A Categorized List of Emotion Definitions, with Suggestions for a Consensual Definition

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A major problem in the field of emotion has been the wide variety of definitions that have been proposed. In an attempt to resolve the resulting terminological confusion, 92 definitions and 9 skeptical statements were compiled from a variety of sources in the literature of emotion. These definitions and statements were classified into an outline of 11 categories, on the basis of the emotional phenomena or theoretical issues emphasized. There are two traditional experiential categories of affect and cognition; three physical categories of external emotional stimuli, physiological mechanisms, and emotional/expressive behavior; definitions that emphasize disruptive or adaptive effects; definitions that emphasize the multiaspect nature of emotional phenomena, those that distinguish emotion from other processes, and those that emphasize the overlap between emotion and motivation; and skeptical or disparaging statements about the usefulness of the concept of emotion. The definitions are evaluated, trends are identified, and a model definition is proposed.

The problems involved in defining emotion have been recognized by many writers. According to English and English (1958), emotion is virtually impossible to define, except in terms of conflicting theories. Fantino (1973) remarked: "Unfortunately, emotional behavior has not been scientifically studied with the same breadth and depth as many other fields in psychology. One reason for this dearth of knowledge and of agreement about emotion is the problem of defining what emotion is" (p. 281). Young (1973) concluded that "almost everyone except the psychologist knows what an emotion is.... The trouble with the psychologist is that emotional processes and states are complex and can be analyzed from so many points of view that a complete picture is virtually impossible. It is necessary, therefore, to examine emotional events piecemeal and in different systematic contexts"

(p. 749). Mandler (1979) stated that too many psychologists fail to accept today "that there is no commonly, even superficially, acceptable definition of what a psychology of emotion is about" (p. 279). Chaplin and Krawiec (1979) said that "one of the difficulties that has stood in the way of an acceptable theory of emotions has been disagreement over definitions" (p. 422).

A further complication is psychologists' failure even to agree on a superordinate label for all "emotional" phenomena. The majority of authors whom we have cited from the English-language psychological literature have used "emotion" as the main label (cf. Darwin, 1872/1965; Delgado, 1973; Watson, 1924). We have followed this convention in the present article. However, there is also a strong tradition that considers "affect" or "affective processes" as the superordinate label (cf. Chaplin, 1975; Lewis & Rosenblum, 1978; Young, 1943). This tradition probably originated in philosophy's 18th-century distinction between affect, cognition, and volition (Hilgard, 1980b). Following this approach, Young (1961) described a variety of affective processes, of which emotion is only one, characterized as being acute, intense, and disturbing. The criteria he used for distinguishing among feelings, affect, emotion, etc., included source of stimulation, intensity, duration, disruptiveness, cognitive involvement, and presence of pathology. Young recognized that some overlap existed among the affective categories, and he was not sure whether all of them were necessary.

While there have been many attempts to categorize qualitatively different types of emotions such as anger, fear, and disgust (cf. Bridges, 1932; Davitz, 1969; G. Ekman, 1955; P. Ekman, 1973; Freud, 1926; Millenson, 1967; Plutchik, 1980; Russell & Mehrabian, 1977; Schlosberg, 1954; Titchener, 1910; Tomkins, 1962; Watson, 1919; Wenger, Jones, & Jones, 1956; Young, 1975), definitions of emotion have not been analyzed and classified so exhaustively. Fantino (1973) compiled a broadly selected list of 11 definitions, and Plutchick (1980) listed 28. Fantino (1973) summarized his conclusions: "Some of these approaches to the emotions are in strictly behavioral terms, others are in strictly physiological terms, and still others have sought a compromise. Some have stressed the experimental operations that define an emotion, while others have stressed the outcome of these operations. Some definitions are relatively precise, while others are quite vague. Some would restrict the term emotion to disturbing states of the individual, while others apply the term to a far broader range of phenomena. Some are explicit about the distinguishing characteristics of emotional behavior, while others maintain that it is folly to try to cling to such a distinction" (p. 283). Fantino, like Duffy (1941), saw little or no reason to retain the concept in psychology.

After examining his list, Plutchik (1980) came to the following conclusions: "For one thing, it is evident that there is relatively little consistency

or unanimity in the proposed definitions. More importantly, there is no sense of the definitions moving in a certain direction with time; the more recent definitions are as inconsistent as are the earlier ones. A second interesting point about the definitions is that many are not really explicit definitions at all.... A third point worth noting is that very few of the definitions state that an emotion is a state of disturbance or disorganization of the individual. The idea of emotion as adaptation or self-preservation is also mentioned infrequently. Finally, it is of considerable interest to note that most of the definitions do not refer to the subjective aspect of emotions at all.... Integration of competing ideas is thus sorely needed" (p. 80). The present review of a much larger sample of definitions led us to agree with some of Plutchik's conclusions but to disagree with others; a detailed comparison is provided in a later section.

Fantino's (1973) and Plutchik's (1980) lists were the starting point of the present approach. While most of their definitions were included, some were deleted, either because they were more theoretical statements than definitions or because we found more representative definitions by the same authors. The list was expanded to 92 definitions and 9 skeptical statements about the concept of emotion, drawn mainly from psychological dictionaries and well-known texts on emotion, motivation, physiological psychology, and introductory psychology. The sources of the definitions and statements are summarized in Table I, with 38 sources dated prior to 1970 and 63 dated 1970 and later. The earlier group includes fewer introductory and physiological psychology sources. In the later group we have tried to include almost all emotion and motivation texts that gave explicit definitions, and to select the most popular texts in physiological and introductory psychology, based on information supplied by a publisher (Moulton, 1980). We anticipated that the complexity of the definitions might vary according to the audience for which they were intended. Those designed for laymen or introductory psychology students tend to be phrased in simpler language; those intended for a more specialized audience, such as students of emotion, tend to be longer and more precise and to provide more conceptual distinctions.

After collecting the definitions, we analyzed and classified them, in order to identify the concepts that traditionally have been considered critical for defining emotion. Decisions concerning which categories of definitions were necessary, and the particular category into which a definition fits most appropriately, were made unsystematically through discussions among the authors and several colleagues. We have attempted to categorize definitions primarily on the basis of their specific wording, rather than relying too heavily on other theoretical statements by the same author.

Our analysis led to the description of 11 categories, based on the primary characteristics of emotion emphasized in the definitions. The first two categories reflect an emphasis on the subjective or experiential aspects

Table I. Sources of Emotion Definitions

| And the state of t | Number | Number | | Number | Number | |
|--|-------------------------|----------------------------|----------------------|---------------------|------------------------|---|
| Area of psychology | of texts before 1970 | of articles before 1970 | Total before 1970 | of texts since 1970 | of articles since 1970 | Total since 1970 |
| Introduction | m | 0 | | 22 | 0 | 22 |
| Emotion | 6 | 4 | 13 | 18 | 7 | 20 |
| Motivation | - | 0 | - | - | 0 | - |
| Motivation/emotion | | | 2 | 60 | 0 | e |
| Physiological | 4 | 0 | 4 | 11 | 0 | ======================================= |
| Learning | S | 0 | S | - | 0 | - |
| Social | - | 0 | - | - | 0 | - |
| Experimental | - | 0 | yand | 0 | 0 | 0 |
| History and systems | 0 | 0 | 0 | _ | 0 | - |
| Clinical | 9 | 0 | 9 | 0 | 0 | 0 |
| Anthropology | 0 | 0 | 0 | _ | 0 | |
| Dictionary/encyclopedia | 7 | 0 | 7 | 7 | 0 | 7 |
| Totals | 33 | 5 | 38 | 61 | 2 | 63 |

of emotion: affective definitions, which emphasize either feelings of excitement/depression or of pleasure/displeasure, and cognitive definitions, which emphasize appraisal and/or labeling processes. The next three categories fit a S-O-R paradigm, including definitions that emphasize external emotional stimuli, mediating physiological mechanisms of emotion, and emotional/expressive behavior. Two categories are based on the functional consequences of emotion: disruptive definitions, which emphasize emotion's great potential for causing disruptive and/or maladaptive effects, and adaptive definitions, which emphasize that emotion usually increases the likelihood of the organism's meeting its needs. Three categories are based on the scope of the definitions: multiaspect definitions, which emphasize the many facets of emotion, restrictive definitions, which attempt to differentiate emotion from other processes such as motivation, and motivational definitions, which emphasize the overlap of emotion and motivation. Finally, there is a category of *skeptical* statements, which question or deny the usefulness of the concept "emotion."

In reviewing the categorized list of emotion definitions (Appendix) and analysis that follow, it should be recognized that the categories need not be mutually exclusive. The definitions are listed under the category of primary emphasis, with secondary areas of emphasis indicated where appropriate. At the end of the definitions in each primary category is a crossindex of references that also mention the same aspect of emotion as a secondary emphasis. Listings within categories are arranged chronologically and include the type of source.

After identifying the categories of primary emphasis, we attempted to evaluate them. The affective category contains definitions that emphasize the aspect many psychologists consider to be the sine qua non of emotion: feelings of arousal level and pleasure/displeasure. Traditionally, feelings have been defined as the elementary subjective experiences, which form the foundation for the more complex processes called emotion (Izard, 1971). The affective dimension was emphasized more frequently than any other single aspect of emotion, exceeded only by the multiaspect category: it was the primary emphasis in 23 definitions and a secondary emphasis in 44 others. While all of these authors probably recognize the complexity of emotion, some of their definitions (cf. Hilgard, Atkinson, & Atkinson, 1979; Smith, Sarason, & Sarason, 1978) mentioned little beyond the subjective experience, while others (Cf. Kemper, 1978; Morris, 1979) mentioned seveveral other characteristics of emotion. We prefer the broader definitions, since they provide a more complete picture. However, the question of whether the affective aspect of emotion should be considered the most important feature of emotional phenomena still remains.

