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Early Childhood Fears

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EARLY CHILDHOOD FEARS

by

Lenore Bernadette McCarthy

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of
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1932

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Chapter I

Introduction

The oldest records of mankind indicate the prevalence of the emotion of fear in human experience. In the book of Genesis we read: "The God of Abraham, and the God of Nachor, the God of their father, judge between us. And Jacob swore by the Fear of his father Isaac" (Genesis XXXI, 53). "Deliver me, I pray thee, from the hand of my brother, from the hand of Esau: for I am greatly afraid of him lest perhaps he come and kill the mother with the children" (Genesis XXXII, 11). Subsequent sections of the Bible offer repeated evidence of the compelling and seemingly irresistible force of fear which actuated men and nations in the earliest days of the world's history.

A modern psychologist, John Rathbone Oliver, commenting on the omnipresence of fear in the life of man, says: "Fear like death came into the world without first parents and unless it is removed by mental training it will persist" (63:3). The same thought has been expressed in a diversity of ways by numerous writers. The British dramatist Bernard Shaw expresses his opinion of the universality of the emotion of fear through the mouth of a well-known stage character: "There is only one universal passion -- fear." That fear is inextricably bound up

with all human progress must be almost self-evident to any one who has given the matter any serious consideration.

Every thinking person knows that it is possible for fear to destroy the power of the mind to reflect or to reason clearly. It is not necessary to submit evidence to prove this statement or to cite authorities. But as soon as we admit that fear affects the power of rational reflection, we establish the importance of the element of fear in human conduct. When this capacity for clear thinking is interfered with, there is a derangement of the allied mental processes. Memory becomes unreliable and often inaccurate, and there may be abnormal or irrational association of ideas. In connection with this general disturbance of the mental operations the imagination is frequently likewise demoralized.

Psychologists everywhere are in accord as to the important place which fear occupies in mental health. William McDougall writes: "There is one tendency which, though it has its proper part to play in our lives, is yet in the great majority of us stronger than the circumstances of civilized life require, and which, by working too frequently and too strongly, needlessly darkens the lives of very many and plays havoc with not a few. I mean the fear tendency" (54:36).

That fear is a potent element distinctly in need of control seems to be generally recognized. Whether a native tendency shall work for good or evil is largely a matter of direction and

of wise control (54:25). It is very evident that, without fear, we should be incautious, imprudent, utterly rash, without awe, reverence, or religion (54:25). The general importance of fear is easy to accept since certainly to a very large proportion of men it has been given in a strength that is excessive for the needs of civilized society (54:27).

There are probably few if any adults who have not learned through personal experience that fear causes physical reactions which pass almost immediately beyond the regulatory power of the mind. Experience of this type is practically universal. Consequently, if one bears in mind the serious aspect of human conduct removed from the intelligent control of the mind, he must recognize the value of knowledge of the factors which lessen or increase mental control in the presence of fear.

Not only fear, but many other human emotions as well, are receiving new consideration in their relation to man's well-being. Leading physicians contribute their opinions as to the place of emotions in the measurement of physical and mental health. According to Dr. Alfred Adler and some of his associates of the Pedagogical Institute of Vienna, if it were not for the quackery which has accompanied the study of the relationship existing between mental and physical health, there would be a far greater interest manifested by the general public today in the scientific relation of the welfare of the mind to the welfare of the body (2:10-11).

The consideration of emotions as an independent factor in human growth has been a slow and gradual development. Early studies in behalf of man's progress were principally concerned with his intellectual advancement, with little or no attention to anything except scholastic objectives. Gradually, however, observing people came to recognize in the learning process other factors than pure mental activity. With the determining of definite elements separate from intellectual achievement, there began a movement to consider influences surrounding individuals, especially children.

The great impetus to a closer and more scientific study of the content of children's minds was given about 1870 by Wundt. The technics developed by him were extended and perfected by later workers, with a constantly growing tendency toward making some one definite element an object of special study.

At the present time, as the study of maladjusted, anti-social, emotionally unbalanced, and otherwise abnormal types is being extensively developed, more and more emphasis is placed on early influences, childish emotional experiences, dangerous repressions, and infantile mental and physical terrors. It is quite to be expected, therefore, that the child of preschool age should receive more attention these days than he has ever before received in the history of child psychology (6:4). Young children are being studied carefully and scientifically, and unusual efforts are being made to provide a type of environment

in which the most advantageous development will result. Vast sums of money are used and the serious work of many trained, interested persons is employed in the study of youngsters whose activities were formerly unthought of as material for scientific investigation. With unprecedented eagerness parents, teachers, and students are interesting themselves in the new child psychology. The mere accumulation of facts does not satisfy the ardor of these zealous workers; they are making extensive, practical applications of their valuable findings.

Research workers have emphatically agreed on the importance of the preschool period as an influential factor in a child's development. Arnold Gesell of Yale University says of this period, "The preschool period is of all periods the most prolific for fears (36:230). William A. White refers to the early childish years as "the golden period of educational possibilities" (92:53). Among those who have submitted evidence supporting the theory of importance of early years as compared with the later are Helen T. Woolley, director of the Institute of Child Welfare Research, Teachers' College, Columbia University (109:12), Sidonie M. Gruenberg, director of Child Study Association in America (38:1-30), John E. Anderson, director, Institute of Child Welfare, University of Minnesota (108:40), Benjamin G. Gruenberg, director of the American Association for Medical Progress, New York City (108:30), and John B. Watson,

author of the "Psychological Care of Infant and Child" (90:10).

Of all the emotions which a little child experiences, fear is, no doubt, one of the most influential. For centuries, fear has been recognized, praised, condemned, cultivated, discussed, and generally accepted in the end as inevitable; however, the popular interest in the inception or beginnings of this powerful emotion which so radically influences human behavior is of comparatively recent development. Many leading authorities in the fields of psychology and education have referred to or discussed this element, but rarely at any length. John Dewey concedes that "probably the greatest enemy in the life of human beings is the attitude of fear." That fear may be present at birth or very shortly after is admitted, and seems to be confirmed by the evidence gathered by recent research workers (4:44).

According to James Rowland Angell, formerly head of the Department of Psychology of the University of Chicago, long before the experience of a normal baby has afforded him opportunity to observe and copy fear reactions in others, there is evidence of fear (3:294).

Other authorities, however, consider that fear is acquired rather than instinctive. For example, Annie Dolman Inskip, in her work on "Child Adjustment," refers to fear as a matter of stimulations, association, and training, something depending for its appearance upon the physical condition of the child (41:378).

In 1901 actual experimental work conducted by Karl Groos furnished the data for "The Fear Emotions," a valuable section of his "Psychic Life of the Child." This was the most important piece of psychological research on fear made up to the time of its publication. Subsequently, significant contributions on this subject were made by Preyer, Sully, Major, Compayre, and especially by Hirschlaff (6:8-11).

Among the more recent experimental investigations was a five-year study of preschool children made in the Nursery School Division of St. George's School, Toronto, by a mental hygiene staff. The investigators found that infants showed symptoms of fear almost at birth (8:302).

Watson, the pioneer behaviorist, conducted experiments at Johns Hopkins University to determine the relation between sound and fear. He demonstrated that there is a rapid growth of fear in children through accidental association of sound with simple mental concepts (90:15).

The Nancy School has sponsored extensive research on the subject of the relation of attention to pathological fear. The findings show conclusively that the idea of fear creates fear (57:132).

In 1925 Arnold Gesell, of Yale University, in "The Mental Growth of the PreSchool Child," contributed some distinctly worth-while data on the objects of children's fear (36:285). In

1923 he made a comprehensive contribution to education on the preschool child (36:12).

There is a modern tendency toward prevention that appears to the writer to be manifesting itself in many of the recent movements in the fields of psychology and education. The homely adage, "An ounce of prevention is worth a pound of cure," has been found applicable to many of the vexing problems which are constantly arising to confront psychologists and educators. More and more it is being recognized that a correct knowledge of child nature can prevent many of the difficulties in child training which are so baffling once they have arisen. Formerly much effort was centered on problems of correction and reconstruction. The older method of procedure has been superseded by a scientific study of the preschool child with a view to cultivating the favorable and removing the unfavorable conditions which are known to influence his development so strongly.

With the idea of prevention in mind, Douglas A. Thom, in 1921, opened his "Habit Clinic" in Boston. This and the hundreds of similar clinics which have since been opened have achieved great success in diagnosing abnormal conditions and in suggesting simple remedies for overcoming certain fears in children (77:30-39). They have succeeded in one way and have failed in others. There has been much corrective work, too little successful preventive work, and this chiefly because parents come for help only when serious damage has already been done.

Realizing that the study of fear presents several phases which have not as yet been summarized in a comprehensible form, and likewise noting that there is vital need for a practical, workable plan to assist those interested in children to control wisely that tremendously important emotional factor, fear, the writer will attempt to accomplish the following things:

1. To study fear as an instinct and as an emotion;
2. To classify the various kinds of fears to which children are subject;
3. To consider the immediate and remote causes of the more common fears of childhood;
4. To determine the effects of fear, physical, mental, and moral;
5. To formulate a plan for parents and educators whereby they can direct the powerful emotion of fear in children so that the latter may have a technic for meeting situations involving the element of fear.

Chapter II

What Is Fear?

The term "fear," like so many other commonly used words in our language, is one that possesses many meanings. First, there are the dictionary definitions. The Oxford, or New English Dictionary of Historical Principles, defines it as follows:

The emotion of pain or uneasiness caused by the sense of impending danger or by the prospect of some possible evil. Now the general term for all degrees of the emotion; in early use applied to its more violent extremes, now denoted by alarm, terror, fright, dread.

An instance of the emotion; a particular apprehension of some future evil.

This emotion viewed with regard to an object; the state of fearing (something).

Apprehension or dread of something that will or may happen in the future.

Apprehensive feeling towards anything regarded as a source of danger, or towards a person regarded as able to inflict injury or punishment.

A mingled feeling of dread and reverence towards God (formerly also towards any rightful authority).

Webster defines fear as follows:

1. The painful emotion characteristic of the apprehension of evil; a primitive affection marked by revulsion and agitation in the presence of the object feared and normally by a desire to flee or avoid it; in its more intense forms fright or terror.

2. Apprehension or terrified contemplation of something.

3. (a) Apprehension of incurring or solicitude to avoid the wrath or violence of someone as of God; hence, the dread or reverence felt toward the Supreme Being.

(b) Respectful reverence for men of authority or works.

4. That which causes or which is the object of apprehension or alarm, ground for or occasion for alarm; danger.

In the Dictionary of Philosophy and Psychology, James Mark Baldwin presents the following definition:

Fear, an emotion arising in a situation demanding practical adjustment but of such a nature as to disconcert either by its strangeness or by the threat of approaching evil. In intense fear no form of adjustment may be possible except evasion or escape; and in extreme cases even these are impossible.

The emotion arising from the expectation of what is disagreeable. In this sense fear is contrasted with hope as in the expression hopes and fears.

Fear belongs to the primary emotions i.e. to those which are found at the very level of mental development above the mere sense of reflex.

We find that educators, child guidance experts, psychiatrists, and psychologists differ widely in the classification of fear. Fear has been variously described as an emotion, an instinct, a combination of an instinct and an emotion, a mere example of atavism, an inherited tendency, a "throw-back" or recapitulation to prehistoric man. In this chapter we shall attempt to present some of the many concepts of fear that are held by different psychologists in the various schools of psychology. The remark of Ebbinghaus: "Psychology has a long past but only a short history," may partially explain why it is rather difficult to classify the schools and attain the ends of logical classification.

While there are other schools than those listed by W. B. Pillsbury in his Essentials of Psychology, it will perhaps best serve our purpose to confine ourselves to the ones of which he

treats -- Structuralism, Functionalism, Behaviorism, Animism, and the Gestalt School (67:452-56). To distinguish the representatives of the different schools named we shall use in this chapter the terms Structuralist, Functionalist, Behaviorist, Animist, and Configurationist.

I. The Structuralists

Volumes might be written to describe adequately and explain what the Structuralist holds; here we must be content to sketch his position. His method is precisely that of the analysis of the content of consciousness, of the structure of the mind, somewhat as a chemist or naturalist would proceed. The special psychological method he follows is really introspection, in that he would observe the conduct of children and interpret it in the light of his own introspection. He places emphasis upon the qualities of sensation and mental images during recall and thinking, and the constituents of feeling and emotion and the antecedents of action (67:452). His work is to him the science of mental structure and his problem is to find out what that structure is.

Among the outstanding Structuralists are Wilhelm Wundt and Edward Bradford Titchener. Wundt defines feelings in general as reactions of apperception to the separate contents of consciousness (67:349). His tri-dimensional theory of feeling plainly distinguishes between the simple feelings and the complex

emotions, although in his earlier writings he held that feeling was a tone of sensation. Therefore, in trying to extract from Wundt's writings a definition of fear, we meet with difficulty.

The following probably best represents his concept of fear:

Fear is an emotion; and an emotion, like feeling, is an elementary form of an affective state. Fear is a reaction to an intellectual insight and not merely a sensation, and is accompanied by a complexity and an extensiveness of bodily resonance.

This view is evidently in accord with a more recent theory that emotional experiences are produced by unusual and powerful influences emerging from the region of the thalamus and affecting various systems of cortical neurones (67:267). And we find traces of agreement with the views of Wundt in the brief notes, touching only upon some of the problems of feeling and emotion, in which Aveling presents the following definitions: "A feeling is the experience of pleasure or unpleasure enjoyed by the Self. An emotion is the massive and generally wholly unclear experience of coenaesthesio-kinaesthetic sensation" (93:57).

