negative emotional art such as tragedy.

This leads on to to the final question of whether or not there are some particular emotions that are unique to art appreciation and aesthetics in general. Levinson believes that there are not, but does see some emotional reactions as a typical part of art appreciation. He describes these as: admiration for skill; fascination with form; delight in beauty, awe at insight and expression; and transcendence by being absorbed. Any and all of these might equally well be seen as reactions to the natural environment, or to a sporting accomplishment, or even to a well-crafted dinner party or some other social occasion. Such emotional reactions might be a significant aspect of art, but they are not necessarily exclusive to it.

General theory

Although Hjort and Laver's (1997) volume *Emotion and the Arts* (1997) makes an interesting contribution to a somewhat scanty literature, still the most searching general analysis of the relationship between emotion and the arts is made by Kreitler and Kreitler (1972). Although it is some years since its publication, their book is still of force. Their main thesis rests on the concepts of set and empathy. The experience of art depends on stimuli from the art itself and responses from the observer/listener/reader. The more responsive the spectator, the more intense the experience and the greater the emotional involvement. Strength of response is thought to depend, among other things, on set or expectation, which is of course a cognitive capacity. Similarly, empathy can also be generated by cognitive set.

Aesthetic meanings are partly shaped by social standards and habits. Sets are shaped from this by developing meanings associated with ideas and from the influence of specific settings in which this might occur. Surroundings make a difference to judgements.

According to Kreitler and Kreitler, emotion is a significant element in the experience of art. Since art is essentially fictional, they argue that the emotional involvement is generated through empathy, which they characterize as a 'feeling into'. This is essentially a reaction people have to others who undergo emotional experiences.

There are two basic theories about how empathy occurs in art. The first involves representation. So, in attempting to understand something, a spectator might dredge up memories relevant to previous emotional experiences. In this sense, empathy depends on cognition and imagining, with the relevant emotional experience being attenuated.

The alternative theory involves the notion of 'feeling into', in which the emphasis is on the actual emotional experience. It is reflected in a tendency to imitate the movements of others, which in turn leads to the imitator enjoying a similar emotional experience to that of the person being imitated.

Although Kreitler and Kreitler apply this type of analysis to the experience of many kinds of art, for present purposes it is sufficient to consider literature. In these terms, literature has great power to develop 'feeling into', via the events, situations and characters. It is assumed that the emotion generated in the reader would be weaker than that generated in real life (see Neill, previously discussed). However, in literature there are techniques and devices that enhance empathy. For example, the selective description of expressive movements would make a difference, as might the sounds of the words and the melodies of sentences.

It is also argued that in literature stimuli to do with emotion evoke kinaesthetic imitation in the reading, which leads to physiological arousal. Emotional experience might follow when such physiological changes are linked with cognitive elaboration. Such elaboration might come from expanding on and enhancing the written material, and from identifying with the author.

The Kreitlers argue that the author depends on a sort of suggestive reporting to bring about a sense of completion in the reader and that this is similar to the way in which we attempt to understand people in everyday life. In literature this is aided by fantasy. The problem with this type of argument, and there are many of a similar nature, is that it can be distorted to account for almost anything.

A final point that is worth making from the Kreitlers' analysis of emotion and art concerns the stress they place on what might be termed 'emotional distance'. They regard a type of inhibition called 'disinterestedness' as crucial to the experience of art. There are two main aspects to this. An object and its appeal may be separated from the self, at a distance from the practicalities of life. This is a positive condition and seems to help to intensify the subjective experience of the object. A second possibility is the detachment that results when a person concentrates so fully on a work that the result is an experience of richness and complexity. In this instance, there seems to be personal involvement at many levels. The difference between these two possibilities is that the distance involved is either external to the experience or an integral part of it.

Clearly, the experience of art is complex emotionally. It is either enhanced or inhibited by whatever social roles the individual might be playing or by the particular sets being held. Such sources of influence change with culture and with time. Both emotional closeness and emotional distancing appear to be important, the exact nature of which is perhaps dependent on whatever form of empathy is occurring.

Mandler (1982) has been one of the few psychologists who has attempted to deal with the difficult topic of art and emotion as they relate to aesthetics and creativity. He

argues that art arouses, through its interaction with the experiencing individual. He also places emphasis on set, which he refers to as anticipation. The work of art may or may not be in accord with anticipation, thus, in Mandler's usual terms, leading to some or other degree of interruption.

The suggestion is that negative emotion results from the confirmation of expectations with low probability. The emotion becomes positive if the expectations are of medium probability and ends up as boredom if they are of high probability. Another viewpoint is that emotional tension depends on competition between incompatible tendencies, and another is that the degree of arousal from a work of art varies with the discrepancies between stimulation and set.

Mandler argues that aesthetically meaningful experience in the emotional sense will depend to an extent on making more and more new interpretations and differentiations. The more complex the object or the work the more intense the possible emotional experience. A certain amount of artistic knowledge and training is related to any emotional experience of art. A piece of simple, popular music will soon lose its emotional impact, whereas a more complex piece will not.

The essential ingredient in the emotionally positive side of aesthetic appreciation is novelty. This cognitive characteristic can be in the form of new interpretations, new views or new mental structures, according to Mandler. However, extreme novelty in art can lead to negative emotional reactions. This is because the individual has no mental structures that can accommodate any attempts to analyse the work. With more familiarity and education, more should become assimilated and the reaction become more positive.

In a most interesting passage, Mandler argues that creative persons have to have certain emotional characteristics. For example, they should be able to tolerate the new, emotionally, and find such novelty attractive, cognitively. To Mandler, a creative work should involve the destruction of existing structure, a sort of interruption. Also, he believes that creative individuals often have a parent of opposite sex who was frustrated creatively. This is likely to prompt the parent to push the child, constantly interfering with the child's structures and destroying stability. Within a positive relationship, the development of new structures comes to be seen as an emotionally positive achievement. In this way, being creative (through destruction and production) is learned early in life and becomes associated with a positive emotional tone. Of course, society also helps to form cognitive evaluations of feelings and actions. To view the destruction of the old as creative rather than aggressive depends on social values aimed toward creativity and aggression.

Conclusions

Much as in the previous chapter, the aim of this chapter on emotion and culture has been to make a further analysis of emotional meaning in everyday life. Work, sport and the arts embrace much of what many people spend their time engaged in, and, as has been shown, the emotions play an integral part in each of these areas, both with respect to customs and accomplishments. The aim was also to add to the general *verstehen* of emotion in this way.

The study of emotion and work is in its infancy, and so theoretical development has not yet gone far. Such theories as there are, to do with emotional management in the workplace and with the links between emotion and transformational leadership, can be seen as concerned with emotion regulation rather than emotion *per se*. As they are inevitably somewhat circumscribed and essentially practically based, the usual criteria for assessment thus far in this book are less applicable. Theories of emotion in the workplace certainly provide a good summary of some of the existing knowledge and help to account for the phenomena of emotion at work through extant theory in areas such as leadership. But they do not seek to give a full account of emotion in its various aspects.

The same may be said of theoretical accounts of emotion and sport. Here, Weiner's attributional theory of emotion (which does not have many adherents in the general field of emotion) has been applied and Boutcher has developed an interesting three-stage model of emotion and the development of aerobic exercise. But, again, these theories are very limited in their compass and do not add a great deal to our understanding of emotion in general.

Theories concerned with the relationship between emotion and the arts, although interesting, are expressed in such broad terms as to be of limited value. They are focused and do provide explanations of a sort, but they are relatively difficult to pin down. Even the Kreitlers' general theory of emotion and art depends on concepts such as set, expectation and empathy, which have proved relatively unwieldy in the past. Again, though, it is interesting to note that a central concept to all the theories in this area is cognition. Indeed cognitive theory plays an integral part in what is probably the most thought-provoking of the theories in this area, those concerning the 'paradox' of fiction. Also noteworthy and very cognitively based is Konin's model of the complex matter of emotions as they have to be dealt with by actors. Interestingly, again, as in the areas of emotions at work and in sport, this seems to be concerned with emotion regulation rather than emotion itself.

As suggested already, Lazarus's (1991a, b) prescriptions for emotion theory do not apply readily to the theories summarized in this chapter. They are not concerned with the causes of emotion, nor particularly with emotion as an independent or a dependent variable. They are more to do with emotion as a variable that might intervene between the person and the world or that might even intervene between the person and him or herself.

So these theories meet very few of the criteria, even in some cases eschewing behaviour and physiology altogether, for example. However, some of them are based in a loose evolutionary framework and see emotion as socially constructed, and they do all have an absolutely central place for cognition. Moreover, some of them become concerned with consciousness and with the links between emotion and motivation.

Similarly, Oatley's (1992) criteria for emotion theories are less applicable to the theories under consideration here than they have been in previous chapters. Certainly, they tend to be concerned with the functions of emotion and with the evaluative aspect of emotion as it is to do with goals. They also touch on the possible unconscious causes of emotion. The other criteria are irrelevant, however. Also, it is difficult to derive specific predictions from the theories. Moreover, their capacity to deal with more evidence is indeterminate.

What then, in general, can be said of the theories that have been covered in this chapter? In Oatley's sense of *verstehen* they do add to our sense of what emotion is or add to the richness of emotion theoretically. Although they are not the best theories that surround emotion, it is interesting that, for the most part, they end by being concerned with the same type of issues. In particular, of course, these include cognition, in one form or another, appraisal, belief, set, empathy, novelty or consciousness.

Of the theories mentioned in this chapter, the best is probably Mandler's. Mandler makes a genuine attempt to deal with difficult aspects of emotion theory, even going so far as to consider its links with creativity. In this, he goes further than most of the other theories described.

Finally, it should be pointed out that an analysis of the role of emotion in the arts, particularly in fiction, and of emotion at work and in sport forms a useful bridge between folk psychological approaches and the methodologies of science. There is no doubt that managers, leaders, sportspersons and artists have great insights into emotion and that they have to find suitable ways of both expressing emotion and regulating it. Those who study emotion from a scientific viewpoint should not set these everyday approaches to one side.

Summary

- The workplace, sports and the arts represent the ways in which emotion is part of culture.
- Emotion in the workplace is about emotion management and regulation. It is now recognized that the workplace is no longer a place in which emotion has to be suppressed in favour of 'rationality'.
- There are strong links between the management of workplace emotion and transformational (charismatic) leadership.
- Emotion is an integral part of sport and exercise, but beyond the obvious effects of winning and losing has been little studied. Attribution theory is relevant to this area.
- Emotion is essential in the arts, which might be described as being concerned with the basic expression of emotion and the manipulation of the emotion of others. It is clearly seen in literature, drama, music and fine art.
- There are various paradoxes to do with emotion and the arts, in particular the paradox of fiction and the paradox of tragedy.
- In general terms, to think about emotion and culture is to increase the richness of understanding of emotion, but this understanding is largely about emotion management and regulation rather than emotion itself.

A question of application

- What are the main emotions you experience at work? Do you feel able to express them freely? Are there particular emotions that you have to suppress at work? What methods other than suppression do you use to regulate your emotions at work?
- What procedures or methods or conventions, if any, are there in your workplace for managing emotions?
- Have you experienced both transformational and transactional leadership? What different emotions do these styles of leadership produce?
- What are the main emotions you have experienced playing sport and watching sport?
- What emotions have you had to regulate in any sport you have played? How do you do it?
- Do you think that there are differences in the emotions experienced in team sports and individual sports?
- Do you become emotionally caught up when: reading fiction, reading poetry, seeing a play, watching a film, watching dance, looking at paintings and sculpture, listening to music? Which of these captures your emotions most readily? Why?
- Is it possible to experience all the emotions through the arts? Which of the emotions are most easily experienced? Do you think that emotional experiences through the arts are 'real' emotions?
- Can the arts exist without emotional involvement?

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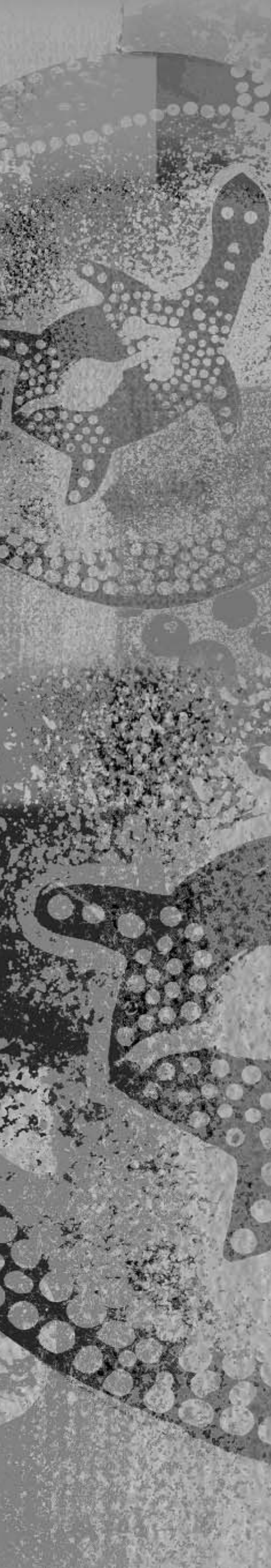

Chapter 14

Theory outside psychology

But as far as understanding ourselves is concerned, the concept of emotion, like the concept of spirituality, can only be a hindrance

P. E. GRIFFITHS, 1997

The renewed interest in emotion research can only gain in scope and solidity by encompassing a grasp of emotions, individually and collectively, as a partial function of change over time, in which the present cannot be captured without understanding at least the recent past.

