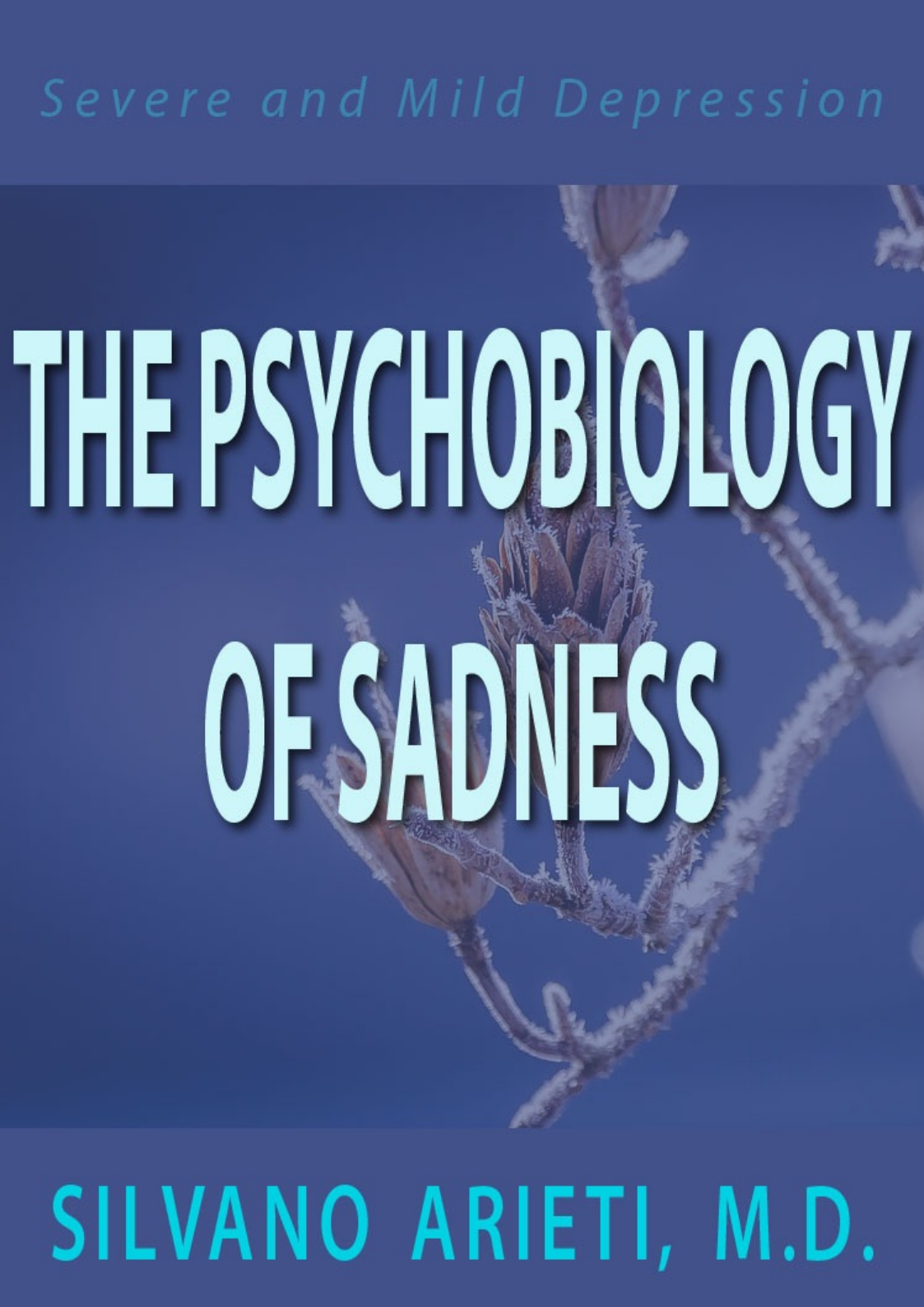


Severe and Mild Depression



THE PSYCHOBIOLOGY OF SADNESS

SILVANO ARIETI, M.D.

THE PSYCHOBIOLOGY OF SADNESS

SILVANO ARIETI, M.D.

e-Book 2015 International Psychotherapy Institute

From *Severe and Mild Depression* by Silvano Arieti & Jules Bemporad

Copyright © 1978 Silvano Arieti & Jules Bemporad

All Rights Reserved

Created in the United States of America

www.freepsychotherapybooks.org
ebooks@theipi.org

Table of Contents

[Introductory Remarks](#)

[Feelings And Experiences Of Inner Status](#)

[Sadness](#)

[Sadness—And Bereavement In Particular—As A Motivational Force](#)

[Other Aspects of Sadness](#)

[Transformation of Sadness](#)

[Unresolved Sadness and Depression](#)

[REFERENCES](#)

THE PSYCHOBIOLOGY OF SADNESS

Silvano Arieti

Introductory Remarks

Many psychiatrists warn the therapist in training not to confuse sadness, or normal unhappiness, with depression. The warning is appropriate, but certainly the confusion would not arise if there were no similarities between these two human conditions. And even if the similarities were less important than the differences, they would deserve to be studied, unless proved coincidental or casual.

In many scientific fields progress is often made when two or more conditions or things which are apparently alike can be differentiated and eventually proved dissimilar in their basic structure. But progress on many occasions is made also in the opposite way, when similarities appearing in different conditions are recognized as not being casual, adventitious, or coincidental, but indications of relatedness between the nature of the phenomena involved. As a matter of fact, in some cases one of the two similar conditions is fundamentally only a quantitative transformation of the other. For instance, fever is different from normal body temperature, but it is nevertheless a body temperature raised by some special contingencies.

I believe that a close relation exists between sadness, a normal emotion, and depression, which is a psychiatric symptom or condition. Undoubtedly I am predisposed to think so by some personal bias, but I am aware of the opposite bias held by most authors who see a completely different nature in sadness and depression. These authors interpret depression only or almost exclusively as a chemical event occurring in the brain. I do not deny that a chemical event occurs in the brain when people experience depression. In fact, I believe that a chemical event occurs even when they experience sadness. But the chemical event is an effect, and to some extent the medium of the psychological event, with which I—as a psychiatrist, psychologist, or therapist—am mainly concerned. The psychological event may be caused by an external event or by a previous psychological event, or a combination of the two, and it has to be studied by me, a psychotherapist, as such. Naturally I do not disregard or consider useless the study of the neuronal and biochemical events which necessarily accompany the psychological event. If in the experience of these phenomena we recognize the primacy of the psychological event, I believe it then will be easier to recognize a relation between normal sadness and abnormal depression.

When a normal person is sad or unhappy as a result of some unpleasant events which have occurred in his life, at times he calls himself depressed and melancholy. Similarly we may call our most depressed psychiatric patients sad, melancholy, anguished, unhappy. This free interchange of adjectives is

based on the fact that all of them imply a similar feeling of “unpleasure.” Perhaps we could bypass the study of sadness and proceed directly to the study of the syndrome called depression if we knew all there is to know about sadness, but unfortunately this is far from being the case. In the indexes of many major books on depression, I found no entry for such items as sadness and unhappiness. Sadness and unhappiness also do not appear in the psychological dictionary by English and English (1958), the psychiatric dictionary by Hinsie and Campbell (1960), and the *Dictionary of Behavioral Science* by Wolman (1973).

Normal sadness is the emotional effect on a human being when he apprehends a situation that he would have preferred not to occur, and which he considers adverse to his well-being. This definition would not pass the test of a rigorous logician. It is to some extent circular, like all definitions that refer to the subjective life of the individual, and it shows once again our difficulty in overcoming the mind-body dichotomy. Nevertheless I think we can use it as a working definition.

First we must remember that sadness presupposes the capacity to experience other normal emotions and conditions, such as affection, closeness, love, self-respect, feelings of satisfaction. In fact, the lack or loss of these positive emotions makes us vulnerable to sadness.

Sadness has many characteristics similar to other feelings and emotions, as well as some special traits of its own. Before taking sadness as the object of our study, we will review some aspects of all feelings. This is an unusual procedure in psychiatric books; but feelings do pertain to all psychiatric conditions and in particular to affective disorders. Studying them, even as they occur in nonpathological conditions, seems to me an essential prerequisite not only for psychological but also for psychiatric studies.

Feelings And Experiences Of Inner Status^[1]

In the English language the word feeling can refer to all subjective or private experiences from elementary sensations to complicated emotions.

Sensations, when they reach the level of perceptions, have two experiential aspects: they consist of a subjective apprehension of a physical state of the organism (for instance, a specific unpleasant feeling which we call pain), and they mirror an aspect of reality.

One aspect is sensory, or the transformation of a bodily change into an experience of an inner status, an experience that as a subjective event occurs within the organism. On the other side we have the function of mirroring reality, a function which generally expands into numerous ramifications that have to do with cognition.

If we examine sensory perceptions, we recognize that the importance of these two components varies tremendously. The experience of inner status is very important in the perception of pain, hunger, thirst, and temperature. It becomes less pronounced in other perceptions when the organism is of necessity in contact with some stimuli (tactile, gustatory, and, less obviously, olfactory) coming from the external world. In these perceptions the subjective alteration of the organism plays the predominant role, but the presence of the external stimulus generally also is acknowledged.

In auditory and visual perceptions, the experience of a change of inner status plays a minimal role. What is most important is the awareness these perceptions give us of what happens in the external world; thus they enable the organism to deal more appropriately with the world. They are to a great extent the foundation of cognition, they develop connections with the symbolism of language, they are elaborated to the level of apperception, and they become increasingly removed from their sensorial origin. Their importance finally no longer lies in their sensorial nature but in their meaning.

Both kinds of experience are purposeful, but the experiences of inner status have an immediate survival value and are fundamentally not symbolic, and the experiences of mirroring of reality soon acquire a symbolic function and have less immediate survival value.

I must point out that I have oversimplified this complex matter for expository reasons. No experience, especially at a human level, is ever exclusively of one type or another, but only predominantly of one type. Although in this chapter we are particularly interested in the experiences of inner status, I shall make a few remarks about the general character of cognitive experiences in order to highlight their differences from the experiences of inner status.

Cognitive experiences become symbolic, that is, they acquire the property of making things stand for other things. For instance, sounds stand for words, things, and meanings. Therefore this field of cognition becomes potentially endless. It is a constantly enlarging system which must be fully evaluated as a capacity of the individual, as a social and a historical phenomenon in the spatial dimension of the community, and in the temporal dimension of the history of man. Symbols are created continuously and they become more and more detached from their original perceptual foundation. What starts as a simple perception continues as a probe of wider and wider horizons. The finitude of man seems temporarily overcome by the use of the symbolic process.

In contrast to this unlimited scope, it at first seems that the experiences of inner status play only a secondary role, at least in the human organism. They cannot expand endlessly and they seem by necessity concerned with

here-and-now reality, a reality restricted to the boundaries of the organism, but one which immediately can be divided into pleasant and unpleasant experiences.

Has the organism really relegated the experiences of inner status to a secondary role? Not at all, as will be apparent if in paradigmatic fashion we take into consideration one of these experiences: an unpleasant one, pain.

When some special nerve endings are stimulated, there is a flow of stimulation which eventually reaches the thalamus and the cerebral cortex, and pain is experienced. Pain is not just a sensation and a perception. It is a warning, a signal that a discontinuity or an adverse change has occurred in the body, which may persist and increase unless the organism removes the source of pain. Pain thus translates an abnormal state of the animal organism into a subjective experience. Lower species attempt to remove pain by motor withdrawal from its source. Higher species and especially human beings generally attempt to remove the source of pain by purposeful behavior so that the regenerative potential of the organism can permit healing. If we have a toothache, we rush to the dentist.