We find Edward Bradford Titchener mentioned by several psychologists, and especially by W. B. Pillsbury, as the most prominent representative of the Structuralists, and as the historian par excellence in experimental psychology (93:277). His definitions and explanations are, then, of especial value. We quote him as follows:

It would be interesting to take representative statements

of the three views of emotion -- say, the statements of Wundt, James, and Stumpf -- and to estimate each one in the light of the other two. I doubt, however, whether the comparison would be profitable. Surely, if we are to reach anything like a conclusion, we must begin lower down; we must go, not to emotion, but to sense-feeling. Is there any one who, when weighing James' theory in the balance, has not heartily wished that he had given us a chapter on the feelings? Is there any student of the *TONPSYCHOLOGIE* and of Stumpf's later work who has not felt the want of that "Abschnitt uber die durch Sinneseindrucke erweckten Gefuhle" which was promised in 1883 and has been delayed until 1906? Can any one doubt that the issue raised by Wundt's tridimensional theory of affections is, systematically, a more fundamental issue than is involved in the most radical doctrine of emotion? I may be seeing things crookedly; but as I see them, the heart of the problem lies in feeling. Let us, then, attack the problem at this point; let us consider, as critically as we may, the alleged criteria of affection.

We may take up, first, the statement that sensations are the objective and affections the subjective elements of consciousness; and we will try to give these terms, 'objective' and 'subjective,' a tangible psychological meaning.

Let us be clear that the meaning must be psychological; the difference, if it exists, must be a difference that is open to introspective verification. Anything in the way of epistemological argument is wholly out of place. It is out of place for two reasons. On the one hand, psychology is an independent discipline, and can no more take dictation from epistemology than it can from metaphysics or ethics. And, on the other, epistemology is concerned with the principles of knowledge -- whether with the material and formal principles together, or with the material principles alone, is a matter of definition; while the psychological element has no part or lot in knowledge, has no reference or meaning or object or cognitive contents of any sort.

Let us be clear, also, that the meaning which we give to the terms 'objective' and 'subjective' must cover a difference in the elementary processes regarded as elementary. It has been urged, for instance, that the sensory elements in perception are looked upon, in ordinary thought, as properties of external things, whereas feeling is always personal, reflects always a state of the mind itself. Heat seems to reside in the burning coals; but the pleasantness, the gratefulness, of the warmth is in me. I will not now dwell on the epistemological implications of this argument, but will accept it at its face value,

as an argument from the psychology of perception and feeling. And I reply, first, that the statement which it makes is not true, the distinction which it draws cannot be drawn. For the pleasant or grateful feeling which is subjective, in me, is a feeling and not an affection; it comprises certain organic sensations; and nobody confuses organic sensations with properties of external things. I reply, secondly, that the argument, even if it were true, would be irrelevant. For it is an argument based, not on introspection of the elementary processes as such, but on the character or behavior of these processes in combination. We, however, are dealing with the mental elements in their status as elements.

"Feeling...is always falling into unitary masses, it forms a single continuum."

It is quite probable that Titchener would define fear as an emotion and let it be understood that emotion meant a sudden boiling up of feeling which for a time overwhelms the mind and prevents the free and natural combination of the cognitive elements (85:426). But it is almost impossible to extract from the quarter-of-a-century-old writings of Titchener a definition of fear that today could be considered concise, comprehensive, and entirely satisfactory.

II. The Functionalists

The Functionalist studies mental operations and not mental elements. His viewpoint is shown in the following excerpts from Edwin G. Boring's History of Experimental Psychology:

There was put forward at Chicago a systematic view that became the platform of the school of functional psychology. America adopted the new psychology from Germany (9:538).

They considered coordinations -- not sensation followed by the idea by movement but a single integral act. The response is to the sensation, the sensation is for the response, neither has any meaning alone (9:541).

The stimulus, or the sensation, exists only logically, and

exists thus for the act. For this reason Titchener could say that the datum of functional psychology is not an "Is" but an "Is-for."

In dealing with complete coordination the answer to the question "What" includes the answer to the questions "How" and "Why" (9:543).

It is the psychology of the fundamental utilities of consciousness in which mind is primarily engaged in mediating between the environment and the needs of the organism. The function of the psychological act is "accommodatory service." The function of consciousness is "accommodation to the novel" since consciousness wanes in the face of an habitual situation (9:544).

The functionalist does not deny the existence of purely structural mental processes and he does give them some consideration where they help to explain a function but his emphasis is placed chiefly upon what consciousness does and not upon explaining what it actually is (9:544).

James Rowland Angell and John Dewey are listed among the outstanding Functionalists. The views of the former may be accepted as representative of those of the entire school.

Angell distinguishes between the psychological and the physiological aspects of fear in discussing the latter as an emotion. Of psychological fear he says:

The psychological constitution of the emotion of fear is typical of all strong emotions which lend themselves readily to introspective emotion. In each one the organic reverberation which is produced by the emotional, stimulus enters into consciousness to give it its characteristic emotional coloring and to mark it off from other modes of mental activity. Emotions are extremely complex processes at least as regards the organic activities which condition them. On the other hand, referring to physiological fear, he continues: But we never feel afraid unless we have already made certain of the motor reactions which characterize fear. If the heart remains undisturbed in its pulsations, if the distribution of the blood in the various parts of the body is not markedly changed, if the breathing is not affected, if we do not tremble, it matters not how clearly we may appreciate the danger of the situation, nor how dangerous the situation may be, the total complex feeling, the emotion of fear is not ours. These movements which common description accredits with the expression of the emotion are not merely

expressions, but they are causal factors producing the psychical condition which we all recognize when we experience it as the genuine emotion (3:121).

Angell agrees with McDougall and others in the instinct-emotion classification of fear. He says distinctly that fear is "a union of instinct and emotion." Continuing on this point, i.e., the double definition, he writes, "A part of the terms apply primarily to acts and so connect themselves with the common implication of the term, instinct; whereas the other part suggests much more immediately the conscious feelings characteristic of the several forms of emotional experience" (3:179). Angell associates instinct with physiological phenomena; emotion with psychological phenomena.

III. The Behaviorists

We find in Behaviorism the great reaction to what may be called the orthodox psychology of the first decade of the twentieth century. Edwin G. Boring says of it: "Behaviorism is the typical American psychology in spite of the refusal of perhaps the majority of American psychologists to call themselves Behaviorists" (9:584).

In attempting a brief description or explanation of the position of the Behaviorist, we are almost forced to simplify matters by presenting what he rejects or denies. The Behaviorist rejects all conscious elements such as sensations, images, and feelings. Consciousness to him exists only as a reflex arc.

John B. Watson, the outstanding representative of this "muscle-twitch" psychology, classes fear as one of the emotional reactions belonging to the original and fundamental nature of man. In other words, fear is merely stimulus response. He does not lean toward hard-and-fast definitions; consequently he offers this formulation: "An emotion is an hereditary 'pattern-reaction' involving profound changes of the bodily mechanism as a whole, but particularly of the visceral and glandular systems" (91:195).

The concept of emotion is something that can be used by the Behaviorist only on the condition that it is looked upon as an intra-organic behavior, consisting principally in the action of glands and unstriped muscles. But when Watson proceeds to describe and identify fear, which he calls one of the primary emotions, he actually does so in terms of external stimulus and overt behavior (67:223).

IV. The Animists

There is another school that is almost the direct opposite of the Behaviorist school. Adherents of this school, which makes mental aspects dominant, are called Animists. They represent an almost complete return to the viewpoint of Aristotle.

W. B. Pillsbury brings out this point as follows:

Aristotle gave full importance to the body, but assigned a determining place to the purposive directing force that he called form or entelechy. Matter had laws of its own, but the final control was always through the more mental activity which

was guided by a desired end rather than by mere mechanical laws (67:449).

Mind as a force must be taken into account in addition to the action of the nervous system and all chemical and physical forces. Mind is Aristotle's 'form' that, of its own volition, works changes in matter. Mind is the determining factor in all of the selections to which we have assigned the name of sub-junctive influences in attention, in the selection of ideas in recall, and in the development of perceptions. It would also be the initiating and vitalizing as well as selecting agent in the control of action (67:455).

Because Aristotle, in his doctrine of mind, is the prototype of the modern psychologist who would make mental aspects dominant, we may look upon him as the earliest and most outstanding representative of the Animist school. In his defense of a spiritual, vivifying, and unifying principle he was followed by the entire school of Scholastic philosophers. It is the opinion of W. B. Pillsbury that William McDougall is urging and advocating a revival of the Animistic doctrine.

The writer has observed traces of the Animistic theory in the work of Lawrence W. Cole especially, in his Factors of Human Psychology. This is evident in the observations made by Cole on the subject of emotions:

Emotions are more subjective than other psychic states.

Emotions warp judgment.

Emotions depend on the sympathetic nervous system.

Emotions are pervasive.

Emotions are poorly localized.

Emotions are not dependent on specialized end organs.

Emotions are less clear than sensations.

Emotions arise and subside more clearly than sensation.

Emotions are more subjective than sensations.

Emotions have the quality of pleasantness and unpleasantness.

Emotions have the power of irradiation.

Emotions are sources of the release of psychic energy

(15:176).

According to William McDougall, each of the principal instincts is paralleled by a primary emotion, and there is an affinity between the two innate forms of reaction. Psychologists speak of emotion as the consciousness of instinctive adjustments running their natural course, and hence sensational in character. Fear, therefore, would be considered by McDougall to be both an instinct and an emotion (53:119).

In his paper on "Emotion and Feeling Distinguished," which was read at the Wittenberg Symposium on Feelings and Emotions, William McDougall writes:

It is reasonable to assume that the primary forms of animal striving were the seeking of food and the turning away from the noxious, primitive appetite and aversion; and that from these two primitive forms all other modes of appetite and aversion have been differentiated and evolved.

Setting out from these assumptions, my thesis is, first, that all the modes of experience we call feeling and emotion are incidental to the striving activities, the conations of the organism, evoked either by impressions from the environment or by metabolic processes taking place within it or, more commonly, in both ways; secondly, that we may broadly and consistently distinguish feelings on the one hand and emotions on the other by their functional relations to the conative activities which they accompany and qualify, these relations being very different in the two cases (93:201).

V. Configurationist (The Gestalt School)

The interest manifested in what may be called the old-new psychology incited valuable and effective research. Almost contemporaneously with the Behaviorist we find arising the Configurationist, or the adherent of the Gestalt School. As it appears to the writer, there is much in the later extensions of its theory that gives it a great deal in common with the Animist school.

Since "Gestalt" is the German word for "form," it is obvious the Configurationist will exhibit a tendency away from the elements and toward the totalities or wholes of mental life. When Edwin G. Boring in A History of Experimental Psychology mentions that James and Dewey professed a Gestalt psychology twenty years too soon (9:540), he directed attention to the fact that the Configurationist and the Functionalist have many things in common.

The Gestalt school is vitally interested in the investigation of seen movement, regards movement as a phenomenon, and sometimes makes use of the term "phi-phenomenon." Psychologists of this school consider phenomenon and stimulus a total system which may be termed psycho-physical (9:571). But the only thing the Gestalt and the Behaviorist both accept is experimentalism (9:580).

Gestalt accepts introspection in the modified form of phenomenologism, and also retains its interest in system. It

rejects elementarism completely both in phenomena and in bodily processes, and this rejection is its primary characteristic. In addition to this, it rejects Associationism, which the Behaviorist accepts under conditioned reflex (9:580). Apparently the Gestalt school inclines toward "historical sophistication." It uses the old with the new in a way that meets an immediate, practical, scientific need.

Gestalt psychology protests against analysis into elements and anathematizes the older theory of "bundle hypothesis." It also protests against attention, associationism, and the constancy hypothesis (9:576).

Among the outstanding Configurationists, or members of the Gestalt school, are the German psychologists, Kurt Koffka, Wolfgang Kohler, and Max Wertheimer, and Professor Robert Morris Ogden of Cornell University. Writing on the subject, "Can Gestalt Theory Save Instinct?" in the Journal of General Psychology for January, 1931, M. Bullard Drury makes it clear that the new theory of organism functions emphasized by Gestalt school of psychology suggests a view of instinct which is not open to the objections that have been raised against other doctrines. It is held by Kohler that the essential basis of conduct is brain events whose assimilations and organization are determined, not by neural pathways along which impulses have come, but by the mutual influences of these processes upon each other in accordance with the dynamic principles of physical

chemistry. Total brain events are physio-chemical systems which tend to a state of dynamic equilibrium. Mind is a system and not a mechanism (99:88-93).

Since the Gestalt school restores consciousness to its rightful place in mental life, the physiology of the senses is not accepted by it as an adequate explanation of mental life. A school that lifts mental life above mere sensism may attempt to define fear as a real conflict between a conscious purpose and an unconscious or co-conscious factor. At least that is the way it impresses the writer.

Summary

While it is virtually impossible to formulate a definition of fear to which all psychologists will subscribe, as is evident from the views expressed in this chapter, all will agree on a few of the elements that any definition of fear must contain. With the possible exception of Watson and his Behaviorists, all seem to agree that fear is an instinct; Watson prefers to call it stimulus and response or a "stimulus reflex." All agree that fear is an emotion; Watson, however, seems to be afraid of the word emotion and attempts to avoid its use. Hence the utter futility of attempting a formal definition that will be satisfactory to all schools of thought. As was expressed at the Wittenberg Symposium, we find ourselves after all our wanderings back at the dictionary: Fear is "the emotion of pain

or uneasiness caused by the sense of impending danger or by the prospect of some possible evil. Now the general term for all degrees of the emotion; in early use applied to its more violent extremes, now denoted by alarm, terror, fright, dread."

Chapter III

Types of Fear

1. Instinctive or Inherent Fears

Instinctive or inherent fears are fundamentally neither constructive nor destructive; considered potentially, however, they may be valuable constructive forces or decidedly detrimental influences. In many cases fears of the instinctive variety may apparently operate both for good and evil. It is also possible for a fear to have a desirable effect for a time and then suddenly to develop into something with a very harmful result. In this section we will discuss briefly those fears which there is authority for considering instinctive.