The cognitive category contains definitions that emphasize the perceptual/thinking aspects of emotion, particularly appraisal and/or labeling processes. A cognitive approach to emotion assumes that when appropriate arousal occurs, individuals may engage in various types of cognitive-emotional activity: sensing emotional stimuli and responses, appraisal of the sensed experience, labeling the emotion, emotional memory searches, planning or eliciting control mechanisms to deal with the emotional situation, or other cognitive activities triggered by that situation. There appears to be some overlap between cognitive and affective processes, particularly where hedonic evaluation is concerned. However, the hedonic deliberations (e.g., evaluating whether the effects of an event are to the individual's advantage) are usually considered more cognitive, while the hedonic reactions (e.g., feeling happy or unhappy) are considered more affective.

The cognitive definitions do not imply that cognitive factors are the only aspect of emotion, but see them as one of the most important factors in determining how one reacts to potentially emotional situations (cf. Schachter, 1970). Some definitions (Bowlby, 1969; Peters, 1970) emphasized appraisal processes, while others (Kimble, Garmezy, & Zigler, 1980; Schachter, 1970) emphasized labeling processes. Although there were only 4 definitions whose primary emphasis was on cognitive factors, 47 others also mentioned this component as an aspect of emotion; thus, more than half of the definitions recognized the role of cognitive processes. We still are left with the questions of their importance in the causal chain of emotions (Plutchik, 1980), and of the degree of awareness of these cognitive processes needed to trigger or influence the various emotional reactions.

The external-stimuli category contains definitions that emphasize external triggers of emotion. A theory has been held in psychology, at least since Woodworth (1938) and represented recently by Plutchik (1980), that emotion has primarily external triggers while motivation has primarily internal triggers. This distinction may not always be appropriate, since interoceptive stimuli may set off emotions and external incentives may set off motives (Gazzaniga, Steen, & Volpe, 1979); however, the relationship between external stimuli and emotions has been recognized frequently. Strasser (1970) emphasized the context of the situation in determining emotion, and Millenson (1967) emphasized the operant control exerted by external reinforcers, punishers, or discriminative stimuli. While only 3 definitions had their primary emphasis on external stimuli, 24 others mentioned their role in emotion. Probably few psychologists would question that external stimuli often trigger emotion, even though the question of their relative importance is unresolved.

The physiological category contains definitions that emphasize the dependence of emotions on biological mechanisms. The philosophical

Zeitgeist in psychology today is that all activities of organisms must have a biological substrate (Carlson, 1980). However, debate is still strong concerning identification of the physiological structures of emotion (Schneider & Tarshis, 1980), and even whether any structures can be considered exclusively emotional in function (Gallistel, 1980). Nevertheless, the large number of definitions mentioning physiological mechanisms attests to the importance psychologists have given to them. There were 7 definitions with strong enough emphasis to be included in this category, and 59 others that also mentioned physiological factors.

The emotional/expressive behavior category contains definitions emphasizing externally observable emotional responses. These responses may include certain changes in surface skeletal muscles, breathing, vocal or other sound-producing structures, hair, surface capillaries, or exocrine gland secretions. While only 2 definitions emphasized emotional behavior strongly enough to fit into this category, 43 others mentioned behavior as a part of emotion. Darwin (1872/1965), as well as several other writers (cf. Delgado, 1973; Izard, 1971; Lazarus, 1975) particularly emphasized the expressive aspects of emotional behavior. It can have meaning to other organisms: an angry facial expression may be recognized and responded to by another organism in a functional way. While a debate is possible over the amount of emotional behavior that is expressive in nature, or how well organisms read emotional behavior, it is generally recognized that a great deal of emotional communication goes on (Eibl-Eibesfeldt, 1975; P. Ekman, 1977).

The disruptive and adaptive categories contain definitions that emphasize the functional effects of emotion, either disorganizing/dysfunctional (cf. Young, 1943) or organizing/functional (cf. Carr, 1929). A debate ensued over which of these characteristics to emphasize (Arnold, 1960; Leeper, 1948; Young, 1949), leading eventually to the recognition that emotion can be either organizing or disorganizing, functional or nonfunctional, depending on the circumstances and time frame. Later even Young (1975), while maintaining that emotion always led to some initial disorganization, conceded that at least occasionally emotions may be organizing and functional: "Now the truth is that affective arousals do organize attitudes, interests and aversions, motives, traits of personality, and similar dispositions. Pleasantness reinforces reactions of approach and determinations to preserve and repeat the stimulations that produce positive reactions" (p. 90). While we may assume that evolutionary history has shaped emotions to be more beneficial than harmful overall, it is difficult to judge how often they are adaptive. It is even more difficult to judge the extent to which emotions disorganize or organize psychological processes. It may be that emotions typically are disruptive initially but usually lead to adaptive effects subsequently. Relatively few of the definitions listed functional effects; 3 placed the primary emphasis on disruption and 5 others mentioned it, while 2 emphasized adaptive effects and 14 others mentioned emotional adaptiveness.

The multiaspect category was the largest, having 32 definitions that emphasize that emotion contains several important components. While the specific definitions included different components, the following were the most common: affective, cognitive, physiological, and emotional/expressive behavior. As a group, these definitions come closest to the authors' views, as they include most of the traditionally meaningful components of emotion (cf. Izard, 1971; Lazarus, 1975). However, one reservation we have with respect to most of the definitions in this category is that they do not go far enough in differentiating emotion from other basic psychological processes. Many of the characteristics attributed to emotion (influenced by external stimuli, physiological mechanism, mediating cognitive processes, behavioral results, etc.) apply to processes other than emotions. While the same criticism could be made of most definitions of basic psychological concepts, such as learning and motivation, our goal should be to make the boundaries of our concepts as clear as possible.

The multiaspect approach to the definition of emotion also suggests that psychologists should have a language that can describe each component, even if we assume that they typically overlap, or if we assume that each component is almost always present to some degree. For example, we might find it useful to develop terms such as strongly or weakly motivating emotion, highly cognitive or low-cognitive emotion, externally or internally triggered emotion. We believe that further attention should be given to agreeing on names for the different aspects or components of emotion.

The restrictive category contains definitions that have attempted to meet the admirable goal of differentiating the concept of emotion from other psychological concepts. The most common theoretical distinctions that have been drawn are between emotion and other affective processes (cf. Ewert, 1970; Young, 1961) and between emotion and motivation (cf. Gazzaniga et al., 1979; Woodworth, 1938). There were 9 definitions with enough emphasis to be placed in this category, and 10 others that mention restrictions.

Unfortunately, the distinctions cited above have not met with anything approaching universal acceptance by psychologists. We have already mentioned some of the problems with the most common distinctions in earlier sections. In summary, we are not sure how many types of emotion or affect exist (feelings, sentiments, moods), nor the degree of separate identity that exists for emotion and motivation. In spite of the present difficulty in distinguishing emotion from other psychological processes, we believe that continued efforts should be directed toward this goal. Possibly, a fuller understanding of the physiological mechanisms of

emotion will help to sharpen the behavioral and experiential boundaries of the concept, just as more complete behavioral and experiential knowledge will lead to better understanding of physiological mechanisms.

The motivational category provides an interesting contrast to several of the definitions in the restrictive group. Instead of drawing sharp distinctions between emotion and motivation, motivational definitions emphasize the overlap of the two processes (cf. Leeper, 1948; Leukel, 1976). Tomkins (1970) and Izard (1971, multiaspect category) consider emotions (affects) to be our primary motives. Most of these authors are saying not that emotions are completely identical to motives but that emotions may energize need or motive systems (Arnold, 1960). Clarification of the relationship between emotional and motivational systems (if they are separate systems) will have to await further developments (Buck, 1976). This category was well represented, with 7 definitions giving primary emphasis to motivation and 31 others mentioning the motivational properties of emotion.

Rather than being a group of definitions, the final category includes nine statements questioning the value of the concept of emotion. In some cases these statements merely point out dissatisfaction with psychology's lack of agreement on a single definition of emotion (cf. Cofer, 1972; Stein & Rosen, 1974), while in other cases they reflect disapproval of intervening variable concepts in general (cf. Skinner, 1953; Verplanck, 1954). We certainly concur that the lack of agreement on a definition of emotion is a problem; however, we also agree with Miller (1959) that intervening variables like emotion may be useful for theory construction and understanding subjective phenomena. A healthy concern over objective data-language and consistency in terminology should not be incompatible with the contemporary use of some intervening variables like emotion.

Since Plutchik (1980) provided the most recent and comprehensive analysis of definitions of emotion, it is appropriate to compare our conclusions with his. First, Plutchik stated that there is little consistency among definitions, and that there is no evidence of a trend toward unanimity. The present review also found a great deal of inconsistency among the definitions, but three trends were identified. We found a statistically significant increase (χ^2 , .01) in multiaspect definitions since 1970, as well as increases in mentioning the affective (χ^2 , .01) and cognitive (χ^2 , .10) components of emotion. These trends were present in all three of our most frequent sources (emotion, introductory, and physiological texts). The increases are not surprising, since there appears to be a general shift throughout much of psychology toward more subjective/cognitive language (Chadwick-Jones, Lenzer, Darley, & Hill, 1979; Hilgard, 1980a; Mahoney, 1974). In Table II, the percentages of definitions mentioning each aspect of emotion before 1970 and since 1970 are listed.