But long before we have the capacity to understand the meaning of a toothache and to seek the help of a dentist, we have the capacity to understand pain. The baby has such a capacity in his very first day of life. Pain

for him is an immediate revelation antecedent to any learning. The subjective unpleasant experience is instantaneous. It operates prior to and much faster than any cognitive experience that derives from the elaboration of the second type of sensations—perceptions. The baby does not know how to talk but he is able to express his experience of pain by crying. The fact that he cries tells us that he is already capable of attributing a negative *value* to pain. The baby seems also to convey a message to the adult: “Remove my pain by feeding me, holding me, changing my clothes.”

When the child gets older, he does not cry anymore but the motivation is the same: “Remove the source of pain.” This removal is attempted with the help of others or by one’s own efforts. Thus the value—in this case negative—which is immediately perceived even by the infant as inherent in a particular state of awareness, corresponds to an objective value for life in general and promotes a special type of motivated behavior. In other words, the feeling of pain becomes a motivational force, and the motivation is to eliminate the source of the pain, or at least to give a warning that a method should be found to eliminate the cause of that feeling.

Of course there is no perfect correspondence between the intensity of the painful feeling, the warning implied, and the resulting behavior. A toothache can cause very distressing pain and a serious disease may produce only a dull pain. In some serious diseases the pain becomes noticeable or

unbearable when the illness has reached an advanced degree which may be beyond remedy at the present stage of our therapeutic knowledge. Even if the system of feeling pain is not a precise signaling equipment or a sophisticated diagnostician, in its total effect it is of tremendous and indispensable value for the organism. It is logical to assume that pain was at first selected in evolution because the animal, unlike vegetable life, moves or changes positions and needs a sensation signal to avoid surrounding bodies having certain harmful characteristics (too hard, cutting edges, thorns, etc.). Pain is also an indicator, although an imperfect one, of certain internal harmful states and diseases of the organism. We can assume safely that pain perception has such a survival value that without it animal life would not be possible, except for the simplest species.

Elsewhere (Arieti, 1960, 1967) I have described how emotions share some of the properties of simple feelings, such as sensations and perceptions of inner status. Emotions too can be divided into those that are pleasant and unpleasant and therefore they become motivational forces: pleasant emotions motivate a behavior aimed at preserving the pleasure, and unpleasant emotions motivate a behavior aimed at ending the unpleasantness. What Freud called cathexis—that is, investment of energy or libido—is probably only the motivational value of felt experiences, as Freud himself thought before he wrote *The Ego and the Id*.

We must carefully take into consideration two important issues concerning emotions.

Many well-known psychologists (for instance, Woodworth, 1940; Munn, 1946) have considered emotions as a disorganization of the organism. It is to the merit of Leeper (1948) that he showed the fallacy of this position. I myself have independently pursued the line initiated by Leeper, and I have described the highly organized status of emotions and their motivations (Arieti, 1960, 1967). For instance, a state of tension is motivationally organized to induce a return to homeostasis and a state of satisfaction, fear warns us of a present danger and prepares us to cope with it, anxiety warns us against a future or indefinite danger, rage and anger put us in a position to fight an adverse force, and so on. The experience of emotion is indeed a change in the organism and thus may be a disturbance, but not a disorganization.

The second characteristic, which I described fully for the first time in *The Intrapsychic Self* (1967), consists of the fact that at a human level all emotions have a cognitive component, minimal in some emotions and preponderant in others.

Emotions can be divided into three orders or ranks (Arieti, 1967, 1970a, 1970b). The first rank includes the simplest emotions which I have called first-order or protoemotions. There are at least five types: (1) tension, a

feeling of discomfort caused, for example, by excessive stimulation and hindered physiological or instinctual response; (2) appetite, a feeling of expectancy which accompanies a tendency to move toward, contact, grab, or incorporate an almost immediately attainable goal; (3) fear, an unpleasant subjective state which follows the perception of danger and elicits a readiness to flee; (4) rage, an emotion that follows the perception of a danger to be overcome by fighting; that is, by aggressive behavior rather than by flight; (5) satisfaction, an emotional state resulting from gratification of physical needs and relief from other emotions.

In a general sense we can say about protoemotions that: (1) They are experiences of inner status which cannot be sharply localized and which involve the whole or a large part of the organism. (2) They either include a set of bodily changes, mostly muscular and humoral, or retain some bodily characteristics. (3) They are elicited by the presence or absence of specific stimuli which are perceived by the organism to be related in a positive or negative way to its safety and comfort. (4) They become important motivational factors and to a large extent determine the type of external behavior of the subject. (5) They have an almost immediate effect; if they unchain a delayed reaction, the delay ranges from a fraction of a second to a few minutes. (6) In order to be experienced, they require a minimum of cognitive effort. For instance in fear or rage a stimulus must promptly be recognized as a sign of danger. The danger is present or imminent.

The fifth and sixth characteristics require further discussion. Protoemotions are not experienced instantaneously, like the simple sensations of pain and thirst. They require some cognitive work. However, this cognitive work is of very short duration and presymbolic, or in some cases symbolic to a rudimentary degree. Presymbolic cognition includes perception and simple learning. It also includes the sensorimotor intelligence described by Piaget in the first year and a half of life.

Protoemotions are extremely important for the survival of the species and also as motivational forces. They are important in both infrahumans and man. However, let us remember that the learning which is required at this level is very simple. It deals with messages immediately given with either direct stimuli or signals, but not with symbols. Signals or signs indicate things. Some of them may actually be parts of things. (The smell of a mouse is connected to or part of the mouse for the cat.) However, they are not necessarily so. Like the ringing of a bell for the conditioned dog, they indicate something which is forthcoming.

Organization at the protoemotional level is very simple. It does not include what is most pertinent in the field of psychiatry. In fact, we must go to the second-order emotions to find such psychological experiences as anxiety, anger, wishing, security.

Second-order emotions are not elicited by a direct or impending attack or by a threatened immediate change in homeostasis of the organism, but by cognitive symbolic processes. The prerequisite learning deals not only with immediate stimuli or signals, but also with symbols; that is, with something which represents stimuli or stands for the direct sense-data.

These symbols may vary from very simple forms to the most complicated and abstract representations. The simplest symbol is the image, a psychological phenomenon which has been badly neglected in psychology and psychiatry. We know that an image is a memory trace which assumes the form of a representation. It is an internal quasi-reproduction of a perception that does not require the corresponding external stimulus in order to be evoked. Although we cannot deny that at least rudimentary images occur in subhuman animals, there seems to be no doubt that images are predominantly a human characteristic. The child closes his eyes and visualizes his mother. The mother may not be present, but her image is with the child and it stands for her. He may lie peacefully in bed and that image will be with him until he falls asleep. By the image representing her, the mother acquires a psychic reality which is not tied to her physical presence.

Image formation is actually the basis for all higher mental processes. It enables the human being not only to re-evolve what is not present, but to retain an affective disposition for the absent object. The image thus becomes

a substitute for the external object. It is actually an inner object, although it is not well organized.

Now let us see how images may increase the emotional gamut. Anxiety is the emotional reaction to the expectation of danger. The danger is not immediate, nor is it always well defined. The expectation of danger is not the result of a simple perception or signal, as it is in the case of fear. Images enable the person to anticipate a future danger and its dreaded consequences, even though he does not expect it to materialize for some time. In its simplest form anxiety is fear mediated by images or imagined fear. However, often the danger is represented by sets of symbols which are more complicated than sequences of images.

Similar remarks could be made for the other second-order emotion, anger. In its simplest form anger is imagined rage; that is, a rage elicited by the images of the stimuli which generally elicit rage. Whereas rage usually leads to immediate motor discharge directed against the stimulus that elicits it, anger tends to last longer although it retains an impelling characteristic. The prolongation of anger is possible because it is mediated by symbolic forms, just as anxiety is. If rage was useful for survival in the jungle, anger was useful for the first human communities to maintain a hostile-defensive attitude toward the enemy, even when the latter was not present.

Wishing is an emotional state which has received little consideration in psychology except when it has been confused with appetite. Whereas appetite is a feeling accompanied by a preparation of the body for approach and incorporation, wishing means a pleasant attraction toward something or somebody, or toward doing something. Contrary to appetite, wishing is made possible by the evocation of the image or other symbols of an object whose presence is pleasant. The image of an earlier pleasant experience—for instance, the satisfaction of a need—evokes an emotional disposition which motivates the individual to replace the image with the real object of satisfaction. A search for the real object thus is initiated or at least contemplated. This search may require detours, since a direct approach is often not possible.

Security is the last second-order emotion. It has played an important role in the theoretical framework of the psychiatrist Harry Stack Sullivan (1940, 1953). It is debatable whether such an emotion really exists; the term may indicate only the absence of unpleasant emotions or else be a purely hypothetical concept. We can visualize the simplest form of security as imagined satisfaction. That is, images permit the individual to visualize a state of satisfaction not only for today but also for tomorrow.

The brain, which uses images, can be compared to some extent to an analog computer. With the advent of language, the nervous system in some

aspects becomes like a digital computer; a system of arbitrary signs is now capable of eliciting the emotions that earlier could be engendered only by external stimuli or images. Until now emotions seem to be only experiences of inner states which are connected with the organism itself, its immediate surroundings, or its image of the immediate surroundings. Emotions, as experiences of inner states and with some exceptions to be discussed later, are not symbolic. They stand only for themselves and they do not extend beyond the boundaries of the organism. However, when they become connected with symbolism, they are capable of partaking of the infinity of the universe.

Second-order emotions can be elicited also by a preconceptual type of cognition; that is, by primitive forms of thinking included in what Freud called the primary process. The nonhuman animal is at a level where only first-order emotions are possible and so is very limited psychologically; it remains within the boundaries of a limited reality but is indeed a realist. It is capable only of a nonsymbolic type of learning. It interprets signs but not symbols in the light of past experience. When man uses symbols, especially preconceptual symbols, he opens his mind toward the infinity of the universe but also toward an infinity of errors and the realm of unreality. For instance, the experience of anxiety may be wasted because it is based not on a realistic appreciation of danger, but on an inaccurate or arbitrary symbolism.

Third-order emotions occur with the gradual abandonment of preconceptual levels and the development of the conceptual levels of cognition. In conjunction with the first- and second-order emotions, they offer the human being a very complicated and diversified emotional repertory. Language plays an important role in third-order emotions. The temporal representation is enlarged in the direction of both the past and the future. As an experiential phenomenon emotion has only one temporal dimension, which is the present. However, because of its cognitive components it is a present experience which may have a great deal to do with past experiences and with an envisioned future. A person may be happy or unhappy now because of what happened long ago or what he thinks may happen in the future.

Third-order emotions, although capable of existing even before the occurrence of the conceptual level, expand and become much more complicated at the conceptual level. Important third-order emotions are sadness, hate, love, and joy. To discuss adequately what we know about them, which is little in comparison to what remains to be known, would fill many books. I shall take into consideration only one third-order emotion: sadness.

