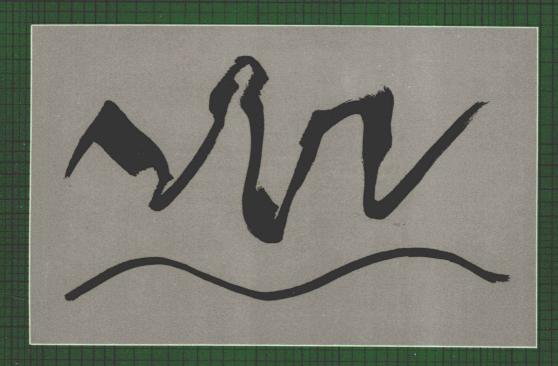
The Emotions

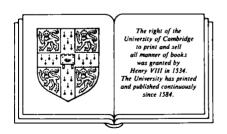


STUDIES IN EMOTION & SOCIAL INTERACTION

The emotions

NICO H. FRIJDA

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What are "emotions"? Drawing together the threads of current research on the nature and functions of emotional expression, of physiological reactions, and of emotional experience, this book offers a balanced survey of facts and theory. Nico Frijda discusses the motivational and neurophysiological preconditions for emotions, and the ways in which emotions are regulated by the individual.

Considering the kinds of events that elicit emotions, he argues that emotions arise because events are appraised by people as favorable or harmful to their own interests. He takes an information-processing perspective: Emotions are viewed as outcomes of the process of assessing the world in terms of one's own concerns, which, in turn, modify action readiness. This analysis leads him to address such fundamental issues as the place of emotion in motivation generally and the discrepancy between the functions of the emotions and their often irrational and disruptive character.

An important contribution to recent debates, *The Emotions* does not presuppose extensive prior knowledge.

Studies in Emotion and Social Interaction

Paul Ekman University of California, San Francisco

Klaus R. Scherer Justus-Liebig-Universität Giessen

General Editors

The emotions

Studies in Emotion and Social Interaction

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Preface

This book was written because I wanted to put the various bits and pieces that I encountered in the literature on emotion in some sort of order. And because I wanted to understand what they had to do with emotions as they fill one's daily life. The connections were, when I began, not always obvious.

When I began the book, to give a representative account of work on emotion appeared to be a feasible task. I am not so sure now that I have succeeded, considering the upsurge of interest in emotion during the last several years. In any case, work on the book ended in early 1985.

I profited much from conversations, comments, and other contributions. I wish to thank the members of our group on emotions with whom I discussed this work for their stimulating remarks and cooperation: Bob Nieuwenhuyse, whom we had to lose; Bob Bermond, Gerbrand Bovenkerk, Rita Dapper, Huib van Dis, Hetty Rombouts; and also Martijn den Uyl.

I thank my mother for her warm support and unceasing readiness to meet succorance needs.

I wish to thank my good friend Louis Tas for persistent interest, comments, and ideas; and my late friend Johan Barendregt for what I owe him.

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Many thanks go to Molly Veenman and Andries Denys for their enthusiastic work in preparing the text; to Andries also for his careful and intelligent editing of the final version; and particularly to Willy Krijnen for untiring work on many previous versions; and to Hansje Ehbets for so much help. Anjo Anjewierden I thank for his time and energy generously spent in adapting text-processing facilities to suit my purposes, Preface xii

and Beulah MacNab and Cambridge University Press's copy editor Bill Green for doing the same in shaping up my English. My good friend Jan Bons did me the kindness of designing the expression of expression on the dust jacket.

I wish to thank Yolande Waldeck and Roos Kroon for their inspiration and friendship.

I give the book to my children. It is the best I have to offer.

N.H.F.

Amsterdam, March 1986

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1. Introduction

The aim of this book is to present a survey of data theories on emotion. This book considers the primary questions concerning emotions: (1) What is the nature of the phenomena called "emotions" or "emotional"? (2) Which conditions – stimuli, dispositions, activities – give rise to these phenomena? (3) What functions, if any, do these phenomena serve? and (4) By what processes and through what mechanisms do the conditions lead to these phenomena? Part I, "Analysis," is concerned with question 1; Part II, "Antecedents," discusses questions 2 and 3; Part III, "Synthesis," which comprises the last chapter, is devoted to question 4. In discussing the above questions, a coherent theoretical framework will be developed into which phenomena concerning emotion can be ordered.