Table II. Number and Percentage of Definitions by Category of Primary and Secondary Emphasis

| 1 | The state of the s | arrage of a comm | torne of camper. | war of annual of the fall | dura francisco | THE PARTY OF THE P |
|---|--|------------------|------------------|---------------------------|----------------|--|
| | Number (%) | Number (%) | | Number (%) | Number (%) | |
| | emphasizing | secondary | Total | emphasizing | secondary | Total |
| | category | emphasis | number (%) | category | emphasis | number (%) |
| Definition | before 1970 | before 1970 | before 1970 | since 1970 | since 1970 | since 1970 |
| category | (N = 38) | (N = 38) | (N = 38) | (N = 63) | (N = 63) | (N = 63) |
| Affective | 8 (21) | 10 (26) | 18 (47) | 15 (24) | 34 (54) | 49 (78) |
| Cognitive | 1(3) | 14 (37) | 15 (39) | 3(5) | 33 (52) | 36 (57) |
| External emotional | | | | | | |
| stimuli | 1(3) | 8 (21) | 9 (24) | 2(3) | 16 (25) | 18 (29) |
| Physiological | 3 (8) | 20 (53) | 23 (60) | 4 (6) | 39 (62) | 43 (68) |
| Emotional/ex- | | | | | | |
| pressive behavior | 1(3) | 14 (37) | 15 (39) | 1(2) | 29 (46) | 30 (48) |
| Disruptive | 3(8) | 3 (8) | (91)9 | 0)0 | 2(3) | 2(3) |
| Adaptive | 2(5) | 4 (10) | 6(16) | 0)0 | 10 (16) | 10 (16) |
| Multiaspect | \$ (13) | 0)0 | \$ (13) | 27 (43) | 1(2) | 28 (44) |
| Restrictive | 4 (10) | 4(10) | 8 (21) | 5 (8) | (6)9 | 11 (17) |
| Motivational | 4 (10) | 10 (26) | 14 (37) | 3(5) | 21 (33) | 24 (38) |
| Skeptical | 91)9 | 000 | (91)9 | 3(5) | 0)0 | 3(5) |
| Totals | 38 (100) | | | 63 (100) | | |

Second, Plutchik concluded that many definitions are not specific enough to provide a distinction between emotion and other states or processes. Our review found 9 definitions specific enough to be placed in the restrictive category and 10 others that mentioned some distinguishing aspect of emotion.

Third, Plutchik found few definitions that dealt with disruptive or adaptive effects of emotion. We found 8 definitions that mentioned disruption and 16 that mentioned adaptation. However, if Marx and Hillix (1979) are correct in describing a rebirth of functionalism, it is somewhat surprising that there has not been an increase since 1970 in definitions that mention the functional aspects of emotion.

Finally, Plutchik concluded that few definitions dealt with the subjective characteristics of emotion. However, we found 67 definitions that mentioned the affective aspect of emotion and 51 that mentioned the cognitive aspect. The discrepancy between these two reviews may be due partially to the facts that Plutchik's sample was much smaller, and that only 4 of his 28 definitions were written since 1970.

In reviewing the different types of definitions of emotion, we came to the following conclusions: We suggest that a formal definition of emotion should be broad enough to include all traditionally significant aspects of emotion, while attempting to differentiate it from other psychological processes. However, since psychologists cannot agree on many distinguishing characteristics of emotion, we suggest, for the time being, a definition that emphasizes the many possible aspects of emotion. As a working model, we propose the following definition: Emotion is a complex set of interactions among subjective and objective factors, mediated by neural/hormonal systems, which can (a) give rise to affective experiences such as feelings of arousal, pleasure/displeasure; (b) generate cognitive processes such as emotionally relevant perceptual effects, appraisals, labeling processes; (c) activate widespread physiological adjustments to the arousing conditions; and (d) lead to behavior that is often, but not always, expressive, goal-directed, and adaptive.

In conclusion, we believe that examining and analyzing definitions of emotion is a worthwhile endeavor. In reviewing the present suggestions, it may be that others will develop a different set of categories, recognize different developmental trends, or make different suggestions for future definitions of emotion. However, we hope that our analysis will serve as a starting point in the effort to achieve a consensual definition, which will be useful to psychologists and nonpsychologists alike.

REFERENCES

Arieti, S. Cognition and feeling. In M. B. Arnold (Ed.), Feelings and emotions; The Loyola Symposium. New York: Academic Press, 1970.

- Arnold, M. B. *Emotion and personality* (2 vols.). New York: Columbia University Press, 1960. Baron, R. A., Byrne, D., & Kantowitz, B. H. *Psychology: Understanding behavor* (2nd ed.). New York: Holt. Rinehart & Winston, 1980.
- Bennett, T. L. Brain and behavior. Monterey, California: Brooks/Cole, 1977.
- Bentley, M. Is "emotion" more than a chapter heading? In M. L. Reymert (Ed.), Feelings and emotions: The Wittenberg Symposium. Worcester, Massachusetts: Clark University Press, 1928.
- Bourne, L. E., & Ekstrand, B. R. *Psychology* (3rd ed.). New York: Holt, Rinehart & Winston, 1979.
- Bowlby, J. Attachment and loss: Vol. 1, Attachment. New York: Basic Books, 1969.
- Brady, J. V. Emotion: Some conceptual problems and psychophysiological experiments. In M. B. Arnold (Ed.), Feelings and emotions: The Loyola Symposium. New York: Academic Press, 1970.
- Braun, J., & Linder, D. E. Psychology today (4th ed.). New York: Random House, 1979.
- Brenner, C. On the nature and development of affects: A unified theory. *Psychoanalytic Quarterly*, 1974, 43, 532-556.
- Bridges, K. M. B. Emotional development in early infancy. *Child Development*, 1932, 3, 324-341.
- Brown, H. Brain and behavior: A textbook of physiological psychology. New York: Oxford University Press, 1976.
- Bruce, R. L. Fundamentals of physiological psychology. New York: Holt, Rinehart & Winston, 1977.
- Bruno, F. J. Behavior and life: An introduction to psychology, New York: Wiley, 1980.
- Buck, R. Human motivation and emotion. New York: Wiley, 1976.
- Bull, N. The attitude theory of emotion. Nervous and Mental Disease Monograph, 1951, 81.
- Candland, D. K. The persistent problems of emotion. In D. K. Candland, J. P. Fell, E. Keen, A. I. Leshner, R. M. Tarpy, & R. Plutchik, *Emotion*. Monterey, California: Brooks/Cole, 1977
- Cannon, W. B. Neural organization for emotional expression. In M. L. Reymert (Ed.), Feelings and emotions: The Wittenberg Symposium. Worcester, Massachusetts: Clark University Press, 1928.
- Carlson, N. R. Physiology of behavior (2nd ed.). Boston: Allyn and Bacon, 1980.
- Carr, H. A. Psychology, a study of mental activity. New York: McKay, 1929.
- Chadwick-Jones, J. K., Lenzer, I. I., Darley, J. A., & Hill, K. A. Brain, environment, and social psychology. Baltimore: University Park Press, 1979.
- Chaplin, J. P. Dictionary of psychology (New rev. ed.). New York: Dell, 1975.
- Chaplin, J. P., & Krawiec, T. S. Systems and theories of psychology (4th ed.). New York: Holt, Rinehart & Winston, 1979.
- Clynes, M. Sentics: The touch of emotions. New York: Anchor/Doubleday, 1977.
- Cofer, C. N. Motivation and emotion. Glenview, Illinois: Scott, Foresman, 1972.
- Coon, D. Introduction to psychology: Exploration and application (2nd ed.). New York: West, 1980.
- Darwin, C. The expression of the emotions in man and animals. Chicago: University of Chicago Press, 1965. (Originally published 1872).
- Davitz, J. R. The language of emotions. New York: McGraw-Hill, 1969.
- Davitz, J. R. A. dictionary and grammar of emotion. In M. B. Arnold (Ed.), Feelings and emotions: The Loyola Symposium. New York: Academic Press, 1970.
- Delgado, J. M. R. Emotions. In J. Vernon & P. Suedfeld (Eds.), Introduction to general psychology: A self-selection textbook (2nd ed.). Dubuque, Iowa: Wm. C. Brown, 1973.
- Duffy, E. The conceptual categories of psychology: A suggestion for revision. Psychological Review, 1941, 48, 177-203.
- Edwards, P. (ed.). Encyclopedia of philosophy. New York: Macmillan, 1967.
- Eibl-Eibesfeldt, I. Ethology: The biology of behavior (2nd ed.). New York: Holt, Rinehart & Winston, 1975.
- Ekman, G. Dimensions of emotion. Acta Psychologica, 1955, 11, 279-288.
- Ekman, P. Cross-cultural studies of facial expression. In P. Ekman (Ed.), *Darwin and facial expression*. New York: Academic Press, 1973.