Sadness

Sadness is a specifically human phenomenon, although rudimentary

forms of it or related emotions have been observed in other species of vertebrates. It may be referred to as a special pain which is not physical, but mental. The English word *pain* includes both physical and mental pain because they are similar as subjective experiences of suffering. If our general assumption about feeling is correct, sadness, like physical pain, must have been retained in evolution because it was useful for survival. It may have become a motivational force similar to other unpleasant feelings, whether sensations or emotions. The motivation would be an urge to remove the cause of the unpleasant feeling. This may seem hard to prove; take as examples seven situations in which a normal person is likely to feel sad or unhappy:

- I. He hears the news that a person dear to him has suddenly died. He is in a state of grief and mourning.
- II. A son or daughter has flunked an examination.
- III. A sweetheart has openly and irrevocably declared that her love has come to an end.
- IV. He unexpectedly loses a position which has been held for many years with a feeling of commitment, loyalty, pleasure, and fulfillment.
- V. He has been humiliated by his chief in the place of work.
- VI. He has been the victim of an injustice.

VII. He recognizes that a basic position, a specific direction he has taken in life (for instance, allegiance to a cause, a person, a special type of work) is wrong. He has wasted time and energy, and must now change direction.

Our life experiences enable us to understand how an individual who is faced with one or more of these seven circumstances may have emotions ranging from mild sadness to despondency, anguish, unhappiness, and severe sorrow.

An individual who expects an unhappy or dangerous event to happen is in a state of anxiety. But in the seven examples, the loss has already occurred or the damage has already taken place. Because the individual realizes that the damage has already taken place, he experiences not anxiety, but sadness. It is evident that an appraisal of the situation has been a prerequisite for the sadness to occur. The individual not only realizes the impact of the undesirable event on his present life, but he is able to assess the negative effect that it will have on his future. To refer again to the seven examples, he no longer will enjoy the company of the deceased person; his son will not be promoted; he will no longer receive love from the sweetheart; he no longer will retain the coveted position; he has lost face or reputation among co-workers; he may not be able to undo the damage done to him, as people may really believe he is guilty; he has been a fool in devoting himself so much to an unworthy cause; and so on.

Some authors believe that feelings of sadness and depression are caused by a decrease of norepinephrine in certain parts of the central nervous system. It seems certain that a chemical change occurs in the brain of the individual who experiences sadness. But contrary to the position taken by Akiskal and McKinney (1975), it seems plausible that the leap is not from chemistry to psychology, but from psychology to chemistry. In other words, the cognitive appraisal of the event comes before the chemical change. If the chemical change is necessary for the subjective experience of sadness, then the chemical change must be responsible for another leap, from a chemical reaction to the psychological experience of sadness.

It is important to stress at this point how extensive the cognitive work is that prepares the ground for the feeling of sadness. To understand the meaning of the death of a person dear to us and the significance that his absence will have in our life, or to comprehend fully the meaning of a humiliation or a basic error that we have made, implies evaluating thousands of facts and their ramifications, myriads of ideas, and a plurality of feelings which are often discordant. First, billions of neurons do cognitive work in the neopallium; then sadness is experienced as the outcome of the cognitive work. The concerted functioning of all the neopallial neurons is transformed into an emotion, an experience of inner status.

In this book we shall not deal with the anatomical structures that

mediate this transformation. From the classic work of Papez (1937) and those who have followed Papez's work, we know that a large number of neopallid structures must find pathways to some parts of the limbic system. But at this point already we can reflect upon a phenomenon which appears miraculous; that in as little time as a fraction of a second to a few seconds, the work of a multitude of neurons is transformed into an emotional experience. When we respond to a simple stimulus with an experience of inner status, the phenomenon may not appear impressive until we realize that the experience of inner status is the outcome of the concerted work of billions of neurons.

Similar phenomena, which include an enormous variation in the intensity or complexity of stimuli, occur throughout the nervous system. For instance, the auditory system can hear the weakest whisper and also hear and understand the meaning of an explosive sound, even though these two sound experiences vary as much as a trillionfold. The eyes can see visual images that vary a millionfold in their light intensities (Guyton, 1972). Thus some regions of the limbic system may also be capable of responding with a painful emotion to wave fronts of nervous stimulation varying enormously in size and coming from the neopallid areas.

It seems easy to establish that a cognitive work is necessary to experience normal sadness, just as we can ascertain easily that a change in the cognitive work may reverse the feeling of sadness. The following example

will clarify this point. During the second World War some families were notified of a relative missing in action. The news generally provoked a great deal of sorrow and also anxiety, since the death of the missing person was not proved. When additional news arrived that confirmed the death of the soldier, any feeling of anxiety disappeared and only a profound feeling of sadness was experienced. In those rare instances, reported in the newspapers, in which the soldier who was thought to be dead was instead found to be alive and well, sadness immediately disappeared and was replaced by happiness and joy. It is thus clear that a change in the cognitive work can change the emotion. What remains to be demonstrated is how in the case of sadness the emotion becomes a motivational force.

Sadness—And Bereavement In Particular—As A Motivational Force

If sadness is like other unpleasant feelings, it must be a promoter of behavior which will lead to the disappearance of sadness. This function is easy to understand in the case of pain, hunger, thirst, tiredness, fear, and anxiety, which all lead to behavior that tends to avoid, remove, or prevent the cause of the feeling itself. But what can we do in the case of sadness, when the harmful event or the loss has already taken place? Moreover, when we feel sad we also feel less equipped to take any action whatsoever. In contrast to persons who are angry and ready to fight, or persons who are afraid and ready to flee, we feel slowed down in our activities and thought processes. In

order to understand the phenomenon, we must consider some of the seven examples listed above. Let us consider in greater detail our first example of an individual who hears the news that a person he loves has unexpectedly died.

After he has understood and almost instantaneously evaluated what this death means to him, he experiences shock and then sadness; or to be exact, that particular type of normal sadness which is called bereavement, mourning, or grief. For a few days all thoughts connected with the deceased person bring about a painful, almost unbearable feeling. Any group of thoughts remotely connected with the dead person elicits sorrow. The individual cannot adjust to the idea that the loved person does not live any more. And since that person was so important to him, many of his thoughts or actions are directly or indirectly connected with the dead person and therefore elicit sad reactions. He finds himself searching for the dead person. When he sees a person who looks like the dead person, he has a fleeting impression, almost immediately corrected, that he sees the dead person. Nevertheless, after a certain period of time which varies from individual to individual, the person in mourning seems to become adjusted to the idea that the loved one is dead.

How is this change possible? If the individual is able to introspect, he will recognize that some clusters of thought have replaced the old ones which were connected with the departed. At first he had the impression at a

conscious level that the painful thoughts about the departed person prevented him from thinking about anything else. But after some time he recognizes that the opposite is true: the painful thoughts attract new ones, as if they wanted to be replaced by new thoughts. This cognitive activity goes on until the grief work is completed.

At first there is an attempt to recapture the dead person, to make the deceased live again in dreams, daydreams, and fantasies. Because these attempts are doomed to fail, the individual is left with only one possibility, which is to rearrange the ideas that are connected with the departed. This rearrangement can be carried out in several ways, according to the person's mental predisposition. For example, he may come to consider the deceased no longer indispensable. He may associate the image of the dead person mainly with the qualities of that person which elicited pleasure, so that the image no longer brings mental pain but pleasure. Or he may think of the deceased's life as not really ended, but as being continued either in a different world or in this world through the lasting effects of the deceased's actions. Finally he may think that another person can replace the deceased one in his life; the deceased was not unique in every respect. Whatever the ideational rearrangement, there is no moving away from a physical source of discomfort as in pain, or from the source of danger as in fear. The moving away is only from certain chains of thought that perpetuate the feeling of sadness. It is not the passage of time that heals, but the rearrangement of ideas, which still may

require a considerable amount of time.

As I wrote in *The Intrapsychic Self*,^[2] sadness is an unpleasant emotion which has a tendency not to be extinguished rapidly, like rage, but to last. It does not have an impelling tendency toward immediate action and discharge, like rage and fear; it is neither centripetal, such as fear which is experienced as something directed from the frightening stimulus to the organism, nor centrifugal, such as rage which is experienced as being directed toward something outside of the organism. Although precipitated most of the time by certain events that occur in the external world, it is reflexive in the sense that it seems to reflect back to the organism that experiences it.

In summary, sadness slows our activities and lasts long enough in us not to evoke a prompt motor response. It favors slow mental processes which bring about a reorganization of thoughts about life directives, and eventually different purposeful behavior.

In children who are not mature enough to know that the loss is irreparable, the urge to recover the lost object is stronger than in adults, as Bowlby has described (1960a). Many authors (Anna Freud, 1960; Jacobson, 1971) doubt that the reaction of children to the loss of their mother can really be called mourning and not bereavement. At any rate, even if such a reaction is not equivalent to the mourning of adults, it is certainly a state of sadness

following an unpleasant event.

Parkes (1964, 1965, 1972, 1973) has done the most extensive research on mourning. He described the effects of mourning or bereavement on sixty-six widows from several parts of England. He wrote that when a bereaved adult learns of the death of a loved person, he tends to call and search for that person. Since he knows, however, that the search is useless and painful, he denies the search. The result is a compromise, a partial expression of the search. Whereas the child cries and protests, as Bowlby described, the adult goes on searching. Parkes (1973) described a woman who was searching for her missing son. "She moves restlessly about the likely parts of the house scanning with her eyes and thinking of the boy; she hears a creak and immediately associates it with the sound of her son's footfall on the stair; she calls out, 'John, is that you?'"

In the process of searching there is in the beginning a motor hyperactivity which, according to Parkes, has the specific aim of finding the one who has died. This hyperactivity was already described by Lindemann: "The activity throughout the day of severely bereaved persons show remarkable changes. There is no retardation of action and speech; quite to the contrary, there is a rush of speed, especially when talking about the deceased. There is restlessness, inability to sit still, moving about in an aimless fashion, continually searching for something to do. There is, however, at the same

time, a painful lack of capacity to initiate and maintain normal patterns of activity” (Lindemann, 1944). According to Parkes, after hyperactivity subsequent features are preoccupation with the memory of the lost person, a scanning of perceptual stimulations to find evidence of the lost person, focusing attention on those parts of the environment that are associated with the deceased, and finally the conscious recognition of the urge to search for the lost person.

Parkes wrote that grief is commonly described as a process by which a person detaches himself from a lost object. Yet the bereaved person acts as if he wants restoration of the object. However, Parkes (1973) adds that “with repeated failure to achieve reunion, the intensity and duration of searching diminish, habituation takes place, the ‘grief work’ is done. It seems that the human adult has the same need to go through the painful business of pining and searching if he is to ‘unlearn’ his attachment to a lost person.”

I believe that Parkes focuses on an early stage of mourning, after the period of initial shock and retardation. Parkes reaffirms what I have previously described (Arieti, 1959), that the bereaved individual becomes reactivated in the search of a restoration of the lost person. There is no longer retardation, but motor and mental hyperactivity which aims at retrieving the lost person. It seems to me that by enacting this unrealistic and futile search, the individual is behaving like a person who has undergone a trauma and

dreams about it again and again in order to get used to the trauma, to become desensitized to it, or to diminish its emotional impact.

I disagree with Parkes that the “grief work” is done with the completion of the activities he described. If by grief work we mean reparative work, we must recognize that Parkes has described only the first part which is preparatory for the second.

With the first part of the grief work, the patient becomes partially desensitized to the loss but, having realized the futility of his efforts, he also becomes more open to realistic alternatives. He will accept the cognitive possibilities described: he no longer considers the deceased individual to be indispensable; he thinks the deceased is still alive through his works or in another world, or that the deceased can be replaced by another person; and so forth. The grief work is done and sadness disappears only when one or more of these alternatives are accepted and they elicit in the bereaved a different type of mental and motor behavior.