(a) Constructive Fears

It is widely felt that there is implanted in every human being an inherent fear of a Supreme Being and of the power that such a Being must possess. Even the most skeptical person must admit that a fear of this nature has a salutary influence on the standards and conduct of millions of men. Ranging all the way from those who worship a known God according to a recognized code to the most primitive savages with their oddly conceived deities, the members of the human race seem without an exception to be better for their instinctive fear of a Supreme Being.

Another instinctive fear which seems to be universal is the dread of death. Operating as it were as a complement to the strongest instinct in human nature, that of self-preservation, the fear of death is generally accepted as belonging to everyone. The normal operation of this instinctive fear is to safeguard the life, health, and general welfare of mankind.

Watson and his disciples reduce all instinctive fears to two: the fear of removal of support and the fear of loud sounds. Obviously both of these fundamental fears serve a very useful purpose. No one lives very long in this world without finding out by personal experience that the removal of support and loud sounds often justify in their consequences the fear which they inspire.

Most writers on the subject of fear admit that there are other recognizable inherent forms besides the two classified by Watson. Physical pain, extremes of heat and cold, jars and jolts are mentioned in the physical order, while in the mental order ridicule and failure seem to have been accorded a definite place as universal sources of fear. It would be futile to refuse to admit the practical value of fear of pain, heat, cold, jars or jolts, although a great deal will probably be said later about the abnormal development of these natural fears. Undoubtedly the general effect of fears of this physical type is salutary. Also, in the matter of failure and ridicule, the consensus of opinion seems to be that such fears are construc-

tive, if one may judge by the universal approbation which the world renders to success and accomplishment. Nevertheless, because of the variation in standards of success, the fear of failure and of subsequent ridicule may be anything but a constructive force. Given a true and admirable standard of success, the fear of failure may be a stimulus for good, but at best it is an inefficient and short-lived inspiration.

(b) Destructive Fears

In the entire field of inherent fears which may be termed destructive, not a single one can be found which will not be an off-shoot, a perversion, an abnormal development, or a false interpretation of a natural instinctive fear. However, since there are so many instances when inherent fears develop into destructive forces along similar lines, these tendencies may be grouped and classified as destructive fears. They really qualify as such, because in those cases where an inherent fear has become truly detrimental, the established fear has been so far removed from the original salutary instinctive force from which it sprang that the relationship is entirely lost.

Contradictory as it may seem, many spiritual writers maintain that it is possible to have too great a fear of God, and thereby experience distinctly harmful results. Scrupulosity, diffidence, moral cowardice, and a recognized type of spiritual "paralysis" are traceable to an unwisely developed fear of a Supreme Being. However, such manifestations are probably the

result of supplementary training rather than of the original instinct.

An inordinate fear of death, such as is found in countless persons in all walks of life, is most assuredly a handicap to success and accomplishment. Unwillingness to take chances, uncalled-for solicitude for health and safety, squeamishness, worry, loss of mental equilibrium and normal mental perspective frequently develop from an exaggerated fear of death. In addition, persons afflicted with this fear are often found to be incapable and insufficient in meeting and handling the crises of life, due in large part to their inability to face situations involving death.

Watson's two fundamental fears have hundreds of obnoxious possibilities, all traceable to the original two. Because of instinctive fear of loss of support, many persons find themselves in terror of chasms, depth, voids, distances, heights, ascents and descents of various kinds, water, boats, bridges, railings, climbing, aquatic sports, and in general any type of labor, activity, or amusement involving even a brief departure from solid footing. And because of an elementary feeling about loud noises, countless more persons are frightened by thunder, the whirr of motors, the roar of wind and waves, machines of various kinds, animals, explosions, fireworks, guns, crashes, bells, gongs, shouts, cries, and in general by din and tumult.

In addition, the recognized fears such as physical pain and

extremes of heat and cold are capable of much detrimental development. Too great a sensitiveness to pain often makes a child a moral and physical coward. Besides, this fear is a constant impediment to experimental and accidental learning, to regular advancement along social lines, and shuts out its victim from a wealth of valuable educating contacts and instructive experiences. Similarly, heat and cold, when feared unduly, cause a type of cowardice, which, although thoroughly ridiculous, results in much real suffering on the part of children and unpleasantness for parents and guardians. In fact, a large number of the "scenes" between parents and difficult children may be ascribed to children's exaggerated fear of physical pain, or heat, or cold. Reluctance or refusal to be washed, to have their hair combed, to get up in the morning, to take baths and showers, to change clothes, to run errands under uncomfortable conditions, any one or all of these may be due to children's oversensitiveness to physical conditions. A child's natural instinct to avoid physical pain, heat, cold, and other disagreeable states may develop inordinately as an outgrowth of actual physical inferiority or illness, or it may be the result of "coddling" on the part of oversolicitous parents.

The instinctive fear of jars and jolts apparently is rarely a destructive force. Under very unusual circumstances children may be roughly handled, or given brutal or abusive treatment. The type of defensive reaction in such cases furnishes a

pitiabile behavioristic study, but can scarcely be considered an ordinary outgrowth of the fear of jars and jolts.

2. Acquired Constructive Fears

Included in this category are those numerous fears implanted in childish minds by parents, spiritual superiors, teachers, educators, or other older persons, or acquired by children through experience, example, or precept, all of which operate to promote individual well-being, success and ultimate happiness.

In the spiritual order there are those wholesome fears preserved and transmitted from generation to generation, fear of sin, of judgment, of hell and damnation, of death under certain conditions, of Divine anger, displeasure, and punishment. These fears, deliberately inspired, are naturally imparted for constructive ends.

In the physical order there are the many fears which are the outgrowth of scientific knowledge, or which are acquired from people experienced along special lines, fears which result from actual personal experience or incidental learning, fears which are distributed in a wholesale fashion by the guardians of public health, safety, well-being, and general happiness. Fear of disease, contagion, of unsanitary or unhygienic conditions, of germs, bacteria, pests, certain foods, poison, drafts, exposure, chills, dampness, and in general of those things which threaten or menace health is certainly something to be desired.

Likewise there is in the physical order the fear of war, of

revolution, riots and mob violence, of famine and pestilence, of storms, drought, cyclones, tornadoes, of ship and train wrecks, collisions, automobile and other accidents, of financial losses, poverty, bank and business failures, and a host of other fears, which, accepted in moderation, are admittedly wholesome and desirable occurrences.

Considering the mental division of acquired constructive fears one recognizes fear of disapproval, reproof and humiliation, fear of special types of failure, of embarrassment, inferiority, and of confusion and many allied fears. It is in this group of mental fears that the greatest potentiality for harmful development seems to be found. However, of themselves these fears are highly constructive, and when used judiciously may become powerful incentives to wholesome growth.

3. Acquired Destructive Fears

Acquired destructive fears are not limited, as one might be led to believe, to those which have been accumulated by an individual, through unfortunate experiences, faulty information, or accidental association of unrelated causes and results, but on the contrary, they include in large numbers fears which have been deliberately transmitted by ignorant or unthinking parents, nurses, guardians, teachers, older brothers or sisters, and thoughtless adults. As in the case of the constructive fears, we may group the examples of these fears under spiritual, physical and mental.

Under the spiritual fears which may be well be termed destructive can be placed the exaggerated sense of the vengeance of God, the belief in His eagerness to punish, to crush, to exact. Thousands of children as well as many adults know the mental agony which accompanies scruples and the expectation of terrible punishments to follow trivial or even imaginary wrongdoing. Nervous breakdowns, inability to study or play, loss of peace of mind and other related ills in children can sometimes be traced directly to fears deliberately established by over-zealous instructors and well-intentioned "pious" persons.

Acquired physical fears occupy an important place in the average child's equipment. Naturally, in learning all the lessons which are now considered necessary to his safety in a complex world, the child accumulates many undesirable fears. Due to over-emphasis on the part of anxious parents, thoughtless demonstrations of terror on the part of adults in their presence, or idle threats to insure good behavior many children pass their early years badly handicapped by terrors. Practically every single contribution to the child's set of constructive fears is capable of becoming a destructive force through unwise elaboration or too vivid delineation. Instruction in health may develop inordinate fear of contagion or of infection; too much talk about the micro-organisms in water and food may render a person almost afraid to eat. Fear of accidents may develop so strongly that a child actually does not play; he may refuse to

take part in any games involving possible encounter with other youngsters; he may be unwilling to take any of the risks which seem to be a necessary part of a child's experimental education. The intense desire for personal safety and assurance frequently develops an inordinate fear of the dark and of the unknown, the latter to such an extent that the victim of this fear practically limits his progress to those accomplishments in which "he can see his way through."

There are fears of germs, fears of accidents, fears of sickness and death, fears of anything and everything that jeopardise one's feeling of safety. These are the "too much emphasis fears" that are given prominence because of the very solicitous doctors, nurses, and teachers sometimes found in child welfare work.

In addition to the more abstract acquired fears, practically every child seems to be well equipped with a large number of concrete fears which do not contribute to his welfare or his happiness. In this class come such common fears as doctors, dentists, nurses, policemen, teachers, automobiles, motors, machines of various kinds, animals, bugs, insects, people with physical peculiarities, strangers, salesmen, larger children, and an almost unlimited number of persons or objects which for some reason not apparent to adult reasoning are capable of inspiring fear.

Likewise in this group must be placed those fears which

in the strict sense of the word are not concrete, in that they do not have an actual existence, but which, as far as the children who fear them are concerned, are very real indeed. I refer to bogey men, ghosts, goblins, witches, and all of the allied beings of the imagination. When we consider that children live so much in their own world we may understand more fully how the fear of one or more of these things mentioned above is really a concrete physical thing. It is unnecessary to dwell on the fact that such fears are detrimental to happiness and to progress.

Lastly, in the matter of acquired mental fears which may be labeled destructive, the writer has already stated that fears of this type are potentially very numerous. There are comparatively few children who are not injured by a deliberately transmitted fear of reproof, or of disapproval, humiliation, embarrassment, or inferiority. Oddly enough, these fears are exactly the ones which a child will try most desperately to conceal, or to misrepresent, with the inevitable result of fresh effort on the part of those in charge of him to establish the unexhibited fear. In many cases fears of this nature have been established so deeply that a lifetime of struggle does not suffice to overcome the ingrained fear. It should be borne in mind that most authorities admit that the fear of failure and of ridicule is an instinctive fear; consequently the too-frequent appeal to this inherent feeling is almost certain to injure the helpless children who must either lose their con-

fidence or develop a thoroughly ugly defense against the fear which they cannot understand.

Needless to state, an allowance must be made for individual differences in classifying types of acquired fears as constructive or destructive. Some particular fear might easily be imparted to one individual to contribute to his general welfare, while the same fear might be a real source of difficulty and a destructive force to another differently constituted person who had unwittingly acquired it. Since all attempts to control fear must be made in individual cases, one needs only to determine in a special case whether a fear is constructive or destructive in that particular instance, in order to apply help.

Chapter IV

Causes of Fear

No one can be absolutely certain of the causes of all fears. Many demonstrations of emotion are obviously instinctive, and so intense fear often arises instinctively. In discussing the causes of fear only brief attention can be paid to those fears which are clearly inherent. The classification in a preceding chapter lists certain types of cases which are unmistakably not acquired, and a discussion of the cause in these cases is at best a matter of opinion.

Authorities are apparently agreed on the fundamental causes of fears that are inherent or instinctive. Watson's statement of two big causes should be generally accepted only when man is regarded merely as a biological unit. He distinguishes these two causes as loud noises and the withdrawal of support. He maintains that the essential situation seems to be a sudden, unexpected change in the environment. However, he frankly admits that this explanation does not carry us very far in understanding the causes of more complex and derived forms of fear (89:15).

Both loud noises and withdrawal of support threaten an individual's security. According to Dr. W. A. Evans, former Health Commissioner in Chicago, the absence of security is the

basis of fear. He says: "The great hunger of our times is for security.... It began with life, has run down the ages, and will always be the greatest of all urges.... This hunger for security has a social and not a natural basis. Inability to satisfy that hunger begets anxiety.... Anxiety is a disease in a certain sense. It is a mild form of the great root-stock disease-fear" (100:6).

There is reason for believing that a constitutional or inherited factor is often a contributory cause of fear. It is quite probable some children are born with more sensitive dispositions and are as a consequence more inclined to unpleasant emotion. In "Dreads and Besetting Fears" T. A. Williams states that "a constitutional tendency is a predisposing cause of fear" (94:20). From the viewpoint of the physiologist rather than of the psychologist we term this inherent proclivity a function of the endocrine glands or associate it with psychoanalytic formulations.

In the matter of acquired fears there is almost unlimited opportunity for speculation, deduction, and scientific study of origin. Ada Hart Arlitt has studied numerous cases, making use of the Behavioristic method of investigation, and has found fears that have been developed in some one of five ways: (1) by direct conditioning; (2) by transference of a fear state aroused in a similar object or situation; (3) by verbal asso-

ociations, as when fear is developed in one individual by warnings or suggestions about an object or situation received from others; (4) by imitation, as when an adult shows fear of lightning and thunder, and thus develops a fear of these phenomena in a child who has witnessed the adult's fear state; and (5) as a deliberately chosen means of control (4:7-10).

The writer, to facilitate this discussion, will discuss acquired fears under the following divisions: (a) fears acquired by imitation, (b) fears acquired by deliberate transmission, (c) fears acquired by association, and (d) fears deliberately engendered for disciplinary purposes.

(a) Fears Acquired by Imitation

One of the simplest known methods by which children acquire fear is imitation. Contact with adults or older persons who show fear has been demonstrated to be a real provocative of fear in children. The mother who runs into the house and slams the door when a strange dog appears will perhaps make her small child fearful of any dog. The indiscreet and thoughtless parent who in the presence of a two- or three-year-old child reads aloud, discusses and trembles over the details of a ravaging fire, of racketeering, of accidents, or of a burglary is laying the basis for fears of these things (7:138-40).