P. N. STEARNS, 1986

Even if a man is asleep and dreaming, it is impossible that he should feel sad, or feel moved by any other passion, without it being strictly true that such a passion is in the soul.

R. DESCARTES

. . . a very large class of emotions results from real, imagined, or anticipated outcomes in social relationships.

T. D. KEMPER, 1978

The law cannot be expected to be flatly for or flatly against emotion or emotionality any more than it could have a uniform policy toward information or belief.

R. A. POSNER, US Court of Appeal judge, as quoted in the *New York Times*, 2001

But if you're going to make sense of emotion, you have to bring in the past and show how it can shadow the present.

M. NUSSBAUM, as quoted in the *San Francisco Chronicle*, 2001

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Some real life

Compare the following two descriptions, bearing in mind the question: Do emotions have to be about something?

Imagine that you are sitting with five other people, flying in a light aircraft. You are wearing warm clothes and, more particularly, a parachute. This is to be your first jump. You have completed several sessions of training quite nervously, but nevertheless successfully and you now wait your turn as the aircraft circles gently. It is a fine, still day and you glance out the window as the first person moves to the door under the careful eye of the instructor. The ground looks much further away than it did from the training tower.

You can feel a trickle of sweat running down your back and your body is clammy. Your heart is beating faster than normal and your stomach is in a tight knot. You keep trying to think of other things, but as your turn approaches, so your temperature seems to fluctuate and you keep wondering about: 'What if the parachute doesn't open? What if I forget what to do? What if I black out?' You hope that you will not make a fool of yourself and refuse to step out of the door when the instructor says 'go', but the fear of what could go wrong is strengthening by the moment.

Now imagine that you are sitting at work when you generally become aware of a sort of sinking feeling somewhere inside your body. It is as though your stomach has suddenly become hollow. You notice that the pulse in your leg seems to be both faster than usual and perhaps erratic – you can see it beating erratically as the blood pumps through.

You try to concentrate on your work, but keep becoming overwhelmed by a feeling of vague apprehension. It is not quite a sense of dread or doom, but it does seem as though a disaster is not far away. You are not sure whether this is a thought or a feeling – it seems to be an odd mixture of both.

You try to review your life. Your work is going well and things are good at home. Try as you might, you cannot pin your feelings on to anything in particular. You eventually recognize that you are feeling anxious, but it is a feeling that just seems to be there, unattached and unaccountable. You know that something must be wrong, but you don't know what.

Picture a group of people at work, having their weekly meeting to discuss progress during the week and prospects for the forthcoming week. It is early on Friday morning after a week of bickering, backbiting and general tension. Gossip has been particularly rife, at times bordering on the malicious, and relationships are generally very strained. Of course, there are small friendship groups, and a few factions have formed, but the overall atmosphere is depressed and tense. It is clear, even from the body postures.

The manager tries several tacks in order to generate some energy and enthusiasm, but nothing seems to have any effect. Everyone either sits morosely, or occasionally there is

a small eruption of irritation between two or three people, which then dies down as quickly as it flared. The manager is thinking of cutting losses and ending the meeting with one or two deftly delivered homilies about team spirit, coordination and the future, when, suddenly, one of the group becomes rigid and slips to the floor, his heels drumming and his body twitching and shaking. Instantly, everybody is alert, some people jumping up and rushing over to the shaking figure. Someone says, 'Bill's having another seizure. He must be cutting down on the pills again.' A few people know exactly what to do and tend to Bill, making sure his airway stays clear and that he is as comfortable as possible. Someone telephones for the nurse, and within a few minutes she arrives, takes over and eventually, when the seizure has passed, helps Bill from the room.

As the door closes and people sit down, so everyone looks around and neighbours begin talking. A few jokes are made. The emotional atmosphere has changed and the level of energy in the room has increased massively. The manager calls the meeting to order and within a few minutes a number of decisions have been amicably made and the next week's programme worked out. Everyone moves back to their individual offices quite buoyantly and the remainder of the day passes well and productively.

The majority of theories of emotion have come from the discipline of Psychology. This is hardly surprising since emotion is traditionally regarded as a matter of individual expression and experience. However, the study of emotion does not *belong* to the psychologist. Perhaps more than many areas of human functioning, it also lies in other domains and might be better seen as an interdisciplinary affair. Philosophers, historians, sociologists, anthropologists and, even cutting across these, those who are interested in various aspects of culture (even more broadly conceived than might be by the anthropologist or the sociologist), all have much to add to an understanding of emotion. As well as being an individual matter, emotion is also a historical, sociological and cultural matter.

The aim of this chapter is to place theories of emotion within this broader perspective. Recent theories of emotion from the disciplines that are adjunct to Psychology will be described. Although in certain respects they are in accord with recent psychological theorizing about emotion, they also add to its complex richness.

Philosophy

A glance at the history of Western Philosophy shows that there have been philosophical accounts of emotion to some degree, ever since there have been philosophical accounts of anything. Detailed discussion began with Aristotle, although there are hints in Plato. The present purpose, however, is to consider some of the more recent philosophical accounts of emotion. The history as well as contemporary views of the philosophy of emotion are well analysed by Lyons (1992) and Solomon (1988, 1993).

Lyons

Although what might be termed 'modern accounts of emotion' (against a philosophical background) have been given by Peters (1969, 1970) and Ryle (1948), one of the most

thorough and useful philosophical discussions of emotion has been made by Lyons (1980, 1992). He expounds his causal–evaluative theory of emotion via a series of propositions, which will be considered in turn:

(1) Lyons proposes that emotion is an occurrent state, rather than a disposition. This is not exceptional; many theories of emotion are concerned with occurrent states. Generally some emotion terms are used in both ways and some are not. For example, fear can be occurrent or dispositional, whereas rage is used only occurrently. Within this framework, an emotional disposition can be reasonably focused (an angry person expresses anger in specific directions) or relatively unfocused (irascibility is a general proneness to react angrily). Lyons believes the occurrent view gives the full case of emotion. Whatever might be latent in an angrily disposed person is also present when anger is occurring, particularly when there is physiological arousal. He suggests a progression that starts with our beliefs about the present situation as the basis for an evaluation. This in turn causes wants and desires that cause behaviour, physiological change and subjective feelings.

(2) Causal–evaluative theory derives its name from the suggestion that a state is emotional if and only if it is a physiologically abnormal state caused by a person's evaluation of a situation. Emotion is a psychosomatic state in which both evaluation and physiological change are necessary conditions for emotion, not individually, but together. To be essential to emotion an attitude must be an evaluation in relation to self, which may be occurrent or dispositional. Also, the physiological change in emotion must be unusual since others are occurring constantly. The abnormality will usually take the form of being in some way more or less than the normal range. Lyons does not expand the nature of the causal link between evaluation and physiological change. If one frequently follows the other closely in time, it is likely to be causal.

(3) Differently from many psychologists, Lyons argues that it is not possible to differentiate between the emotions behaviourally, physiologically or motivationally. He proposes that such differentiation is only possible through cognitive evaluations. In his view, we clearly seek clues to a person's emotional state from behaviour or physiological indicants, but to be sure we need to find the person's view or evaluation of the situation. If we do draw conclusions from behaviour, this is because the behaviour is a typical expression of an evaluative attitude.

(4) Lyons suggests that there is a complex relationship between emotion and desires. Some emotions would not exist unless the person admits to certain wants or desires. For example, it would make little sense to speak of love without admitting to a desire to be with the loved person. Such emotions (if love is an emotion) need not culminate in behaviour; they do not have to be 'given into'. By contrast, Lyons argues that some emotions have no wants at all attached to them, backward-looking ones such as grief, for example. However, it may be that even this might subsume the desire that an event such as the death of another has not occurred.

(5) In his causal–evaluative theory Lyons also proposes that evaluations lead rationally and causally to specific desires, which then lead to behaviour. He argues that

this type of evaluative theory is better than a motivational theory of emotion since it can explain, for example, how various types of behaviour can be part of one emotion. The diversity of fear cannot be explained with action tendencies resulting from motivational theory. Wants/Desires are not tied to particular patterns of behaviour. The evaluative aspect of emotion gives a reason for the emotional behaviour.

(6) Finally, Lyons proposes that if emotions are mainly occurrent they are tangible, their tangible aspects including bodily change, facial expression, gesture, speech and motivated behaviour. For the psychologist, the problem is that a 'mental' event, an evaluation, is the differentiation between emotions. To Lyons though, evaluations are as tangible as behaviour. He makes the further point that there may be a perfect correlation between the structural/categorical basis of evaluations and brain states. If this were to be so then an evaluative account of emotion could eventually be reduced to a behavioural/physiological account – an argument that could apply to any cognitive analysis.

However, evaluations might still provide a way a differentiating between the emotions, even if they are irreducibly mentalist. In Lyons' view, this does not make his theory any more non-objective than one that involves anything equally non-observable – electrons, for example. Inasmuch as a physicist claims to be able to see traces of electrons, so the psychologist can reasonably claim to see traces of evaluations in the tangible aspects of emotion occurrences.

Cognitive emotion theory – Griffiths

Lyons's theory was dealt with at some length because, in its emphasis on cognition, it typifies current philosophical theories of emotion. Similar theories are offered by Solomon (e.g., 1976), who argues that emotions are evaluative beliefs, although he also has a role for constructionism, and Marks (1982), who suggests that emotions are a complex of belief and desire with the desire component being particularly strong.

In a very useful analysis, Griffiths (1989, 1997), following Stocker (1987), criticizes philosophical cognitive theories of emotion. He characterizes them as dependent on two central claims:

(1) '. . . the occurrence of propositional attitudes is essential to the occurrence of emotions'; and
(2) '. . . the identity of a particular emotional state depends upon the propositional attitude that it involves' (Griffiths 1989, p. 299).

Griffiths goes on to list six problems occasioned by this approach:

(1) Some emotional states, such as anxiety, are regarded as sometimes having no object and therefore no content.
(2) The judgements thought to underlie emotions appear to be quite different (more rapid, less conscious) from ordinary judgements.
(3) Too many emotions result from equating emotion and evaluative judgements.

(4) Why must someone who feels a particular emotion have particular beliefs?
(5) The typical *philosophical* cognitive theory of emotion leaves out physiological considerations.
(6) It can be argued that we can have emotional experiences by imagining things, in this case clearly not having the beliefs/desires of a cognitive analysis.

Griffiths' (1989) general thesis is that even if these types of objection were to be overcome, what he terms the cognitivist programme in philosophy would not answer a number of basic questions about emotion. (It should be noted, however, that this is *not* an argument against the cognitive approach to emotion from a psychological perspective.)

A core difficulty is that the cognitivist cannot give an account of why some (or some groups of) propositional attitudes are emotions and others are not. Griffiths characterizes the theory as being in turn dependent on folk theory to establish its taxonomy of emotions:

> The distinctions between one emotion and another are drawn in terms of their content, but content distinctions are taken notice of only when they happen to coincide with distinctions already present in the folk-theory.
>
> P. E. GRIFFITHS, 1989, p. 308

So, Griffiths argues that cognitivism can neither explain what an emotion is nor why emotions are classified as they are. He suggests that the philosophical approach to emotion would better depend on either psychoevolutionary theory or social constructionism. He puts this argument fully in his 1997 book, carefully replacing general categories of emotion with affect programmes (startle, fear, anger, sadness, disgust, joy) and higher cognitive emotions (shame, guilt, pride, etc.). Generally, he argues that emotion is defined by passivity.

Ben Ze'ev – emotional intensity

Ben Ze'ev (1996) makes an interesting analysis of emotional intensity from a philosophical perspective. He regards emotion as having four components: feeling, cognition, evaluation and motivation. Feeling is concerned with consciousness, cognition with information, evaluation with personal significance and motivation with readiness to act. Also, in his terms, emotion is characterized by instability, intensity, brief duration and a partial perspective, its causes resting in perceived changes in situations as they affect goals and self-image.

Ben Ze'ev goes on to argue that many features of emotion are experienced through its magnitude and duration, each of which is expressed through the four components of emotion. However, in daily life, we are particularly used to making comparative judgements of emotional intensity that depend on an evaluation of both events and their surroundings. Thus it follows that there are two sorts of emotional significance, based on primary and secondary appraisals. There is the perceived impact of some event (i.e., its strength, reality and relevance). And there are the background

circumstances at the time (i.e., accountability, readiness and the deservingness of the agents involved).

Let us take these in turn. First, the impact of an event: the stronger an event the greater its intensity; the more real (seen as both existence and vividness) an event the greater its intensity; and the more relevant and significant an event the greater its intensity. The relevance feature of an event is to do with achievement of goals and self-image and is related to emotional closeness.

Second, the background circumstances: there is accountability. Generally, as Ben Ze'ev sees it, the more responsible we are for a change in circumstances (through control, intention or invested effort) so the more available are the alternatives and hence the more intense the emotion. Particularly important here is controllability, which is both personal (through deliberate actions and habits of character) and external (through the deliberate and non-deliberate behaviour of other people). Similarly, with respect to readiness, both unexpectedness and uncertainty are related to emotional intensity, although the relationship can go either way. And, finally, the relationship of deservingness to intensity depends on the subject's and object's deservingness and whether the situation is good or bad.

Ben Ze'ev suggests that this type of analysis should be seen against a background of the personal make-up of the individual. Intensity is also not equally relevant to all emotions in all circumstances.

Solomon's questions

Solomon ends his 1993 overview of the philosophy of emotions with what he considers to be the types of questions that are important for philosophical (and, no doubt, any other) analyses to address. These issues also provide a useful place to end this brief discussion:

(1) What is emotion? What should be considered to be the essence of emotion or essential for it?