Alberta Szalita (1974) wrote about bereavement: “Whenever an individual suffers a loss . . . particularly a beloved person—he normally undergoes a period of grief and mourning of varying intensity until he recovers the energy he invested in the lost object. The process of mourning is very painful. It is a travail that reconciles him to the loss and permits him to

continue his life with unimpaired vigor, or even with increased vitality. A similar process takes place when one is confronted with a disappointment, failure, the loss of a love object through rejection, divorce, abandonment, and the like.”

Szalita divides mourning into three stages: complete identification with the deceased, splitting of the identification, and a detailed review of the relationship. Szalita describes the third stage as “a somewhat detached appraisal of one’s own conduct toward the lost object. The self-evaluation encompasses a painful working-through of myriads of minute elements and a complete scanning of one’s life. There can be no glossing over in this process; shallowness is incompatible with mourning. The result of ‘digging in’ is that one emerges as an integrated, enriched, and revitalized person.” Szalita’s third stage corresponds partially to the reparatory phase that I have described.

It is useful to stress again that the slowness produced by sadness has a purpose. In sadness, the reparatory work takes a long time. Quick actions are more difficult to implement, and so are propensities to make quick escapes in completely unrelated directions.

An additional aspect of the motivational meaning of mourning has been stressed by classic psychoanalysis since Freud wrote *Mourning and*

Melancholia (1917). The bereaved person feels guilty for having survived the deceased person, for not having prevented his death, or more frequently for believing that he has wished his death. Such wishing may only have been unconscious, but the sadness is an expiation for guilt. Although it is true that these complexes can be traced in some people, especially in persons who become depressed to a pathological degree after the death of a close person (see chapter 6), it is very unlikely that this mechanism explains bereavement as a universal phenomenon.^[3]

If we review the other six situations listed above in which a normal person is likely to feel sad or unhappy, the phenomenon of sadness will appear similar and yet in some respects simpler than bereavement.

First there is a cognitive appraisal of the event and its consequences, then a state of sadness and retardation, and finally the reparative work. The reparative work of sadness is generally more realistic and consists of less unrealistic fantasies, unless pathological complications ensue. For instance, the parent of the youngster who has flunked the examination will try to convince the child to study more intensely, try again, or change vocations. The person who has been abandoned by his sweetheart will reevaluate his love or try to find a new sweetheart. The person who recognizes that he is wrong in the special direction he has given to his life or in giving his allegiance to a wrong cause, person, or work generally does not respond with sadness to any

specific event, but to a realization of the pattern of his life or to a new meaning that he gives to this pattern. This is actually one of the most frequent causes of sadness and depression, as we shall study in detail in chapter 6. The reappraisal of one's life may cause sorrow but if the sorrow work is successful, the individual may reacquire normality or at least avoid depression.

What we have illustrated so far seems to indicate beyond doubt that there is a purpose in sadness. Thus we can understand why evolution has selected sadness as one of the essential feelings in the gamut of human experience.

I am aware that this type of formulation may irritate those readers in scientific research who accept an exclusively deterministic explanation without the concept of purpose or selection. I wish to remind the reader that when in biological reports we use such expressions as "evolution has selected," we follow *une façon de parler*. We do not anthropomorphize a process which has taken millions of years to happen. We use human terms to refer to the fact that mutations not suitable to the survival of the species are more likely to disappear. The unfavorable mutations therefore are not reproduced, and only those that are statistically (even if not in individual cases) favorable to survival are perpetuated. Although in some specific states sadness may lead to depression and suicide, in the total picture of the human

species it has positive survival value. Moreover, the feeling of sadness may deterministically be brought about by previous causes, but in the restricted human frame of reference it has a purpose and a beneficial effect for some members of our species. When we use psychodynamic concepts, we imply normal or abnormal purposes even if the whole process of life can be reinstated in the deterministic scheme of the cosmos (Arieti, 1967, 1970).

Other Aspects of Sadness

The purpose of sadness discussed in the previous section does not exclude the possibility that this feeling has other motivations and meanings.

For instance, some thinkers are inclined to see a certain appropriateness or correspondence between an adverse cognitive appraisal and sadness which is similar to the appropriateness between a positive appraisal and happiness. What could be more appropriate than to feel sad when we learn that a friend has died or when we realize that our life has followed a wrong pattern? Would it not seem absurd to laugh in such circumstances? Thus should we not focus on the appropriateness of sadness in similar circumstances, rather than on its biological or psychodynamic function? Moreover, and notwithstanding what I have said earlier in this chapter, why should a symbolic value in sorrow and sadness not exist? Is not the unpleasantness of the sorrow a symbol (or partial reproduction) of the

unpleasant event that caused it, just as joy and love are symbols of pleasant events?

On the other hand, the unpleasantness of an event may be a post hoc consideration. In other words, would we consider an event unfavorable or adverse if we did not experience sadness? Undoubtedly in a restricted human sense or at least in the adult human being, emotions can be evaluated in different ways. However, it seems almost evident in the case of sadness that the negative value of the experience appears to mirror the negative value of the event which caused it. In a certain way this appropriateness is inherent in the quality of the subjective experience, similar to what occurs in the experience of the baby who in its first day of life appreciates the negative value of pain.

Pleasantness and unpleasantness, appropriateness and inappropriateness, again may be the result of associations between stimuli and responses which have been retained because they are favorable to survival. For instance, we know of nothing that seems more favorable to procreation than to associate reproductive activities with the pleasure of sex. In other cases associations between cognitive events and emotional responses or somatic concomitants of these emotions remain obscure: we do not know why we blush when we are embarrassed, yawn when we are bored, and laugh when we hear a funny story.

Transformation of Sadness

In many cases the psyche does not tolerate more than a certain amount of sadness. These are situations in which some individuals seem to function more favorably or less unfavorably under the influence of other feelings, even if those feelings are also negative in value. Sadness thus is transformed into anxiety, rage, anger, and hypochondriacal or psychosomatic mechanisms. These outcomes will be illustrated in other chapters.

An important mechanism in the transformation of sadness has been used throughout the history of mankind, but it is available only to a few people. It consists of the attempt to project the state of sorrow into the external world and to believe it is in the external world that the sorrow work has to be done. At times the imperfection of human nature, society, history, or fate is seen as the object of sorrow. At other times it is the burden that society, religion, or our consciences compel us to bear. In other words, the sadness of the individual becomes enlarged or rationalized as a pessimistic philosophy of life, epistemology, and cosmology. Such a philosophy can always be justified, since as we can always find undesirable aspects in the world. The individual generally concludes that he must accept the ineluctably unhappy state of the world. He sees his own personal unhappiness as part of the total picture and therefore more tolerable.

Some great thinkers have been able to influence society and culture

with this point of view. In its turn, culture has become pessimistic and melancholy and has facilitated a state of sadness or melancholia in society at large. Thus a vicious circle ensues and a tradition of social melancholia becomes established. This matter will be discussed in greater detail in chapter 16.

Unresolved Sadness and Depression

In some cases of psychiatric relevance the state of sadness is not resolved and becomes transformed into a more intense unhappy feeling called depression. This feeling often replaces all other feelings except those, like guilt and self-depreciation, which are associated with sorrow. In some cases anxiety remains for a long time, but eventually anxiety is also submerged by the overall feeling of depression. Any thought is negative and reinforces the depression. Thus thoughts become slow and less frequent, perhaps in an attempt to reduce the quantity of suffering that they cause. If painful thoughts could be eliminated, there would be no depression; but these thoughts are never eliminated. In some situations, as in reactive depression, painful thoughts for the most part remain conscious. In other conditions the thoughts or systems of thought which cause the depression become unconscious or submerged by a general feeling of depression. Consequently the patient is not able to say why he is depressed.

I have suggested that intense depression has (among others) the same function as repression in other psychiatric conditions. Perhaps it is a special type of repression; the cognitive part is repressed, but the painful feeling is experienced at the level of consciousness.

I am aware, however, of another frequent mechanism in people who have experienced depression in the past. They repress painful ideas in order to avert the depression. The attempt is unsuccessful; the ideas, although unconscious, continue to cause conscious depression. Some patients express themselves in this or a similar way: "I woke up this morning, and I was immediately hit by an intense feeling of depression. I don't know where it came from." Other patients attribute their depression to unhappy ideas that they have about themselves, the future, or life—the triad that Beck has described so well. What Beck does not indicate is that patients use these thoughts to justify their depression. Beck is correct to the extent that these thoughts reinforce the depression which comes from other sources. They add a secondary depression to the original, and only important, one.

In more serious cases, thinking is reduced to a minimum and retardation becomes more pronounced even to the degree of stupor. In these circumstances the retardation of mental processes becomes a self-defeating mechanism. Cognitive elements are very rare or disappear completely and the intense, agonizing feeling of depression remains almost as sole possessor of

the psyche. The suffering is so intense that when a patient becomes slightly less depressed and more capable of thinking and moving, he starts to conceive suicidal plans in order to put an end to his suffering.

At this point what is perhaps the most crucial question in this book must be asked: Why do sadness or sorrow work fail in some individuals and depression ensue? At the present stage of our knowledge, no hypothesis can be verified by acceptable scientific standards. We shall examine several possibilities.

1. The biologically oriented psychiatrist is inclined to think that a faulty biochemical process is responsible. For instance, catecholamines are not being produced in a quantity sufficient to restore the organism after the psychological event of sadness has depleted the brain's biogenic amines.
2. The neurologically inclined psychiatrist can think that the part of the limbic brain that receives the stimulation from pathways coming from the neopallid cognitive areas is particularly sensitive and responds excessively. It could also be that, for reasons so far unknown, different parts of the brain are stimulated concertedly, involving unusual neuronal pathways which lead to depression. Unfortunately this hypothesis has not received the consideration that it deserves, presumably because it is very difficult to investigate experimentally. Incidentally, this hypothesis does not exclude an altered biochemical mechanism. The neurological alteration may lead to a biochemical disorder.

3. The reparative process (sorrow work) cannot take place because the person is not psychologically equipped for it. Life circumstances, as well as psychological patterns followed by the patient, have not prepared him for the sorrow work. He has no choice; he is not able to solve psychologically his sorrow or sadness, and pathological depression results.

A psychodynamic approach to depression studies this third possibility. Incidentally, this possibility does not exclude that some biological variables may make the psychological repair work more difficult. In these cases a combination of psychological and neurochemical factors are the determinants of the depression.

A frequent criticism of the psychodynamic explanation for depression is that there is no failure of the sorrow work, no preceding sadness. Many patients have become depressed immediately, without any antecedent and external precipitating factor. If this is the case, we have to attribute the phenomenon exclusively to a faulty neurological or biochemical endogenous mechanism.

In my experience, patients whose depressions do not seem to be precipitated by psychological factors have been unaware of these factors. They have followed life patterns, sustained by cognitive components whose depressogenic value was kept in a state of unconsciousness or dim consciousness. Moreover, these rigid and static life patterns have prevented

any alternative directions and any reparative work. The study of these life patterns constitutes the major part of the psychodynamic approach of this book.