The conversation of an adult about lightning, thunder, and automobiles may cause fear in small children. The child who listens to a mature person describe how lightning makes things

burst into pieces and how huge trees are sometimes struck down will show fear of lightning storms when scenes of this type are shown on the screen (4:120-23). It would appear that children are highly sensitive to the older person's attitudes and that any manifestation of fear on the part of the older person usually results in the communication of his attitude to the children who witness it.

Arnold Gesell believes that fears of natural forces and forms are probably transmitted from one generation to another by social heredity (34:15). But the child's adjustment to his social environment in his first years is almost entirely imitative. Hence such things as thunder, rain and hail beating on the windows, and the rush and roar of wind are causes of fears which seem to be acquired by the average youngster, by the process of imitation, very early in life.

(b) Fears Acquired by Deliberate Transmission

"The fear of the Lord is the beginning of wisdom." So says Holy Writ, and from the earliest ages men have been striving to acquire this salutary wisdom. The old Hebrew law, with its rigid and intricate morality, was maintained in all its purity by the compelling force of a God-inspired fear. In the moral order there can be no justice without punishment, and no punishment without fear. Christ, although bringing into the world a religion of love, gave utterance to some of the most fear-inspiring words that the world has ever heard. So, in the

category of fears acquired by deliberate transmission, we must place that vast mass of fears included in the doctrines held by religions, sects, cults, and other groups, and regularly and systematically transmitted by established agencies to the young, to the ignorant, and to seekers after knowledge.

Likewise thousands upon thousands of big and little fears concerning physical health, safety, and comfort are acquired by deliberate transmission. Doctors, nurses, welfare workers, philanthropists, teachers, parents, and newspaper and magazine writers seem to be tireless in their efforts to inform old and young about every aspect of wholesome living. Every medium known to modern civilization is employed in making folks "conscious" of some danger, menace, or major or minor inconvenience. Advertising by poster, radio, circular, magazine, and periodical or newspaper has increased the public fear ratio many per cent. From the harrowing descriptions furnished by insurance companies of what might be anyone's fate down to the terrible consequences of pyorrhea or halitosis, there seems to be an endless chain of evils threatening the human race. Apparently most of a modern individual's fears have been acquired by transmission, and children in turn are receiving their share of safety lessons, health suggestions and warnings, admonitions, advice, and instruction, all thoroughly saturated with the elements of fear.

(c) Fears Acquired by Association

Association is easily the most prolific cause of fear in

children. As the word implies, fear is "associated" with some experience. In the case of children, in many instances there is an inability to distinguish what has actually in a situation caused fear, and thus an indifferent person, animal, object or place automatically becomes something to be feared.

A child whose finger has been caught and bruised when some careless person closes the automobile door will for a time associate fear with any automobile or with any persons who resemble the person who closed the door. Similarly, if a little one is hurt by a dentist wearing a white surgical gown, probably every person who wears white, from a waiter to a street-cleaner, will inspire a feeling of fear in him. Children who must take bitter medicine sometimes acquire intense fear of all bottles; an unhappy experience in the playground may make a child fearful of apparatus, cement, other children, directors, iron fences, or any other particular element associated by him with his disagreeable experience.

(d) Fears Deliberately Engendered for Disciplinary Purposes

Lastly we come to a cause of fear which must, unfortunately, be classed as a real source -- discipline. No importance need be attached to the little fears attributed to simple childish punishments which are quite in keeping with the gravity of offences and in no wise to be construed as cruel. But there is an amazing prevalence of fears among children due to a most harmful practice followed by many parents and older persons,

that of threatening troublesome youngsters with all kinds of dire misfortunes supposedly caused by innocent persons and things.

Particularly among ignorant people this practice is probably more common than the average person would believe. It is believed that some persons go through their entire lives with an uneasy fear of milkmen, or negroes, or old women, or Chinamen, or some other innocent group of people because as children they were told that a certain person belonging to that group would cut off their ears, or make them cross-eyed, or knock-kneed, or pigeon-toed, or cause them to stutter, or perhaps even eat them alive.

It must be clearly understood that no criticism is intended of those persons who inspire children in their care with a very wholesome fear of specified unpleasant consequences which will follow certain kinds of behavior. Fears of this type seldom injure, and rarely persist beyond the period of necessary control.

No reference is made in this chapter to some of the more fantastic causes of fear as outlined by such men as Freud and others. Discussion of their theories would lead nowhere.

Chapter V

Effects of Fear

Numerous and diversified are the effects of fear; in fact, in order to arrive at anything like an adequate knowledge of these effects it will be necessary to consider them under separate divisions. That there are unmistakable physical effects of fear, even the most ignorant person is fully aware; that the mind of a person in fear or terror does not function normally has been demonstrated to every man by his own experiences; and lastly, that the moral conduct of both children and adults becomes or may become distinctly abnormal in the presence of intense fear is so generally recognized that responsibility for conduct under such conditions is denied. Hence in this treatise the effects of fear will be considered under the three divisions of physical, mental, and moral results.

William S. Sadler tells us that fear weakens the heart by means of a double mechanical affection: (1) by decreasing the impulses arising in the cardio-augmentor centers of the medulla, resulting in the weakening of the heartbeat; (2) by greatly increasing the rapidity of the heart action. These changes are accomplished through the influence of the sympathetic nervous system. The sympathetic influences whip up the heart action

under conditions of fright and fear just as a panic-stricken driver sometimes lashes his frightened horse (72:15).

According to Freud, decided circulatory changes result from fear. There is a more rapid heart beat and a constriction of arteries of the abdomen which drives blood to the skin, lungs, brain, and skeletal muscles in large quantities. With increased stimulation in the lungs there follows more deep and rapid breathing. Beads of perspiration form on the skin and a process of elimination of heat begins (31:162-63). In addition, the adrenal glands are activated by the sympathetic fibres and the adrenalin which pours into the blood seriously affects many of the bodily organs (33:163-64).

On the same subject, Arnold Gesell states:

"Adrenalin generated by fear curtails the glandular and muscular activities of digestion, tightens the abdominal arteries, and excites the heart and lungs. There is a prolonging of the more prompt effects of the sympathetic nerves. In the lungs there is an expanding of small smooth muscles and a more free ventilation resulting in a speedier assimilation of oxygen and an emission of the products of fatigue. Greater strength and endurance may result from increased sensitivity to nerve impulses in skeletal muscles effected by adrenalin" (35:121).

According to Ada Hart Arlitt, the following processes are occurring when a subject is under the influence of fear. Impulses proceed to the adrenalin gland, causing a discharge of adrenalin into the blood. This substance acts on the muscles to increase their excitability to nerve impulses. It acts on the liver to produce a discharge of glycogen or blood sugar into the blood. The glycogen is carried by the blood stream to the

skeletal muscles, and provides additional food for them. The additional food and the heightening of excitability insure greater rapidity of movement, greater muscular strength, and lessened fatigability. A substance is produced in the blood which makes it clot more easily (4: 114-48).

In her work on "The Psychology and Early Childhood" Dr. Arlitt, writing of the effects of fear, states:

At the same time organic changes are going on there is an increase in the rate of the heart and in the number of respirations per minute, and the blood pressure is increased. The adrenalin acts on the lungs to cause greater expansion of the arterioles. These changes insure the rapid oxidation of the blood. The visceral arteries in the abdomen contract and force the blood to the skeletal muscles. Changes also occur in the digestive tract. There is a cessation of secretion in the salivary glands and in the glands of the stomach and in the intestines. The churning movements of the stomach and the peristaltic movements in the intestines also stop (4:51).

As one reads the literature of psychopathology and discovers how many cases of functional nervous diseases apparently started in childhood, one may conclude that many of these cases are probably the after effects of fear. The unusual excitement and acceleration of every bodily function are effects of fear. Strange, imaginary sensations in certain parts of the body are produced by fear. The very inhibition of the heart centers and the degree of inhibition follow fear. These functional nervous diseases are effects of the fear of disease (57:275).

There exists such a close association between the mental and the physical results of fear that it is not always possible

to completely isolate the two effects. Angell's statement about the effect of fear shows this close linking. He classifies the results of fear as follows: (1) the temporary suspension of voluntary control in the forward movement of consciousness; (2) the overflow of motor impulses into channels leading partly to the involuntary muscles and partly through hereditary influences to the voluntary system (3:12).

Upon the authority of William McDougall, fear, whether there is the impulse to flight or concealment, has a tendency to bring to a close all other mental activity, and by fastening its attention upon its object, makes a harmful and lasting impression upon the mind of even the young child (53:57).

Timidity is a self-evident effect of fear. The timid, shrinking child familiar to all of us owes his plight to his sense of fear. Fear may make its victim rigid. Or, as Tom A. Williams writes, another well-known effect of fear is the shy self-consciousness of the child, withdrawn and absorbed in day-dreams and clearly showing a feeling of inadequacy and inferiority (94:25).

Mosso shows that, owing to the effect of fear on the glands and muscles of the body, the child becomes distrustful of his own powers and afraid to venture. He may even become apprehensive of what each day might bring forth (58:221-29).

According to G. A. Morton, in his work on "Childhood's

Fears," inferiority feelings breed fears and fears breed feeling of inferiority. This writer comes to the conclusion that in practically every case the maladjusted child suffers from an inferiority fear complex (57:107).

Many psychopathic diseases are the effect of fear; in fact, it has been asserted that fear is the cornerstone of all psychopathic disease. A condition of vague anxiety does not long continue unattached to specific objects, for if there is nothing definite to which it can attach itself the imagination creates something. Therefore, the fear of the strange and unknown has an element of danger, since it may remain unassociated with any definite object and produce a state of vague fear, which state frequently results in serious mental disturbances.

The moral effects of fear are many and varied. A goodly percentage of the abnormalities in children's conduct are perhaps directly traceable to fear of some kind or another not properly controlled. Of course, not all abnormalities in behavior are related to morality, but behavior will be here considered as a phase of moral conduct. Nearly everyone has seen children who are so fearful of strange people that they are thrown into an emotional state upon seeing a stranger which causes them to stand speechless or to run shrieking for protection (69:18-19). And this fear of strangers is only one of thousands of recognized sources of sensations of fear, which in turn have uncounted avenues for manifestation.

Gesell says that fear always cramps or paralyzes the moral nature of the child. If the truth of this statement is granted, then one must look for many departures from moral standards when children are obsessed by or under the obvious influence of fear. Falsehood and deception result from unwarranted fear of punishment. Jealousy is frequently traceable to a modified form of fear. Grovelling superstition, with its attendant manifestations, is an outgrowth of imaginative fear. Many children, moved by fear, exhibit a stubbornness, a perversity, a contrariness which can only be understood when a keen observer can diagnose the underlying difficulty.

The relation of fear to moral conduct may easily be misunderstood. There is danger of error in interpreting these exhibitions of so-called traits of character, shown up under the influence of fear. The resultant harm to a child's nature is often life-long. Acts performed through fear and consequently possessing little or no moral value are accepted as manifestations of certain undesirable traits, whereas the child would probably never have developed the traits at all if the element of fear were not present. Once the idea has been fixed that a child possesses certain unwanted characteristics, attention is often focused on the special traits with disastrous results to the child's behavior and moral conduct.

The reader must be reminded at this point that while we have been discussing the more undesirable effects of fear he must

not lose sight of the power of fear as a moral force. A normal amount of fear has a very salutary effect on conduct and is perfectly compatible with serenity and peace of mind. The faculty which is designated as "conscience" depends in a large measure for its proper development on the growth of desirable moral fears.

It must be obvious to nearly everyone that the effects, physical, mental, and moral, of fear are numerous, far-reaching, and permanent. While no attempt has been made to include all the results of fear in this chapter, nevertheless the reader should have a general idea of the variety and the scope of the triple effects of fear. No mention has been made of the physical, mental, or moral potentialities of fear when used as a constructive force. The study of effects just completed concerns those fears which are acquired unconsciously, incidentally, accidentally, or in any manner other than by intelligent use with a definite objective.

Chapter VI

Controlled Studies of the Incidence and Causes of Fear

Despite the fact that a great deal of material has been written on the subject of fear, few controlled objective studies of this emotion are available in the literature and it is soon noted that most of the material not only in books but also in magazines is of the subjective, opinionated type. In this chapter the writer will present a summary and criticism of those few objective studies that have been made and are more or less readily available. The material will be presented in the chronological order of its appearance in the literature, covering about a ten-year period. The writer feels that to cover a period of time greater than that indicated would be outside the scope of the present piece of work; it is the more modern opinions that are of more immediate concern to present-day educators.

In December, 1921, John B. Watson and Rosalie Rayner Watson published a report on work done by them in the psychological laboratories of the Johns Hopkins University. In this article they quite frankly admit that a great deal of the work on which they are reporting is not controlled, and, as a consequence,

verified conclusions are not possible. They add, however, that this condition seems to be a prevailing one. To quote them directly:

Modern psychology catalogues most elaborate lists of instincts and emotions in human beings. These catalogues are not based upon experimental work but upon the preconceived opinions of the men making up the lists. At present we simply have not the data for the enumeration of man's original tendencies and it will be impossible to obtain such data until we have followed through the activity of many infants from birth to advanced childhood (107:495).