- Ekman, P. Biological and cultural contributions to body and facial movement. In J. Blacking (Ed.), *The anthropology of the body: A. S. A. Monograph 15.* New York: Academic Press, 1977.
- English, H. B., & English, A. C. A comprehensive dictionary of psychological and psychoanalytic terms: Acquide to usage. New York: McKay, 1958.
- Ewert, O. The attitudinal character of emotion. In M. B. Arnold (Ed.)., Feelings and emotions: The Loyola Symposium. New York: Academic Press, 1970.
- Fantino, E. Emotion. In J. A. Nevin (Ed.), The study of behavior: Learning, motivation, emotion, and instinct. Glenview, Illinois: Scott, Foresman, 1973.
- Fernald, L. D., & Fernald, P. S. Introduction to psychology (4th ed.). Boston: Houghton Mifflin, 1978.
- Ferster, C. B., & Perrott, M. C. Behavior principles. New York: Appleton-Century-Crofts, 1968.
- Freud, S. Inhibitions, symptoms, and anxiety. London: Hogarth Press, 1926.
- Freud, S. Repression. In S. Freud, Collected papers (Vol. 4). London: Hogarth Press, 1949. (Originally published 1915.)
- Gallistel, C. R. The organization of action: A new synthesis. Hillsdale, New Jersey: Erlbaum, 1980.
- Gazzaniga, M. S., Steen, D., & Volpe, B. T. Functional neuroscience. New York: Harper & Row, 1979.
- Geiwitz, J. Psychology: Looking at ourselves (2nd ed.). Boston: Little, Brown, 1980.
- Groves, P., & Schlesinger, K. Introduction to biological psychology. Dubuque, Iowa: Wm. C. Brown, 1979.
- Haber, A., & Runyon, R. P. Fundamentals of psychology (2nd ed.). Reading, Massachusetts: Addison-Wesley, 1978.
- Hebb, D. O. A textbook of psychology (2nd ed.). Philadelphia: Saunders, 1966.
- Hilgard, E. R. Consciousness in contemporary psychology. *Annual Review of Psychology*, 1980, 31, 1-26. (a)
- Hilgard, E. R. The trilogy of mind: Cognition, affection, and conation. Journal of the History of the Behavioral Sciences, 1980, 16, 107-117. (b)
- Hilgard, E. R., Atkinson, R. L., & Atkinson, R. C. Introduction to psychology (7th ed.). New York: Harcourt Brace Jovanovich, 1979.
- Houston, J. P., Bee, H., Hatfield, E., & Rimm, D. C. Invitation to psychology. New York: Academic Press, 1979.
- Howard, D. T. A functional theory of the emotions. In C. Murchison & M. L. Reymert (Eds.), Feelings and emotions: The Wittenberg Symposium. Worcester, Massachusetts: Clark University Press, 1928.
- Isaacson, R. L., Douglas, R. J., Lubar, J. F., & Schmaltz, L. W. A primer of physiological psychology. New York: Harper & Row, 1971.
- Izard, C. E. The face of emotion. New York: Appleton-Century-Crofts, 1971.
- James, W. What is emotion? Mind, 1884, 19, 188-205.
- Jaspers, K. Allgemeine psychopathologie (5th ed.). Berlin: Springer, 1948.
- Jung, C. G. Psychological types. New York: Harcourt, Brace, 1923.
- Kagan, J. On emotion and its development: A working paper. In M. Lewis & L. A. Rosenblum (Eds.), The development of affect. New York: Plenum Press, 1978.
- Kemper, T. D. A social interactional theory of emotions. New York: Wiley, 1978.
- Kimble, G. A., Garmezy, N., & Zigler, E. Principles of general psychology (5th ed.). New York: Wiley, 1980.
- Landis, C., & Hunt, W. A. The startle pattern. New York: Holt, Rinehart & Winston, 1939.
- Lazarus, R. S. A cognitively oriented psychologist looks at feedback. American Psychologist, 1975, 30, 553-561.
- Leeper, R. W. A motivational theory of emotion to replace "emotion as disorganized response." Psychological Review, 1948, 55, 5-21.
- Lefrancois, G. R. Psychology. Belmont, California: Wadsworth, 1980.
- Leukel, F. Introduction to physiological psychology (3rd ed.). St. Louis: C. V. Mosby, 1976.
- Leventhal, H. Emotions: A basic problem for social psychology. In C. Nemeth (Ed.), Social psychology: Classic and contemporary integrations. Chicago: Rand McNally, 1974.
- Lewis, M., & Rosenblum, L. A. (Eds.). The development of affect. New York: Plenum Press, 1978.

Lindzey, G., Hall, C. S., & Thompson, R. F. Psychology (2nd ed.). New York: Worth, 1978.

Mahoney, M. J. Cognition and behavior modification. Cambridge, Massachusetts: Ballinger, 1974.

Mandler, G. Emotion. In E. Hearst (Ed.), The first century of experimental psychology. Hillsdale, New Jersey: Erlbaum, 1979.

Marx, M. H., & Hillix, W. A. Systems and theories in psychology (3rd ed.). New York: McGraw-Hill, 1979.

McConnell, J. V. Understanding human behavior: An introduction to psychology (3rd ed.). New York: Holt, Rinehart & Winston, 1980.

McDougall, W. An introduction to social psychology. Boston: Luce, 1921.

Melzack, R., & Casey, K. L. The affective dimension of pain. In M. B. Arnold (Ed.), Feelings and emotions: The Loyola Symposium. New York: Academic Press, 1970.

Millenson, J. R. Principles of behavioral analysis. New York: Macmillan, 1967. Miller, N. E. Liberalization of basic S-R concepts: Extension to conflict-behavior, motivation, and social learning. In S. Koch (Ed.), Psychology - A study of a science (Vol. 2). New York: McGraw-Hill, 1959.

Milner, P. M. Physiological psychology. New York: Holt, Rinehart & Winston, 1970.

Mischel, W., & Mischel, H. N. Essentials of psychology (2nd ed.). New York: Random House, 1980.

Morgan, C. T. Physiological psychology (3rd ed.). New York: McGraw-Hill, 1965.

Morgan, C. T., King, R. A., & Robinson, N. M. Introduction to psychology (6th ed.). New York: McGraw-Hill, 1979.

Morris, C. G. Psychology: An introduction (3rd ed.). Englewood Cliffs, New Jersey: Prentice-Hall, 1979.

Moulton, J. Personal communication, November 1980.

Ochs, S. Elements of neurophysiology. New York: Wiley, 1965,

Peters, R. S. The education of the emotions. In M. B. Arnold (Ed.), Feelings and emotions: Loyola Symposium. New York: Academic Press, 1970.

Plutchik, R. The emotions: Facts, theories, and a new model. New York: Random House.

Plutchik, R. Emotion: A psychoevolutionary synthesis. New York: Harper & Row, 1980.

Pribram, K. H. Feelings as monitors. In M. B. Arnold (Ed.), Feelings and emotions: The The Loyola Symposium, New York: Academic Press, 1970.

Rado, S. Adaptational psychodynamics: Motivation and control. New York: Science House, 1969.

Rapaport, D. Emotions and memory. Baltimore: Williams and Wilkins, 1942.

Reich, W. Character analysis (3rd ed.). New York: Noonday, 1949.

Ruch, T. C. Neurophysiology of emotion and motivation. In T. C. Ruch, H. D. Patton, J. W. Woodbury, & A. L. Towe, Neurophysiology. Philadelphia: W. B. Saunders, 1962.

Russell, J. A., & Mehrabian, A. Evidence for a three-factor theory of emotions. Journal of Research in Personality, 1977, 11, 273-294.

Schachter, S. The assumption of identity and peripheralist-centralist controversies in motivation and emotion. In M. B. Arnold (Ed.), Feelings and emotions: The Loyola Symposium. New York: Academic Press, 1970.

Schlosberg, H. Three dimensions of emotion. Psychological Review, 1954, 61, 81-88.

Schneider, A. M., & Tarshis, B. An introduction to physiological psychology. New York: Random House, 1980.

Schneirla, T. C. An evolutionary and developmental theory of biphasic processes underlying approach and withdrawal. In M. R. Jones (Ed.), Nebraska Symposium on Motivation (Vol. 7). Lincoln: University of Nebraska Press, 1959.

Schwartz, M. Physiological psychology (2nd ed.). Englewood Cliffs, New Jersey: Prentice-Hall, 1978.

Silverman, R. E. Psychology (3rd ed.). New York: Meredith, 1978.

Simonov, P. V. The information theory of emotion. In M. B. Arnold (Ed.), Feelings and emotions: The Loyola Symposium. New York: Academic Press, 1970.

Skinner, B. F. Science and human behavior. New York: Macmillan, 1953.

Smith, R. E., Sarason, I. G., & Sarason, B. R. Psychology: The frontiers of behavior. New York: Harper & Row, 1978.

- Stein, D. G., & Rosen, J. J. Motivation and emotion. New York: Macmillan, 1974.
- Strasser, S. Feeling as basis of knowing and recognizing the other as an ego. In M. B. Arnold (Ed.), Feelings and emotions: The Loyola Symposium. New York: Academic Press, 1970.
- Thompson, R. F. Introduction to physiological psychology. New York: Harper & Row, 1975.
- Titchener, E. B. A textbook of psychology. New York: Macmillan, 1910.
- Tomkins, S. S. Affect imagery consciousness. Vol. 1, The positive affects. New York: Springer, 1962.
- Tomkins, S. S. Affect as the primary motivational system. In M. B. Arnold (Ed.), Feelings and emotions: The Loyola Symposium. New York: Academic Press, 1970.
- Valenstein, E. S. Brain stimulation and motivation. Glenview, Illinois: Scott, Foresman, 1973.
- Verplanck, W. S. Burrhus F. Skinner. In W. K. Estes et al. (Eds.), *Modern learning theory*. New York: Appleton-Century-Crofts, 1954.
- Vonderahe, A. R. The anatomic substratum of emotion. New Scholasticism, 1944, 18, 76-95.
- Watson, J. B. Psychology from the standpoint of a behaviorist. Philadelphia: Lippincott, 1919.
- Watson, J. B. Psychology from the standpoint of a behaviorist (2nd ed.). Philadelphia: Lippincott, 1924.
- Wenger, M. A., Jones, F. N., & Jones, M. H. Physiological psychology. New York: Holt, Rinehart & Winston, 1956.
- Wickens, D. D., & Meyer, D. R. Psychology (Rev. ed.). New York: Holt, Rinehart & Winston, 1961.
- Wolman, B. B. Dictionary of behavioral science. New York: Van Nostrand Reinhold, 1973.
- Woodworth, R. S. Experimental psychology. New York: Holt, Rinehart & Winston, 1938.
- Young, P. T. Emotion in man and animal: Its nature and relation to attitude and motive. New York: Wiley, 1943.
- Young, P. T. Emotion as disorganized response: A reply to Professor Leeper. *Psychological Review*, 1949, 56, 184-191.
- Young, P. T. Motivation and emotion: A survey of the determinants of human and animal activity. New York: Wiley, 1961.
- Young, P. T. Feeling and emotion. In B. B. Wolman (Ed.), Handbook of general psychology. Englewood Cliffs, New Jersey: Prentice-Hall, 1973.
- Young, P. T. Understanding your feelings and emotions. Englewood Cliffs, New Jersey: Prentice-Hall, 1975.
- Zimbardo, P. G. Essentials of psychology and life (10th ed.). Glenview, Illinois: Scott, Foresman, 1980.