(2) Does emotion have to have its subjective aspect? Can there be emotion without feeling? Is feeling sufficient to account for emotion?

(3) Do the neurological patterns in the central nervous system (CNS) that are clearly associated with the various emotions themselves provide a theory of the emotions?

(4) Should the behavioural, expressive side of emotions be regarded as essential to an account?

(5) All philosophical accounts nowadays, and perhaps since Aristotle onward, have cognitions as a background, or a necessary aspect, or a precondition. Does every emotion have a cognitive base and an object? Moreover, what, in emotion, is the nature of cognition? In more philosophical terms, do emotions have intentionality? That is, are emotions always about something? (See also Griffiths, above.)

(6) What are the functions and explanations of emotions? Accounts of some emotions draw attention to someone's beliefs and attitudes about the world, and others to underlying causes that make no mention of objects of the emotion.

What is the relationship between accounts made in terms of intentionality and accounts made in terms of causes?

(7) What is the relationship between emotion and rationality? Are emotions irrational? Are emotions rational? Can we compare the rationality of emotions (their reasons, from cognition) with evaluations of deliberate activities? One might also extend this line of question into: What is the distinction between emotional and deliberative activities?

(8) What are the links between emotion and ethics? This abuts the matter of the universality or relativity of emotions, on which (according to Solomon) philosophers take a middle road. Are we overwhelmed by our emotions or do we have some choice?

History

By far the majority of the research on emotion from a historical perspective has been reported by Peter Stearns (e.g., 1986, 1993b), Stearns and Knapp (1993), and Stearns and Stearns (1994), although also see Kemp and Strongman (1995) for a discussion of the history of anger. Much of this research is concerned with an analysis of changes in emotional standards in the past and of course how these changes are reflected in emotional behaviour and expression. There are obvious links between a historical approach to emotion and approaches that derive from Anthropology and Sociology, and an equally clear rapprochement with the social constructionist theoretical standpoint. Of particular significance here is the study of change or transition.

What becomes clear from a reading of the work of Stearns and others is that an enormous amount remains to be done with respect to the charting of emotion history. However, it is also obvious that there is a rich history to emotional norms, they have changed rather than remained static. There are also some claims that basic emotions have changed as well. This is not as easy to demonstrate as it is to show that changes in emotional perception and the judgement of the self occur in reaction to shifting social norms.

Theoretically, then, the significant aspect of historical research into emotion is that *change* has to be included as a key theoretical variable. Stearns (e.g., 1986) argues that historical research also places emotions into an ongoing social process and furthermore prompts a discussion of particular types of causation in emotional reactions. For example, changes in various economic factors have helped to shape the development of anger, or a reduction in birth rate has altered the emotional intensity with which individual children are dealt.

Changes in emotional standards can also be analysed in a similar way. For instance, what is expressed, and when, and where, emotionally, has changed over time with changes in social conditions. Again, it is the 'appropriateness' of the expression of anger that provides a good example, the targets of its expression in both the home and the workplace having undergone considerable change in Western society.

Interestingly, Stearns (e.g., 1986) makes the point that the main findings of historians of emotion apply to cognition. However, this leaves out what might be important biological considerations (see below). His thesis is that some emotions

might be more subject to change, historically, than others, depending on the balance between their cultural and biological determinants.

A further useful theoretical concept that Stearns (e.g., 1993b) discusses is *emotional culture*. This is '. . . a complex of interrelated norms, standards, and ideals that govern the endorsement, the expression, and, ultimately, even the acknowledgment of emotions' (p. 36). He uses this concept to elucidate the more important concept of change. An emotional culture prevails for a time and then seems to give way to another emotional culture, thus leading, to use Stearns' oft-quoted example, to anger being thought much less well of in the middle of the 20th century than it was at the end of the 19th, at least in Western society.

He points out that a significant aspect of emotional culture tends to be gender. Within a prevailing emotional culture there are usually quite different prescriptions for men and women, and these lead to the development of particular roles and identities. Again, anger in Western society provides a good example of this. Even though times are changing, anger is still generally regarded as being an emotion more appropriate for men than women.

This brief section on emotion viewed within the discipline of history has been included in order to point out that this perspective brings with it some extra theoretical variables that might otherwise not be considered by those who seek to understand emotion. To date, work on emotion from a historical standpoint has produced some very interesting descriptions of socio-emotional change, although this is not the context in which to list them. As yet, however, emotional historians have not produced their own theory of emotion, although they have pointed to the significance of concepts such as emotional culture in the analysis of emotion. More particularly, Stearns, among others, has shown that emotion does not consist of static phenomena, but that emotion is always in a state of change within society. Theorists of emotion should perhaps take this into account or at least stay aware of it.

Anthropology

Anthropologists have long been interested in emotion, but it is only in recent years that their interest has been expressed in a form that is accessible to those in related disciplines. White and Lutz have done most to bridge the disciplinary gap between Anthropology and Psychology (e.g., Lutz & Abu-Lughod, 1990; Lutz & White, 1986; White, 1993). As might be expected, the anthropological approach to emotion has more in common with emotions conceived as social constructions or as discourse-centred than it has with the biological or physiological.

Theoretically, a basic matter that emerges from recent anthropological writing about emotion is that it is an area that has been almost hijacked, theoretically, by a mixture of folk psychology and psychobiology. As is usual within this tradition, and as much of the present book attests, the typical way of thinking within this tradition is in terms of binary oppositions. White (1993) lists a series of dichotomies that are typical and that work to force emotions (and other phenomena) to be thought of in particular

ways: mind–body, cognition–affect, thinking–feeling, reason–emotion, rational–irrational, conscious–unconscious, intentional–unintentional, controlled–uncontrolled. Simply reading them is to see how compelling they are.

This tradition of thought has placed emotion *within* the person, as a psychological process or set of processes. This is the approach that has come to be expected of individual psychology. White (1993) points out that one effect of this is '... privileging psychobiological variables in emotion theory to the detriment of social and semiotic factors ...' (p. 37). Of course, the alternative to this, which can stem from Anthropology, is to consider emotional meaning within culture and to study the influences of cognitive, linguistic and sociocultural processes. This in turn would place greater emphasis on the phenomenological and communicative aspects of emotion. The links between this approach, the one that comes from History and the study of culture are obvious.

Lutz and White (1986) describe a number of what they term 'tensions' in the study of emotion, which act to determine *how* emotion is both conceived of and investigated:

(1) Materialism versus idealism, with emotions usually seen as material things, although emotions are seen by some as evaluative judgements.
(2) Positivism versus interpretivism, the emphasis in the study of emotion being mainly positivistic, concerned with a search for the emotional causes of behaviour. The anthropological view would derive from interpretivism, with emotions seen as central to cultural meaning and a concern with language and the negotiation of emotion.
(3) Universalism versus relativism. The search has long obtained in psychology for universal processes in emotion, rather than for cross-cultural differences.
(4) Individual versus social. The main tradition is for emotion to be viewed as a matter of individual psychology, rather than social processes. Emotion is seen as *in* the individual.
(5) Romanticism versus rationalism. Rather than distinguishing between psychological and anthropological ways of thinking, this distinction represents two ways of thinking within anthropology. Emotion might be evaluated positively as part of natural humanity or equated, negatively, with irrationality.

The argument sustained by White and Lutz is that each of these alternatives prompts a particular stance toward the study of emotion. So, for example, emotion might be seen as an entity that is explained by some other variables, or it might be seen as something that in its turn can explain cultural institutions, or even be an integral part of cultural meaning.

In general then, anthropological approaches to emotion take emotion out of the person and instead see it as constructed within cognition, language and interaction. Anthropologists suggest that any theory of emotion should at least have a place for culture, communication and social interaction, rather than simply seeing these somehow as *effects* of emotion or as things that follow on from emotion. Human emotion has cultural meaning, and it is to this that the anthropologist draws attention.

Sociology

Although the sociology of emotion has a long history, it is Kemper (e.g., 1991, 1993) who has done most in recent times to bring it to a wider, interdisciplinary audience. Kemper's fundamental starting point is that the sociology of emotion, or presumably the sociology of anything, is not reducible to anything else, such as Psychology:

> . . . for the most part psychologists study emotions as a property of generic human beings, while sociologists study emotions as a property of socially specific people, alive in a particular time, living in a particular culture in particular circumstances.
>
> T. D. KEMPER, 1991, p. 301

In this context, any theory of emotion must deal not only with individual, internal matters such as cognitions and physiological change but also external matters such as social processes.

Kemper makes a searching analysis of the various sociological models of emotion, only some of which will be summarized here, in order to give an idea of the theoretical considerations to which they prompt us.

The first type of model (see Kemper, 1978) is based on social relations and sees emotions as dependent on *power and status*. The social relations involved in emotion are not only *real* but may also involve anticipation, imagination or recollection. The theory suggests that large numbers of human emotions can be understood as reactions to the meaning that underlies power and status. In this context, Kemper makes an analysis of security, anxiety, guilt, happiness, shame, embarrassment, depression, liking, optimism and pessimism, and even love.

To consider one detail of the theory, Kemper suggests that guilt, shame, anxiety and depression come about through a socialization process that depends on the type of punishment used (power or status, physical or psychological), the proportionality of the punishment to the punished act and whether or not the person doing the punishing is a source of affection. This leads to a $2 \times 2 \times 2$ outcome model of how the major negative emotions are socialized.

In a second model, emotions are seen as the forces that lie behind group cohesion (see, e.g., Durkheim, 1954; Goffman, 1967). Collins (e.g., 1990) and Kemper and Collins (1990) extend this view into a theory that depends on the concept of *emotional energy*. This is the feeling that follows ritual interactions in groups that turn out successfully. It depends on focused attention in the group, a common emotion and a feeling of solidarity. Again, underlying emotional energy are power and status, interactions based on these having their emotional effects. Ultimately, from this perspective, emotional resources come from power and status. In some ways, the significance of Collins's theory of emotional energy is that it makes sense of many of the emotional experiences of everyday life.

The third type of model that Kemper describes comes from the ideas of Scheff (1990), in which concern centres on the emotions that are at the basis of social control. He draws on Durkheim's social inference theory to propose a deference–emotion system. Scheff suggests that we are always experiencing either pride or shame, depending on how we are dealing with the strictures of the world around us. Thus, conformity

to external norms and rewards leads to deference and pride, whereas non-conformity is punished and leads to a lack of deference and shame. Scheff sees these aspects of emotion as a constant, silent, almost invisible biosocial system of social control. This is an interesting theory and quite unlike any that are found in the psychological literature, because it gives a central position to two emotions, pride and shame. They are seen to provide an account of conformity and therefore to be at the basis of social order or disorder.

The fourth type of sociological theory depends more on *culture* than on social structure (e.g., Hochschild, 1990; Thoits, 1990) and is concerned with emotion management. For example, Hochschild suggests that how we feel depends on appraisals that in turn depend on variables such as social class, gender, race, etc. On top of this, there are culturally determined rules about the appropriateness of what is felt and what is expressed. So, in general, emotion serves a signalling function that prompts us into *managing* emotional lives, something that is achieved by various types of acting.

Kemper (1993) describes a fifth type of sociological theory of emotion that depends on the view that the self is a social creation that comes about through *role-taking*. Because such role-taking occurs mainly through language, this type of theory has come to be known as *symbolic interaction* or *reflexivity* (e.g., Rosenberg, 1990). It is considered in detail shortly.

Heise and O'Brien (1993, see also Chapter 10) describe *affect control theory* in some detail, which Kemper believes to be among the most significant sociologically based emotion models. It is based on the view that '. . . people construct and understand social action so as to have important cultural meanings affirmed by the impression generated in manifest behaviour' (1993, p. 493). Also relevant to this model is the semantic differential, the three dimensions of affective meaning (evaluation, activity and potency) that Heise and O'Brien suggest can be used for measuring the sentiments that are part of the identities that people create for themselves during their social encounters.

Within affect control theory, people are affected by events, and emotions are transient states that reflect this: 'The emotions depend on the current impression of the person, and on how that impression compares to the sentiment attached to the person's identity' (p. 493). Affect control theory links with emotion management in that if an emotion is socially undesirable it can be changed. It can be replaced with a new emotion, or a past event is reinterpreted such that it generates a new emotion.

Toward the end of his 1991 paper, Kemper argues for a rapprochement between psychologists and sociologists through a socio-psychophysiological theory of emotion. He is urging an exploration of the links between the biology and the sociology of emotion, the body and society. He is suggesting that any model or theory of emotion should keep in mind the various limits imposed by both the body and society.

Of course, there are theoretical links between psychologists and sociologists of emotion, particularly through cognition. Even here though, they tend to take slightly different approaches. The psychologist attempts to spell out what exactly the cognitive processes in emotion might be, whereas the sociologist only specifies any cultural cognitive processes in the broadest social interactionist terms. Kemper also stresses the importance of affect control theory within a psychological framework and naturally enough also draws attention to the more structural models of Collins (1990) and

himself. Clearly, any theorist of emotion would do well not to omit what are usually conceived of as sociological variables from consideration.

Finally, within a sociological framework it is important to return to Rosenberg (1990). Although he believes that emotions are basically organismic, his contribution is an explication of reflexivity, which he suggests is an integral part of emotion.