And getting down to our subject, Fear:

What are the stimuli (objects or situations) which will bring out fear responses in infants? Our observation shows that the stimuli to fear are quite constant and quite simple. If the infant is held over a pillow and allowed to drop suddenly the fear response appears. It can be brought out generally by a sudden shake or push or by suddenly pulling the blanket upon which it is lying. We might group all of these and say that sudden removal of support is an adequate stimulus to fear. The other most far reaching and important stimulus is that of a loud sound; for example, the striking of a long steel bar with a hammer is one of the most effective means of calling out this response. These are the common stimuli which are present almost daily in the life of every infant. The reaction or response to such stimuli is a sudden catching of the breath, clutching randomly with the hands, the sudden closing of the eyes, and the puckering of the lips followed in some cases by crying. In older children these reactions appear and in addition there is crawling away, running away, and in some cases hiding the face. We have found no other stimuli which will call forth fear in the very young infant. It has been often stated that children are afraid of the dark, or animals, of furry objects in general. We shall show later that this is not the case (107:506-07).

They make a detailed report on one infant, "Albert B.," who was especially chosen because of "his stolid and phlegmatic disposition." The child was eleven months of age and weighed twenty-one pounds at the beginning of the experiment. The one

experiment of value to us is the one with the white rat, in which the child's reactions, especially of fear, were noted. Dr. Watson at the time of the experiment entered the following notes in his record:

(1) White rat suddenly taken from the basket and presented to Albert. He began to reach for rat with left hand. Just as his hand touched the animal the bar (this refers to the steel-bar experiment mentioned in the first quotation) was struck immediately behind his head. The infant jumped violently and fell forward, burying his face in the mattress. He did not cry, however.

(2) Just as his right hand touched the rat the bar was again struck. Again the infant jumped violently, fell forward and began to whimper (107:511).

The tests were then discontinued for a period of a week, out of consideration for the child. Then the experiments were resumed, and it was found that the conditioned fear that was set up was transferred to many other objects immediately and without any additional experience in connection with these other objects. It was found that even after an interval of thirty days, during which time no experiments were performed, Albert retained both the original fear and the transferred emotional reactions (107:510).

It is unfortunate that the Watsons did not have more data and more subjects for so interesting a piece of work.

G. M. Stratton, in reporting on a laboratory study on the relation between emotion and the incidence of disease, found that persons who have had an illness tend to respond more

intensely to anger situations and "probably also to fear situations" than healthy persons do. He began his experiment by giving each of his 1,000 testees two papers, one containing brief, printed descriptions of some twenty situations that would tend to provoke "mild anger;" the other, a similar set of fear-provoking situations.

Each subject was requested to write down upon a form given him the date, hour, and approximately the minute of the occurrence of the particular emotion. Only those records were used which were made upon the day of the emotional reaction. This necessitated that a very close tab be kept on the reports that were made every day.

Separate composite scores were made for each emotion for that particular individual, from the information obtained from the individual, for anger or for fear. These records were carefully and accurately made. The reports with regard to fear were obtained in successive years and from two different groups of individuals. After an interval of some months the experiment was repeated with one of the groups. In all, a report of some 700 fears were had from 650 persons, and 1,350 reports of anger from 900 persons. The study was based upon more than a thousand individuals who made more than 2,000 reports.

In commenting on the data obtained, Dr. Stratton admits it is of rather low consistency as far as psychological returns are concerned and is subject to correction.

He offers the conclusions to which the facts point with the above-mentioned reservations fully in mind. He concludes:

There is a difference between the average scores of those whose history is free from disease and the average score of those whose history is of disease. The difference usually is so exceeding small that I should feel that it is probably quite accidental were it not recurrent in the same direction and in different groups of persons and in different samples of the same group. And this recurrent difference is such that individuals who have had disease show a somewhat more intense emotional reaction than do those who have not had disease.

But this is clearly true only of anger. Little or no connection appears between the history of disease and the intensity of the fear response.

The connection and disconnection with disease in general in the case of anger and fear are clearer than the connection or disconnection with a particular disease. My number of cases is usually too small when I consider only one disease to serve as the basis of sound judgment. But it seems probable that the diseases here considered are of quite unequal importance....

As for a difference or resemblance between men and women the facts here considered indicate that the same general relation between a past disease and a present anger exists with men and women alike and that with men and women alike there is the same ground for doubt or denial of a relation between a past disease and a present fear. There seems, however, to be this difference between men and women in general, that with men the connection between disease and anger is more pronounced than with women. That is to say, men who have had a history of disease appear to be thrown farther from the normal and into a readiness for somewhat more intense anger than do women who have had a similar history. And the importance of the particular diseases, it seems not improbable, is not entirely the same with men and women, Influenza, for example, which thus far has revealed little or no importance for the anger reactions of women, appears to be of considerable importance for the anger reactions of men.... (a) Disease may cause organic changes which in turn carry with them a lowering of the threshold of anger. (b) Recurring anger may cause organic or functional changes which in turn carry with them some lowering of the resistance to disease. And (c) the constitution which is less resistant to disease may in that very fact involve obscure nervous and psychic characters which mean a reduced resistance to the stimuli of anger, mean a lowering of the threshold of the anger-response. Any or all of these hypotheses seem in harmony with the facts thus far collected (105:21-23).

George M. Stratton made another valuable contribution to the psychology of fear in his report published in the American Journal of Psychology in December, 1927 (104:139). It deals principally with anger and fear and their probable relation to each other, to intellectual work, and to primogeniture. It continued the account of a study of conditions known in a less degree, with the purpose of adding to the knowledge of the causal connections of these important processes and it gives additional weight to the study of "Emotion and Incidence of Disease," which was completed the previous year.

The strengths of reaction to anger and fear were measured by means of self-rating scales and the actual occurrences of emotional situations were taken and compared with each other, with scholastic grades, and with position in the family.

The cases studied were of persons most interested and willing, namely, those in the Infirmary of the University of California. The entire class in general psychology co-operated with Dr. Stratton in the study of emotion; some assisted in making the test and others were subjects for the tests. The intelligence quotients were taken and recorded and a general medical examination made for each person taking the tests. About three days were given over to the observation of anger. Although it was quite generally conceded that anger and fear were related, mere observation did not make very clear what this relationship actually is.

In one particular instance it was found that sudden fear was relieved and passed into anger. A good example is in a case where one sees a young child in danger and then sees that the danger has been escaped. In this or similar cases it was somewhat apparent to the observers that the original fear had been replaced by anger.

There was a wish to know whether the person who is not more inclined to anger is not more inclined to fear. There was a definite positive correlation between the two types of emotive response which may be partially explained by the fact that they are both defense reactions. There was some evidence to indicate that in a given situation anger for a time may or may not exclude fear (104:139).

One hesitates to apply to statement very generally that the "psychophysical basis for strong anger (according to this interpretation of the evidence) is also in part the basis for strong fear; and weak for weak fear." This condition may be true only in certain ranges of mental life.

It was generally agreed that since anger and fear may be classed as defense reactions both may have the same fundamental desires at the base. Thus the common psychophysical basis for the two emotions may help to explain their resemblance in the field of psychology. But there was found to be much room left for contrast both in roots and fruits.

Those conducting the experiments found also that there is

no connection between either the emotion of fear and anger and scores on intelligence tests, but that both show slight negative correlation with academic grades. Their findings indicated, too, that the first-born in a family is more subject to anger than are the later children (104:140).

The theory that the threshold of anger and the threshold of fear are very near seems to be strengthened somewhat by the results of this experiment. It suggests that question, What is it that distinguishes and differentiates fear from anger?

N. Bayley under the direction of Dr. Christian A. Ruckmick made an exhaustive study of fear by means of the psychogalvanic technic, and the study was published in 1928 in the Psychological Monographs of the University of Iowa.

Pneumographic and galvanometric readings and introspections were procured from twenty-five observers. Diverse visual stimuli, mental work, and material dealing with words and music were used to draw out the responses. The greatest deflections appeared in connection with alarm, shock, and startle. Protracted excitement resulted in a diminution of bodily resistance. A distinction between startle and anticipatory fear was evidenced by the galvanometric readings and sustained by the introspections; reflexes effected by startle stimuli are temporarily more disconnected than those caused by anticipatory fears. Startle is more reflex in quality than mere apprehension. Many breathing changes were recorded, but they did not

mark the various emotions by specific differences (96:23).

The following table shows the descending order of magnitude of deflections according to reported emotions.

Table I
Deflections Resulting from Emotions (Bayley, 96:23)

% Mean	Emotions	No. of cases
169	startle, surprise or shock	53
123	fear	14
111	fear and apprehension combined	89
109	pain	19
108	apprehension, dread, expectancy	75
114	humiliation, embarrassment	3
80	anger, irritation	9
72	gruesome horror	5
60	disgust or repulsion	14
45	relief	15
35	neutral "didn't bother"	23
26	pleasant	25
14	slightly unpleasant	6

While the present writer does not use some of the terms N. Bayley has listed under the heading "Emotions," she is interested in noting that the second-greatest reaction had a

mean score of 123 and was described as fear. According to some authorities fear is very much the same as apprehension or dread, which with a mean score of 108 is classed fifth in Table I. If they are considered together they rank third. However, these slight differences are of no great significance. The most significant fact is that what may be termed startle emotions appear much greater than do the apprehensive fears, that is, in so far as they are measured by the psychogalvanic reflex. It appears that there is no actual standard by which it can be determined whether the stimuli used for the production of apprehension fears were of sufficient intensity to be comparable to those causing startle.

Taken as a whole, the stimuli were of such nature that startles and fears would have a tendency to be more intense than other things listed. If we grant this, we must accept with reservations a portion of the table we have presented. However, other studies have reported that fear stimuli cause the greatest number of deflections. These sudden, unexpected stimuli occasion the greatest change. This reaction was found to be true both when the classification was according to stimuli and to introspective reports of the emotion experience (96:23).

In November, 1928, Mary Cover Jones and Harold Ellis Jones of the University of California published in Childhood Education an account of a study of fear made by them. They had a pen 8' x 10'- 6" built and in this inclosure they scattered toys

and also placed two suit cases. There was a toy in one suit case and a snake in the other. If the child did not open the case containing the snake, an observer who remained hidden from the child pulled a string attached to the lid and the snake crawled out of the container. The experimenter studied the child's reactions. There was only one case of a child showing fear, but this reaction changed to a more favorable one the following day. This child, Doris, was about twenty-six months old.

The different reactions to the snake shown by the children can best be understood from the table which follows.

Table II

Reactions to Presence of Snake (Jones and Jones, 102:138-39)

Subject	Age	Reaction
1	1 year, 3 months	mild interest to attention
3	1 year, 7 months	wound it about neck
8	2 years, 3 months	looked into eyes
11	3 years, 8 months	I don't want it
12	4 years, 2 months	Can it drink?
15	6 years, 7 months	smiled

The experimenters made another test and used a large snake which they showed to children from a little over a year to ten

years of age. Each child was given an opportunity, supplemented by urging and encouragement, to handle the snake. The very young children -- that is those under two years of age -- showed no fear, and those from two to six years of age showed fear reactions that may be described as of a "guarded" type (102:136).

These results help support the hypothesis that the feared object is one which is perceived as new, and that the behavior manifested is that for which no appropriate reaction in the subject has been developed. Other experiments in which a frog was greatly feared, only help corroborate the findings resulting from the experiment with the snake and give more ground, perhaps, for the hypothesis already stated (102:136).

Under the title "Fear as an Inhibitory Factor in a Motor Function" Dorothy Elizabeth Bresnahan presents in a Master's thesis accepted by Loyola University, in 1929, a study of one of the most common fears, namely, the fear of water. She considers the instinct and emotion of fear and its relation to swimming and shows that fear may be caused by some painful, discomforting, or frightening experience while in the water.

A questionnaire was used and results obtained that may be of value to instructors and students alike. The present writer is interested, because of its bearing on her own study, in the following:

Table III

Age When Fear was First Experienced (Bresnahan, 98:69)

Age	Number
4.....	2
5.....	1
6.....	9
7.....	5
8.....	12
9.....	19
10.....	7
11.....	4
12.....	9
13.....	9
14.....	6
16.....	5
18.....	4
19.....	1
20.....	1
29.....	1

Six students did not remember when they first experienced fear, and as a consequence they replied that they "always feared the water." The above tabulation was the result of answers to the question, "Do you remember when you first experienced fear of the water?"

There may be some pertinent facts in what Miss Bresnahan has tabulated under the heading "Types of Fear Experienced." These are in substance the replies to the question, "Will you describe exactly what you fear?" (98:70). The result follows:

Table IV

Types of Fear Experienced (Bresnahan, 98:70)

24 feared putting their head under water -- afraid of choking
21 feared that they might be unable to regain footing
8 feared that they might get beyond their depth
5 feared their supposed inadequacy to meet the situation
4 feared cold and cramps
3 feared having others near them in the water
1 feared headache caused from exercise in the water
1 feared the noise of the water which hurt her ears
1 feared the height in diving

It seems to the present writer that some if not all of the fears thus described may have been contracted at any early age and as a result of unpleasant childhood experiences.

For seventeen years C. W. Valentine of the Education Department of the University of Birmingham, England, made a careful study of his own five children, and in September, 1930, published in the Pedagogical Seminary and Journal of Genetic Psychology a report of his observations and experiments. He entitles his report "The Innate Bases of Fear." He opens his study with the

following statement:

The question of innate bases of fear -- how far experience or suggestion, causes fears supposed to have an instinctive basis -- can hardly be settled except by a careful study of early childhood.

In the same decade Dr. J. B. Watson had boldly challenged the orthodox view of instinctive factors on the ground of observation of infant behavior. C. W. Valentine found evidence to contradict Watson's theory that most fears are learned by conditioning. Valentine grants it is impossible to be certain when fear is actually felt by a child. We can only observe the first appearance of signs, or behavior, and then draw our own conclusions, and in spite of the unreliability of these methods the psychologist can scarcely go beyond them. Referring to the earlier experiment of Watson's, already described, he says: "J. B. Watson claims that his experiments on a 11 month old baby show that the supposed innate fear of furry animals such as rats is due to experience and is not innate." He then calls attention to the fallacy in method which may affect some of the "cross-section observation" made on children at a given period, the danger of failing to allow for time for the maturing of impulse, emotion, or any trait, and the danger of assuming that because a supposed innate fear does not show at six months, such a fear when it does develop must be due to experience (106:394).