APPENDIX

Categorized List of Emotion Definitions

Affective Definitions (emphasizing feelings of arousal and/or hedonic value)

William James, 1884. (emotion article)

"My theory... is that the bodily changes follow directly the perception of the exciting fact, and that our feeling of the same changes as they occur is the emotion."

secondary emphasis: physiological, cognitive, external stimuli

William McDougall, 1921. (social text)

"The emotional excitation of specific quality that is the affective aspect of the operation of any one of the principal instincts may be called a primary emotion."

secondary emphasis: motivational

M. Bentley, 1928. (emotion text)

"Emotion may be defined as a quality of excitement which accompanies operation of an instinct, or a kind of drive under which the organism whips itself into action, or a certain kind of response to a certain kind of stimulus."

secondary emphasis: motivational, emotional/expressive behavior

Wilhelm Reich, 1949. (clinical text)

"Basically, emotion is an expressive plasmatic motion.... These two basic directions of biophysical plasma current (from the center toward the periphery, or vice versa) correspond to the two basic affects of the psychic apparatus, pleasure and anxiety."

secondary emphasis: physiological

Nina Bull, 1951. (emotion article)

"Feeling, in the sense of affect, arises from involuntary motor attitude, maintained as readiness or wish, and held in leash pending the lifting of whatever form of interfering mechanism, or functioning barrier, is holding up the action."

secondary emphasis: motivational, physiological, emotional/expressive behavior

Horace B. English and Ava C. English, 1958. (psychological dictionary)

"Emotion: a complex feeling-state accompanied by characteristic motor and glandular activities; or a complex behavior in which the visceral component predominates."

secondary emphasis: physiological, emotional/expressive behavior

Donald O. Hebb, 1966. (intro text)

"Special state of arousal accompanied by mediating processes which tend to excite behavior maintaining or modifying the present state of affairs."

secondary emphasis: motivational, physiological, adaptive

Paul Edwards, 1967. (philosophy encyclopedia)

"Definition of an emotional state as a more or less disturbed state of the organism, together with the bodily sensations produced by this state, arising from a perceptual evaluation of something."

secondary emphasis: cognitive, physiological, disruptive

Silvano Arieti, 1970. (emotion text)

"All of them [simple feelings like pain, hunger, etc., and emotions] are 'felt experiences' or experiences of the inner state of the organism. The main characteristic which justifies the inclusion of feelings and emotions in the category of experiences of inner status is the fact that they occur when an intraorganismic state is subjectively experienced. These experiences become motivational factors because the awareness of what is pleasant elicits behavior aimed at searching for or retaining pleasure. On the other hand, the awareness of what is unpleasant elicits behavior which tends to avoid or discontinue the experience."

secondary emphasis: motivational, adaptive, cognitive, physiological

Elliot S. Valenstein, 1973. (motivation text)

"Emotionality is said to involve strong physiological responses associated with states that are not neutral—they may be positive or aversive."

secondary emphasis: physiological

Charles Brenner, 1974 (emotion article)

"An affect is a sensation of pleasure, unpleasure, or both, plus the ideas, both conscious and unconscious, associated with that sensation." secondary emphasis: cognitive

Hugh Brown, 1976. (physiological text)

"Emotion: perceived states (feelings) which give rise to nonrational adaptive reactions (approach or avoidance)."

secondary emphasis: adaptive, motivational, emotional/expressive behavior

Ross Buck, 1976. (motivation/emotion text)

"Emotion is generally defined in terms of states of feeling....[I]t is impossible to separate the activation and direction of behavior, subjective feelings, and cognition."

secondary emphasis: cognitive, motivational, multiaspect

Theodore D. Kemper, 1978. (emotion text)

"Emotion is a relatively short-term evaluative response essentially positive or negative in nature involving distinct somatic (and often cognitive) components."

secondary emphasis: cognitive, physiological, restrictive, emotional/expressive behavior

R. E. Smith, I. G. Sarason, and B. R. Sarason, 1978. (intro text)

"Emotions—a state in which feelings and sentiments are experienced by the individual."

Lyle E. Bourne, Jr., and Bruce R. Ekstrand, 1979. (intro text)

motives."

"There are two primary dimensions of emotion: (1) the qualitative dimension of pleasant-unpleasant and (2) the quantitative dimension of intensity....[U]npleasant emotional states...will act as negative incentives....[P]leasant states...will be positive incentives....The stronger or more intense the emotion, the greater the motivation to approach or avoid."

secondary emphasis: motivational

- E. R. Hilgard, R. L. Atkinson, and R. C. Atkinson, 1979. (intro text) "Emotion. The condition of the organism during affectively toned experience, whether mild or intense."
- J. P. Houston, H. Bee, E. Hatfield, and D. C. Rimm, 1979. (intro text) "Emotions are characterized as intense, relatively uncontrollable feelings that affect our behavior....[I]n other words, emotions can act as

secondary emphasis: motivational, restrictive, emotional/expressive behavior

Charles G. Morris, 1979. (intro text)

"An emotion is a complex affective experience that involves diffuse physiological changes and can be expressed overtly in characteristic behavior patterns."

secondary emphasis: physiological, emotional/expressive behavior

R. A. Baron, D. Byrne, and B. H. Kantowitz, 1980. (intro text)

"A subjective feeling state involving physiological arousal, accompanied by characteristic behaviors."

secondary emphasis: physiological, emotional/expressive behavior

Frank J. Bruno, 1980. (intro text)

"On a formal level we shall define an emotion as follows: A state of arousal tending to disrupt homeostatic baselines.... On a personal and private level, an emotion is experienced as a strong feeling to which we attach a conscious label such as fear, anger, or joy." secondary emphasis: disruptive, cognitive, physiological

Walter Mischel and Harriet N. Mischel, 1980. (intro text)

"Emotions seem to range from the mildest promptings to the most profound passions and from the most positive to the most negative feelings A physiological response state of general arousal is common to the most diverse emotional experiences.... The individual... must make a 'cognitive appraisal' (interpretation) to give a distinct label to this emotional state."

secondary emphasis: motivational, physiological, cognitive

Allen M. Schneider and Barry Tarshis, 1980. (physiological text)

"Emotions can best be defined as feelings or sensations....Like other sensations, emotions can be subjectively identified in terms of their general arousal, or intensity, and their specific feeling, or quality."

See also, from the Cognitive category: Schachter (1970), Kimble et al. (1980); from the Physiological category: Bruce (1977); from the Emotional/Expressive Behavior category: Clynes (1977); from the Disruptive category: Young (1943), Wickens and Meyer (1961); from the Multiaspect category: Landis and Hunt (1939), Vonderahe (1944), Schneirla (1959), Ruch (1962), Morgan (1965), Davitz (1970), Melzack and Casey (1970), Isaacson et al. (1971), Izard (1971), Delgado (1973), Wolman (1973), Leventhal (1974), Chaplin (1975), Lazarus (1975), Thompson (1975), Bennett (1977), Candland (1977), Ekman (1977), Kagan (1978), Lindzey et al. (1978), Schwartz (1978), Braun and Linder (1979), Groves and Schlesinger (1979), Morgan et al. (1979), Coon (1980), Geiwitz (1980), Lefrancois (1980), McConnell (1980), Zimbardo (1980); from the Restrictive category: Freud (1915/1949), Jung (1923), Young (1961), Brady (1970), Ewert (1970), Fernald and Fernald (1978), Hilgard et al. (1979); from the Motivational category: Milner (1970), Tomkins (1970).

Cognitive definitions (emphasizing appraisal and/or labeling processes)

John Bowlby, 1969. (clinical text)

"Emotions are phases of an individual's intuitive appraisals either of his own organismic states and urges to act or of the succession of environmental situations in which he finds himself."

secondary emphasis: motivational, external stimuli, physiological

Richard S. Peters, 1970. (emotion text)

"Emotions have in common the fact that they involve appraisals elicited by external conditions which are of concern to us or by things which we have brought about or suffered."

secondary emphasis: external stimuli, adaptive

Stanley Schachter, 1970. (emotion text)

"It is my basic assumption that the labels one attaches to a bodily state, how one describes his feelings, are a joint function of...cognitive factors and of a state of physiological arousal." secondary emphasis: physiological, affective

G. A. Kimble, N. Garmezy, and E. Zigler, 1980. (intro text)

"Emotional experiences can be qualitatively very different. It is surprising, then, to find that the physiological conditions underlying these experiences are pretty much the same, and that cognitive factors such as the label we apply to the state determine the quality of an emotion." secondary emphasis: affective, physiological

See also, from the Affective category: James (1884), Edwards (1967), Arieti (1970), Brenner (1974), Buck (1976), Kemper (1978), Bruno (1980), Mischel and Mischel (1980); from the External Stimuli category: Strasser (1970), Plutchik (1980); from the Physiological category: Wenger et al. (1956), Simonov (1970), Pribram (1970), Silverman (1978);Emotional/Expressive Behavior category: Darwin (1872/1965); from the Disruptive category; Howard (1928); from the Adaptive category: Rado (1969); from the Multiaspect category: Landis and Hunt (1939), Vonderahe (1944), Schneirla (1959), Ruch (1962), Davitz (1970), Melzack and Casey (1970), Izard (1971), Delgado (1973), Leventhal (1974), Lazarus (1975), Thompson (1975), Candland (1977), Ekman (1977), Haber and Runyon (1978), Kagan (1978), Lewis and Rosenblum (1978), Schwartz (1978), Groves and Schlesinger (1979), Mandler (1979), Coon (1980), Geiwitz (1980), Zimbardo (1980); from the Restrictive category: Freud (1915/1949), Jung (1923), Young (1961), Ewert (1970), Gazzaniga et al. (1979); from the Motivational category: Arnold (1960), Milner (1970), Leukel (1976).

External Stimuli Definitions (emphasizing external emotion-generating stimuli)

J. R. Millenson, 1967. (learning text)

"Emotion...the association between certain widespread changes in ongoing operant behaviors and the presentation or removal of reinforcers." secondary emphasis: motivational

S. Strasser, 1970. (emotion text)

"It [emotion] is definitely not a synonym of 'drive' or 'need'....We propose to mention the following three characteristics of emotion. 1. Emotions always occur in the context of situations which—to use a modern expression—have an existential nature....2. Emotional behavior is eruptive and expressive by nature....3. Emotion is a primitive form of answer given by a subject to a situation. It is not a 'disorganized response'...." secondary emphasis: cognitive, emotional/expressive behavior, adaptive

Robert Plutchik, 1980. (emotion text)

"The characteristics of emotion may be summarized in the following way: 1. Emotions are generally aroused by external stimuli. 2. Emotional expression is typically directed toward the particular stimulus in the environment by which it has been aroused. 3. Emotions may be, but are not necessarily or usually, activated by a physiological state. 4. There are no 'natural' objects in the environment (like food or water) toward which emo-

tional expression is directed. 5. An emotional state is induced after an object is seen or evaluated, and not before."

secondary emphasis: emotional/expressive behavior, physiological, cognitive, restrictive

See also, from the Affective category: James (1884); from the Cognitive category: Bowlby (1969), Peters (1970); from the Physiological category: Simonov (1970); from the Adaptive category: Carr (1929); from the Multiaspect category: Schneirla (1959), Ruch (1962), Melzack and Casey (1970), Leventhal (1974), Bennett (1977), Candland (1977), Ekman (1977), Kagan (1978), Lindzey et al. (1978), Mandler (1979), Geiwitz (1980), Zimbardo (1980); from the Restrictive category: Woodworth (1938), Brady (1970), Ewert (1970), Gazzaniga et al. (1979), Hilgard et al. (1979); from the Motivational category: Arnold (1960), Plutchik (1962).