1.1. Emotional phenomena

Any study must begin by defining the subject of investigation. One must know, and let be known, what one is talking about. In the case of emotion this is a difficult matter. The phenomena to which the label *emotion* or *emotional* is attached appear to be diverse. Also, there is no agreement about which phenomena these are. Some people, laymen as well as scientists, consider "hunger" an emotion; others do not. Some talk about the "sex emotion"; in many treatises on emotion such a concept or phenomenon is, however, absent. To include a particular phenomenon under the label *emotion* is to see similarity; to exclude to see difference. Seeing and emphasizing similarities or differences are matters of theoretical outlook. In other words: A definition of *emotion* can only be a product of theory; it thus can be reached only at the end of the investigation.

Yet investigation must start somewhere. We propose to derive a rough indication of the field of inquiry, a "working definition," from an in-

vestigation of the phenomena that motivate the use of the label *emotion* or constituent labels like *fear*, *joy*, or *anger*. To investigate the nature and conditions of these phenomena will then be the goal of inquiry.

We thus ask: For what reasons do we use words like *emotion* or *emotional*, *anger* or *fear*? Three major classes of phenomena appear to lead to the use of such words: phenomena of behavior, of physiological response, and of subjective experience.

Phenomena of behavior

Emotion terms are almost unavoidable when describing the behavior of people and even of animals. Evidently, there is behavior that invites one to use such terms. Why does certain behavior do that, and which is the behavior that does so?

It appears to be this: At some moments when observing behavior, that behavior seems to come to a stop. Effective interaction with the environment halts and is replaced by behavior that is centered, as it were, around the person himself, as in a fit of weeping or laughter, anger or fear. Or interaction with the environment may go on but seems peculiarly ineffective. When someone smashes the dinner plates, the broken plates would hardly seem to be the end result the person had in mind. Other behavior that invites emotion words seems to contain a surplus that is not needed for the end results: superfluous emphasis in speed and scope of movement, or hesitation and undue toning-down, or a smile that, in someone who is stroking a child, does not add to the tenderness of the touch. The surplus can reside also in nonresponse: A dog walks up to another dog, stops two feet away, and turns its head away without moving and without looking at anything in particular.

What leads to the use of emotion words, then, appears to be superfluousness or disruption or ineffectuality with respect to instrumental purpose or coherence of interaction. *Emotion* thus appears to be a hypothesis to explain behavior that has neither sufficient nor adequate external purpose or reason; the explanation, then, is sought "within" the subject. This behavior, with the characteristics mentioned, offers a starting point for the investigation of emotion. *Emotion* can be provisionally defined as the inner determinant of noninstrumental behavior and noninstrumental aspects of behavior. *Emotional behavior* can provisionally be defined as that behavior itself. The definition needs further specification, for as it stands it applies also to behavior that does not strike one as emotional: mannerisms, play, mistakes. The specification 1. Introduction 3

will come from consideration of the stimuli eliciting the behavior, to be discussed below.

Characterization of emotion through noninstrumental attributes of behavior has found its way into psychological theory. Emotion has often been defined as disturbance – for instance, by Munn (1946), Young (1943), and Hebb (1949). The characterization is meant here, however, not as a theoretical interpretation but as an impressionistic account and a provisional, heuristic designation. It may be possible, and will in fact turn out to be possible, to replace its negative nature (as signaled by the "non" of *noninstrumental* and the "dis" of *disturbance*) with something more positive. By itself, the characterization serves merely as a starting point; but one which indicates the behavioral phenomena to be studied.

Physiological manifestations

There exists physiological upheaval that, on the face of it, does not appear to have a sufficient cause in physical events, either to the subject himself or to an outside observer: sweating or trembling without heat or cold or physical exertion; blushing; palpitations; butterflies in the stomach and weakness in the legs. Such changes tend to follow psychological causes: sudden events or psychologically significant ones. These changes, too, ask for explanation; the notion of emotion is one kind of explanation and, we may assume, invented or at least employed for that purpose.

Characterization of emotion through physically unexplained physiological upset has also found its way into psychological theory. Emotional experience has been identified with such upset, particularly in attribution theory approaches (e.g., Schachter 1970). Again, this is not what is meant here. The constellation of physically unexplained physiological change does, however, describe one of the conditions that engenders the use of emotion words. It thus provides a second starting point for investigation of emotion.

Experience

Subjective experience is another source of the use of emotion words. People use expressions like "I feel sad" and "I feel happy." Presumably, something is special about the experiences referred to by these expressions. Two features of the expressions serve to roughly identify the experiences involved. The first is evaluative connotation. When emotion

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words are judged by means of semantic differential rating scales such as *good-bad* or *weak-strong*, the largest amount of variance by far is taken up by the evaluative dimension (e.g., Block 1957). The second feature is subjective reference: "I feel...," "I am in the state of ..."