Criticising the results of some of Watson's later tests, he calls attention to the fact that the failure of infants to show

fear of animals at four or five months offers no proof that there was not lurking within them the germ of an innate fear that was not to ripen until ten or twelve months of age.

As a result of experiments on "conditioned fear responses" made upon his own children, Valentine suggests that in Watson's famous experiment, where a newborn infant, Albert, who had never been out of the hospital showed fear of a white rat used, this fear of the rat was readily established because there was an existing innate tendency, though as yet unawakened, to fear the rat.

We quote Valentine's argument which gives additional strength to his proposition that there are innate bases of fear:

This playing at fear seems to imply a craving for the stimulation of fear, and agrees better with the assumption of an innate tendency than with the idea of fear as merely a conditioned reflex (106:417).

Dr Marion E. Kenworthy's contribution to a round table on fear is printed in the Child Study Magazine for April, 1931. The study of children's responses immediately after birth led to selecting the title, "The Experience of Birth," as fitting for a work showing reasons why birth traumata may have serious effects upon the child's fear reactions in later experiences. Dr. Kenworthy has the viewpoint of an obstetrician as well as that of a psychologist, and quite plainly states that children's responses after birth reflect many elements which are suggestive of birth trauma origin.

The following direct quotation will best convey the value

of Dr. Kenworthy's study:

In the study of symptomatic fear reactions of children, one is immediately struck with the need for a complete consideration of all the cause and effect values involved in the child's total experience.... Early origins of anxiety and fear are very numerous.... Here this point of view dovetails very closely with that of the behaviorists, although it antecedes the latter in registering the child's emotional reactions before he is born instead of afterward.... In being torn from this center of omnipotence he experiences not only pressure but also the psychic threats which register as anxiety.... There are interesting aspects of this relationship between the birth trauma and later fears. In the first place, we compare the child born with a very difficult labor, perhaps of a mother who has had no child before, with a child where, because the mother has had other children, the birth canal has been somewhat enlarged so that labor is markedly simplified. We might compare the physical and psychical reactions of these two groups with those of children born by an uncomplicated Caesarean section.... The placid and more easy-going baby is the baby who has had the easy time.... This he makes use of, tying to it elements of anxiety which are a part of his pattern of life, predisposed by the psychic traumata of birth (103:222-24).

Dr. Kenworthy has made a worth-while study. It is the opinion of the writer that similar studies might profitably be made at the Lewis Memorial Maternity Hospital, Chicago.

In reporting on the "Conditioning of Overt Emotional Responses" in the Journal of Educational Psychology, 1931, Harold Ellis Jones describes quite fully the establishment and later course of a conditioned emotional response in a child fifteen months of age. His report is practical as illustrating, in a single experiment, many of the phenomena generally found in studies of conditioned reflexes in animals. We quote the passage explaining the procedure:

The experiment was conducted in an isolated chamber, on a platform inlaid with thin brass strips; the strips were one-

quarter inch in width, separated by quarter-inch spaces and connected alternately to the positive and negative primaries of a Porter inductorium. For greater quiet, a fifty dv. tuning fork was substituted for the reed make-break of the inductorium. Care was taken to adjust the secondary coil of the inductorium, so as to give an electro-tactual impulse restricted to a range of low intensities; the stimulus value may be described as a mildly uncomfortable "tickle" rather than as a "shock." The subject for this experiment was Robert B., a child fifteen months of age, of a markedly stolid and apathetic disposition, able to walk, and possessing a speaking vocabulary limited to fewer than five words. When he was brought to the laboratory a group of toys on the platform attracted his attention. He sat down in the middle of the platform and remained contentedly at play when left alone in the situation. Two observers, concealed behind a one-way vision screen three feet away, recorded the child's overt behavior in as great detail as was possible by a simple observational method. The inductorium, batteries, and a system of bells and buzzers, were housed in an apparatus box in a corner of the room. Robert's original reaction to an electric bell, which was sounded for approximately two seconds, could be described as "mild interest," shortly becoming "indifference."

After four repetitions he no longer gave any observable reaction to this auditory stimulus. Stimulations were now given, at intervals of about fifteen seconds, associating the bell with the electro-tactual stimulus: After two seconds with the bell the inductorium circuit was established, and auditory and tactual stimuli were continued together for three seconds. The applicator of the tactual stimulus (felt either on hand or foot, or both) resulted in a prompt shifting of the skin areas which were in contact with the conducting strips; in each case a slight but unmistakable startle reaction was registered by expressional changes such as a box-shaped mouth, or a puckering or pouting of the lips, and frequently by vocal murmurs or a slight whimpering which ceased at the end of the stimulation period. In the periods between stimulations, Robert played quietly with the toys, and showed no overt indications of a persisting apprehensiveness or emotional upset. After three associations with the primary stimulus, the bell was sounded alone; for the ensuing five stimulations, startle reactions were recorded which were indistinguishable, from those elicited by the primary stimulus; the second observer, who of course heard the bell, but had no direct means of knowing where the electro-tactual stimulus was used, judged that the associations with the unconditioned stimulus were being continued through eight (instead of through merely the first three) successive trials. Two stimulations by a buzzer were also effective in giving startle reactions, although with appreciably greater delay. A small hand bell, of very

different timber and frequency from the conditioned stimulus, elicited no reaction. In the following trials an extinctive inhibition was established to the bell, and six reinforcements were given; in five of these, the electroactual stimulus was received on the foot and not on the hand, and it was noted that the stimulus to the foot showed a reduced effectiveness. At the fifteenth trial, after eighteen presentations of the conditioned stimulus alone a C-R was still present. The subject moved his foot sharply, turned his head away, and vocalized in a manner interpreted as scolding."....

Opportunities were lacking to test the later course of the C-R; in view of the mildness of the primary stimuli employed in the original conditioning, it may be expected that the C.R. would be short lived; the effect of telephone and other bells would be to inhibit rather than to maintain the reaction. In conducting an experiment of this nature, it is obviously desirable to select a child of stable make-up and to proceed with careful attention to the possibility of psychological damage. At the age under consideration, and with properly supervised conditions, it is fair to say that the experiment involves less risk of emotional upset, or of any persisting ill effects, than an equivalent amount of time spent in routine physical examination.

For purposes of classroom presentation, the writer has found it useful to summarize the foregoing data in the form of the following table.

Table V
Overt Responses

Stimulation Number	Stimulus	Overt response	Process
	Current	++	Startle reaction to unconditioned stimulus
1-4	Bell	+	Investigatory reactions
5-10	Bell	-	Negative adaptation
11-13	Bell, current	++	Conditioning
14-18	Bell	++	Startle reaction to conditioned stimulus
19-20	Buzzer	+	Generalization (irradiation of excitation)
21	Hand bell	-	Specialization of the C.R. (d
22-24	Bell	+	(discrimination)
25-26	Bell	-	Extinctive inhibition
27-32	Bell, current	+	Reinforcement
33-50	Bell	+	Re-established C.R.
After 24 hours			
51-54	Bell	-to+	Summation (?)
55	Buzzer	+	
56	Hand bell	-	
57-60	Bell, food	-	Temporary external Inhibition
61-62	Bell	+	
63-65	Bell	-	Extinctive inhibition
After 72 hours			
66-70	Bell	++	Spontaneous recovery (disinhibition)

Summary

In reviewing the experimental studies that have been made on the subject of fear, we are struck by the following facts:

(1) Practically all the work done shows the influence, either conscious or unconscious, of the experimental work of Watson; this is especially noted in the studies of N. Bayley (96), Harold Ellis Jones (101), Harold Ellis Jones and Mary Cover Jones (102), and Marion M. Kenworthy (103).

(2) Watson's theory that most fears are learned by conditioning is contradicted by the results of the study of the innate bases of fear by E. W. Valentine (106).

(3) We find the psychogalvanic technic used in some of the experimental work. Since this merely is an objective measurement with some promise of proving fruitful, it is almost too early to say anything very conclusive about the results (96). The questionnaire, which is so often unfavorably criticised by some research workers, was rather cleverly used in the study of Miss Bresnahan's (98). These are so distinctly unlike -- that is, the use of the questionnaire and the use of the psychogalvanic technic -- that we have singled them out for mention.

(4) Despite the diversity of results obtained from the studies available and the opinions expressed by the experimenters, there is in them a promise, somewhat dimly outlined perhaps, that from today's studies, however insufficient they may be,

will come the almost perfectly developed technic of tomorrow.

Chapter VII

A Study of Children's Earliest Fears

In an effort to determine just what are the outstanding fears that beset young children, the writer asked the pupils of the sixth, seventh, and eighth grades of the Plamondon School, Chicago, to record for her their earliest fears. This experimental group was composed of a total of 274 boys and girls who were in attendance in February, 1931, the time of the study. The group included both boys and girls, in exactly equal numbers, the chronological ages of whom ranged from eleven to seventeen years. Although the writer has no objective measurements on which to base her belief, she is of the opinion that it may be safely assumed that all members of the group were of average intelligence in that none of them had case histories in the Child Study Department of the Chicago Public School System, where children who are suspected of being subnormal are examined. The children were quite definitely from the poorer and less gifted classes of society and were, for the most part, children of Russian peasant emigrants.

In planning this study the writer was confronted with several rather serious difficulties. There was, first, the very real difficulty that the children might not be able to recall their earliest fears. Obviously, there was nothing to remove

completely this obstacle; memory does vary with the individual. The only solution seemed to be a slight change in the object of the study itself, to change it from a study of earliest fears to earliest remembered fears.

Then there was possible hesitancy on the part of the pupils to reveal this earliest fear. And again, might the child, unable to remember the emotion asked for, merely write the first one that might flash through his mind, in an attempt to be helpful? Or might he record what he has been told he should fear? These rather serious possibilities needed to be eliminated as much as possible if the study was to have much value. It seemed to the writer that all she could do was to instil a sense of sincerity and honesty in the pupils at the time the data were being obtained. This solution will be discussed more in detail when the procedure of the actual study is described.

All the data were gathered by the writer personally. She visited the various classes who were to be the subjects of the experiment and described briefly just what was wanted. By talking in a friendly and conversational tone the writer feels that she helped to remove any hesitancy on the part of the pupils. Small slips of paper were then passed out, two to each pupil; on one of these they were asked to write their names; on the other they were asked to write what they recalled as their earliest fears. They were told to reflect for a short time before writing that they might the better remember. Such a request no

doubt suggested the seriousness of the situation and the desire for true responses. It is to be noted that the name was not to be placed on the paper on which the fear was recorded. The only information other than the fear to be recorded on that slip was the sex of the individual. It would seem, then, that the directions given as well as the thought connoted tended to minimize the difficulties that confronted the writer when she was planning the experiment. After all we seem to assume in a great many of our dealings with other human beings that they are for the most part honest.

After the data were gathered together they were assorted in an attempt to make a frequency distribution of them. The results are presented in Table VI. In an effort to make the findings more concise many of the responses have been lumped together. No child feared "animals," but some particular species of animal. No child feared "specific types of people" or "inanimate object," but a dentist or a fire engine. These general classifications are given more specific treatment in Tables VII, VIII, and IX, where more detailed discussion and interpretation will be given. Table VI, however, brings out one extremely interesting fact: 19 boys and 17 girls, 13% of the entire group, experienced an early fear of darkness. It is also to be noted that 36 boys and 50 girls feared some form of animal; in other words 26% of all the boys tested and 36% of the girls recalled this early emotion. In general, one must be

struck by the extreme reasonableness of the greater part of the fears recorded. One is, however, rather startled that a child remembers "failure" or "operation" or "school" as his earliest fear.

Table VI

Earliest Remembered Fears Experienced by Boys and Girls

Fears	Boys	Girls	Total
Animals	36	50	86
Specific Types of People	27	32	59
Darkness	19	17	36
Inanimate Objects	15	10	25
Lightning	6	7	13
Bogey Man	3	3	6
Corpse	4	1	5
Fire	2	3	5
Ghosts	3	1	4
Injury	4	0	4
Water	2	2	4
Fire Gong	3	0	3
Horrible Dream	0	3	3
Noises	2	1	3
Solitude	2	1	3
Thunder	0	3	3

Fears	Boys	Girls	Total
Train Whistle	3	0	3
Crossing Bridges	2	0	2
Being Run Over	0	1	1
Failure	1	0	1
Nocturnal Noises	1	0	1
Operation	0	1	1
School	1	0	1
Shadows	0	1	1
Spanking	1	0	1
Total Number of Cases	137	137	274

Table VII, which records the fear of animals, shows not only that children fear dogs more frequently than they fear any other animal, but also that a larger number of girls as compared with boys fear dogs. The predominance of this fear is due, no doubt, to the fact that city children encounter dogs oftener than they do any other animal. It is notable that the total fear of snakes and rats is identical. The significance of this is interesting, since there is so much repugnance connected with both animals. The combined numbers of those who feared bulls, chickens, cows, bugs, ducks, geese, hogs, tigers, wolves, and worms do not equal the number of girls who feared dogs. It may

appear strange to find the fear of a wolf and of a tiger listed. These fears can be explained by what the children related shortly after the data were collected. One boy had seen a tiger at a circus and was fearful of it. A girl was afraid of a wolf, although she had never seen one, simply because her brother told her one had been captured in Douglas Park about five years previously.