Physiological Definitions (emphasizing internal physical mechanisms of emotion)

John B. Watson, 1924. (learning text)

"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."

secondary emphasis: emotional/expressive behavior

Walter B. Cannon, 1928. (emotion text)

"For the theory that emotional experiences arise from changes in effector organs is substituted the idea that they are produced by unusual and powerful influences emerging from the region of the thalamus and affecting various systems of cortical neurones."

M. A. Wenger, F. N. Jones, and M. H. Jones, 1956. (physiological text)

"Emotion is activity and reactivity of the tissues and organs innervated by the autonomic nervous system. It may involve, but does not necessarily involve, skeletal muscle response or mental activity." secondary emphasis: emotional/expressive behavior, cognitive

Karl H. Pribram, 1970. (emotion text)

"In my language, emotions are Plans (Miller et al., 1960), neural programs which are engaged when the organism is disequilibriated." secondary emphasis: cognitive, emotional, adaptive

Pavel V. Simonov, 1970. (emotion text)

"From the physiological point of view, emotions constitute a special nervous mechanism which ensures the adaptive behavior of higher living beings in situations which disrupt their habit systems, that is, when there is a lack of the information required for reaching a goal and satisfying a need." secondary emphasis: cognitive, adaptive, motivational, external stimuli

Richard L. Bruce, 1977. (physiological text)

"The descriptive term to 'feel' an emotion is largely a statement of the bodily feedback from the various systems that have suddenly altered their activity."

secondary emphasis: affective

Robert E. Silverman, 1978. (intro text)

"Emotion is behavior that is primarily influenced by conditioned visceral responses. Our viscera are always reacting; but in emotion, their reactions affect perception, learning, thinking, and virtually everything we do."

secondary emphasis: cognitive, restrictive, emotional/expressive behavior

See also, from the Affective category, James (1884), Reich (1949), Bull (1951) English and English (1958), Hebb (1966), Edwards (1967), Arieti (1970), Valenstein (1973), Kemper (1978), Morris (1979), Baron et al. (1980), Bruno (1980), Mischel and Mischel (1980); from the Cognitive category: Bowlby (1969), Schachter (1970), Kimble et al. (1980); from the External Stimuli category: Plutchik (1980); from the Emotional/Expressive Behavior category: Darwin (1872/1965), Clynes (1977); from the Disruptive category: Howard (1928), Young (1943); from the Adaptive category: Carr (1929); from the Multiaspect category: Landis and Hunt (1939), Vonderahe (1944), Schneirla (1959), Ruch (1962), Morgan (1965), Melzack and Casey (1970), Isaacson et al. (1971), Izard (1971), Delgado (1973), Wolman (1973), Leventhal (1974), Chaplin (1975), Lazarus (1975), Thompson (1975), Candland (1977), Haber and Runyon (1978), Kagan (1978), Lewis and Rosenblum (1978), Lindzey et al. (1978), Schwartz (1978), Braun and Linder (1979), Groves and Schlesinger (1979), Mandler (1979), Morgan et al. (1979), Coon (1980), Geiwitz (1980), Lefrançois (1980), McConnell (1980), Zimbardo (1980); from the Restrictive category: Young (1961). Brady (1970), Gazzaniga et al. (1979); from the Motivational category: Leeper (1948), Arnold (1960), Ochs (1965), Tomkins (1970), Leukel (1976).

Emotional/Expressive Behavior Definitions (emphasizing externally observable emotional responses)

Charles Darwin 1872/1965. (emotion text)

"Actions of all kinds, if regularly accompanying any state of mind, are at once recognized as expressive. These may consist of movements of any part of the body, a wagging of a dog's tail, the shrugging of a man's shoulders, the erection of the hair, the exudation of perspiration, the state of capillary circulation, labored breathing, and the use of the vocal or other sound-producing instruments.... That the chief expressive actions, exhibited by man and by lower animals, are now innate or inherited, —that is, have not been learnt by the individual, —is admitted by every one." secondary emphasis: cognitive, physiological, adaptive, restrictive

Manfred Clynes, 1977. (emotion text)

"A class of qualities which is inherently linked to the motor system, so that its uniqueness is complete only with inclusion of the dynamics of the motor system as an integral part of their spatio-temporal existence....Emotion and its expression form an existential unit, a system." secondary emphasis: affective, physiological

See also, from the Affective category: Bentley (1928), Bull (1951), English and English (1958), Brown (1976), Kemper (1978), Houston et al. (1979), Morris (1979), Baron et al. (1980); from the External Stimuli category: Strasser (1970), Plutchik (1980); from the Physiological category: Watson (1924), Wenger et al. (1956), Silverman (1978); from the Disruptive category: Young (1943), Wickens and Meyer (1961); from the Adaptive category: Carr (1929); from the Multiaspect category: Landis and Hunt (1939), Vonderahe (1944), Schneirla (1959), Ruch (1962), Morgan (1965), Isaacson et al. (1971), Izard (1971), Delgado (1973), Leventhal (1974), Chaplin (1975), Lazarus (1975), Thompson (1975), Bennett (1977), Ekman (1977), Haber and Runyon (1978), Lewis and Rosenblum (1978), Lindzey et al. (1978), Schwartz (1978), Braun and Linder (1979), Groves and Schlesinger (1979), Morgan et al. (1979), Coon (1980), Lefrancois (1980), McConnell (1980); from the Restrictive category: Hilgard et al. (1979); from the Motivational category: Plutchik (1962), Tomkins (1970).

Disruptive Definitions (emphasizing disorganizing or dysfunctional effects of emotion)

D. T. Howard, 1928. (emotion text)

"In the disruptive state called emotional the victim can be said, in one sense, 'not to know what to do'....Accompanying this disruptive condition we have those strange visceral and vegetative phenomena commonly recognized as characteristic of the emotional condition." secondary emphasis: cognitive, physiological

Paul T. Young, 1943. (emotion text)

"Emotion is an acute disturbance of the individual as a whole, psychological in origin, involving behavior, conscious experience, and visceral functioning."

secondary emphasis: affective, physiological, emotional/expressive behavior

Delos D. Wickens and Donald R. Meyer, 1961. (intro text)

"A form of responding, characterized by high levels of psychological activation, which often results in disruption of the usual patterns of behavior."

secondary emphasis: affective, emotional/expressive behavior

See also, from the Affective category: Edwards (1967), Bruno (1980); from the Multiaspect category: Landis and Hunt (1939), Wolman (1973); from the Restrictive category: Young (1961).

Adaptive Definitions (emphasizing organizing or functional effects of emotion)

Harvey A. Carr, 1929. (intro text)

"An emotion may thus be provisionally defined as a somatic readjustment which is instinctively aroused by a stimulating situation and which in turn promotes a more effective adaptive response to that situation."

secondary emphasis: physiological, external stimuli, emotional/expressive behavior

Sandor Rado, 1969. (clinical text)

"Emotion is the preparatory signal that prepares the organism for emergency behavior.... The goal of this behavior is to restore the organism to safety."

secondary emphasis: cognitive

See also, from the Affective category: Hebb (1966), Arieti (1970), Brown (1976); from the Cognitive category: Peters (1970); from the External Stimuli category: Strasser (1970); from the Physiological category: Pribram (1970), Simonov (1970); from the Emotional/Expressive Behavior category: Darwin (1872/1965); from the Multiaspect category: Izard (1971), Lazarus (1975); from the Restrictive category: Brady (1970); from the Motivational category: Plutchik (1962), Ochs (1965), Tomkins (1970).

Multiaspect Definitions (emphasizing several interrelated components of emotion)

C. Landis and W. A. Hunt, 1939. (emotion text)

"A relationship existing between many diverse elements of experience and reaction. This relationship is not well specified, but, generally speaking it is marked by pleasantness or unpleasantness and by disorganization of usually integrated behavior patterns. An emotion is the total of the experience of an individual during any period of time when marked bodily changes of feeling, surprise or upset occur."

secondary emphasis: affective, disruptive, cognitive, physiological, emotional/expressive behavior

A. R. Vonderahe, 1944. (emotion article)

"Emotion is a way of feeling and a way of acting. It may be defined as a tendency of an organism toward or away from an object, accompanied by notable body alterations. There is an element of motivation—an impulsion to action and an element of alertness, a hyperawareness or vividness of mental processes. There is of course the opposite, a depression of movement."

secondary emphasis: affective, emotional/expressive behavior, motivational, physiological, cognitive

Theodore C. Schneirla, 1959. (motivation text)

"We define 'emotion' broadly as: 1) episodes or sequences of overt and incipient somatic adjustments, 2) often loosely patterned and variable, 3) usually with concurrent exciting sensory effects, perhaps also perceptual attitudes characterizable as desirable or undesirable, pleasant or unpleasant, 4) related to the intensity effects or perceptual meaning of a stimulus, 5) synergic with organic changes of A - (approach) or W - (withdrawal) types."

secondary emphasis: emotional/expressive behavior, physiological, affective, cognitive, external stimuli, motivational

Theodore C. Ruch, 1962. (physiological text)