'Reflexivity refers to the process of an entity acting back upon itself' (1990, p. 3). Rosenberg refers to two types of reflexivity. The first is cognitive, in which all a person's cognitive processes can be used to consider or deal with the self. The second concerns agency, in which we can act or do things to ourselves, either as a whole or in part. The parts can be external (public) or internal (including things such as cognitions and emotions). Rosenberg is arguing that through reflexivity people can affect their own internal processes, including emotion, and in particular its physiological aspects:

> The central message ... is that reflexivity works a fundamental change in the nature of human emotions. Once the internal state of arousal comes to be 'worked over' by these reflexive processes, they acquire a totally different character.
>
> M. ROSENBERG, 1990, p. 3

Rosenberg suggests that there are three ways in which reflexivity affects emotion:

(1) through identification (i.e., in interpretative processes).
(2) through emotional display (i.e., in behaviour that is intended to affect other people).
(3) through emotional experiences (i.e., in internal states of arousal that are intentionally, rather than unintentionally, created).

Importantly, Rosenberg also distinguishes between emotional display and emotional expression, the former being intentional and the latter unintentional. Perhaps even more importantly, he also distinguishes reflexive and non-reflexive emotional experiences, again the difference between what is intentional and what is spontaneous. His particular interest is in the reflexive processes because they stem from social interaction.

Rosenberg takes some care to explicate the details of reflexivity in the identification, display and experience of emotion. For example, he suggests that since people cannot control their emotional experiences directly, instead they attempt to control their causes. So from this perspective, we try to control our emotions by controlling our thoughts, either by only attending to some things rather than others or intentionally shifting our viewpoint. Alternatively, we try to control our emotions by controlling our bodies (e.g., by physical exercise or drugs).

In the present context, it is not the details of Rosenberg's analysis of reflexivity in emotion that is important, but rather his general view. Through social interaction human beings are able to be both subject and object and to take themselves as objects of processes that are to do with cognition or agency. In particular they are able to reflect on physiological states that are to do with their own emotions, and in so doing change, or at least affect, these emotions.

Culture

It may seem odd that this chapter includes a specific section on culture when it already contains sections on History, Anthropology and Sociology. There are obvious areas of overlap between any approaches to emotion that might be made under any of these heads. Clearly, for example, cultural meanings are of concern to some historians, to anthropologists and to sociologists of a particular persuasion. However, there have been recent developments in the culture of emotions *per se* that make it appropriate to consider them under their own head. It is almost as if there is developing what might be called a 'cultural psychology of the emotions'.

Shweder (1993) suggests that cultural psychology is aimed at elucidating the meanings that underlie psychological processes, at exploring how these meanings are distributed throughout the world and ethnic groups, and at studying how they are acquired. Within this type of framework, culture is seen as an amalgam of meanings, conceptions and schemes that are activated through normative social institutions and practices. Importantly, such practices include language.

According to Shweder, acts of meaning such as conceptualization can take place either very rapidly or automatically. Examples in the emotion sphere are given by shame and embarrassment. In fact, within the area of emotions, there are four significant questions in cultural psychology:

(1) What in terms of meaning allows an experience to be defined as emotional rather than something else?
(2) What particular emotional meanings exist in particular parts of the world (geographically or ethnically)?
(3) States of the world can be experienced in various ways. To what extent in different parts of the world are particular states experienced through emotion rather than in some other (somatized) way?
(4) How are meanings, particularly emotional meanings, acquired, especially with respect to everyday discourse and social interpretations?

The broad aim of cultural psychology is to decompose emotional states into narrative slots in order to try to determine the meaning of other people's mental states without necessarily being dependent on the researcher's own language.

Gerhards

At a broad level, Gerhards (1989) considers the ways in which modern society reflects a changing culture of emotion. He suggests that there are three ways in which culture influences emotion:

(1) Cultural interpretations guide out understanding of social structures and hence influence emotions.
(2) Cultural norms lead to the development of 'appropriate' feelings and expressions (e.g. in the home or in the classroom).
(3) There are cultural definitions of personality and identity, which include emotional

identity. So, for example, through cultural influences I might think of myself as an angry person or an anxious person.

Meanwhile, against these sources of influence, Gerhards argues that modern society is exercising increasing control over the emotions, particularly through the use of fear and shame.

However, in recent times there have developed what Gerhards terms 'post-modern influences on emotion' (see also Chapter 15). First, there is *commercialization*, as part of which there are links between emotion and the economic world. For example, emotions and their expression are frequently an aspect of the professional roles that people play (Hochschild's emotion work). Another way of characterizing this is to say that emotions are being increasingly controlled or colonized by economic factors. So, perhaps part of the way in which we learn emotion regulation is through cultural forces.

Second, there is what Gerhards terms *informalization*. This is almost the opposite of commercialization, involving a loosening of emotional control. So, we are encouraged to 'share' our feelings and to lower our thresholds for shame and embarrassment. This is an orientation to emotional states, rather than to emotion control. It is linked to non-materialist values, a general avoidance of negative emotions and seeking out of positive emotions. All this, in turn, links to the hierarchy of needs, with the lower ones being satisfied for many people in modern society leaving the way clear for concentration on self-actualization.

The third of the post-modern influences on emotion comes through language (also see below). We are increasingly encouraged to talk about and reflect on our emotions. Put another way this means that emotions are gradually being taken out of the private world and put more into the public domain. There are increasing numbers of books on emotional guidance and increasing demands for therapy.

The final influence that Gerhards describes is the formation of new identities, emotional selves. So there are emerging new concepts of the self in modern society, in which it is acceptable to be impulsive (emotional) and to show oneself as emotional is acceptable. For example, on occasion men now cry on television. Emotion is to some extent being used to establish identity.

These four developing aspects of emotional influence come together in modern society in what Gerhards terms a 'post-conventional emotional consciousness'. At this point, Gerhards' catchphrase is 'unity comes through diversity'. This leads on to the notion that modern society, or perhaps post-modern society, is characterized by people who can 'dispose of their emotions', which includes giving in to them, rather than suppressing or ignoring them.

Wierzbicka

A significant way into what might be termed the 'cultural psychology of emotion' is through linguistics. An excellent start has been made in this direction by Wierzbicka (e.g., 1992). The main thrust of her argument is that the emotions that we think of as basic, in either folk psychological terms or in the terms of academic theories of emotion, are 'cultural artefacts' of our language. It is likely that all languages have provided such prompts. She is therefore assigning to language a core role in how emotions are

conceptualized and suggesting that any analyst of emotion should attempt to deal with the way in which language obstructs direct access to the emotions.

Her argument is not that there might not be universal emotions, nor that it is impossible to penetrate the emotions of those whose culture is different from the investigators. Rather, she is urging that the study of emotion be conducted from a perspective that is truly universal (i.e., independent of language and culture). Thus, even if there are universal facial expressions that can be matched with particular emotions, such emotions are not necessarily characterized properly by the terms of say the English language, such as happiness or sadness.

Wierzbicka believes that our understanding of emotion would progress better if it were based on what she terms 'universal semantic primitives'. Her point is that much of the analysis of emotions conducted by psychologists has been in culture-dependent terms. Emotion words such as anger tend to be explicated in terms that are themselves dependent on our culture. (One might take this argument further and question just how much the *many* cultures that happen to share a form of the English language actually have in common, emotionally or in any other way.) Instead, Wierzbicka argues that emotion analyses should depend on explication by very simple concepts that at least come closer both to being universal and to being semantic primitives.

One example of the type of language-based explication of emotion that Wierzbicka makes will suffice.

angry
X feels something
sometimes people think something like this (of someone)
  this person did something bad
  I don't want this
  because of this, I want to do something
  I would want to do something bad to this person
because of this, they feel something bad
X thinks something like this
because of this, *X* feels something like this.

A. WIERZBICKA, 1992, p. 303

It should be clear from this example that Wierzbicka is attempting to use the most simple and basic (and therefore, it is to be hoped, universal) terms in her descriptions. It should be noted in passing that in speaking of anger she also gives examples of cultures in which explications of anger, although similar, are also different. So, in this sense, anger is not universal.

To make one final point about Wierzbicka's important suggestions, she takes Johnson-Laird and Oatley (1989) to task for speaking of happiness, sadness, anger, fear and disgust as universal and as categories of direct experience. To do this she believes that they would have to demonstrate how these categories can be discriminated, and not simply in terms of the cultural artefacts of the English language. In short, we cannot simply use the emotion terms of our particular language merely because it is convenient to do so.

Russell

In an analysis that is as penetrating as Wierzbicka's, Russell (1991) comes to a similar conclusion. Although based on cultural comparisons it does not rest as squarely on language as Wierzbicka's. He reviews research in three areas: emotional lexicons, emotions as they are inferred from facial expressions and the dimensions that appear to be implicit in judgements of emotion made across different languages and cultures.

Russell goes on to review five hypotheses that have been addressed with respect to similarities and differences in emotion words across cultures and the integration of categories and dimensions:

(1) There are universal basic categories of emotion, although lesser categories might be specific to cultures. He makes the point that even if there might be universal basic emotions in expression, these might or might not be related to universal categories for understanding emotion. Moreover, even if there are universal basic emotions they might not be best denoted by English emotion words.
(2) There are universal basic categories of emotion, although the cognitive models developed for emotion may differ widely between cultures. Languages might differ in their cultural boundaries, but there could be universal focal points.
(3) The categories of emotion derive in the historical development of language from a single unpleasant state of physiological arousal.
(4) Wierzbicka's idea of near-universal, semantic near-primitives, already discussed, provides a framework to consider cross-language comparisons.
(5) The final hypothesis is that a category of emotion is a script, this being a '... knowledge structure for a type of event whereby the event is thought of as a sequence of subevents' (1991, p. 442). This will have both universal and culture-specific aspects.

Russell's conclusions are that the emotions are categorized differently by those in different cultures and speaking distinct languages. Because categorization of emotion is culture-specific it does not follow that emotion itself is not universal. However, the important point here is one that Russell shares with Wierzbicka: since English language categories for emotion are not universal there might not be labels for universal experiences. As Russell neatly puts it, '... they are hypotheses formed by our linguistic ancestors' (p. 444).

Russell also concludes that emotion categories are in fact extremely similar across cultures and languages. All emotion words and categories are an integral part of a folk theory of mind. It might follow from this that (1) *any* theory of emotion ultimately derives from a folk theory and that this should be recognized and (2) folk theories are explicitly taken into account when constructing other types of theory, even when such types are based on the formalities of science.

Conclusions

It can be seen from this chapter that some researchers in disciplines related to psychology have made important contributions to emotion theory. However, although

important and interesting, to what extent can these contributions be regarded as good theory? This is the first of several questions that should be asked of the material summarized in this chapter. In answer it is perhaps best to work through each of the disciplines in turn.

Recent philosophical theories of emotion certainly provide good accounts or explanations of emotion, even though they do not necessarily provide good summaries of existing knowledge or data. They focus well on emotion and on possible distinctions between emotion and non-emotion. They have good heuristic value, but for the most part they do not lead to easily testable predictions.

By and large, the recent philosophical theories of emotion are epitomized by Lyons's causal–evaluative theory, which has much in common with Schachter's psychological theory, or indeed any psychological theory that emphasizes a mixture of cognitive appraisal and physiological arousal. In terms of the Lazarus (1991a, b) prescriptions for emotion theory then, these theories do well on the cognitive/appraisal side of things. They also tend to have room for motivational considerations and to be expressed more in terms of social variables than biological. Attempts are made to distinguish between emotion and non-emotion and to discuss discrete emotions. However, they fall down on the remainder of Lazarus's criteria.

In more general terms, the philosophical theories are concerned with the causes of emotion and with emotion as an independent variable. They are not, however, much concerned with emotion as a dependent variable.

Moving to Oatley's (1992) prescriptions, the philosophical theories fare reasonably well. They do tend to be concerned with the functions of emotion and with discrete emotion (both from a folk psychology and scientific psychology approach), with unconscious causes, with interpersonal communication, with evaluations and with basic emotions. They have little to say though about the simulation of the plans of other people. More generally, they tend to be so broadly expressed as to be able to embrace any amount of new evidence, although whether or not they can do so well is another matter. Also, as already noted they are typically not couched in terms from which specific predictions can be easily derived.

In this context of theory evaluation it is worth bearing in mind the problem that Griffiths (1993, 1997) sees with recent philosophical theories of emotion. He regards them as not good at distinguishing emotion and non-emotion, as not having much of a place for contentless emotions such as anxiety, as not dealing well with either physiology or imagination and as being too dependent on folk theory. These are all debatable points, the force of the last one being particularly difficult to appreciate.

The theoretical considerations about emotion that have derived in recent times from History and Anthropology are not currently in the form of theories, either formally or informally expressed. However, they both draw attention to the importance of cultural variables in any understanding of emotion. They draw attention to emotion not being static, but to some extent dependent on change, in both time and space. Furthermore, although they are both (as are members of all the disciplines canvassed in this chapter) concerned with meaning that might underlie emotion, they tend to place emotion *outside* the individual. For psychologists of course its natural resting place is within the individual.

There is a long history of emotion theory in Sociology. Taken as a whole, the sociological theories can be evaluated in similar terms to the philosophical theories.

They provide reasonable summaries of some existing knowledge and definitely are expressed in terms of ready explanation. They are well focused and have a useful heuristic value; they clearly promote new thoughts. However, again, they do not lead to readily testable predictions. Of course, though, like the philosophical theories, they are not aimed at having predictive power.

In Lazarus's terms, once more the sociological theories are good on the causes of emotion and on emotion considered as an independent variable. They have little to say, however, about emotion as a dependent variable. As might be expected they tend to stress the social rather than the biological and they have a core role for cognition. They also bring other conceptual matters into consideration. These will be discussed a little later.