The data presented in Tables VII and VIII impress one with the thought that children often fear obviously harmless persons and animals. Let it be noticed that they fear policemen more than they fear teachers, and fear gypsies less than they fear teachers. There is nothing unusual in the evidence that there is agreement in the total number of fears of gypsies and of kidnapers. But it is remarkable that more girls than boys feared gypsies. "Doctors" are no more feared than individual men or negro boys are. This information would not be very flattering to a physician, but it does suggest the likelihood that modern parents do not frighten their children by threatening to take them to the physician. A dentist was feared less often than a physician. This may indicate that dentists were not consulted as often as radio speakers so frequently advise that they be visited, or that those who were consulted practiced painless dentistry. The strangest fear in this group is the fear of the German Kaiser, whom the boy has never seen but has heard his parents describe.

Table VII

Children's Fear of Animals

Species of Animal	Boys	Girls	Total
Dogs	10	16	26
Rats	3	11	14
Snakes	8	6	14
Horses	3	5	8
Cats	3	4	7
Insects	4	0	4
Bull	1	1	2
Chickens	1	1	2
Cows	0	2	2
Bugs	0	1	1
Ducks	1	0	1
Geese	1	0	1
Hogs	0	1	1
Tigers	1	0	1
Wolf	0	1	1
Worms	0	1	1
Totals	36	50	86

Table VIII

Children's Fear of Specific Types of People

Type	Boys	Girls	Total
Policemen	3	5	8
Teachers	5	2	7
Gypsies	0	6	6
Kidnapers	4	2	6
Doctors	3	1	4
Individual Man	0	4	4
Negro Boy	4	0	4
Dentist	2	1	3
Old Person	0	2	2
Father	0	2	2
Cat Catcher	0	1	1
Chinaman	0	1	1
Fireman	0	1	1
Gang	1	0	1
German Kaiser	1	0	1
Girls	1	0	1
Indian	0	1	1
Negro Woman	0	1	1
Sandman	1	0	1
Santa Claus	0	1	1

Types	Boys	Girls	Total
Truant Officer	1	0	1
Women	0	1	1
Strangers	1	0	1
Totals	27	32	59

In Table IX we have presented a list of inanimate objects that some children fear. A hard baseball, a train, and high places are feared equally by boys only; the girls admit no fear of these things. The more sheltered life of a girl may partially account for this fact. This does not hold in the cases where the girls fear an automobile, a haunted house, a grave, a baseball bat, a hearse, a hot stove, and a gun. There is no satisfactory way of accounting for these fears unless we assume that the girl who has brothers is apt to experience fears that other girls do not experience.

Table IX

Children's Fear of Inanimate Objects

Object	Boys	Girls	Total
High Places	3	0	3
Hard Baseball	3	0	3
Train	3	0	3
Boat	1	0	1
Baby Buggy	1	0	1
Automobile	0	2	2
Bullets	1	0	1
Ferris Wheel	1	0	1
Vacuum Cleaner	1	0	1
Fire Engine	1	2	3
Haunted House	0	1	1
Grave	0	1	1
Hearse	0	1	1
Baseball Bat	0	1	1
Hot Stove	0	1	1
Gun	0	1	1
	15	10	25

The following conclusions based on this study are not presented as generalizations applicable to all children for the number of subjects is entirely too small and the group is not a random sampling even of the school population. The results, however, should indicate a trend, and as such are valuable.

1. Children fear animals oftener than they fear anything else. The fear of dogs outnumbered the fear of any other animal.

2. Next in order is their fear of specific types of people, and in this group the policeman is most feared and the teacher almost as much as the policeman.

3. Children fear darkness less frequently than they fear specific types of people. Boys fear darkness more often than girls do.

4. Granting that the information tabulated is reasonably reliable, it would seem that the great bulk of the listed childish fears is not inherited and has been acquired in some manner.

Chapter VIII

A Plan for the Control of Fear in Children

If any attempt is to be made to control the fears which beset young children, the writer must presuppose the ability on the part of the reader to accept her aim and viewpoint. It would be impossible to cover all types of fear individually, to discuss their control and how it is to be accomplished, so it will be necessary that the reader be able to apply general formulae to specific cases, if any good results are to be looked for. He must naturally know whether a particular fear should be avoided, eradicated, or controlled before attempting to achieve his specific end. Sufficient means to enable the reader to determine the desirability or undesirability of a special fear will be offered by the writer in the subsequent discussions.

There have been some very valuable general suggestions for the general control of fear made by recognized authorities, suggestions which the writer has summarized later in this chapter, but at this point an attempt is being made to be more specific about suggestions and recommendations. Therefore the writer will follow the divisions or classifications of fear recognized earlier in this treatise, viz., fears to be avoided,

fears to be eradicated, fears to be controlled or conditioned. Under each of these heads there are the four groups assembled according to their method of acquisition and to their desirability.

FEARS TO BE AVOIDED

A. Instinctive.

It would be sheer nonsense to attempt to discuss ways and means of avoiding instinctive fears. However, it is eminently sensible to consider how to prevent such fears from becoming excessive or abnormal. Recognizing certain fears as natural to all men and generally constructive in tendency, the writer will discuss the commonest ways in which abnormality develops, and how to avoid its development.

(a) By imitation:

The instinctive fears of children are strongly influenced by the attitudes of those about them. Just as childish fears may be allayed by an exhibition of calmness in trying situations, so also may these same fears become violently exaggerated by unwise demonstrations of real or imagined fear on the part of excitable older persons. Expressions of intense fear of God, of His punishments, or of His judgments made where children may hear will very soon be part and parcel of childish viewpoints. Similarly, terror of death, or fear of falling from high places, or unusual fear of loud noises is often abnormally developed in children as a result of their listening to timorous, neurotic,

or nervous individuals who delight in voicing their fears. And everyone knows how very frequently children imitate expressed fears of physical pain, or of extremes of heat and cold, even when they themselves have not the slightest idea of what is involved in the fear. Those who are with children have a serious obligation to refrain from furnishing models of miscellaneous fears and dreads for observant children to imitate. This is especially true in the case of fears implanted by nature in everyone, and capable of giant development if unwisely encouraged and cultivated.

(b) By transmission:

Transmission is perhaps the least common method by which an instinctive fear may develop to abnormal proportions. Occasionally there will occur a case of ill-advised instruction of a child concerning God; a case of deliberate or even unconscious overemphasis of the fear-inspiring elements of a Supreme Being, which results in the development of a fear so overwhelming that the harm done may last for a lifetime. Comparatively few of the common instinctive fears of children develop to abnormal states by transmission. Transmission is fundamentally a deliberate, conscious process.

(c) By association:

Many fears of children reach an unusual intensity due to association of two unrelated events, which causes them to attach the effect of one to the cause of the other, or vice versa. No

conscientious parent would think of telling a little child suffering from measles or mumps or tonsillitis that God sent these ills because He was displeased with the tiny sufferer. Likewise in the matter of life's vicissitudes and trivial disappointments, no thinking person should link man-made happenings with the Providence of God. Nevertheless, if an investigation were made, many cases would be found of children who have a distinctly unlovable concept of their Creator, thanks to viewpoints expressed in their respective homes.

(d) By discipline:

It is not at all uncommon for parents and for those in charge of children to employ instinctive fears for purposes of discipline and control. This procedure always involves serious risk because of the inability of those who encourage these fears to check the development once it is under way. Too frequent appeal to a child's fear of ridicule will result in either supersensitiveness or callousness; too frequent summoning up of his fear of failure may eventually destroy his initiative. Experienced persons avoid using either of these fears as instruments of discipline. The temptation to use them is very strong because both are very easily employed and apparently effective; but the efficacy is short-lived and purchased at a price that is out of all proportion to the good apparently acquired.

While on this subject it will be necessary to make some reference to a pernicious practice sometimes employed as a means

of discipline, that is, subjecting children to extremes of heat and cold, particularly the latter. While cold water has been known to bring some children to their senses very quickly, nevertheless its use in some cases may be decidedly harmful. Likewise compelling children to touch hot objects to give them a wholesome fear of being burned is not a fair way of dealing with a fear that is inherent in all of us.

Lastly, one should not invoke the fear of God as a means of disciplining small children. Such a practice is clearly contrary to the teachings of One who said: "Suffer the little children to come unto Me and forbid them not; for of such is the Kingdom of Heaven." And to speak of God's anger at a childish offence in which there is no moral question of right or wrong, but which is merely a violation of adult conventions or a disturbance of adult convenience, is an unpardonable crime against defenceless childhood.

FEARS TO BE AVOIDED

B. Acquired.

Acquired fears in children far outnumber those which are instinctive. In fact, if it were not true that the great bulk of childish fears is acquired, there would be little object in any discussion about avoiding fear. Since the writer has classified acquired fears as spiritual, physical, and mental, it would be well to follow the same classification in discussing which fears should be avoided.

(a) By imitation:

Parents and older persons who lack adequate religious instruction, who have superstitious beliefs, or who lack ordinary common sense in spiritual matters are responsible for most of the acquired spiritual fears of children. Only by shielding children is as far as possible from contacts with ignorant persons can the little ones be spared the distorted notions of things of the spirit. What adults fear in the hearing of children, these same children will also fear, unless the fear is overcome or counteracted. But in too many cases no one gives attention to this transfer process, with the result that the children must carry around the newly acquired fears until they accidentally stumble upon an antidote or eventually acquire some accurate information.

Similarly, in the matter of acquired fears of the physical order, parents and educators and those who are frequently associated with children should suppress fears to which they are inclined to give expression. Strangers who come to the door are visibly feared; mice and rats are objects of expressed horror; spiders or other insects cause little screams of apprehension; someone hates to go to the dentist's; someone else is violently afraid of burglars and is always worried about his safety or the safety of his things. The imitative process works very well; children witnessing any of these things will very soon have the same fears.

Also, in the case of less tangible things, accidents, disasters of various kinds, sickness, and the like, fear is very easily inspired in the little ones who must listen to the dispensers of gloom. The likelihood that children do not know exactly of what they are afraid does not alter the situation much. The fears are acquired just the same, and when knowledge is acquired, later, oddly enough the fears hang on.

(b) By transmission:

Transmission of acquired fears is nearly always done with the very best of intentions on the part of the transmitter; but the result is not less harmful for all his good intentions. Stories intended to be merely entertaining frequently equip youngsters with fears of things they never knew existed. Needless to state, motion pictures may transmit a distinctly new set of fears to the little patrons. And overemphasis of health, safety, or physical comfort usually brings in its wake a very undesirable group of fear of those things, which tends to interfere with the standards set up.

Clearly those entrusted with the care of children have an obligation to protect them as much as possible from ill-advised fears acquired through these various agencies of transmission. A little more care in the selection of stories to be told to children, a little more supervision of motion pictures attended, and a greater degree of watchfulness over the manner in which instruction is given will do much to lessen the transmission of

useless and destructive fears.

(c) By association:

The most important types of fear acquired by association are those involving illness, injury, pain, and death. In general, children should be kept away from sick people, from repulsive sights, from too close a view of the sorrow and sadness which accompany death. It should be sufficient for most persons to know that children do not have the faculty of distinguishing the various elements which compose a scene of sorrow or suffering. By association, one single terrifying element mixed in with twenty normal or natural things or events will be enough to inspire a child with a horrible fear of twenty-one things. This may sound like an exaggeration, but those who know children will admit that it is true. In those affairs of life where children need not take part, it is far better that they be spared the possibility of harmful fear associations.

Not all pains and injuries are physical. Many are mental and spiritual. Bearing in mind the child's lack of capacity for disassociating elements of impressions, the reader will understand how many apparently incomprehensible fears are acquired -- fears of going to school, fears of playgrounds, or of the park, or of certain houses. It would be well to remember, if one wishes to spare children unnecessary and destructive fears, that one fear-inspiring element is sufficient to poison a group of pleasant experiences. This may refer to anything -- church,

study, games, companions, picnics, or almost any known place, activity, or group of people.

(d) By discipline:

A survey of fears actually admitted by any group of youngsters will reveal the prevalence of fears obviously acquired as a disciplinary measure on the part of an annoyed parent or older person. By far the greatest number of these fears will be found to be harmless persons or objects within the child's range of experience, who or which have been endowed with terrifying possibilities for purposes of discipline. Doctors, policemen, mailmen, nurses, teachers, truant officers, dogs, horses, and dozens of other things are the subjects of fanciful tales. If the child does not do this or that or if he acts thus and so, an impossible something will take place; the policeman will take him away, the doctor will cut out his tongue, a big dog or horse will eat him up, or some other ridiculous catastrophe will result.

If fears of this type were not so common, any thinking person would say that nobody could be so deliberately cruel to a child as to give him such a fear. But anyone who deals with children in any numbers is familiar with the hysterical outbursts and the panic-stricken struggles of children who are obsessed with terrible fears of doctors, teachers, and in general of people without a single fear-inspiring characteristic in their manner or disposition. The injury done to a child by

imparting to him one of these ridiculous fears continues for years after; the open trust and confidence natural to childhood can never be fully recovered; when it becomes desirable to give a boy or girl a wholesome fear of someone or something really a menace to his happiness and to his welfare, there is no basis of trust and confidence on which an older person can approach the younger.

No intelligent person will ever threaten a child with anything that is not likely to happen to him. In the spiritual order no one has any right to assume that such and such a punishment will follow any particular act, or that in any particular situation Divine Providence will make any special arrangements. Yet it is not entirely unheard of that children have been given the most gruesome fears of punishments which they may expect for something they did. Ignorant people sometimes go so far as to promise that certain dire results of a spiritual kind will follow the most indifferent acts, such as whistling, or loud talking, or boisterous conduct. The obligation for parents and those in charge of children is obvious: to protect little ones to the utmost of their ability from those persons who secure obedience through the implanting of pernicious fears, and to refrain scrupulously from ever using an innocent agent as a symbol of retribution.

FEARS TO BE ERADICATED

It should be obvious to nearly every one that an instinctive fear, by its very nature, cannot be eradicated. What is instinctive can be controlled to a greater or less extent, but the inherent quality in certain fears will always prevent their complete disappearance in an individual. On the other hand, when a fear has been acquired, there is a definite chance of its eventual overthrow. Therefore the writer's purpose is to deal with fears which, having been acquired, may under certain conditions be eradicated. Again the three classifications of spiritual, physical and mental fears will be followed.