"Emotion has four aspects. (i) Cognition: a situation a must be perceived, related to past experiences, and evaluated....(ii) Expression: Emotion is expressed outwardly in the form of somatic and autonomic activities....(iii) Experience...the 'inward aspect of emotion'...psychologists once divided emotion into two categories, those accompanied by pleasant affect and those which are unpleasant....(iv) Excitement...when we experience certain emotions we look and feel excited."

secondary emphasis: cognitive, emotional/expressive behavior, physiological, affective, external stimuli

Clifford T. Morgan, 1965. (physiological text)

"Emotion can be an experience, a kind of behavior, or a motive.... There are a great many kinds of behavior included under the term emotion. Some involve primarily the musculature of the body....[A] variety of autonomic responses are also part of emotion.... People and animals not only act emotional; they 'feel' emotional."

secondary emphasis: affective, emotional/expressive behavior, motivational, physiological

Joel R. Davitz, 1970. (emotion text)

"All four dimensions—ACTIVATION, RELATEDNESS, HEDONIC TONE, and COMPETENCE—are involved in emotional experience and must be considered in any general theory of emotion." secondary emphasis: motivational, cognitive, affective

R. Melzack and K. L. Casey, 1970. (emotion text)

"These events, we believe, contain in a nutshell a description of three salient features of emotion. (a) an emotion-provoking sensory input....(b) a high level of arousal or excitement...(c) central mediating processes." secondary emphasis: external stimuli, affective, physiological, cognitive

R. L. Isaacson, R. J. Douglas, J. F. Lubar, and L. W. Schmaltz, 1971. (physiological text)

"Emotion encompasses overt behaviors, expressed feelings, and changes in internal body states."

secondary emphasis: emotional/expressive behavior, affective, physiological

Carroll E. Izard, 1971. (emotion text)

"Emotion is a complex concept with neurophysiological, neuromuscular, and phenomenological aspects. At the neurophysiological level emotion is defined primarily in terms of patterns of electrochemical activity in the nervous system....At the neuromuscular level emotion is primarily facial activity and facial patterning, and secondarily it is bodily (postural-gestural, visceral, and sometimes vocal) response. At the phenomenological level emotion is essentially motivating experience and/or experience which has immediate meaning and significance for the person."

secondary emphasis: adaptive, emotional/expressive behavior, motivational, affective, cognitive, physiological

Jose M. R. Delgado, 1973. (intro text)

"Psychologists in general consider that emotions have two aspects: (1) The state of individual experience or feelings which may be analyzed by introspection and reported by verbal expression....(2) The expressive or behavioral aspect of emotions includes a variety of responses which affect (a) the motor system...(b) the autonomic system...and (c) the endocrine glands."

secondary emphasis: affective, emotional/expressive behavior, cognitive, physiological

Benjamin B. Wolman, 1973. (psychological dictionary)

"Emotion. 1. A complex reaction consisting of a physiological change from the homeostatic state, subjectively experienced as feeling and manifested in bodily changes which are preparatory to overt actions." secondary emphasis: disruptive, physiological, affective, motivational

Howard Leventhal, 1974. (social text)

"Our model [of emotion] must put together the following key elements: (1) a mechanism for interpreting situations which turns on emotional reactions; (2) an expressive reaction system whose feedback further defines the subjectivity and quality of the emotional state; (3) an instrumental action system which is concerned with manipulating the emotion-provoking situation; and (4) the bodily reaction system which sustains the instrumental action. All of these components are active and thoroughly mixed and integrated in the production of emotional behavior."

secondary emphasis: cognitive, affective, emotional/expressive behavior, motivational, external stimuli, physiological

James P. Chaplin, 1975. (psychological dictionary)

"Emotions may be defined as an aroused state of the organism involving conscious, visceral, and behavioral changes. Emotions are therefore more intense than simple feelings, and involve the organism as a whole." secondary emphasis: affective, physiological, emotional/expressive behavior, restrictive

Richard S. Lazarus, 1975. (emotion article)

"I define and analyze emotion as a complex disturbance that induces three main components: subjective affect, physiological changes related to species-specific forms of mobilization for adaptive action, and action impulses having both instrumental and expressive qualities.... The quality and intensity of the emotion and its action impulse all depend on a particular kind of cognitive appraisal of the present or anticipated significance of the transaction for the person's well-being."

secondary emphasis: cognitive, motivational, affective, physiological, emotional/expressive behavior, adaptive

Richard F. Thompson, 1975. (physiological text)

"Three rather clearly separate aspects of emotion may be distinguished ... experiential aspect... motor behavior... physiology of emotion." secondary emphasis: affective, cognitive, emotional/expressive behavior, physiological

Thomas L. Bennett, 1977. (physiological text)

"The term emotion can be applied to three types of phenomena. First, emotion can be used to refer to a subjective feeling. Emotion is the organism's way of acting—that is, its emotional expression. Finally, certain complex behaviors that occur during an animal's interactions with its environment are often regarded as emotional."

secondary emphasis: affective, emotional/expressive behavior, external stimuli

Douglas K. Candland, 1977. (emotion text)

"Emotional stimuli elicit both cognitive and physiological components of the emotional experience concurrently. Neither cognitive nor physiological factors are antecedent. Because the combined cognitive and physiological components of the emotional experience can be activated quickly, they are viewed as feeding back upon and modifying both continuing emotional experiences and future emotional responses."

secondary emphasis: cognitive, physiological, affective, external stimuli

Paul Ekman, 1977. (anthropology text)

"Emotion refers to the process whereby an elicitor is appraised automatically or in an extended fashion, an affect programme may or may not be set off, organized responses may occur, albeit more or less managed by attempts to control emotional behavior."

secondary emphasis: affective, external stimuli, emotional/expressive behavior, motivational, cognitive

Aubrey Haber and Richard P. Runyon, 1978. (intro text)

"While no definition of emotion is completely satisfactory, we may regard emotions as complex states involving cognitions, overt responses, internal changes, and motivational aspects."

secondary emphasis: cognitive, emotional/expressive behavior, physiological, motivational

Jerome Kagan, 1978. (emotion text)

"At present, many psychologists, but certainly not all, regard the category affective as being characterized by the following dimensions: a. A change in feeling state that is derivative of internal physiological events, b. produced by an immediate incentive event, c. that is short-lived in duration, d. linked to cognitive structures, and e. not related to physiological deprivation....The dimensions of events that are classified as motives (in contrast to affects) are less clear but often include (a) anticipation of a future goal that, (b) was acquired as a result of past experience."

secondary emphasis: affective, physiological, external stimuli, cognitive, restrictive

Michael Lewis and Leonard A. Rosenblum, 1978. (emotion text)

"Affect is defined as a consistent, temporally delimited, multiphasic response pattern that involves four essential elements: (a) the production of a specific constellation of internal physiological and/or cognitive changes in the organism; (b) some concomitant of these changes in overt, surface expression in the individual; (c) the individual's perception of this pattern of changes; and (d) the individual's personal experience or interpretation of the perceived changes."

secondary emphasis: physiological, cognitive, emotional/expressive behavior

G. Lindzey, C. S. Hall, and R. Thompson, 1978. (intro text)

"To explain what happens in emotion, the psychologist must consider all three links in the emotional sequence: the object at which emotion is directed; the experience or emotional attitude toward the object, including the impulse to action; and the associated physiological changes, including emotional expression."

secondary emphasis: external stimuli, affective, motivational, physiological, emotional/expressive behavior

Marvin Schwartz, 1978. (physiological text)

"'Emotions' are a complex amalgam of behavior, cognitions, physiological changes, and feeling."

secondary emphasis: emotional/expressive behavior, cognitive, physiological, affective

Jay Braun and Darwyn E. Linder, 1979. (intro text)

"Essentially they [emotions] can all be described as consisting of subjective feelings, overt behavior, and physiological responses." secondary emphasis: affective, emotional/expressive behavior, physiological

Philip Groves and Kurt Schlesinger, 1979. (physiological text)

"Psychologists nevertheless distinguish between the following aspects of emotion: (1) conscious aspects, which refer to experience, (2) behavioral aspects, which refer to actions of the somatic nervous system, and (3) visceral aspects, which are mediated by the actions of the sympathetic and parasympathetic divisions of the autonomic nervous system."

secondary emphasis: cognitive, affective, emotional/expressive behavior, physiological

George Mandler, 1979. (history and systems text)

"The two traditions (mental and organic) seem to have merged into a more general view that conflicting interruptive (mental and environmental) events play an important role in emotion and may even play an important role in generating the visceral substratum. Conversely, it is recognized that mere visceral response is not a sufficient condition for emotional phenomena, though it may be necessary; other, mental or cognitive, events are also required."

secondary emphasis: physiological, cognitive, external stimuli

C. T. Morgan, R. A. King, and N. M. Robinson, 1979. (intro text)

"There is no concise definition, because an emotion is many things at once...the way we feel when we are emotional...the behavioral arousal ...the physiological, or bodily, basis...that emotions are expressed by language, facial expressions, and gestures...that...some emotions...are very much like motive states in that they drive behavior."

secondary emphasis: affective, physiological, emotional/expressive behavior, motivational

Dennis Coon, 1980. (intro text)

"There are a number of facets to any emotional experience...subjective feeling, emotional expressions, physiological changes, [and] interpretation."

secondary emphasis: affective, emotional/expressive behavior, physiological, cognitive

James Geiwitz, 1980. (intro text)

"Emotions comprise both physiological components, geared mainly toward mobilizing the body for action, and psychological elements related to learning and experience. Our interpretation of these bodily and mental indicators, plus cues from the situation, help us to judge what emotion we feel and determine our responses to it."

secondary emphasis: physiological, motivational, cognitive, external stimuli, affective

Guy R. Lefrancois, 1980. (intro text)

"Definitions of emotion are based on what we presume to be the subjective experiences of being in that emotional state. Emotion, however, has other dimensions. Among the most important of these for human interaction is its expression. Emotions can be expressed in behavior....[E]motions may be seen as having approach or avoidance tendencies.... In addition to its experiential and expressive features, emotion is also related to activity of the autonomic nervous system."

secondary emphasis: affective, emotional/expressive behavior, motivational, physiological

James V. McConnell, 1980. (intro text)

"Emotional experiences seem to have three rather distinct aspects: 1. The bodily changes associated with arousal and relaxation. 2. The emotional behavior (such as fighting, loving, or running away). 3. The subjective feelings that give a distinctive personal flavor to the emotion."