Differently from the philosophical theories, the sociological theories do not fare so well within the framework that Oatley suggests. They are concerned with the function of emotions and of course with emotions that involve interpersonal communication. They are also concerned with the discrete emotions and have some of their origins in folk theory, although this is not often made evident. They can deal with any amount of new evidence, but they cannot be used to derive specific predictions with much ease.

Finally, what have been categorized here as cultural theories of emotion actually do well in terms of what makes for good theory. They are focused, of great heuristic value, give ready explanations and can be used to develop testable predictions. In Lazarus's terms, however, they do not cover much theoretical territory. Since they are restricted to cultural meanings and the significance of language, they give no room to biological matters, or behaviour, or physiology (except through language, of course). They are, however, concerned with how emotion is generated and develops. As with the other contributions summarized in this chapter, the cultural ones bring new theoretical matters into consideration. These will be mentioned later.

In Oatley's terms perhaps the main strength of the cultural theories of emotion is that they are based squarely in folk theory as well as in science. However, they are also concerned with the causes of emotion, with emotion as interpersonal communication, with the basic emotions, with emotions that involve evaluations and even with the simulation of the plans of others. They can deal with more evidence and they can be used to derive specific predictions. They fare well.

Generally, then, theories of emotion from outside psychology are a mixed bag, some of them being very good on most measures of good theory, and some not. What use are they to our understanding of emotion? What do they tell us? The important answer to this question is that they tell us or point us in the direction of different things than do the typical psychological theories. Of course, many of them emphasize cognition, and motivation, and so on. But they also bring important new theoretical concepts into account. For example, there is stress on the importance of change, of the cultural meanings that might underlie emotion, of social variables such as power, status and role, and very basic concepts such as reflexivity.

Penetrating a little more deeply, theories in the areas dealt with here begin to come to grips with the way in which people might be regarded simultaneously as both subject and object when dealing with emotion. Or with the possible significance of symbolic interaction. Or with entirely new concepts such as Wierzbicka's universal semantic primitives, which she puts forward in the context of emotion being considered as a cultural artefact of language. It is also through these approaches that folk theory

begins to be built into conceptions of emotion even more firmly than it is placed there by psychologists such as Oatley.

From the viewpoint of generating an understanding of emotion, the theoretical issues dealt with in this chapter should at least be kept in mind by anyone who might attempt to devise yet another theory of emotion. Perhaps the case should be made more strongly, however. These issues *should* be built into any new theory of emotion, even if it is from a psychological basis. This does not mean that such theories should do away with some of the psychological concepts that have arisen so frequently throughout the history of emotion theory, but rather that once matters such as change over time and place, or the issue of the extent to which emotion is an artefact of language have been thought of, it is impossible to leave them out. As Kemper suggests it should be perfectly possible to have a socio-psychophysiological theory of emotion. But perhaps historico-cultural factors should also be added to this in some way.

Summary

- For psychologists, emotion is centred within the person. For those in cognate disciplines such as Philosophy, History, Anthropology and Sociology, emotion is also outside the person, as part of the culture or society.
- There are strong similarities between some of the recent philosophical theories of emotion and psychological appraisal theories.
- Philosophers of emotion provide extremely penetrating analyses particularly of the main questions that should be asked by anyone attempting to understand emotion.
- It is important to remember that emotion as we study it now is of the present. Emotion (expression and perhaps experience) changes over time in society.
- Emotion also changes from place to place (i.e., from culture to culture) and its meaning always reflects a particular place and time.
- There have been many sociological theories of emotion, based on social relations, social forces, social control, symbolic interaction and reflexivity.
- There is a cultural psychology of emotion, exemplified by analyses of post-modern influence on emotion and emotion seen through linguistic analysis.
- Understanding of emotion is enriched by studying its discussion in the disciplines of social science other than psychology, such discussions being clearly grounded in folk theory.

A question of application

- What changes, if any, in general emotional expression have you seen throughout your life? How do you think they have come about? Do you think that people's experiences of emotion have also changed?

- Have you seen different types of emotion or emotional expression in people of different cultures? Do you think that their experiences of emotion differ?
- When you look around at home or at work can you see instances of emotional reactions that do not seem to have a focus?
- When you are attempting to understand and cope with other people's emotions is it important to know what caused them or what the person's goals might be?
- Is emotional intensity important to an everyday experience of emotion? Is it possible to judge how intensely someone is experiencing an emotion? Do you think people can control emotional intensity?
- When dealing with emotion, either your own or others', how important is it to understand what the emotion means, what underlies it? Do we need the context in order to be able to do this well?
- When you see emotion at home or at work, is it useful also to look at power and status relationships and social forces?
- List instances of differences between the expression of emotion and people *displaying* emotion. Under what circumstances do people display emotion?
- List instances of the commercialization of emotion on the one hand and the informalization of emotion on the other.
- How important is it to recognize and 'give into' our emotions in daily life? Are home and work different in this respect?
- How much do you think can be learned of emotion by paying close attention to the exact words that people use when expressing it or talking about it?
- Collect and compare some 'theories' of emotion held by your family members, friends or colleagues. What do you think of these theories?

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Chapter 15

Emotion themes

More broadly, emotional scenarios approximate forms of cultural dance; the available forms may be limited, but the conventions are subject to historical erosion and accretion.

K. J. GERGEN, 1994

Psychologists have always had to struggle against a persistent illusion that in such studies as those of the emotions there is something *there*, the emotions, of which the emotion word is a mere representation.

R. HARRÉ, 1986

The conceptual repertoires of emotions provides for an extraordinary flexibility in how actions, reactions, dispositions, motives and other psychological characteristics can be assembled in narratives and explanations of human conduct.

D. EDWARDS, 1999

. . . much of what passes for psychology in traditional psychology is a restatement of everyday 'folk theories' about the mind embedded in the language and interactional practices of certain, usually middle, classes of people.

J. P. GEE, 1999

Emotions are not a luxury.

A. R. D'AMASIO, 1994

He's getting a little emotional. And he needs to make no apology for that. It's perfectly understandable.

SKY TV, sports commentary, 2002

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Some real life

Imagine Peter, a 12-year-old schoolboy. It is the morning of the annual athletics day and he is a good runner. He has made it into the final of the under-14s' 100 metres, to be held that afternoon. All the school and many of the parents will be there. If previous form holds up, the winner should be between him and another boy Eric, who is in the same year. They are evenly matched and have each beaten the other on an equal number of occasions. Recently, because their running has shown such promise, their respective parents have bought them spiked running shoes. They have both found that the shoes make a noticeable difference to their speed. But spikes have not been allowed at the school sports in previous years. Both Peter and Eric have asked that they be allowed to wear them for the 100 metres.

Nothing has been decided during the morning, but then, shortly before the race, the sports master finds Peter and tells him that the decision has been made: he and Eric can wear spikes if they wish. He asks Peter to find Eric and let him know. Peter is very excited.

Now, imagine two distinctly different possibilities. In the first, Peter finds Eric, tells him about the spikes and they both go off to the race. It is very close and they both do their personal best times, but Peter just wins. Eric congratulates him. What would Peter be feeling.

Alternatively, Peter goes straight to the race and says nothing to Eric about the spikes. It is a very close race and they both do their personal best times, but Peter just wins. Eric congratulates him and then looks down and notices Peter's spikes. What would Peter be feeling? Is it conceivable that he would feel pride in both cases? Is it conceivable that he would feel guilt in both cases?

Now imagine that you are in your thirties, happily married and secure in your job. You have two children aged eight and nine, both boys. In recent years, perhaps since settling into parenthood, you have become more reflective than in the past. Priorities in life seem fairly clear to you and you are comfortable with yourself, knowing your own strengths and weaknesses. You acknowledge your shortcomings, but are rarely complaisant about life.

Generally, you have a clear view of your own place in the moral order of things. You know your own values and beliefs and, while not pushing these on to other people, rest securely yourself. These values include a firm belief in equity and justice and in reciprocity and fairness in dealing with people.

Your relationship with your sons is good. You spend time with them, playing, mentoring and giving them both emotional support when things go wrong and encouragement in everything that they want to do or for acquiring skills that they are interested in developing. However, even though you have never mentioned it to anyone else, even your spouse, and do not even like to admit it to yourself, you consistently prefer one to the other. Your favourite seems to try a little harder and to be a little more resilient when things go wrong. You have always admired such

characteristics and so cannot help making the comparisons between your sons. In other ways, their abilities are equal, but they are consistently different in these two fundamental ways of being.

At an emotional level, this makes things difficult for you. Inside, you cannot help warming to the fortitude and resilience of one son and being slightly disappointed when the other son never quite measures up to this. But you work very hard never to show these feelings – to do so would be too much of a clash with your beliefs about fairness and justice. So you become scrupulous in your dealings with your sons and hope that they can never detect the small emotional differences that lurk within. Eventually, these emotional reactions disappear and you begin to appreciate each of your sons for his own worth, without making the distinction, even to yourself. Over time, your emotional reactions have been changed by your beliefs.

This final chapter has a number of aims. The first is the identification of themes within the psychology of emotion that are both current and are likely to contribute to the future direction of emotion research and its application. A second aim is to draw whatever conclusions it is possible from the overview of theories of emotion that has been attempted throughout this book and to say a little about what any theory of emotion should include. Finally, some recent and very broad directions of theoretical development will be touched on in an attempt to speculate a little about the future.

Summary of theoretical perspectives

Perhaps the best place to begin is with a very broad overview of the theoretical perspectives that have been discussed in this book. This should allow attention to centre on major themes, on issues that are necessary for any theoretical analysis of emotion to embrace and on which theories appear to be the most cogent. It should also be relevant to the recognition of pointers to future developments.

Chapter by chapter, and it is to be hoped systematically, the many theories of emotion have been broadly appraised as to their worth according to various prescriptions for what a 'good' theory and particularly a 'good' theory of emotion should include. Moreover, the aim has been to do this within everyday and 'applied' settings. Irrespective of what sounds like a moral imperative, it is important to say what most (but not all, of course) theories considered here *have* included.

The 'better' theories deal with what emotion is, its nature, origins and development and the distinction between emotion and non-emotion. They make room for experience, for behaviour and for physiology, and in so doing consider the biological (functional, adaptive) and the social (learned, constructed) foundations of emotion. Above all, they deal with the relationship between emotion and cognition, even if this is simply (in some few cases) to make a distinction between the two.

Moving to a slightly more detailed overview, the phenomenological theories tend to be narrow and restricted to the nature of emotional experience and consciousness. They add to the richness of our understanding of emotion, but do not stand out as theories. They do, however, give a central role to cognition.

Behavioural theories of emotion are simpler than the phenomenological, but are just as narrow. Oddly, they also bring cognition into the picture. By contrast, the physiologically based theories are relatively broad and, at least in their more recent form, can be called 'good' theories. Again, they give a crucial role to cognition.

What have been termed in this text the 'ambitious theories of emotion' (i.e., the large-scale ones) are also 'good' theories in general, almost being theories of psychology rather than just emotion. Turning though to those theories that are centred on particular emotions rather than on emotion in general, the focus becomes restricted again. Even within the narrower focus, however, these theories do not go very far, although they do begin to point to the importance of an interdisciplinary approach to emotion.

Recent theories that start from a developmental perspective are quite impressive. As well as stressing cognition, they bring into consideration new themes such as attachment. They also do rather well at considering both the biological and the social foundations of emotion. By contrast and perhaps surprisingly, social theories with one or two exceptions are not so good, being rather restricted. However, they do put cognition into a central role.

The broadly based clinical theories are not very impressive, although some of the more specific theories of anxiety are better, as are theories linking emotions and health. Again, cognition is regarded as a core matter, as it is in more applied types of theory that stem from considerations of the individual, the environment and the culture.

Finally, theories of emotion from related disciplines such as Philosophy, History, Sociology and Anthropology make a very interesting contribution. They add enormous breadth to our understanding of emotion, bring new theoretical concepts into consideration and once again give a prominent role to cognition.

Within the context of this very broad overview there are some theories that stand out above the remainder. In particular, the theories of Ekman, Izard, Kemper, Lazarus, Mandler, Oatley and Johnson-Laird, Panksepp and Plutchik are prominent, although other people have made extremely important contributions as well. The issue of the best current theory of emotion will be revisited.

Biological foundations

One of the major themes to have emerged in emotion theory is that of the biological foundations of emotion. Even those theorists who do not address this matter directly seem to have the matter there almost as a hidden agenda. A good starting point is with Plutchik's theory. As is well known, he has long taken an evolutionary perspective on emotion, constructing his very practically based theory on functional grounds. A similar perspective has also frequently been taken by those who have been primarily concerned with the biological bases or physiological substrates of emotion: Panksepp, for example. However, the evolutionary approach in general is very usefully dealt with by Nesse (1990; Nesse & Berridge, 1997; Nesse & Williams, 1994), as discussed in detail in Chapter 5. However, this evolutionarily functional, adaptive, survival-based approach to emotion occurs throughout the field, no matter what the starting point, even the spiritual.

A different, but equally compelling discussion of emotion viewed from a bio-

logical perspective is made by emotion historians Stearns and Stearns (1994). Their particular concern is to explore the links between biology and culture, their way of saying nature and nurture, as far as emotion is concerned. In summarizing their viewpoint links will be made with some of the discussions that occur later in the present chapter.

The Stearns describe two types of evolutionarily based approaches to emotion. The first emphasizes emotion having been there at least throughout human evolution, functioning to improve the chances of survival. The second emphasizes the pre-speech communicative function of emotion. They point out that the three major lines of 'evidence' considered relevant to this are concerned with physiological response-patterning, infant emotional expression and the possibility of cultural universality in facial expression.