It is true that many depressed patients—and, incidentally, many people who experience normal sorrow—can be relieved with ingestion of certain drugs. This possibility does not disprove the psychological origin of the feeling. It proves only that whatever physiological or biochemical intermediary exists between the psychological factors and the subjective experience can be altered. Exclusive concern with the biochemical intermediary stage is a reductionist approach. Nature has equipped us to respond to adverse aspects of life not only with biological changes but also with our sorrow—that is, with psychological participation. When sorrow is not solved and depression ensues, we must help the person to acquire a different pattern of psychological participation.

Notes

- [1] In an article published in 1960 I described sensations and emotions as experiences of inner status, or subjective conditions of the organism. In my book *The Intrapsychic Self* (1967) I also examined in detail the main emotions. In this section I discuss this topic briefly and only in relation to the main theme of the book.
- [2] In that book I called sadness “normal depression,” a term I no longer use.
- [3] For additional studies on bereavement, the reader is referred to Parkes (1972), and Schoenberg et al. (1975).

REFERENCES

- Abraham, K. 1960 (orig. 1911). Notes on the psychoanalytic treatment of manic-depressive insanity and allied conditions. In *Selected papers on psychoanalysis*. New York: Basic Books. Pp. 137-156.
- _____. 1960 (orig. 1916). The first pregenital stage of the libido. In *Selected papers on psychoanalysis*. New York: Basic Books. Pp. 248-279.
- _____. 1960 (orig. 1924). A short study of the development of libido, viewed in the light of mental disorders. In *Selected papers on psychoanalysis*. New York: Basic Books. Pp. 418-501.
- Adler, K. A. 1961. Depression in the light of individual psychology. *Journal of Individual Psychology* 17:56-67.
- Akiskal, H. S., and McKinney, W. T. 1975. Overview of recent research in depression. Integration of ten conceptual models into a comprehensive clinical frame. *Archives of General Psychiatry* 32:285-305.
- Annell, A. L. 1969. Lithium in the treatment of children and adolescents. *Acta Psychiatrica Scandinavia* Suppl. 207:19-30.
- Annell, A. L., ed. 1971. *Depressive states in childhood and adolescence*. New York: Halsted Press.
- Ansbacher, II. L., and Ansbacher, R. R. 1956. *The Individual psychology of Alfred Adler*. New York: Harper.
- Anthony, E. J. 1967. Psychoneurotic disorders. In A. M. Friedman and H. I. Kaplan, eds. *Comprehensive textbook of psychiatry*. Baltimore: Williams & Wellsing.
- _____. 1975a. Childhood depression. In E. J. Anthony and T. Benedek, eds. *Depression and human existence*. Boston: Little, Brown.
- _____. 1975b. Two contrasting types of adolescent depression and their treatment. In E. J. Anthony and T. Benedek, eds. *Depression and human existence*. Boston: Little, Brown.

- Anthony, E. J., and Scott, P. 1960. Manic-depressive psychosis in childhood. *Child Psychology and Psychiatry* 1:53-72.
- Arieti, S. 1950. New views on the psychology and psychopathology of wit and of the comic. *Psychiatry* 13:43-62.
- _____. 1959. Manic-depressive psychosis. In S. Arieti, ed. *American handbook of psychiatry*, First ed., Vol. I. New York: Basic Books. Pp. 419-454.
- _____. 1960. The experiences of inner states. In B. Kaplan and S. Wapner, eds. *Perspectives in psychological theory*. New York: International Universities Press. Pp. 20-46.
- _____. 1962. The psychotherapeutic approach to depression. *American Journal of Psychotherapy* 16:397-406.
- _____. 1967. *The intrapsychic self*. New York: Basic Books.
- _____. 1970a. Cognition and feeling. In A. Magda, *Feelings and emotions*. New York: Academic Press.
- _____. 1970b. The structural and psychodynamic role of cognition in the human psyche. In S. Arieti, ed. *The world biennial of psychiatry and psychotherapy*, Vol. I. New York: Basic Books, Pp. 3-33.
- _____. 1972. *The will to be human*. New York: Quadrangle. (Available also in paperback edition. New York: Delta Book, Dell Publishing Co., 1975.)
- _____. 1974a. *Interpretation of schizophrenia*, Second ed. New York: Basic Books.
- _____. 1974b. The cognitive-volitional school. In S. Arieti, ed. *American handbook of psychiatry*, Second ed., Vol. I. New York: Basic Books. Pp. 877-903.
- _____. 1974c. Manic-depressive psychosis and psychotic depression. In S. Arieti, ed. *American handbook of psychiatry*, Vol. III. New York: Basic Books.
- _____. 1976. *Creativity: the magic synthesis*. New York: Basic Books.

- _____. 1977. Psychotherapy of severe depression. *American Journal of Psychiatry* 134:864-868.
- Aronoff, M., Evans, R., and Durell, J. 1971. Effect of lithium salts on electrolyte metabolism. *Journal of Psychiatric Research* 8:139-159.
- Baastруп, P. C., and Schou, M. 1967. Lithium as a prophylactic agent against recurrent depressions and manic-depressive psychosis. *Archives of General Psychiatry* 16:162-172.
- Baldessarini, R. J. 1975. The basis for the amine hypothesis in affective disorders. *Archives of General Psychiatry* 32:1087.
- Beck, A. 1967. *Depression: clinical, experimental, and theoretical aspects*. New York: Paul B. Hoeber.
- _____. 1970. The core problem in depression: the cognitive triad. In J. Masehman, ed. *Science and Psychoanalysis* 17. New York: Grune & Stratton.
- _____. 1976. *Cognitive therapy and the emotional disorders*. New York: International Universities Press.
- Becker, E. 1964. *The revolution in psychiatry*. New York: Free Press.
- _____. 1969. Kafka and the Oedipal complex. In *Angel in armor*. New York: Braziller.
- Beckett, S. 1959. *Waiting for godot*. London: Faber & Faber.
- Beliak, L. 1952. *Manic-depressive psychosis and allied conditions*. New York: Grune & Stratton.
- Bemporad, J. R. 1970. New views on the psychodynamics of the depressive character. In S. Arieti, ed. *The world biennial of psychiatry and psychotherapy*, vol. I. New York: Basic Books.
- _____. 1973. The role of the other in some forms of psychopathology. *Journal of the American Academy of Psychoanalysis* 1:367-379.

- _____. 1976. Psychotherapy of the depressive character. *Journal of the American Academy of Psychoanalysis* 4:347-372.
- Bender, L., and Schilder, P. 1937. Suicidal preoccupations and attempts in children. *American Journal of Orthopsychiatry* 7:225-243.
- Beres, D. 1966. Superego and depression. In R. M. Lowenstein, L. M. Newman, M. Scherr, and A. J. Solnit, eds. *Psychoanalysis—a general psychology*. New York: International Universities Press.
- Berg, J., Hullin, R., and Allsopp, M. 1974. Bipolar manic-depressive psychosis in early adolescence. *British Journal of Psychiatry* 125:416-418.
- Berman, H. H. 1933. Order of birth in manic-depressive reactions. *Psychiatric Quarterly* 12:43.
- Berner, P., Katschnig, H., and Poldinger, W. 1973. What does the term “masked depression” mean? In Kielholz, P., ed. *Masked depression*. Bern:Huber.
- Bertalanffy, L. von. 1956. General system theory. In Bertalanffy, L. von, and Rapaport, A., eds. *General system yearbook of the society for the advancement of general system theory*. Ann Arbor: University of Michigan Press.
- Bibring, E. 1953. The mechanism of depression. In P. Greenacre, ed. *Affective disorders*. New York: International Universities Press.
- Bieber, I., and Bieber, T. B. (In press.) Postpartum reactions in men and women. *Journal of the American Academy of Psychoanalysis* 6 (1978).
- Bierman, J. S., Silverstein, A. B., and Finesinger, J. E. 1958. A depression in a six-year-old boy with poliomyelitis. *Psychoanalytic Study of the Child* 13:430-450.
- Bigelow, N. 1959. The involuntional psychosis. In S. Arieti, ed. *American handbook of psychiatry*, First ed., Vol. I. New York: Basic Books. Pp. 540-545.
- Binswanger, L. 1933. *Über ideenflucht*. Orrele-Fusseler.

- _____. 1963. Heidegger's analytic of existence and its meaning for psychiatry. In *Being-in-the-world*. New York: Basic Books.
- Bonhoeffer, K. 1910. *Die symptomatischen psychosen im gefolge von akuten infektionem und inneren erkrankungen*. Leipzig: Deutieke.
- Bonime, W. 1960. Depression as a practice. *Comparative Psychiatry* 1:194-198.
- _____. 1962. *The clinical use of dreams*. New York: Basic Books.
- _____. 1962. Dynamics and psychotherapy of depression. In J. Masserman, ed. *Current psychiatric therapies*. New York: Grune & Stratton.
- _____. 1976. The psychodynamics of neurotic depression. *Journal of the American Academy of Psychoanalysis* 4:301-326.
- Bonime, W., and Bonime, E. (In press.) Depressive personality and affect reflected in dreams: a basis for psychotherapy. In J. M. Natterson, ed. *The dream in clinical practice*. New York: Aronson.
- Bowlby, J. 1958. The nature of the child's tie to his mother. *International Journal of Psycho-Analysis* 39:350-373.
- _____. 1960a. Grief and mourning in infancy and early childhood. *The Psychoanalytic Study of the child* 15:9-52. New York: International Universities Press.
- _____. 1960b. Separation anxiety. *International Journal of Psycho-Analysis* 41: 89-113.
- Boyd, D. A. 1942. Mental disorders associated with child-bearing. *American Journal of Obstetrics and Gynecology* 43:148-163; 335-349.
- Braceland, F. J. 1957. Kraepelin, his system and his influence. *American Journal of Psychiatry* 114:871.
- _____. 1966. Depressions and their treatment. In J. J. Lopez Ibor, ed. *Proceedings IV, Part 1*. Madrid: World Conference on Psychiatry. p. 467.

- Brand, H. 1976. Kafka's creative crisis. *Journal of the American Academy of Psychoanalysis* 4:249-260.
- Brenner, B. 1975. Enjoyment as a preventative of depressive affect. *Journal of Comparative Psychology* 3:346-357.
- Brill, H. 1975. Postencephalitic states or conditions. In S. Arieti, ed. *American handbook of psychiatry*, Second ed., Vol. IV. Pp. 152-165.
- Brod, M. 1973. *Franz Kafka: a biography*. New York: Schocken Books. (Paperback.)
- Brown, F. 1968. Bereavement and lack of a parent in childhood. In E. Miller, ed. *Foundations of child psychiatry*. London: Pergamon.
- Buber, M. 1937. *I and thou*. Edinburgh: Clark.
- Bunney, W. E., Carpenter, W. T., and Engelmann, K. 1972. Brain serotonin and depressive illness. In T. A. Williams, M. M. Katz, and J. A. Shield, Jr., eds. *Recent advances in the psychobiology of the depressive illnesses*. Department of Health, Education, and Welfare: Publication No. (HSM) 70—9053.
- Burton, R. 1927. *The anatomy of melancholy*. New York: Tudor.
- Cade, J. F. 1949. Lithium salts in the treatment of psychotic excitement. *Medical Journal of Australia* 2:349-352.
- Cadore, R. J., and Tanna, V. L. 1977. Genetics of affective disorders. In G. Usdin, ed. *Depression*. New York: Brunner/Mazel. Pp. 104-121.
- Cameron, N. 1944. The functional psychoses. In J. Mev. Hunt, ed. *Personality and behavior disorders*, Vol. 2. New York: Ronald Press.
- Camus, A. 1942. *Le myth de sisyphé*. Paris: Gallimard. (Quoted in Esslin, 1969).
- Carver, A. 1921. Notes on the analysis of a case of melancholia. *Journal of Neurology and Psychopathology* 1:320-324.