Secondary emphasis: physiological, emotional/expressive behavior, affective

Philip G. Zimbardo, 1980. (intro text)

"Emotion. A complex subjective, psychological process, which may be induced by environmental stimuli and mediated by physiological variables; it may have the power to motivate an organism to action. It is a felt tendency toward stimuli appraised as good, and away from those appraised as bad."

secondary emphasis: external stimuli, physiological, motivational, affective, cognitive

See also, from the Affective category: Buck (1976).

Restrictive Definitions (distinguishing emotion from other psychological processes)

Sigmund Freud, 1915/1949. (clinical text)

"Ideas are cathexes—ultimately of memory traces—while affects and emotions correspond to processes of discharge, the final expression of which is perceived as feeling."

secondary emphasis: affective, cognitive, motivational

Carl G. Jung, 1923. (clinical text)

"Feeling is also a kind of judging, differing, however, from an intellectual judgment, in that it does not aim at establishing an intellectual connection but is solely concerned with the setting up of a subjective criterion of acceptance or rejection."

secondary emphasis: affective, cognitive

Robert S. Woodworth, 1938. (experimental text)

"Anyone will unhesitatingly classify as emotions: anger, fear, disgust, joy and sorrow; and as states of the organism: hunger, thirst, nausea, fatigue, drowsiness, intoxication.... It is hard to find a valid distinction, unless it be that the typical emotion is directed toward the environment, whereas a state of the organism, such as hunger or fatigue, originates in intraorganic processes and has no direct relationship to the environment." secondary emphasis: external stimuli

Paul T. Young, 1961. (motivation/emotion text)

"In technical psychology, the term emotion refers to one kind of affective process and not to all. Among the varieties of affective processes are the following: Simple sensory feelings.... Persistent organic feelings.... Emotions are acutely disturbed affective processes which originate in a psychological situation and which are revealed by marked bodily changes in the glands and smooth muscles.... Moods.... Affect.... Sentiments.... Interests and aversions.... Temperament."

secondary emphasis: disruptive, affective, cognitive, physiological

Joseph V. Brady, 1970. (emotion text)

"Emotional behavior seems most usefully considered as part of a broad class of effective interactions, the primary consequences of which appear to change the organism's relationship to its external environment. Feelings or affective behavior, on the other hand, can be distinguished as a generic class of interactions, the principal effects of which are localized within the reacting organism rather than in the exteroceptive environment." secondary emphasis: external stimuli, adaptive, affective, physiological

Otto Ewert, 1970. (emotion text)

"An analysis of the concept 'emotional experience' clearly shows that at least three subordinate concepts have to be distinguished: moods,

feelings, and emotions....Moods are background experiences of a diffuse nature....By feelings is meant the emotional coloring of conscious contents....Since they are figure, not ground, such well defined affective experiences of grief over the death of a family member...should be called emotions, as distinguished from feelings....Emotion is also different in having an object reference."

secondary emphasis: external stimuli, cognitive, affective

L. Dodge Fernald and Peter S. Fernald, 1978. (intro text)

"Emotion refers primarily but not exclusively to the feeling state, while motivation refers chiefly to the goal-directed activity, which may involve gaining or dispelling a feeling state. To the extent that goal-directed activity is prompted by feelings, as opposed to cognitive processes and routine habits, we may speak of emotional motivation."

secondary emphasis: affective, motivational

M. S. Gazzaniga, D. Steen, and B. T. Volpe, 1979. (physiological text)

"About the only distinction that can be drawn between motivation and emotion is that one usually thinks of motivation as arising from within the organism, often as a result of some biological need or hormonal influence. Emotion, on the other hand, is often thought to be a cognitive response initiated by an external stimulus. This is not a wholly valid distinction however...there are times when hunger is induced...by seeing or smelling a particularly enticing food. Fear, too, can certainly come from an internal stimulus."

secondary emphasis: cognitive, external stimuli, physiological

E. R. Hilgard, R. L. Atkinson, and R. C. Atkinson, 1979. (intro text)

"Emotions are usually aroused by external stimuli and...emotional expression is directed toward the stimuli in the environment that arouse it. Motives...are more often aroused by internal stimuli and are 'naturally' directed toward certain objects in the environment."

secondary emphasis: external stimuli, emotional/expressive behavior, affective

See also, from the Affective category: Kemper (1978), Houston et al. (1979); from the External Stimuli category: Plutchik (1980); from the Physiological category: Silverman (1978); from the Emotional/Expressive Behavior category: Darwin (1872/1965); from the Multiaspect category: Chaplin (1975), Kagan (1978); from the Motivational category: Leeper (1948), Arnold (1960), Ochs (1965).

Motivational Definitions (emphasizing the relationship between emotion and motivation)

R. Leeper, 1948. (motivation-emotion article)

"Emotional processes are one of the fundamental means of motivation in the higher animals—a kind of motivation which rests on relatively complex neural activities rather than primarily on definite chemical states or definite receptor states, as in the case of bodily drives or physiological motives such as hunger, thirst, toothache, and craving for salt." secondary emphasis: restrictive, physiological

Magda Arnold, 1960. (emotion text)

"Emotions themselves are action tendencies like physiological appetites, but they are not activated by a physiological state, nor do they aim toward a specific naturally determined object....Though there is a physiological state specific for each emotion, this state is induced after the object is seen or appraised."

secondary emphasis: external stimuli, cognitive, restrictive, physiological

Robert Plutchik, 1962. (emotion text)

"An emotion may be defined as a patterned bodily reaction of either destruction, reproduction, incorporation, orientation, protection, reintegration, rejection or exploration, or some combination of these, which is brought about by a stimulus."

secondary emphasis: external stimuli, adaptive, emotional/expressive behavior

Sidney Ochs, 1965. (physiological text)

"The visceral centers...can be considered as the origin of appetitive drive states, and emotions considered as augmentation mechanisms intensifying the drives and leading to a satisfaction of those primary needs." secondary emphasis: physiological, restrictive, adaptive

Peter M. Milner, 1970. (physiological text)

"Motivational states that are not always accompanied by obvious external stimuli have names like 'fear' and 'anger.' We call these states (which we are aware of mainly through introspection) 'emotions.'" secondary emphasis: affective, cognitive

Silvan S. Tomkins, 1970. (emotion text)

"If the affects are our primary motives, what are they and where are they? Affects are sets of muscle, vascular, and glandular responses located in the face and also widely distributed through the body, which generate sensory feedback which is inherently either 'acceptable' or 'unacceptable.'" secondary emphasis: physiological, affective, adaptive, emotional/expressive behavior

Francis Leukel, 1976. (physiological text)

"An emotion may be characterized as a highly motivated state, usually accompanied by heightened awareness (in man), often recognizable approach or withdrawal behavior, much autonomic activity, and widespread activation in the central nervous system."

secondary emphasis: cognitive, physiological

See also, from the Affective category: McDougall (1921), Bentley (1928), Bull (1951), Hebb (1966), Arieti (1970), Brown (1976), Buck (1976), Bourne and Ekstrand (1979), Houston et al. (1979), Mischel and Mischel (1980); from the Cognitive category: Bowlby (1969); from the External Stimuli category: Millenson (1967); from the Physiological category: Pribram (1970), Simonov (1970); from the Multiaspect category: Vonderahe (1944), Schneirla (1959), Morgan (1965), Davitz (1970), Izard (1971), Wolman (1973), Leventhal (1974), Lazarus (1975), Ekman (1977), Haber and Runyon (1978), Lindzey et al. (1978), Morgan et al. (1979), Geiwitz (1980), Lefrancois (1980), Zimbardo (1980); from the Restrictive category: Freud (1915/1949), Fernald and Fernald (1978).

Skeptical Statements (questioning the usefulness of the concept of emotion)

E. Duffy, 1941. (emotion article)

"I am aware of no evidence for the existence of a special condition called 'emotion' which follows different principles of action from other conditions of the organism. I can therefore see no reason for a psychological study of 'emotion' as such. Emotion has no distinguishing characteristics. It represents merely an extreme manifestation of characteristics found in some degree in all responses."

D. Rapaport, 1942. (emotion text)

"There was indiscriminate application of the words 'emotion' and 'affect' and their adjectival forms, to almost everything that is not apparently rational or lawful."

K. Jaspers, 1948. (clinical text)

"As for the term and concept 'emotion,' it is often uncertain what is meant by it in a given case."

B. F. Skinner, 1953, (learning text)

"The 'emotions' are excellent examples of the fictional causes to which we commonly attribute behavior.... The names of the so-called emotions serve to classify behavior with respect to various circumstances which affect its probability."

W. S. Verplanck, 1954. (learning text)

"Unfortunately...emotion appears frequently in the role of deus ex machina, in that it is used to account for changes in strength which are observed when the conceptual system, taken with the experimental procedures, would otherwise lead to the expectation...that no change in strength would occur."

C. B. Ferster and M. C. Perrott, 1968. (learning text)

"The term emotion, as it is classically used, has the disadvantage of referring to an inner state which usually cannot be observed."

Charles N. Cofer, 1972. (motivation/emotion text)

"There does not seem to be a satisfactory way to define emotion, aside from its manifestations in act or verbal statements of feeling."

Edmund Fantino, 1973. (learning text)

"In general, it appears that emotional behavior is so complexly determined that a consistent characterization is at present elusive. It would appear, then, that little is gained by retaining the concept of emotion in psychology."

Donald G. Stein and Jeffrey J. Rosen, 1974. (motivation/emotion text)

"There is no universal agreement on the use of the concept....[P]sychologists have resorted to extremely limited 'operational definitions' of emotion; emotionality is defined as the number of squares crossed on an open-field maze, or as a marked shift in the base line of the galvanic skin response."