On the other side of the coin, the Stearns characterize the social constructionist view (see extended discussion later in this chapter) as suggesting that context and function make emotional life what it is. Typically, they stress the importance of cognitive appraisal (rather than a basic emotions approach) and demonstrate enormous emotional variety from culture to culture, and even from time to time within a culture.

They argue that areas such as emotion would benefit from a rapprochement between the biological and the constructionist viewpoints. However, this has not yet happened, the two camps usually dealing with each other only critically. Stearns and Stearns believe that the lack of common effort is the result of three matters:

(1) The biological/psychological approaches to emotion were established long before the constructionist.
(2) The Stearns do not use the term 'binary', but they use similar terms to characterize the typical 'either/or' thinking that characterizes many researchers. Nature versus nurture would be a typical example. The constructionists are also prone to oversimplified thinking, but in their case it is more in terms of absolutes or extremes.
(3) The third issue is the most trenchant and goes to the heart of the question of the *type* of science that is acceptable. The basic emotions approach stems from a background of laboratory science, replicability and so on. The constructionist approach moves on to wider ground and includes the much broader study of culture, even embracing disciplines such as literary theory. Mostly, such an approach does not permit such bastions of traditional science as replicability.

Stearns and Stearns conclude, among other things, that a way forward from these difficulties (and they are difficulties that ramify into the politics of research) must hinge on theory linking the gap between science and cultural analysis. These issues will be returned to later in this chapter.

In a treatise on the links between biology and emotion in which he specifically does not attempt to offer yet another theory of emotion, McNaughton (1989) nevertheless puts the biological/evolutionary approach to emotion in a balanced perspective. His basic point is that, while what he terms 'teleonomic* arguments' do not provide

*Teleonomy according to *Webster's Dictionary* is 'the quality of apparent purposefulness in living organisms that derives from their evolutionary adaptation'.

final accounts of emotion, they do generate the appropriate types of question for psychologists to ask about emotion. It allows questions to be asked in such a way that they can be tested empirically. Moreover, as McNaughton sees it, even when such questions cannot be asked, the biological approach puts emotion on a firm enough foundation that unwarranted assumptions are not made. It might be noted here that the social constructionist approach does not automatically lead to unwarranted assumptions either.

McNaughton does not make huge claims for the biological approach to emotion. He sidesteps the detailed discussion of emotion theory and even suggests that it is still premature to offer a definition of emotion. However, he sees the biological approach as a way of integrating emotion data and as a basis for exploring mechanisms that might underlie such data. From this perspective it does not matter whether or not a researcher is correct in his definition of emotion. It is enough that researchers outline their area of study as emotional and then try to say what its specifications or part of its specifications are on the basis of a teleonomic argument. This is certainly one approach.

Social construction of emotions

In recent years much has been written about emotions as socially constructed. The discussion that follows relies particularly on Averill (1982), Fisher and Chon (1989), Gergen (1994), Greenwood (1992), Harré (1986), Kemper (1987), Oatley (1993) and Ratner (1989, 2000). Also, some of what follows will extend the discussion of the links between biology and culture (Stearns and Stearns, 1994) already canvassed in this chapter.

Theory deriving from social constructionism (or social constructivism – the terms are used interchangeably) has it that emotions (or at least adult human emotions) come from culture or social concepts. For human adults there are internal and external stimuli that are interpreted, this interpretation mediating between the stimuli and any emotional response that might ensue. This means that any culture has its distinctive patterns of emotions that come from social practices. From this perspective, then, emotion is relative and changeable. It is usually contrasted with emotion in animals or human neonates where emotions are immediate and biologically determined reactions, in which the catchwords are universality and continuity. It is almost impossible to consider ideas of emotion being socially constructed without immediately comparing them with what Ratner (1989) terms 'naturalistic theories'.

Social constructionists usually distinguish between two types of emotion: those that have 'natural' analogues (i.e., they occur in animals and human neonates) and those that do not. Examples of the former are joy, sadness and fear and of the latter guilt, shame and pride. Such emotions are entirely socially constituted.

Oatley (1993) points out that the social constructionist view of emotion, although based to some extent on the inferences of cognitive analyses, also has the extra components that come from folk theories of emotion. He describes two forms of social constructionism. The strong form is that *all* human emotions are socially constructed (i.e., they are based on beliefs and shaped by language) and ultimately stem from culture. So, they are not modifications of natural states, but derive solely from

culture. The weaker view is preferred by most of those who are in this camp. It is that some emotions are socially constructed and some are more socially constructed than others. Interest then centres on how any social construction occurs.

Oatley goes on to make some interesting comparisons between various types of theory. For example, as has been seen throughout the present book, some theorists believe that the only biological constraint on emotion is that of arousal. Others, such as Oatley himself (e.g., Oatley & Johnson-Laird, 1987, in their basic theory of emotions) believe that constraint comes from the brain adopting a particular mode of functioning when recognizing stimuli relevant to a goal.

The usual way of determining the extent of the social construction of emotions is to make comparisons between cultures. As has already been seen (Chapter 14), this can be done either historically or anthropologically. Typical types of comparison might be between the prescriptive aspects of emotion in various cultures, determining how appropriate it is for particular emotions to be expressed in particular circumstances. Or cross-cultural comparisons are often made between the various socialization practices that obtain in different societies.

Typically, as Oatley points out, the social constructionist approach to emotion also involves attempts to describe *how* emotions are socially constructed in adults and what emotions accomplish in terms of social roles and obligations. Hochschild's (1983) analysis of emotions in particular settings is a good example of the former, and Averill's (1982) searching analysis of anger is a good example of the latter.

Oatley concludes that, rather than a theory of emotion *per se*, social constructionism offers an approach to understanding emotion. It does embrace certain theories, Averill's or Harré's, for example. Its particular strength is that it gives a way of considering the extent to which emotions are apposite to their circumstances. In other words, it begins to suggest what the purposes of emotion might be. Its other strength, at this point, is perhaps that it has obvious links with the various cognitive approaches that have come to predominate almost all theories of emotion.

Ratner (1989, 2000) develops his analysis by making a strong critique of naturalistic theories of emotion from a constructionist standpoint. He begins by giving a very useful 11-point summary of the naturalistic approach, taken largely from Zajonc, Izard, Ekman and Plutchik, which will be further summarized here. It should be noted that this could be regarded as the strong, rather than the weak naturalistic position:

(1) emotions and cognition are independent;
(2) emotions determine cognition and cognition serves emotion;
(3) there is continuity between animal emotion and the emotions of human infants and adults;
(4) in comparison with cognitions, emotions are spontaneous and communicable;
(5) there are a few basic emotions;
(6) there is a physiological mechanism underlying each basic emotion;
(7) emotions are dealt with by the right side of the brain and by the subcortex, and cognitions by the left side of the brain and the neocortex;
(8) some facial expressions are (near) universal;
(9) emotions can be conditioned without awareness;
(10) we can hold emotional impressions of people without appraisal;
(11) emotions are global and cognitions 'piecemeal'.

Ratner goes through these points in turn and rebuts them vigorously, particularly and not surprisingly emphasizing the significance of cognitive appraisal in emotion, which is given a central position by so many theorists. He goes on to consider more moderate naturalistic approaches, which he terms interactionistic. Here, although there might be biological bases to the emotions, much is provided by social factors. The natural part is still seen as basic and universal, whereas the social is seen as derived from this and as variable. Overall, Ratner argues, 'Rather than cling to the gutted ship of biological reductionism, it is necessary to abandon it altogether and find other moorings for psychological theory' (1989, p. 226).

An alternative conceptualization is to see biology as forming a substrate that gives emotion its potential, but does not determine it. Various emotions, such as joy, sadness and fear, might well occur spontaneously and hence naturally in young children, but by the time these children are adults these emotions have had their character changed by sociocultural influences. Thus, while there may be prototypical facial responses, the actual facial expressions displayed by adults are many and varied and depend on both the individual and the culture.

In the end, as Ratner sees it, the interactionist approach suggests that biology gives emotion its potential and culture produces actual concrete emotions. However, Ratner would prefer to do away with the biological altogether, seeing it as too deterministic. He believes that a full theory can come from assigning culture the complete power to constitute emotions:

> Actually, the social constructionist theory leads to far greater emotional freedom (than naturalistic theory) by recognising the social psychological basis of emotions and emphasising the possibility of changing it.
>
> C. RATNER, 1989, p. 228

Most recently, Ratner (2000) emphasizes activity theory, in which a central place is given to emotion that is interdependent with and interpenetrates other cultural phenomena. Within this context, cultural characteristics, developments and the functions of psychological phenomena are seen as shaped by social activities and cultural concepts. From this perspective, biological processes might underlie or mediate emotional experiences and expressions, but they do not determine them. Many emotions are determined by cultural processes; in other words, our emotions, like other psychological phenomena, come from what we do socially.

Greenwood (1992) offers a characteristically stimulating analysis of what he terms the social *constitution* of emotion, rather than its social construction. He is concerned with the manner in which emotions may be said to be social in nature, instead of socially constructed. He begins by illustrating what is wrong with some aspects of these approaches by pointing out that the ideas that stem from Schachter and Singer's (1962) influential work and from Nisbett and Ross (1980) do not provide social theories of emotion. At best, they offer theories about the development of emotion labels.

Continuing in critical vein, Greenwood points out that the social constructionist argues that we do not have emotional states, so again does not provide a social theory of emotion. Social constructionist approaches, according to Greenwood, are about emotion discourse. In his view, it can only become a social theory if it is assumed

that emotions are constituted by socially learned labels. Greenwood believes in the usefulness of a realist perspective in which conceptual meaning depends on a theoretical model. He regards 'emotion avowals' as falling within the purview of 'The meaning of our psychological ascriptions to self and others is not specified by any form of operational definition that relates these ascriptions to empirical laws' (1992, p. 9).

Within this type of framework, Greenwood believes that we constitute our emotions through the ways in which we represent reality, ways that are dependent on social learning:

> ... emotions are evaluative representations that are constituted as particular emotions by socially learned intensional contents that are directed upon (usually) socially appropriate intentional objects. This account may be classified as an account of the social constitution of emotion.
>
> J. D. GREENWOOD, 1992, p. 11

Greenwood suggests that if emotions are socially constituted in this way, then ideas of self-knowledge of emotion have to be considered. In his view, it is wrong to assume that there is something inside us (i.e., emotion with certain characteristics that we can come to know by various self-referential processes). From Greenwood's perspective, such internal entities do not exist. All I can know of my emotion is to do with the social objects to or at which it is directed. I also know something of how I represent any actions associated with it. What we know about are the intensional contents and intentional objects of our emotion. For example, I know what I feel about my children – the feelings and their object is all there is.

Scherer (1992b), in reply to Greenwood, argues that Greenwood's theory does not convince because it neglects to account for an entire emotion episode and because it does not deal with the dynamic nature of emotion. Scherer also feels that Greenwood does not satisfactorily deal with experience, self-knowledge and verbalization. Greenwood argues back, but this is probably not the place to explicate this further. For now it is enough to say that Greenwood has provided an interesting view of emotions as socially *constituted*, rather than socially constructed.

Another interesting, although relatively mild attack on the strong social constructionist view of emotion is made by Kemper (1987) in a stimulating review of Harré's *The Social Construction of Emotions* (1986). He challenges the book on five grounds.

To begin with, Kemper argues that Harré and his co-writers are too strongly against physiological approaches to emotion, feeling that since emotion, like other aspects of human functioning, has a physiological aspect it should be taken into account in a complete theory.

He argues that the social constructionists take the view that emotions are prescribed too far. We cannot, in his view, be successfully commanded to feel an emotion, because emotions are not simply under cortical control. Somewhat like Greenwood, Kemper believes that the social constructionists tend to miss out the social relational aspects of emotional development.

Kemper criticizes social constructionists for not dealing with specific moral contexts and emotions that might be linked to them, while they nevertheless maintain that emotions occur in a moral context of rights, obligations and duties. Perhaps more

trenchantly, he also points out that the social constructionist position seems simultaneously to suggest that we are determined creatures and that we are free agents.

Finally, Kemper makes the assumption that '... human interaction preceded the ability to talk about it ...' (1987, p. 364). So, if emotions are the result of social practices, they also must precede talk. However, the social constructionists post-Wittgenstein give pre-eminence to language in their accounts of emotion. Kemper is not of course arguing that social practices should not be taken into consideration in any account of emotion, but merely that language is only one aspect of social practice.

Perhaps the clearest exposition of emotion from a social constructionist perspective has been made by Gergen (1994). He begins by stating that the basic problem that comes from the 'standard' (i.e., realist) study of emotions stems from the questions: How do we establish that emotions exist and that there are several kinds of emotions? Again, standardly, there have been two types of answer to these questions. First, emotions exist in human experience, so they must therefore exist. Moreover, human experience allows differentiation between the emotions. Second, relatively rigorous measures of emotion have been developed, so it is assumed that emotions are represented bodily for such measures to be possible.

As Gergen points out, either of these types of answer is based on the assumptions that emotions are somehow *there*. This he sees as the simple folk psychological ideas of emotion being buttressed by the typical measurement-based approach of standard empirical psychology, with the fundamental issues still not being addressed.