The "stimulus"

The phenomena of behavior, bodily response, and experience that lead to the use of "emotion" or related notions all tend to involve the idea of response to some event. Emotions are elicited. The eliciting events appear to fulfil a special role; they are not just stimuli. They appear to act through their significance, their meaning, their rewarding or aversive nature.

Working definition of emotion and the emotional

The provisional or working definition of *emotional phenomena* thus becomes the following: *Emotional phenomena* are noninstrumental behaviors and noninstrumental features of behavior, physiological changes, and evaluative, subject-related experiences, as evoked by external or mental events, and primarily by the significance of such events. An *emotion* is either an occurrence of phenomena of these three kinds or the inner determinant of such phenomena; the choice will be made later. This defines the present domain of investigation.

1.2. Overview of the present approach

By a closer investigation of the phenomena mentioned we hope to arrive at a substantive definition of emotion instead of the negatively phrased and imprecise working definition given. A definition of emotion, however, is not our primary concern. We will proceed as if we do not know what emotion is. We will try to understand the phenomena indicated – their nature, their function, their interrelations, the conditions of their occurrence. That is the aim of this study. Whatever turns out to define them, as a class or as classes of phenomena, will then constitute a definition or set of definitions of emotion.

The study that follows manifests some orienting principles of a not entirely empirical kind. Whereas these principles may in part be considered generalizations from the data and interpretations to be dis1. Introduction 5

cussed, at the same time they have given direction to interpretation and ordering. These orienting principles are:

- 1. Emotions have a biological basis. This is meant in two senses. First, emotions are, or can be, matters of the body: of the heart, the stomach, and intestines, of bodily activity and impulse. They are of the flesh and sear the flesh. Also, they are of the brain and the veins. Second, emotions occur in animals, and some occur in animals in ways highly similar to humans. In emotion, we are each other's next of kin: we share the emotions of fear, anger, dejection, and attachment as well as sexual desire and curiosity. We are, to quite some extent, cousins in emotion; the study of human emotion can therefore profit from the study of animal emotion. A corollary of the biological principle is the functional point of view. If emotions are, wholly or in part, biological phenomena, they must serve a purpose for survival. The search for functional significance is one of the heuristics in the study of emotion.
- 2. Emotions in humans are human phenomena; that is, human emotions may be expected to present typically human aspects. They may be expected to be related to norms and values, to human modes of interaction, and to human cognitive possibilities in particular, those of reflective awareness and intentional activity.
- 3. Both animals and humans not only are subject to emotional impulses, they also endeavor to cope with them. Inhibition and control are to be found even in animals, and efforts to cope with the emotional experience as such, in humans. *Regulation*, as it will be called here, is an integral part of emotion.

The reader who is familiar with the literature will recognize that these principles lead to a theoretical orientation concerning emotion closely akin to that of Freud (e.g., 1926) and, more specifically, to that of Lazarus (1966; Lazarus & Folkman 1984). The theory developed toward the end of this book can, in fact, be considered a variant of the latter's theory, and indebtedness to his formulations should be acknowledged at this point.

The approach taken in this book – if one wishes to oppose cognitive and behavioral formulations – is a cognitive one. But this does not do justice to the present orientation. A better designation is *affective* or *conative*. What is interesting about emotion is the emotional. Feeling is not cognition, it is feeling – it is responding "yes" or "no." Striving is not behavior, it is tending-toward, trying to reach or to avoid.

In the survey to be presented, a theoretical view of emotion will be developed. Emotions will be considered as changes in action readiness.

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Such changes have a quantitative aspect called "activation" and a qualitative aspect called "action tendency"; they tend to be accompanied by autonomic changes. Emotions differ in terms of mode of activation, in terms of kind of action tendency, and in terms of autonomic response. Manifest behavior is realization of action tendency and manifestation of activation mode, as modified by regulatory processes.

Different emotions – that is, different action tendencies or activation modes – are evoked by different stimulus constellations, as these are appraised by the subject. Relevant variables in those constellations regard both what the stimulus event may do to the subject (relevance evaluation) and what the subject may do to the event or is (or is not) allowed to do by the entire situation concerned (context evaluation).

Emotions are elicited by significant events. Events are significant when they touch upon one or more of the concerns of the subject. Emotions thus result from the interaction of an event's actual or anticipated consequences and the subject's concerns.

Emergence of emotion thus depends upon occurrence of events, presence of concerns for which these events are relevant, and cognitive processes by means of which event consequences are or are not recognized. In addition, emotions are shaped by regulatory processes that are elicited by properties of the event and propensities of the subject.

The emotion process as sketched is subject to regulatory processes in each of its components. Those regulatory processes range from involuntary inhibitory processes over cognitive transformations to voluntary suppression and input regulation.