- Cerletti, V., and Bini, L. 1938. L'elettroshock. *Archivi generali di neurologia, psichiatria e psicoanalisi* 19:266.
- Charatan, F. B. 1975. Depression in old age. *New York State Journal of Medicine* 75:2505-2509.
- Chertok, L. 1969. *Motherhood and personality, psychosomatic aspects of childbirth*. London: Tavistock.
- Chodoff, P. 1970. The core problem in depression. In J. Masserman, ed. *Science and Psychoanalysis*, Vol. 17. New York: Grune & Stratton.
- _____. 1972. The depressive personality. *Archives of General Psychiatry* 27:666-677.
- Choron, J. 1972. *Suicide*. New York: Scribner's.
- Cohen, M. B., Blake, G., Cohen, R. A., Fromm-Reichmann, F., and Weigert, E. V. 1954. An intensive study of twelve cases of manic-depressive psychosis. *Psychiatry* 17:103-38.
- Committee on Nomenclature and Statistics of the American Psychiatric Association. 1968. *DSM—II: diagnostic and statistical manual of mental disorders*, Second ed. Washington: American Psychiatric Association.
- Cooperman, S. 1966. Kafka's "A Country Doctor"—microcosm of symbolism. In Manheim, L. and Manheim, E., eds. *Hidden Patterns*. New York: Macmillan.
- Coppen, A., Shaw, D. M., and Farrell, J. P. 1963. Potentiation of the antidepressing effect of a monoamine oxidase inhibition by tryptophan. *Lancet* 11:79-81.
- Covi, L., Lipman, R. S., Derogatis, L. R., et al. 1974. Drugs and group psychotherapy in neurotic depression. *American Journal of Psychiatry* 131:191-198.
- Coyne, J. C. 1976. Toward an interactional description of depression. *Psychiatry* 39: 28-40.
- Cytryn, L., and McKnew, D. H., Jr. 1972. Proposed classification of childhood depression. *American Journal of Psychiatry* 129:149.

- Davidson, G. M. 1936. Concerning schizophrenia and manic-depressive psychosis associated with pregnancy and childbirth. *American Journal of Psychiatry* 92:1331.
- Da Vinci, M. N. 1976. Women on women: the looking-glass novel. *Denver Quarterly* 11:1-13.
- Dennis, W., and Najarian, P. 1957. Infant development under environmental handicap. *Psychology Monographs* 71:1-13.
- Despert, L. 1952. Suicide and depression in children. *Nervous Child* 9:378-389.
- Dublin, L. I. 1963. *Suicide: a sociological and statistical study*. New York: Ronald Press.
- Durand-Fardel, M. 1855. Etude sur le suicide chez les enfants. *Annals of Medicine* 1:61—79.
- Durell, J., and Schildkraut, J. J. 1966. Biochemical studies of the schizophrenic and affective disorders. In S. Arieti, ed. *American handbook of psychiatry*, First ed., Vol. III. New York: Basic Books.
- Easson, W. II. 1977. Depression in adolescence. In S. C. Feinstein and P. Giovacchini, eds. *Adolescent psychiatry*, Vol. 5. New York: Aronson.
- Eaton, J. W., and Weil, R. J. 19550. *Culture and mental disorders*. Glencoe: Free Press.
- _____. 1955b. The Mental health of the Hutterites. In A. M. Rose, ed. *Mental health and mental disorders*. New York: Norton.
- Engel, G., and Reichsman, F. 1956. Spontaneous and experimentally induced depressions in an infant with gastric fistula. *Journal of the American Psychoanalytic Association* 4:428-456.
- English, II. B., and English, A. C. 1958. *A comprehensive dictionary of psychological and psychoanalytic terms*. New York, London, Toronto: Longmans, Green and Co.
- English, O. S. 1949. Observations of trends in manic-depressive psychosis. *Psychiatry* 12:125.
- Erikson, E. H. 1959. *Identity and the life cycle*. *Psychological Issues*, Vol. 1. New York: International

Universities Press.

____. 1963. *Childhood and society*. New York: Norton.

Esslin, M. 1969. *The theatre of the absurd*, rev. ed. Garden City: Anchor Books, Doubleday.

Faris, R. E. L., and Dunham, H. W. 1939. *Mental disorders in urban areas*. Chicago: Univ. of Chicago Press.

Feinstein, S. G., and Wolpert, E. A. 1973. Juvenile manic-depressive illness. *Journal of the American Academy of Child Psychiatry* 12:123-136.

Fenichel, O. 1945. *The psychoanalytic theory of neurosis*. New York: Norton.

Fieve, R. R., Platman, S., and Plutehik, R. 1968. The use of lithium in affective disorders. *American Journal of Psychiatry* 125:487-491.

Forrest, T. 1969. The combined use of marital and individual therapy in depression. *Contemporary Psychoanalysis* 6:76-83.

Frazier, S. H. 1976. Changing patterns in the management of depression. *Diseases of the Nervous System* 37:25-29.

Freud, A. 1953. Some remarks on infant observation. *The Psychoanalytic Study of the Child* 8:9-19.

____. 1960. Discussion of Dr. J. Bowlby's paper. *The Psychoanalytic Study of the Child* 15:53-62.

____. 1970. The symptomatology of childhood. *The Psychoanalytic Study of the Child* 25:19-41.

Freud, S. 1957 (orig. 1900). The interpretation of dreams. *Standard Edition* 4, 5. London: Hogarth Press.

____. 1957 (orig. 1917). Mourning and melancholia. *Standard Edition* 14:243-58. London: Hogarth Press.

____. 1957- (orig. 1921). Group psychology and the analysis of the ego. *Standard Edition* 18.

London: Hogarth Press.

_____. 1957 (orig. 1923). The ego and the id. *Standard Edition* 19. London: Hogarth Press.

_____. 1957 (orig. 1927). Fetishism. *Standard Edition* 21. London: Hogarth Press.

_____. 1969. (orig. 1933). *New introductory lectures on psycho-analysis. Standard Edition* 22. London: Hogarth Press.

_____. 1957 (orig. 1938). Splitting of the ego in the defensive process. *Standard Edition* 23. London: Hogarth Press.

Fromm E. 1941. *Escape from freedom*. New York: Rinehart.

_____. 1947. *Man for himself*. New York: Rinehart.

Frommer, E. A. 1968. Depressive illness in childhood. In A. Coppen and A. Walk, eds. Recent developments in affective disorders. *British Journal of Psychiatry*, special publication no. 2. Pp. 117-136.

Fromm-Reiehmman, F. 1949. Discussion of a paper by O. S. English. *Psychiatry* 12: 133.

Gardner, J. 1977. Death by art. some men kill you with a six-gun, some men with a pen. *Critical Inquiry* 3(5).

Geisler, L. S. 1973. Masked depression in patients suspected of suffering from internal diseases. In Kielholz, 1973.

Gero, G. 1936. The construction of depression. *International Journal of Psycho- Analysis* 17:423-461.

Gibbons, J. L. 1967. Cortisol secretion rate in depressive illness. *Archives of General Psychiatry* 10:572.

Gibson, R. W. 1958. The family background and early life experience of the manic- depressive patient: a comparison with the schizophrenic patient. *Psychiatry* 21: 71-90.

- Goethe, W. 1827. *Nacldeze zu Aristotcles Poetik*.
- Gold, H. R. 1951. Observations on cultural psychiatry during a world tour of mental hospitals. *American Journal of Psychiatry* 108:462.
- Goodwin, F. K., and Bunney, W. E. 1973. A psychobiological approach to affective illness. *Psychiatric Annals* 3:19.
- Gove, W. R. 1972. The relationship between sex roles, marital status, and mental illness. *Social Focus* 51:36-66.
- _____. 1973. Sex, marital status, and mortality. *American Journal of Sociology* 79: 45-67.
- Green, A. W. 1946. The middle-class male child and neurosis. *American Sociological Review* 11:31-41.
- Greenspan, K., Aronoff, M., and Bogdansky, D. 1970. Effect of lithium carbonate on turnover and metabolism of norepinephrine. *Pharmacology* 3:129-136.
- Group for the Advancement of Psychiatry. 1975. *Pharmacotherapy and psychotherapy: paradoxes, problems and progress*, Vol. IX. New York.
- Cutheil, E. A. 1959. Reactive depressions. In Arieti, S., ed. *American handbook of psychiatry*, First ed. Vol. I. New York: Basic Books. Pp. 345-352.
- Guyton, A. C. 1972. *Structure and function of the nervous system*. Philadelphia: W. B. Saunders.
- Hall, C. S., and Lind, R. E. 1970. *Dreams, life, and literature: a study of Franz Kafka*. Chapel Hill: University of North Carolina Press.
- Hauri, P. 1976. Dreams in patients remitted from reactive depression. *Journal of Abnormal Psychology* 85:1-10.
- Helgason, T. 1964. Epidemiology of mental disorders in Iceland. *Acta Psychiatrica Scandinavia* 40.

- Hempel, J. 1937. Die "vegetativ-dystone depression." *Nervenarzt* 10:22.
- Hendin, M. 1975. Growing up dead: student suicide. *American Journal of Psychotherapy* 29:327-338.
- Herzog, A., and Detre, T. 1976. Psychotic reactions associated with childbirth. *Diseases of the Nervous System* 37:229-235.
- Hinsie, L. E., and Campbell, R. J. 1960. *Psychiatric dictionary*. New York: Oxford University Press.
- Horney, K. 1945. *Our inner conflicts*. New York: Norton.
- _____. 1950. *Neurosis and human growth*. New York: Norton.
- Jacobson, E. 1946. The effect of disappointment on ego and superego formation in normal and depressive development. *Psychoanalytic Review* 33:129-147.
- _____. 1954. The self and the object world. *Psychoanalytic Study of the Child* 9:75.
- _____. 1961. Adolescent moods and the remodeling of psychic structures in adolescence. *Psychoanalytic Study of the Child* 16:164-183.
- _____. 1971. *Depression*. New York: International Universities Press.
- _____. 1975- The psychoanalytic treatment of depressive patients. In E. J. Anthony and T. Benedek, eds. *Depression and human existence*. Boston: Little, Brown.
- Janouch, G. 1953. *Conversations with Kafka*. London: Derek Verschoyle.
- Jaspers, K. 1964. *General psychopathology*. Chicago: University of Chicago Press.
- Jelliffe, S. E. 1931. Some historical phases of the manic-depressive synthesis. In *Manic-depressive psychosis*, Applied research in nervous and mental disease, Vol. XI. Baltimore: Williams & Wilkins.
- Joffe, W. G., and Sandler, J. 1965. Notes on pain, depression, and individualism. *Psychoanalytic*

Study of the Child 20:394-424.

Jones, E. 1955. *Sigmund Freud: life and work*, Vol II. New York: Basic Books.

Kafka, F. 1949. *Diaries*. Vol. 1: 1910-1913. Vol. 2: 1914-1923. New York: Schocken.

_____. 1971. *The complete stories*. New York: Schocken.

_____. 1973. (orig. 1919) *Letter to his father*. New York: Schocken.

Kasanin, J., and Kaufman, M. R. 1929. A study of the functional psychoses in childhood. *American Journal of Psychiatry* 9:307-384.