The alternative, constructionist view, as we have to some extent already seen, is that emotion discourse (more of which below) derives meaning from patterns of cultural relationships, not through some hypothesized inner world. In this context, a person 'does' emotions rather than being drawn to action by them. Emotions *are* social life; they do not merely impact on it. This idea that emotions are part of cultural meaning and hence of the moral order accords well with the historical and cultural relativity of emotion. Moreover, emotions are socially constructed and part of a broader pattern of social relationships. They are preceded and followed by other events and hence are part of them.

Gergen, then, sees emotions as part of lived narratives, occurring within relatively standard patterns of relationships – *emotional scenarios*. For example, guilt is typically experienced in scenarios that involve errors, either of omission or commission. One would be unlikely to feel guilt if one had just won a race (although see example at the start of this chapter) or if one's partner was unfaithful. Any emotional act thus derives from a relationship and from a particular cultural history.

Finally, Gergen concludes his analysis with four main points:

(1) conversational markers are needed for people to coordinate their emotions within a particular emotional scenario;
(2) within any scenario there are multiple options, but these are culturally constrained;
(3) most emotional scenarios end either in a neutral or a happy state;
(4) positive scenarios are shorter than negative scenarios.

These are merely interesting points of detail in an analysis in which emotions are seen as lived narratives.

Postmodern themes in emotion

One way into a discussion of postmodern approaches to emotion is through a brief consideration of emotion and modernity. Williams (1998) discusses this by pointing out the essential foolishness of continuing to contrast emotion and reason. He makes the point that social interaction is impossible without emotions; they underpin everything, including rational thought; emotion and reason are simply inseparable. That this rapprochement between emotion and reason is now being recognized and openly discussed does not in and of itself mean that emotion seen from this broad cultural perspective has automatically embraced postmodernism. As Williams puts it, however, emotions are very much at work within society, defying and resisting in a sensual way what he terms the crush of modernity. Nevertheless, it is reasonable to suppose that, as part of this, postmodern influences are beginning to be felt within the study of emotion. It is the aim of this section to look at emotion through postmodern eyes and to describe some existing emotion theory that can be easily placed within a postmodern context. To do so, it is first necessary to say a little of the form a postmodern social science would take.

Postmodern social science celebrates the emotional feelings, non-emotional feelings, intuitions, individuality and the introspective. In this respect postmodernism can be seen as the attempt not only to fuse science and literature (as pointed out by Clifford & Marcus, 1986; Pratt, 1986), but to locate affective states and displays firmly within the prevailing discourse as themselves (i.e., discursive acts). Beyond this, the affective tone in discourse may be analysed in the search for the meaning of emotions and a postmodern substitute for the modernist's causality. The study of emotions based on the thesis that they are the product of biological and environmental factors reflects modernist ways of conceiving social science and the dichotomous, dual-process categorization of thought into the substances-and-qualities, subjective-and-objective, nature-and-nurture approach of Western psychological thinking. For the most part, this of course is the approach that has been characterized in the present book.

Within postmodern thought, intertextuality becomes a substitute for causality in that instead of positing a system of independent verification it emphasizes the interconnectedness of events, concepts, happenstances and discourses. For example, it makes no sense to say that a wind or an idea 'starts', for its origin is already located in the influence of every other wind or idea. Intertextuality is concerned with the interrelatedness of things and is multifarious and pluralistic, whereas the causality of modernist science stresses the linear and binary structure of cause and effect.

Exploration of recent avenues of approach in the psychological study of emotion points to the plethora of possible contributions enabled by the narrative, discursive and linguistic approach of postmodernism (see below). Postmodernists are in sympathy with those approaches of the social constructionists who stress the function of the 'self' within emotion discourse and with anthropologists who have adopted discursive approaches to the study of emotions (e.g., Lutz & Abu-Lughod, 1990) (although postmodernists depart from them in the constructionists' emphasis on analytic methodology).

To locate our emotions in discourse involves the detection of points of affective stability and instability within the intertextual symbolic expression of discourse. While

it would make no sense to locate a modernist's emotion 'source' in discourse because no such definition will be found, emotional meaning may be derived in a postmodern interpretation from the affective response that is incited by the aporiae (contradictions) within our linguistic construction of emotion words. (As will by now be obvious, the language of postmodernism is a little different from that of modernist science.)

When we are looking for emotion in language we are, despite the analytic intentions of modernists, looking for something that is neither 'here' nor 'there', but rather is located or experienced at the point of intertextual symbolic interruption in the text, a textual aporia to which we assign a label to our affective response.

Thus, the meaning of the word 'anger', for example, is not derived from the word itself (nor is emotional tone necessarily located in the word) however used, because it can be used in ignorance (say, by an Eskimo who had another word for it). We cannot conceive of 'anger' without naming it. However, the word 'anger' can never convey the exact quality of the bodily feeling in which it is expressed in various cultures. Our use of the word 'anger' always falls short of conveying the exact quality of that particular cluster of emotions, although it does at least consistently announce something similar from one time to the next. The word 'anger' masks the aporiae of the intertextual symbolic expression of the affective state that is constructed in language to denote something always beyond the text (affect).

Emotion words like 'anger' are located always at the point of *difference* or departure from the text, the point of instability; they are neither 'here' in our reading of the text, nor 'there' in what is written. Rather, they are located in the aporiae between, which, in the terms of postmodern irony, defines them for each person exactly. For example, although a person is acquainted with how it feels to be, say, jealous, the word 'jealousy', however precisely used, cannot convey the immediate quality of the experience.

The locating of emotion displays and feelings within discourse as discursive acts in many ways parallels the aim of postmodern social science in its attempts to provide knowledge systems based on competing discursive alternatives. We construct our emotions through language, and these emotions are constantly updated and modified by language. The language is never stable, so no 'definition' will be found. Only upon deconstruction does there appear the space in which the emotion can be situated, albeit amorphously.

For example, the private experience that occurs when we use the word 'happy' to tell someone 'how it is with us' is not to be found in the construction 'I am happy today'. Rather, it is to be located in the change in my privately conceived state that the word 'happiness' signifies. The individuality of the peculiar quality of experience denoted by 'happiness' leaves open the possibility for the individual's experience or reading of happiness. The use of the emotion word 'happiness' in any particular public conversation is always correspondent to the intertextual or private expression of the affective state of happiness for the given individual or reading, when affective states are relevant to the proper use of an emotion word. It is not a space within the text itself but an extra-textual reference, a gap between public and private expression that is idiosyncratic and entails an idiosyncratic reading of the meaning symbolized by the term 'happiness' – an absence in the text that becomes the direct intentional object of the semantic term 'happiness'.

In the methodology of postmodern social science, intertextuality is substituted for

causal explanation. Causality among states and events and prediction using causal laws assumes a stable and independent reality. An interactive intertextuality denies the relevance of the concept of direct causality to an explanation of psychological phenomena. If everything is semantically related to everything else then it is impossible to extract a chain of causality by fixing background conditions in the manner of the physical sciences. Following Latour (1987), the causality that is implied by the view that social science is a human construct is mutually entailed by the reversal that social practices construct human beings. Put in postmodern terms, Latour's argument becomes not one of causality, but of intertextuality. The construction of social science as a discursive phenomenon of necessity implies a construction of the self through that process. The thesis of the social construction of emotions in discursive acts, the anthropologist's location of culturally specific emotions in the discourses and cross-cultural comparative studies of the uses of emotion words place the study of emotion within this postmodern domain. In this context emotions are not caused by environmental conditions. They are expressions of attitudes to, judgements of and elocutionary acts apropos of how environmental conditions are locally interpreted. And as such they are to be treated as part of discourse.

When postmodernists attempt to construct their own scientific discourses they look to the multiplication of scenarios over the reconciliation of binary oppositions or competing 'truths'. While not seeking modernist 'essences', the postmodernist will seek to place emotion theories in parallel, emphasizing multiple possibilities over single solutions. The text to be interpreted (i.e., the complex pattern of feeling, display, context, significant others, inherited tendencies, local vocabularies and so on) is not seen as an independent reality constraining interpretation, but as something many of whose facets become 'visible' only in the light of the interpretation.

In the debate about nature or environment as the overriding cause of emotion, however, at some point in the theoretical continuum the two factions can be seen to abandon their positions and seek the shared ground of common discourse. This common ground involves the idea that there are no emotions that are intrinsically meaningful (i.e., that could exist *as such* without context). Postmodernists concur with the constructionist view of reality, in which the radical distinction between mental states and the 'outside' world is illusory. Emotional context is the same context as that of discursive communication. As Gergen (1986) puts it, '. . . there are no real world objects of study (for psychology) other than those inherent within the make-up of persons' (p. 141). Postmodernists are also contextualists for whom all knowledge claims are intelligible only within a particular paradigm or interpretative community (Fish, 1989). Postmodernist views of psychological and social reality, like those of social constructionists such as Harré, are dependent on linguistic convention in which the language of social description is not given meaning by independently verifiable, 'real world' referents. Transferring this insight to our knowledge of the physical world and the ontological status of this world constitute a delicate and dangerous business, which fortunately has no place here.

For social science to have a purpose or project (even if viewed as only one of a number of possible interpretations for the activity) then it must be seen to be more than the exercise of linguistic habit. In this regard, postmodernists have advanced the idea of a *soft* content for social science, with affective content that may be transitory. For any language-based discipline, content will in part be derived from a plurality of

methodologies, just as data replicate theory, by its implicit inclusion in the constructs of language. If postmodern social science draws on local practice, narratives or folk stories, without just one author representing a particular claim to legitimacy or 'truth', then the content of social science will inevitably broaden. This is consistent with the postmodern acceptance of multiplicity. The successful (but not 'good' or 'bad') social scientist may well then become the individual who is readily equipped to assemble and process the multiplicity of narratives within his or her discursive scientific domain.

Emotion as discourse

The approach to emotion that derives from both social constructionism and post-modernism is that which views emotion as discourse. As White points out (1993), discourse-centred approaches recognize that all language entails culturally specific modes of thought and action that not only express but also create the relations they represent. Discourse-centred definitions of emotion have the effect of decoupling emotions from their essential interiority and broadening the focus of emotion research into public arenas, made all the more visible, accessible and prolific by mass commun-ication. Such cross-cultural anthropological research casts doubts upon the status of institutionalized 'givens' and macro-narratives of modernist science that try to explain universal, time-independent theories of emotions.

Lutz and Abu-Lughod are anthropological advocates of the discourse-centred, interdisciplinary approach to emotion. In *Language and the Politics of Emotion* (1990), they argue that emotion cannot properly be understood without study of the discourse in which it is used:

> Paying special attention to the theoretical terms 'discourse' is meant to replace, we argue that the most productive analytical approach to the cross-cultural study of emotion is to examine discourses on emotion and emotional discourses as social practices within diverse ethnographic contexts.
>
> C. LUTZ & L. ABU-LUGHOD, 1990, p. 1

In the introduction to their volume, Lutz and Abu-Lughod acknowledge that the post-structuralist, postmodern approach to culture and discourse 'hovers around the edges' of the chapters within it. Lutz and Abu-Lughod claim that:

> Emotion can be *created in*, rather than shaped by, speech in the sense that it is postulated as an entity in language where its meaning to social actors is also elaborated.
>
> C. LUTZ & L. ABU-LUGHOD, 1990, p. 12

Sociability (i.e., the intimacy–formality spectrum) and power relations (i.e., the powerful–powerless spectrum) are key components of Lutz and Abu-Lughod's analysis of the social relations that are implicated in emotion discourse.

From a slightly different perspective, Edwards (1999) is concerned with what he terms 'emotion talk' (i.e., with how much emotion is portrayed in all forms of discourse). He sees links between emotions and scenarios (in this context, scripted

scenes) in everyday talk, in counselling and in some emotion themes. From this perspective emotions are defined through sequences of events or sequences of dialogue, and these can be studied by a discourse analysis of how the specific emotion stories are constructed.

Edwards describes emotion discourse as being used in both *narrative* and *rhetoric*, both involving ways of talking about events in an attempt to make sense of what happens. In this sense, talk is here forming part of social action itself. Emotion is experience. Thus, we not only have emotions or even emotion words, but we have extended metaphors as well. So, for example, anger is often characterized through bodily heat, pressure or agitation. This is represented by many expressions (hot under the collar, trembling with rage, flushed with temper, red in the face, bursting with anger and so on). This is merely to take one example of one type of metaphor for one type of emotion. There are many other types for anger as well as for the other emotions. Such metaphors are not simply conceptual; they also allow things to be described in ways that make the narratives more vibrant.

Edwards also discusses the interesting idea of *rhetorical affordances*, in which we use words to play up various potentials for meaning at different times. In other words, we use rhetoric to help construct the meaning of events that we put into narrative form. Edwards suggests that the nature and causes of events are constructed by a series of rhetorically based discursive opposition or contrasts. Or to put this another way, emotion words can do or achieve many different outcomes in narrative talk or text.

The oppositions involved are: emotion versus cognition; emotions seen as rational or irrational; emotions as cognitively-grounded or cognitively-consequential; emotions as being event-driven or dispositional; emotional states being dispositions or temporary; emotions as controllable actions of passive reactions; emotions as spontaneous or externally caused; emotions as natural or morally derived; emotions as internal states (private feelings) or as represented by external behaviour (public expression); emotions as honest versus faked.

To reiterate, each of these possible oppositional reactions is reflected in emotion talk. If we describe an emotion-laden event (Edwards uses the example of the manner in which Princess Diana's death was publicly described), then we use these conventions in our narratives. They embody our beliefs about the nature and the causes of the events.