(a) By imitation:

Where an unusual fear of God has been established in a child's mind, through thoughtlessness, or carelessness, or actual example of parents or of those in charge of him, the only practical manner of procedure is for these guardians to overcome the acquired fear by demonstrations of calmness, control, and quiet confidence in God's Providence. To discuss feelings of fear experienced by children because of their imitations of their elders as something to be controlled by reason is a futile process, because the fixation of attention on the undesirable fear has a tendency to establish it more deeply.

Often a special effort will be necessary. Frequent references to the opposites of fear-inspiring characteristics, in a loving Father, little stories of God's love, His mercy, His

kindness, His patience will in time obliterate earlier fears of an avenging Taskmaster. And not to be overlooked is one of the simplest methods of help known to those who are much with children, that is, the quiet diversion of interest from one thing to another. Since children are so prone to imitation, any fresh interest manifested by someone in the presence of a child will be immediately rewarded by a childish burst of enthusiasm for the new interest. Parents and others might remember this in dealing with expressions of fear by children; the faculty of imitation, if judiciously used in time, can do much to eradicate any undesirable fear acquired by children through the thoughtless example of their elders.

The above statement is of course applicable to a wide diversity of physical fears which every child apparently acquires through listening to others. Fear of germs, poisons, illness, drafts, aches and pains, an extreme dislike of physical discomforts amounting almost to a fear of them, may be manifested by many children who have only heard about these things from unthinking complainers among older people. There is nothing to do but deliberately to set out to give children a different environment, one of normal health and normal acceptance of little hardships. What has been acquired by imitation must be lost by imitation.

Similarly a host of specific fears, of persons, of animals, of insects, of special noises, of special situations, of certain

duties or obligations, are often witnessed in children solely because a parent or older person gave unwise expression to mere dislikes, or whims, or even to a desire for an audience. Working by opposites is the only solution; cheerfulness must take the place of gloominess where tasks are concerned; there must be sane acceptance of unavoidable things instead of pointless whining.

Rarely is a fear acquired by imitation lost by reasoning or by enforced association, for in most cases such a fear lies unexpressed, and only when a situation involving it arises does a difficulty appear. Opportunities for apparent pleasure are shunned by children, and no one knows why; a new activity has no appeal; children refuse to meet strangers. Not infrequently an imitated fear underlies such behavior. It is only by changing the example set for children that the little folks will give up the fears which they have acquired.

Children's mental fears, where they exist, are as a rule not acquired by imitation, and consequently not to be overcome in that fashion.

(b) By transmission:

The two commonest channels by which undesirable fears are transmitted to children are instruction and entertainment. Clearly there is a heavy obligation resting on those in charge of children to supervise carefully these two necessities in a

child's life. Stories and motion pictures are perhaps the most fruitful source of supply for transmitted fears. Over-zealous instruction, overemphasis of warnings, too much solicitude on the part of older people may sometimes result in undue fear in children; but fears of this nature lack the horror, the terror, and the hair-raising propensities of fears acquired through seeing or hearing what is entirely unsuited to childish minds.

But what is to be done about fears once they have been transmitted?

Depending upon the nature of the fear, there are several different methods of procedure. If by any chance a fear has a natural foundation in the physical weakness, illness, or inferiority of a timorous child, building up his general health is always the first step toward ridding him of his fears. If this fear is mental, mental health can be acquired by building up a child's self-respect and self-confidence by judicious praise, by appealing to his pride, by telling him stories which stress courage and heroism.

Parents are directly responsible for the programing of a child's day. It is very possible to so arrange a child's time that he is pleasantly, actively occupied all day long, that he have plenty of rest and sleep, that his companions are right for his age. A fear which a child does not have time to think about, which he is not permitted to experience, very quickly disappears from his mind. This statement is particularly applicable to the

more fantastic fears acquired through unsuitable stories and motion pictures. If a youngster is healthily tired at night he will probably sleep soundly and will be spared many of the terrifying mental images which seem to trouble wakeful children.

Another very powerful method for eradicating fears which have been transmitted to children is by intelligent instruction and appeal to reason. Of course in many cases this procedure will not do. We may speak reasonably about sickness, germs, and poisons; we may explain that wild animals do not inhabit city streets; but there is little to hope for in talking about the safety of automobiles to a child who has just seen a very vivid portrayal of a terrible wreck in a motion picture. But where a fear comes within the realm of reasoning, with patience it can usually be eradicated.

Prayer is an invaluable aid against any kind of fear. In those comparatively rare cases in which children have been unwisely instructed in religious matters a habit of prayer is perhaps unexcelled as a means of establishing a more rational viewpoint. Children cannot retain fear of anyone with whom they learn to converse familiarly.

(c) By association:

A fear acquired by association is always the result of a composite impression. There is always cognizance of something disagreeable, linked inevitably with whatever person, object or

place seems to be associated with it. The fact that in many cases the association is wrong, that there has been faulty reasoning from cause to effect, does not alter either the resultant fear or lessen its vividness. It will seem logical if we say that if a cure be hoped for, it must be effected as the fear was acquired, that is, by association.

Most fears realized through association are physical or mental. In the physical order are fears of special persons or types, teachers, postmen, policemen, negroes, Indians, Chinamen, old people, people with glasses, or any of the many numerous generalizations made from isolated childish experiences. In addition there are the many objects which somehow or other become unpleasant and consequently fear-inspiring. There are instruments, objects of punishment, bags, bottles, matches, toys, traps, machines, and an almost unlimited number of possibilities for association of a class of objects with unpleasant experiences. In the realm of animals most children acquire fears through some form of association; they have been chased by a dog, scratched by a cat, frightened by a rat, bitten by an insect, stung by a bee, or in some fashion made distinctly uncomfortable through some contact with an animal. Likewise, the idea of fear through association extends to places, to schools, to classes, to church, to playgrounds, to houses, to rooms, to offices.

In the realm of things less concrete are the no less

baffling fears of darkness, solitude, shadows, twilight, and the somewhat vague fears allied to these. And then there are the purely mental fears of failure, of reproof, and of humiliation, which may sometimes become such formidable obstacles to a child's peace of mind.

The treatment of this widely diversified list of fears will vary in particular cases, but the general procedure is the same. Briefly, present the object of a child's fear to him in a pleasant setting. In most cases where parents are concerned it is a question of whether or not they consider the eradication of a child's fear to be worth the trouble it will take to cure it. A cure may take time, it may involve inconvenience, and it always requires patience.

Perhaps the treatment will mean allowing a child to have a dog as a pet, little conversations with a policeman on his beat, a visit to this place or that place to enable a child to see or meet the object of his worst fears or patient explanations repeated many times of what something is made of, or of how something works. Efforts expended in eradicating childish fears usually repay those who make them: the less a child is handicapped by fears the greater are his chances for learning, development, leadership, and ultimately for success.

(d) By discipline:

Fears acquired as a means of discipline are intrinsically vicious. Usually they have their foundation in falsehood. To

correct the untruth would destroy all belief in the integrity of the one who threatens. Fears established for purposes of discipline must remain with their victims as permanent injuries, or give place to a greater evil, the loss of children's trust and confidence in their parents and guardians.

However, should parents be so misguided or carried away by temper as to threaten children with policemen, firemen, dogs, doctors, bogey men, or any of the other miscellaneous forces destined to carry off children, at least do terrible things to the little ones, there is nothing to be done but to hope sincerely that the youngsters will forget about what was said. Not very sound discipline, perhaps, but eminently more practical than hoping that the children may remember the stupid lies which no emergency could possibly justify. Children will eventually discover, whether parents think so or not, that they were imposed upon, but in the meantime they will have acquired two things: a habit of fear and the knowledge that they cannot believe the things their parents tell them.

FEARS TO BE CONTROLLED OR CONDITIONED FOR USE

Fear is pre-eminently necessary to man's success and happiness in this world. And it is infinitely more so to a child's well-being and development. The question naturally arises, What fear should a man have? Likewise, Of what should a child be wholesomely afraid?

The writer has made a thorough survey of instinctive and acquired fears, attempting to show that some are constructive and others destructive. It now remains to sum up those fears which, because of their effects, are genuinely salutary. No attempt will be made to indicate method, except to state that a fear, in addition to promoting his general welfare, should never be given to any one for any other purpose than to enable him to protect himself from the thing to be feared. Under no circumstances whatsoever should a fear ever be used as a means to some other end.

In the spiritual order the writer recognizes certain fears which are highly desirable: a wholesome fear of Divine anger and judgment, a horror of sin and its consequences, a fear of displeasing constituted authority as represented by parents, teachers and other superiors. These fears, when properly established, will tend to promote a child's best development and most lasting happiness.

In the physical order, the only real fears which are desirable are those fears of things which seriously threaten a child's health and safety. Those fears which only involve loss of comfort, or of convenience, or of luxury will always prove to be handicaps in the long run. Analysis of a child's environment will indicate just what fears are essential to his safety. Every other fear should be avoided.

In the mental order, a fear of what is base, or ignoble,

or degrading will be a child's greatest asset. His inherent fear of ridicule and of failure, if not misdirected by parents and teachers, is capable of development into a powerful force, strong enough to carry a child through any number of difficult situations.

There has been a wealth of general suggestions offered for the successful struggle against fear in children, and it might be well to repeat some of them at this point. Perhaps the most important element in the efforts against abnormal fear is the establishment of the proper environment for the young child. Everything possible should be done by parents to create a sense of security. Arnold Gesell gives this advice to parents concerning their relations with their children: "Praise their successes and avoid constant criticism of their faults. Surround their slightest efforts with the aid of encouragement. Avoid ridicule in any form. Never make a comparison with another child to the child's disadvantage. Save him the pangs of insecurity and jealousy which are by-products of fear" (36:12-15).

Love also is important. In fact, too much emphasis cannot be placed on the importance of this factor in a child's life. It is, without doubt, the greatest single element in the child's environment. As Bertrand Russell says, "The thousand ancient fears obstructing the road to happiness can be avoided by bestowing love upon children" (70:2-18).

Too many admonitions are almost certain to result in an attitude of fear on the part of the person listening. A child has the right to make a few mistakes, and unless a real injury is imminent, he should be allowed a reasonable amount of trial-and-error experimentation. A constant repetition of warnings will eventually destroy the initiative of even the most adventurous child, and if it does not make him a coward it will at least render him too timid for his best development.

There is a definite class of fears which cannot be nullified, fears which can only be overcome by a mental or a volitional process. These are usually the unreasonable ones. Quieting assurance may correct them: self-control will help and a growth of courage will bring a cure (35:12). Every attempt at self-control must be praised and reassurance given. Positive not negative treatment promotes courage and the correction of fear.

According to Tracy, the mental hygiene of fear seems to resolve itself into the admitting of fear and then striving to act as if one were unafraid. The wise parent makes the child face the situation he fears, and the child after meeting the object of fear has the feeling of conquest and courage (86:18).

"Fear as an obstacle to growth and development in the young child must be removed by education and a positive attitude of courage cultivated through successive stages of higher appeal to the concerns with the self that are at the basis of fear. Noble ideals must be set up and bravery suggested" (36:30-31).

Christian ideals can be set before the young child as a means of correcting fear (53:20). Teach the child who is old enough to talk a short prayer as a corrective measure of fear (51:12). Give the child rich play experiences to promote growth in self-confidence as a means of correcting fears of strange things and the uncanny (50:20).

Birney says that there is nothing more effective and essential than sympathetic firmness in correcting the children's fears (7:32-33). Through firmness and tenderness fear can be sublimated into respect and reverence. But the element of kindness must always be present, or all effort will be wasted.

Those who deal with children should accept the fact that fear as an emotion is as normal a thing as is respiration and, like the process of respiration, is a healthy condition when it is easy, gentle, regular, and carried on without noise. In disease, respiration may be slow or unnaturally frequent; the same irregularity may occur in fear.

In conclusion the writer submits a list of practical suggestions compiled by a committee appointed by the Boston Public Schools. The points brought out are eminently practical (97:12-13).

School Document No. 2 - 1928 Boston Public Schools on Training the Emotions CONTROLLING FEAR states, "Among the more common means of controlling fear are the following:

- I. Withdrawing the fear object. This means is often appropriate when the fear object is not likely to be met in the future.
- II. Helping the child gradually to become used to the fear object.
- III. Associating a pleasant object with the fear object.
- IV. Bringing the child into group action with those in whom he has confidence and in whom he sees no trace of the fear in question. Thus, with resulting sense of conquest, he may be brought happily through the fear situation.
- V. Explaining to the child so that he sees his fear to be groundless or excessive.
- VI. Discussing the fear with the child. This discussion may include:
 - a. Reminding the child how natural and common fear is.
 - b. Helping the child to recall the origin of the fear.
 - c. Recalling the child's past successes in overcoming fear.
 - d. Assuring the child of future success.
 - e. Indulging in kindly humor. The child's laughter will help him to feel superior to his fear.
 - f. Making the child conscious of the injurious results of fear, and thus appealing to his instinct of self-preservation.
 - g. Quoting maxims and proverbs.

h. Quoting instances of courage and bravery in history and in literature."

The statement has been made that Hippocrates, the Father of Medicine, advised his disciples to choose remedies so constituted that if they did not do any good at least they could do no harm. We vouch for our plan with the same assurance with which the disciples of Hippocrates were able to vouch for their prescriptions.

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The thesis "Early Childhood Fears," written by Lenore Bernadette McCarthy, has been accepted by the Graduate School of Loyola University with reference to form, and by the readers whose names appear below with reference to content. It is, therefore, accepted as a partial fulfillment of the requirements of the degree conferred.

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