Katz, S. E. 1934. The family constellation as a predisposing factor in psychosis. *Psychiatric Quarterly* 8:121.

Kennedy, F. 1944. Neuroses related to manic-depressive constitutions. *Medical Clinics of North America* 28:452.

Kielholz, P., ed. 1972. *Depressive illness*. Bern: Huber.

_____. ed. 1973. *Masked depression*. Bern: Huber.

Kierkegaard, S. 1954. (orig. 1843 and 1849). *Fear and trembling* and *The sickness unto death*. New York: Doubleday (Anchor).

Klaus, M. II., and Kennell, J. H. 1976. *Maternal-infant bonding*. St. Louis: Mosby.

Klein, D. F. 1974. Endogenomorphic depression. *Archives of General Psychiatry* 31: 447-454.

Klein, M. 1948 (orig. 1940). Mourning and its relation to manic-depressive states. In M. Klein, ed. *Contributions to psychoanalysis, 1.921-1945*. London: Hogarth Press.

Klerman, G. L., Dimaseio, A., Weissman, M. et al. 1974. Treatment of depression by drugs and psychotherapy. *American Journal of Psychiatry* 131:186-191.

- Koerner, O. 1929. *Die aerztliche Kenntnisse in Ilias und Odysse*. (Quoted in Jelliffe, 1931)
- Kohlberg, L. 1969. Stage and sequence: the cognitive-developmental approach to socialization. In D. A. Goslin, ed. *Handbook of socialization theory and research*. Chicago: Rand McNally.
- Kolb, L. C. 1956. Psychotherapeutic evolution and its implications. *Psychiatric Quarterly* 30:1-19.
- _____. 1959. Personal communication
- Kovacs, M. 1976. Presentation in working conference to critically examine DMS-111 in midstream. St. Louis: June 10-12.
- Kraepelin, E. 1921. *Manic-depressive insanity and paranoia*. Edinburgh: Livingstone.
- Kuhn, T. S. 1962. *The structure of scientific revolutions*, 2d ed. Chicago: University of Chicago Press.
- Kurland, H. D. 1964. Steroid excretion in depressive disorders. *Archives of General Psychiatry* 10:554.
- Kurland, M. L. 1976. Neurotic depression: an empirical guide to two specific drug treatments. *Diseases of the Nervous System* 37:424-431.
- Landis, C., and Page, J. D. 1938. *Society and mental disease*. New York: Rinehart.
- Laplaneche, J., and Pontalis, J. B. 1973. *The language of psychoanalysis*. New York: Norton.
- Leeper, R. W. 1948. A motivational theory of emotion to replace "emotion as disorganized response." *Psychiatric Review* 55:5-21.
- Lemke, R. 1949. Uber die vegetativ Depression. *Psychiat. Neurol, Und Psychol.* 1:161.
- Lesse, S., ed. 1974a. *Masked depression*. New York: Aronson.
- _____. 1974b. Psychotherapy in combination with antidepressant drugs in patients with severe

- masked depression. *American Journal of Psychotherapy* 31:185-203.
- Levine, S. 1965. Some suggestions for treating the depressed patient. *Psychoanalytic Quarterly* 34:37-45.
- Levy, D. 1937. Primary affect hunger. *American Journal of Psychiatry* 94:643-652.
- Lewinsohn, P. M. 1969. Depression: a clinical research approach. (Unpublished manuscript, cited in Coyne, 1976.)
- Lewis, A. 1934. Melancholia: a historical review. *Journal of Mental Science* 80:1.
- Lindemann, E. 1944. The symptomatology and management of acute grief. *American Journal of Psychiatry* 101:141.
- Loevinger, J. 1976. *Ego development*. San Francisco: Jossey-Bass.
- Lopes Ibor, J. J. 1966. *Las neurosis como enfermedades del animo*. Madrid: Gedos.
- _____. Masked depression and depressive equivalents. (Cited in Kielholz, P. *Masked Depression* Bern: Huber 1972.)
- Lorand, S. 1937. Dynamics and therapy of depressive states. *Psychoanalytic Review* 24:337-349-
- Lorenz, M. 1953. Language behavior in manic patients. A qualitative study. *Archives of Neurology and Psychiatry* 69:14.
- Lorenz, M., and Cobb, S. 1952. Language behavior in manic patients. *Archives of Neurology and Psychiatry* 67:763.
- Luria, A. R. 1966. *Higher cortical functions in man*. New York: Basic Books.
- _____. 1973. *The working brain. An introduction to neuropsychology*. New York: Basic Books.
- McCabe, M. S. 1975. Demographic differences in functional psychosis. *British Journal of Psychiatry* 127:320-323.

- McConville, B. J., Boag, L. C., and Purohit, A. P. 1973. Three types of childhood depression. *Canadian Psychiatric Association Journal* 18:133-138.
- MacLean, P. D. 1959. The limbic system with respect to two basic life principles. In M. A. B. Brazier, ed. *The central nervous system and behavior*. New York: Macy.
- Magny, C. E. 1946. The objective depiction of absurdity. In A. Flores, ed. *The Kafka problem*. New York: New Directions.
- Mahler, M. 1961. Sadness and grief in childhood. *Psychoanalytical study of the child* 16:332-351.
- _____. 1966. Notes on the development of basic moods: the depressive affect. In R. M. Lowenstein, L. M. Newman, M. Schur, and A. J. Solnit, eds. *Psychoanalysis— a general psychology*. New York: International Universities Press. Pp. 152-160.
- _____. 1968. *On human symbiosis and the vicissitudes of individuation*. New York: International Universities Press.
- Malmquist, C. 1971. Depression in childhood and adolescence. *New England Journal of Medicine* 284:887-893; 955-961.
- Malzberg, B. 1937. Is birth order related to incidence of mental disease? *American Journal of Physical Anthropology* 24:91.
- _____. 1940. *Social and biological aspects of mental disease*. Utica, New York: State Hospital Press.
- Mandell, A. J., and Segal, D. S. 1975. Neurochemical aspects of adaptive regulation in depression: failure and treatment. In E. J. Anthony and T. Benedek, eds. *Depression and human existence*. Boston: Little, Brown.
- Maranon, C. 1954. Climacteric: the critical age in the male. In A. M. Krich, ed. *Men: the variety and meaning of their sexual experiences*. New York: Dell.
- Mattson, A., Sesse, L. R., and Hawkins, J. W. 1969. Suicidal behavior as a child psychiatric emergency. *Archives of General Psychiatry* 20:100-109.

- Mendels, J. 1974. Biological aspects of affective illness. In S. Arieti, ed. *American handbook of psychiatry*, Second ed., Vol. III. New York: Basic Books. Pp. 491-523.
- Mendels, J., Stern, S., and Frazer, A. 1976. Biological concepts of depression. In D. M. Gallant and G. M. Simpson, eds. *Depression*. New York: Spectrum Publications. 15P. 19-76.
- Mendelson, M. 1974. *Psychoanalytic concepts of depression*. New York: Spectrum Publications.
- Messina, F., Agallianos, D., and Clower, C. 1970. Dopamine excretion in affective states and following LijCo3 therapy. *Nature* 225:868-869.
- Meyer, A. 1908a. The role of the mental factors in psychiatry. *American Journal of Insanity* 65:39.
- _____. 1908b. The problems of mental reaction—types, mental causes and diseases. *Psychological Bulletin* 5:265.
- Miller, J. B. 1976. *Toward a new psychology of women*. Boston: Beacon Press.
- Miller, W. R., and Seligman, M. E. P. 1976. Learned helplessness, depression, and the perception of reinforcement. *Behavioral Research and Therapy* 14:7-17.
- Minkowski, E. 1958. Findings in a case of schizophrenic depression. In R. May, ed. *Existence*. New York: Basic Books.
- Mitscherlich, A., and Mitscherlich, M. 1975. *The inability to mourn*. Translated by B. R. Placzek. New York: Grove Press.
- Moulton, R. 1973. Sexual conflicts of contemporary women. In E. G. Wittenberg, ed. *Interpersonal explorations in psychoanalysis*. New York: Basic Books.
- Munn, N. L. 1946. *Psychology: the fundamentals of human adjustment*. New York: Houghton-Mifflin.
- Murphy, H. B. M., Wittkower, E. D., and Chance, N. A. 1967. Cross-cultural inquiry into the symptomatology of depression: a preliminary report. *International Journal of Psychiatry* 3:6-15.

- Nagy, M. II. 1959. The child's view of death. In H. Feifel, ed. *The meaning of death*. New York: McGraw-Hill.
- Neal, J. B., ed. 1942. *Encephalitis: a clinical study*. New York: Grune & Stratton.
- Neider, C. 1948. *The frozen sea: a study of Franz Kafka*. New York: Oxford University Press.
- Odegard, O. 1963. The psychiatric disease entities in the light of genetic investigation. *Acta Psychiatrica Scandinavia* (Suppl.) 169:94-104.
- Olds, J., and Milner, P. 1954. Positive reinforcement produced by electrical stimulation of septal area and other regions of rat brain. *Journal of Comparative Physiology and Psychology* 47:419-427.
- Oswald, I., Brezinova, J., and Dunleavy, D. L. F. 1972. On the slowness of action of tricyclic antidepressant drugs. *British Journal of Psychiatry* 120:673.
- Palmer, H. D., and Sherman, S. H. 1938. The involuntional melancholic process. *Archives of Neurology and Psychiatry* 40:762-788.
- Papez, J. W. 1937. A proposed mechanism of emotion. *Archives of Neurology and Psychiatry* 38:725-743.
- Parkes, C. M. 1964. The effects of bereavement on physical and mental health: a study of the case records of widows. *British Medical Journal* 2:276.
- _____. 1965. Bereavement and mental illness. *British Journal of Medical Psychology* 38:1-25.
- _____. 1972. *Bereavement: studies of grief in adult life*. New York: International Universities Press.
- _____. 1973. Separation anxiety: an aspect of the search for the lost object. In R. J. Weiss, ed. *Loneliness. The experience of emotional and social isolation*. Cambridge: MIT Press.
- Parker, S. 1962. Eskimo psychopathology in the context of eskimo personality and culture. *American Anthropologist* 64:76-96.

- Perris, C. 1966. A study of bipolar (manic-depressive) and unipolar recurrent depressive psychosis. *Acta Psychiatrica Scandinavia* (Suppl.) 194:42.
- _____. 1976. Frequency and hereditary aspects of depression. In D. M. Gallant and G. M. Simpson, eds. *Depression*. New York: Spectrum Publications.
- Piaget, J. 1932. *The moral judgment of the child*. New York: Free Press.
- _____. 1951. *Play, dreams, and imitation in childhood*. New York: Norton.
- _____. 1952. *The origins of intelligence in children*. New York: International Universities Press.
- Politzer, H. 1966. *Franz Kafka: parable and paradox*, Second ed. Ithaca: Cornell University Press.
- Pollock, H. M., Malzberg, B., and Fuller, R. G. 1939. *Hereditary and environmental factors in the causation of manic-depressive psychosis and dementia praecox*. Utica, New York: State Hospital Press.
- Poznanski, E., and Zrull, J. P. 1970. Childhood depression: clinical characteristics of overtly depressed children. *Archives of General Psychiatry* 23:8-15.
- Poznanski, E. O., Krahenbuhl, V., and Zrull, P. 1976. Childhood depression: a longitudinal perspective. *Journal of the American Academy of Child Psychiatry* 15:491-501.
- Prange, A. J., Jr., Wilson, I. C., and Rabon, A. M. 1969. Enhancement of imipramine antidepressant activity by thyroid hormone. *American Journal of Psychiatry* 126:457.
- Prange, A. J., Jr., and Wilson, I. C. 1972. Thyrotropin Releasing Hormone (TRH) for the immediate relief of depression: a preliminary report. *Psychopharmacology* 26 (Suppl.).
- Prange, A. J. Jr. 1973. The use of drugs in depression: its theoretical and practical basis. *Psychiatric Annals* 3:56.
- Protheroe, C. 1969. Puerperal psychoses: a long-term study 1927-1961. *British Journal of Psychiatry* 115:9-30.