Emotional experience

Also in accord with both a social constructionist and a postmodern view of emotion are some recent ideas concerning emotional experience. What might be termed a 'postmodern tolerance to the psychological research in emotion' is expressed by Oatley and Duncan (1992). They suggest a synthesis and interrelation of folk narratives of emotion and physiological and behavioural observations:

> For the foreseeable future, people's understandings of the incidents of emotion in their lives will be important for scientific explanations of emotions, as they are for more personal understandings.
>
> K. OATLEY & E. DUNCAN, 1992, p. 289

Such an approach is also reflected in the work of Crawford, Kippax, Onyx, Gault and Benton (1992) in their analysis of emotion and gender (see Chapter 12).

Denzin's (1984, 1985, 1990) work is also concerned with an analysis of the significance of emotionality in daily life. He argues that emotionality forms the basis of interpreting and understanding both scientific life and daily life, that it underlies the social and moral foundations of society, that it prompts us to act in particular ways toward other people and that such actions determine our moral worth and the moral worth of others.

Denzin (1984) emphasizes the hermeneutical study of interactional emotional experience. He argues that concern should centre on interpretation and understanding through linguistic analysis and through attempts to uncover 'inner meanings'. He suggests that the stress should be laid on interpreted understandings of emotionality rather than recording or presupposing prior understandings, which is what traditional researchers in emotion have tended to do. The aim is to search for the meaning of emotional displays.

To allow Denzin to speak for himself:

> Emotionality and its reflections give the everyday world and the ordinary people who live in that world a sense of joy, bewilderment, pain, confusion, satisfaction and pleasure that no other form of conduct can. For this reason emotionality and its investigation must lie at the heart of the human disciplines; for to understand and reflect on how this being called human is, and how it becomes what it is, it is necessary to understand how emotionality as a form of consciousness is lived, experienced, articulated, and felt by persons.
>
> N. K. DENZIN, 1984, p. 278

Emotions and morality

Considerations such as those above on the social construction of emotions and emotions and feelings within the context of postmodern scholarship inevitably suggest reflection on even broader issues such as the place of emotions within the moral order of society. Blasi (1999), for example, considers the extent to which moral motivation can be accounted for by emotional factors.

Blasi begins his analysis by suggestion that it is possible to make three generalizations from the psychology of emotion (I am sure there are more, but he concentrates on these three). These are that emotions are bodily, that emotions are motivational and lead to action, and that emotions are 'subject to organismic regulatory processes'. To expand this a little, Blasi sees emotions as psychological, as connected (through evolution and genetics) to bodily events, as spontaneous and unintentional (from perception and cognition), as leading to a readiness to act, as regulated internally and externally by automatic, unconscious, unintentional processes and as gaining their functional meaning from motivation. Or, it is possible at another level to view emotions as socio-culturally determined and to see emotions as reflecting social meaning through language.

To Blasi, the basic question about emotions concerns agency. If it is accepted that emotion regulation is normally unconscious, can it also become conscious and intentional? If so, then there are obvious implications for emotion as helping to determine the moral order. In this sense, Blasi is concerned with emotional sincerity. If emotions and emotional regulation are sometimes consciously brought about can they still be regarded as sincere (in the automatic way that they must be sincere if they are unconscious)? He suggests that they can still be seen as sincere if they are motivated by the same events or considerations that would elicit emotions spontaneously.

Blasi argues that any moral action must be intentional and any reason that generates such an action must also be moral. So, within this framework, can emotions provide moral motivation? The answer must be 'no' if the emotion is spontaneous and unintentional, but it would have moral meaning if it derived from and reflected moral concerns. Spontaneous emotions might well precede a moral motivation that developed later. In this context, agency becomes very important. If a person makes conscious choices to regulate emotions that otherwise occur spontaneously, then the resultant shaping of the emotions might be said to be guided by moral concerns.

Furthermore, from a different tack entirely, another function of emotion in terms of the moral order is to inform the self about the importance of particular moral concerns. So, emotions might sensitize us to situations that are particularly relevant to moral concerns or even suggest solutions to moral dilemmas. In the end, for emotions to be involved in moral life (and they obviously are) then there has to be agency, people have to be seen as capable of consciously regulating their emotions. And there also has to be the opportunity for emotions to help reconstruct moral meanings.

Emotions and feelings

As a final consideration in this final chapter it is important to say a little about D'amasio's (1994) trenchant analysis of emotions and feelings in his book *Descartes Error*. He makes what might be termed a 'post-Jamesian analysis' of emotion that also happens to provide a relevant way to round up the various emotion themes that have been covered in this chapter as well as being practically grounded in sheer common sense.

Quite unlike Blasi's view, D'amasio argues that emotions help to communicate meaning and often occur only after thoughtful reflection. In other words, there is considerably more to them than given by biology. Clearly, though, there are built-in emotional responses, so D'amasio asks why should these come into consciousness? He suggests that this is because consciousness allows greater protection of the individual through having greater predictive power. Feelings are the conscious part of emotions, the aspect that permits flexibility.

From D'amasio's perspective, secondary emotions are conscious, deliberate considerations, concerning, say, the death of a friend and are made up of mental images and evaluations. Also involved are non-conscious, prefrontal networks made up of acquired dispositions, quite separate from the innate. The relevant changes in prefrontal functioning are signalled to the amygdala and related areas and so onto the autonomic nervous system (ANS), muscles, endocrine system and neurotransmitters, all of which amounts to a change in bodily state:

> ... emotion is the combination of a *mental evaluative process*, simple or complex, with *dispositional responses to that process*, mostly *toward the body proper*, resulting in an emotional body state, but also *toward the brain itself* (neurotransmitter nuclei in brain stem), resulting in additional mental changes.
>
> A. R. D'AMASIO, 1994, italics his

Feeling, to D'amasio, is the process of monitoring, while thoughts continue, the experience of what the body is doing. It is the experience of the bodily changes in emotion with the relevant mental images. Juxtaposition is important. So, the essence of an emotion is a combined perception of bodily states and the thoughts to which they are juxtaposed.

There are a variety of feelings. Some feelings are based on emotions, particularly the basic ones of happiness, sadness, anger, fear and disgust. Others are based on emotions that are subtle variations of this basic five and that depend on experience. And there are also background feelings that are mild, frequent and restricted and really represent the bodily state that obtains *between* emotions. D'amasio sees this as not the same as mood, although it probably contributes to mood. It is more a core representation of the self.

This final type of feeling is distributed over many brain structures and it is what gives us an awareness of our general bodily states and allows us to give a meaningful answer to the question: How do you feel? Anyone who loses this awareness finds it very disturbing: a state of anosognosia, in which knowledge of the bodily state is out of date. The person can only remember how it used to be rather than how it is now.

Generally then, like James, D'amasio sees the body as the theatre for the emotions. Mostly, we constantly monitor bodily states to find out how we feel. But we can also conjure up 'as if' feelings, mental images of surrogate bodily states. He regards emotions as part of cognition and hence as part of the cortex: 'feelings are just as cognitive as any other perceptual image'. But feelings are first and foremost about the body: 'feelings let us mind the body'. Thus they have immense influence on us by giving quality to all our other images.

D'amasio attempts to answer the fundamental question of how we feel, beginning by pointing out that the chemistry and the neurology of emotion cannot do the job. He argues that emotion and feeling rely on two basic processes. The first is the body state juxtaposed to the triggering and evaluative images that caused it. The second is a style and level of efficiency of cognitive processes accompanying in parallel the events in the first process. Behind all this, D'amasio sees emotions and feelings as concrete and related to specific systems in the body and brain (both the cortex and the subcortex), but argues in the final analysis that even while taking such a perspective, we can still adhere to a romantic view of emotions.

Conclusions

As mentioned at the start of this book, approximately 150 theories of emotion have been canvassed in it. Why are there so many? Is there any other area of Psychology in which so many people have had a go at putting forward a theory? I can think of no

other, so perhaps it is the nature of emotion that causes people to have a rush of theory to the head.

Emotion is always there in some form or another, an integral part of existence. Yet, as the plethora of theory attests, it is difficult to define and to distinguish from non-emotion. More than this, because of its ubiquitousness it can be approached from any direction within Psychology and from quite a few in related disciplines.

Whatever the reason, there are many theories of emotion (and it should be pointed out that not all of them have been considered in this book). Which of them may be said to be the best? The answer to this rather significant question depends a little on how one applies the various criteria for judging theory. It also and perhaps inevitably depends on one's particular biases.

It is not a matter of chance that Lazarus's and Oatley and Johnson-Laird's theories are among the best. After all, it is these authors who have suggested the criteria that have been mainly used in assessing emotion theory throughout this book. Lazarus's theory is impressively complete and that of Oatley and Johnson-Laird offers a nice rapprochement between academic psychology and folk psychology.

Mandler's theory is also wonderfully broad and delightfully bold in the way that it faces difficult issues such as the place of consciousness in emotion. Panksepp's theory goes furthest in the physiological direction, Plutchik's in the evolutionary and Ekman's from the important perspective of facial expression. Izard's theory is special because it makes a clear distinction between emotion and cognition, rather than building cognition into emotion as do most of the other theories. And Izard and Malatesta's and M. Lewis's theories are among the best that start from a developmental viewpoint.

Moving outside psychology, there have been some splendid, recent, theoretical contributions to emotion from Sociology, Anthropology, cultural studies in general and to some extent from Philosophy and History. Perhaps Kemper's theory should be mentioned, in particular. These theories from outside psychology show that emotion is not simply an intra-individual matter. All the theories just mentioned here have a useful heuristic value.

Of them all, my own biases would prompt me to choose Lazarus's as the best that is currently available. It has been developed over a lifetime of thought and research and is broad enough to embrace almost anything that one might expect of an emotion theory. It treats emotion from every possible angle, has its applied aspects and is capable of subsuming any new data that one could think of. However, to choose this theory as the best should not be to detract from the others mentioned in this concluding section, nor indeed from the many that are described in this book. They all have a role to play in the understanding of emotion. It is no easy matter to devise a theory that fulfils at least some of the criteria for 'good' theory. So anyone that achieves it is to be congratulated.

Moreover, as recent work on discourse, for example, and D'amasio's stimulating book make clear, discussion of emotion continues to develop. In my view, whatever form this discussion takes, it is important that it be grounded in everyday experience. Whether this is at home or at work, in normal circumstances or abnormal, it has to be there if our understanding of emotion is to be sensibly positioned.

Should you be inspired by reading this book to produce your own theory of emotion, what should you be sure to discuss? You must distinguish emotion from non-emotion even if you do not go so far as to define it. You must discuss emotion's

possible biological (and hence evolutionary) foundations and its socially constructed aspects. You should consider its development, and its role in social interaction and communication. You should consider what happens when it goes wrong or causes distress to the person. Above all you should consider the relationship between emotion and cognition.

Moving outside the person, you should consider emotion in the broader context of language and culture. Of course, you should ensure that your theory is devised in such a way that it is internally consistent, can be used to derive testable predictions, can embrace new data and has heuristic value. You might even wish to see if it could be couched in terms compatible with a postmodern as well as a modernist approach to social science. And above all, you should ground your theory in everyday experience.

Having considered so many theories from so many perspectives, it is easy enough to set down conditions that should be fulfilled. However, this says little about the future directions that should be taken by emotion theory. There would be little point in producing another theory that is simply very similar to those already in existence, or is even an amalgam of some of them. What *should* happen next?

I believe that there are clear lessons to be learned from the sheer number and extent of theories of emotion and from the fact that they come from a number of disciplines. In no aspect of the human condition other than that of emotional life is it more obvious that those who investigate should be comfortable with a multidisciplinary approach and with a theoretical pluralism. Anything else is too simplistic and would not do sufficient justice to the complexities of a fascinating area. Recent developments in feminist thought and in postmodern approaches to social science also point in this direction. Moreover, the increasingly obvious importance of folk psychology or folk theory should also be taken into account. All these concerns not only suggest the importance of taking a theoretically pluralist approach but also that close attention should be paid to the development of qualitative as well as quantitative research methods.

If this argument has some force, then the politics of the academic world do not bode well for the future development of emotion theory. Academic careers are structured within institutions and are predicated on caution and conservatism. Interdisciplinary research and thinking, not only taking theory into account but also making such theory complex and plural, is decidedly unsafe. To create an emotion theory at all is bold; to create the sort of emotion theory suggested here might be considered by some to be foolhardy.

To use this as a starting point and go in previously unheard-of directions might even be considered to be lacking in reason. It might, however, also help to take us into a world in which emotion is not only integral, but is *recognized* as being integral. It is through emotion that we can know what it is to be human.

Summary

- There is a biological theme that runs throughout emotion theory. Many emotion theories have an integral role for a functional analysis of emotion from an evolutionary perspective.
- There is also a theme of social constructionism that runs through some recent emotion theory. Some emotions are thought to be entirely socially constructed.
- Postmodern approaches to emotion are possible. They tend to follow from social constructionism and to stress everyday emotion narrative and theoretical plurality.
- A major approach to emotion that derives form social constructionism and postmodern scholarship is that which views emotion as discourse. This centres on emotion within its cultural context.
- Recent work on the experience of emotion is also relevant to these developments.
- Emotion can also be linked to moral discourse, as part of the moral order.
- Emotion is clearly grounded in the body, and a consideration of the links between emotion and feeling are central to our future understanding of emotion.
- Of the many theories of emotion, it is Lazarus's that offers the most comprehensive analysis of our knowledge to date.
- Future theories of emotion should take into account all the recent developments, but stay grounded in the everyday world.

A final question of application

- Are we entering into an age in which emotion once again assumes its rightful place at the centre of human affairs?

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