- Rado, S. 1956. (orig. 1927). The problem of melancholia. In Rado S. *Collected papers*, Vol. I. New York: Grune & Stratton.
- _____. 1951. Psychodynamics of depression from the etiologic point of view. *Psychosomatic Medicine* 13:51-55.
- Raskin, A. 1974. A guide for drug use in depressive disorders. *American Journal of Psychiatry* 131:181-185.
- Redmond, D. E., Mass, J. W., and King, A. 1971. Social behavior of monkeys selectively depleted of monoamines. *Science* 174:428-431.
- Rennie, T. A. L. 1942. Prognosis in manic-depressive psychosis. *American Journal of Psychiatry* 98:801.
- Rie, M. E. 1966. Depression in childhood: a survey of some pertinent contributions. *Journal of the American Academy of Child Psychiatry* 5:653-685.
- Riesman, D., Glazer, N., and Denney, R. 1950. *The lonely crowd*. New Haven: Yale University Press.
- Roehlin, G. 1959. The loss complex. *Journal of the American Psychoanalytic Association* 7:299-316.
- Rosenthal, S. II. 1968. The involuntional depressive syndrome. *American Journal of Psychiatry* (Suppl.) 124:21-35.
- _____. 1974. Involuntional depression. In S. Arieti, ed. *American handbook of psychiatry*, Second ed. Vol. III. New York: Basic Books. Pp. 694-709.
- Russell, B. 1967. *The autobiography of Bertrand Russell: the early years*. New York: Bantam.
- Sachar, E., Heilman, L., and Gallagher, T. F. 1972. Cortisol production in depression. In T. A. Williams, M. M. Katz, and J. A. Shield, Jr., eds. *Recent advances in the psychobiology of the depressive illnesses*. Department of Health, Education, and Welfare: Publication No. (HSM) 70-9053.
- Sapirstein, S. L., and Kaufman, M. R. 1966. The higher they climb, the lower they fall. *Journal of the*

Canadian Psychiatric Association 11:229-304.

Salzman, L., and Masserman, J. H. 1962. *Modern concepts of psychoanalysis*. New York: Philosophical Library.

Sandler, J., and Joffe, W. G. 1965. Notes on childhood depression. *International Journal of Psychoanalysis* 46:88-96.

Schilder, P., and Weschler, D. 1934. The attitudes of children toward death. *Journal of Genetic Psychology* 45:406-451.

Schildkraut, J. J. 1965. The catecholamine hypothesis of affective disorders: a review of supporting evidence. *American Journal of Psychiatry* 122:509-522.

_____. 1975. Depression and biogenic amines. In D. Hamburg and H. K. H. Brodie, eds. *American handbook of psychiatry*, Vol. 6. New York: Basic Books.

Schlegel, F. 1818. *Lectures on the history of literature, ancient and modern*. Edinburgh.

Schoenberg, B., Gerber, I., Wiener, A., Kutscher, A. H., Peretz, D., and Carrac, eds. 1975. *Bereavement: its psychological aspects*. New York: Columbia University Press.

Schopenhauer, A. 1961. *The world as will and idea*. Translated by R. B. Haldane and J. Keint. New York: AMS Press.

Segal, Hannah. 1964. *Introduction to the work of Melanie Klein*. London: Heinemann.

Seiden, R. H. 1969. *Suicide among youth*. *Bulletin of Suicidology*. (Suppl.).

Seligman, M. E. P. 1975. *Helplessness*. San Francisco: W. H. Freeman.

Seligman, M., and Maier, S. 1967. Failure to escape traumatic shock. *Journal of Experimental Psychology* 74:1-9.

Shaffer, D. 1974. Suicide in childhood and early adolescence. *Journal of Child Psychology and Psychiatry* 15:275-291.

- Shambaugh, B. 1961. A study of loss reactions in a seven-year-old. *Psychoanalytic Study of the Child* 16:510-522.
- Shimoda, M. 1961. Über den fraaruorbideu karakter des manish-depressiven irreseius. *Psychiatria et Neurologia Japonica* 45:101.
- Silverberg, W. 1952. *Childhood experience and personal destiny*. New York: Springer.
- Slipp, S. 1976. An intrapsychic-interpersonal theory of depression. *Journal of the American Academy of Psychoanalysis* 4:389-410.
- Smith, A., Troganza, E., and Harrison, G. 1969. Studies on the effectiveness of antidepressant drugs. *Psychopharmacology Bulletin* (Special issue).
- Smythies, J. 1973. Psychiatry and neurosciences. *Psychological Medicine* 3:267-269.
- Sperling, M. 1959. Equivalentents of depression in children. *Journal of Hillside Hospital* 8:138-148.
- Spiegel, R. 1959. Specific problems of communication in psychiatric conditions. In S. Arieti, ed. *American handbook of psychiatry*, First ed. Vol. I. New York: Basic Books. Pp. 909-949.
- _____. 1960. Communication in the psychoanalysis of depression. In J. Massemian, ed. *Psychoanalysis and human values*. New York: Grune & Stratton.
- _____. 1965. Communication with depressive patients. *Contemporary Psychoanalysis* 2:30-35.
- Spitz, R. 1946. Anaclitic depression. *Psychoanalytic Study of the Child* 5:113-117.
- Strecker, E. A., and Ebaugh, F. 1926. Psychoses occurring during the puerperium. *Archives of Neurology and Psychiatry* 15:239.
- Strongin, E. I., and Hinsie, L. E. 1938. Parotid gland secretions in manic-depressive patients. *American Journal of Psychiatry* 96:14-59.
- Sullivan, H. S. 1940. *Conceptions of modern psychiatry*. New York: Norton.

- _____. 1953. *The interpersonal theory of psychiatry*. New York: Norton.
- Szalita, A. B. 1966. Psychodynamics of disorders of the involuntional age. In S. Arieti, ed. *American handbook of psychiatry*, First ed., Vol. III. New York: Basic Books. Pp. 66-87.
- _____. 1974. Grief and bereavement. In S. Arieti, ed. *American handbook of psychiatry*, Second ed., Vol. I. Pp. 673-684.
- Taulbee, E. S., and Wright, II. W. 1971. A psychosocial-behavioral model for therapeutic intervention. In C. D. Spielberger, ed. *Current topics in clinical and community psychology*, Vol. 3. New York: Academic Press.
- Tellenbach, II. 1974. *Melancholic problemgeschichte-endogenitat-typologie-putho- genese-klinik*. Berlin: Springer-Verlag.
- Thomas, A., Chess, S., and Birch, H. G. 1968. *Temperament and behavior disorders in children*. New York: New York University Press.
- Thompson, C. M. 1930. Analytic observations during the course of a manic-depressive psychosis. *Psychoanalytic Review* 17:240.
- Thompson, R. j., and Schindler, F. H. 1976. Embryonic mania. *Child Psychiatry and Human Development* 7:149-154.
- Titley, W. B. 1936. Prepsychotic personality of involuntional melancholia. *Archives of Neurology and Psychiatry* 36:19-33.
- Toolan, J. M. 1962. Depression in children and adolescents. *American Journal of Orthopsychiatry* 32:404-15.
- Tupin, J. P. 1972. Effect of lithium and sodium and body weight in manic-depressives and normals. In T. A. Williams, M. M. Katz, and J. A. Shield, Jr., eds. *Recent advances in the psychobiology of the depressive illnesses*. Department of Health, Education, and Welfare: Publication No. (HSM) 70-9053.
- Veith, Ilza. 1970. Elizabethans on melancholia. *Journal of the American Medical Association*

212:127.

- Wainwright, W. H. 1966. Fatherhood as a precipitant of mental illness. *American Journal of Psychiatry* 123:40-44.
- Warneke, L. 1975. A case of manic-depressive illness in childhood. *Canadian Psychiatric Association Journal* 20:195-200.
- Weinberg, W. A., Rutman, J., and Sullivan, L. 1973. Depression in children referred to an educational diagnostic center: diagnosis and treatment. *Journal of Pediatrics* 83:1065-1072.
- Weiner, I. B. 1970. *Psychological disturbance in adolescence*. New York: Wiley.
- Weiss, J. M. A. 1957. The gamble with death in attempted suicide. *Psychiatry* 20:17.
- _____. 1974. Suicide. In S. Arieti, ed. *American handbook of psychiatry*, Second ed., Vol. III. Pp. 763-765.
- Weissman, M. M., and Klerman, L. 1977. Sex differences and the epidemiology of depression. *Archives of General Psychiatry* 34:98-111.
- Weissman, M. M., Klerman, G. L., Payhel, E. S., et al. 1974. Treatment effects on the social adjustment of depressed patients. *Archives of General Psychiatry* 30:771-778.
- Weissman, M. M., Prusoff, B. A., and Klerman, G. 1975. Drugs and psychotherapy in depression revisited. *Psychopharmacology Bulletin* 11:39-41.
- Werner, H. 1948. *The comparative psychology of mental development*. New York: International Universities Press.
- Whittier, J. R. 1975. Mental disorders with Huntington's chorea. Clinical aspects. In S. Arieti, ed. *American handbook of psychiatry*, Second ed., Vol. IV. New York: Basic Books. Pp. 412-417.
- Wilson, E. 1962. A dissenting opinion on Kafka. In D. Gray, ed. *Kafka*. Englewood Cliffs: Prentice-

Hall.

- Winnicott, D. W. 1953. Transitional objects and transitional phenomena. *International Journal of Psycho-Analysis* 34.
- Winokur, G. 1973. Depression in the menopause. *American Journal of Psychiatry* 130: 92-93.
- Winokur, G., Cadoret, R., Dorzab, J., and Baker, M. 1971. Depressive disease. A genetic study. *Archives of General Psychiatry* 25:135-144.
- Wolfgang, M. E. 1959. Suicide by means of victim-precipitated homicide: *Journal of Clinical and Experimental Psychology* 20:335-349.
- Wolman, B. B. 1973. *Dictionary of behavioral science*. New York: Van Nostrand.
- Woodworth, B. S. 1940. *Psychology*. New York: Holt.
- Zetzel, E. R. 1965. Depression and its incapacity to bear it. In M. Schur, ed. *Drives, affects, behavior*. Vol. 2. New York: International Universities Press.
- Zilboorg, G. 1928. Malignant psychoses related to childbirth. *American Journal of Obstetrics and Gynecology* 15:145-158.
- _____. 1929. The dynamics of schizophrenic reactions related to pregnancy and childbirth. *American Journal of Psychiatry* 8:733-767.
- _____. 1931. Depressive reactions related to parenthood. *American Journal of Psychiatry* 87:927-962.
- _____. 1941. *A history of medical psychology*. New York: Norton.
- _____. 1944. Manic-depressive psychoses. In S. Lorand, cd. *Psychoanalysis today*. New York: International Universities Press.