The emotions are deeply rooted in man’s cultural as well as his biological heritage. Viable social systems exist under the most diverse political and economic ideologies, but no social system can long survive once it fails to provide for the emotional needs of its citizens (cf. Hebb & Thompson, 1954; 1968; Leyhausen, 1967), or fails to control or channel those emotions in ways tolerable to or advantageous for the social system. Different societies have moulded and shaped emotional experience and expression by a great variety of means, depending upon historical, geographic, economic, and other factors. Lazarus, Averill & Opton (1970) describe the following four strategies:

1. One way in which culture influences emotion is through the perception or appraisal of emotional stimuli.
2. Direct influence on emotional expression without the necessary intervention of altered perception is a second way in which culture may influence the emotional response.
3. A third way in which culture influences emotion is through the shaping of social relationships and systems of judgment which emotional concepts presuppose.
4. Certain conventional forms of behavior, e.g., mourning rites, courting and marriage rituals, and institutionalized aggression stem from and help reinforce the particular social structure.

According to Hebb & Thompson (1954; 1958) “in most primitive societies it is clear that man has generally found himself ringed around by malignant ghosts and devils, with beneficent spirits in the minority, and has found it constantly necessary to spend time, effort, and wealth to propitiate even the friendly ones. Fellow members of the tribe commonly possess evil powers; and the one who has the evil eye is feared and hated, or killed according to circumstances. For any one of the members to be greatly different from the others in appearance, habits, skills or tastes would be more than apt to cost him his life. As for an outsider, even of the same race, language and culture – any foreigner is distrusted and feared. These are well-established facts of human behavior, and not rare exceptions either. However, if they are cited, and if one cites also the concentration and slave-labor camps of our own generation, to show that man is to be thought of as a wild animal, emotionally unstable and often vicious, the answer will be that these things may happen if people are taught as children to behave in these ways, but that fear, hatred and cruelty are not inherent in man’s nature. If so, one might wonder at the coincidences that allowed the same teaching to originate in so many parts of the globe”.

The evolutionary theory of the emotions

Darwin (1873) gathered a great deal of evidence, mostly observational and anecdotal, to illustrate the basic continuity of emotional expression in lower animals and in man. The baring of the fangs of a dog, or wolf, he noted, is related to the sneer of the human adult, and flushing of the face in anger has been reported in widely diverse races of man as well as in
certain species of monkeys. Defecation and urination during fear has been observed in rats, cats, dogs, monkeys, and humans. “Even insects express anger, terror, jealousy and love” Darwin wrote. He used four kinds of evidence for his conclusions about the innate basis of emotional expressions: (a) emotions appear in very young children in the same form as in adults; (b) they are shown in identical ways by those born blind; (c) they appear in widely distinct races and groups of men; and (d) they appear in related forms in many kinds of lower animals. Especially Eibl-Eibesfeldt (1970 et seq.) has gathered impressive evidence that the mimic of anger/rage/paroxysmal fury and its ontogeny, is transculturally invariant. It is probably as little consciously modifiable as the concomitant pattern of physiological changes induced by the autonomic nervous system (see Chapter Physiology’). From the point of view of communication, this rage mimic is highly conspicuous, impressive, redundant, awe inspiring and/or fear provoking; a highly effective signal of threat. The evolutionary theory of the emotions has been further elaborated by Plutchik, Panksepp, Weisfeld, and Ekman, among others. This is Plutchik’s (1962 et seq.) account: All organisms, in order to survive, encounter certain common problems. These problems are created by the nature of the environment, which in certain ways is similar for all animals. In order to survive, any organism must take in nourishment and eliminate waste products. It must distinguish between prey and predator, between a potential mate and a potential enemy. It must explore its environment and orient its sense organs appropriately as it takes in information about the beneficial and harmful aspects of its immediate world. And in organisms which are relatively helpless at birth and for a while thereafter, there must be ways of indicating the need for care and nurturance. The mechanisms by which these functions are carried out will vary widely throughout the animal kingdom, and various rituals may become associated with them, but the basic prototypic function will remain invariant. This functional approach to emotion implies that the recognition by an animal of the beneficial or harmful aspects of its environment means that it must evaluate its environment in some way. This evaluation process represents the cognitive (‘appraisal’) aspect of emotions (Plutchik, 1970).

The simplest concept concerned with behavior is that of movement. Movements are organized into patterns of behavior, and each species has characteristic ways of organizing its movements. Behavior patterns are in turn organized on a higher level. Related patterns are sometimes associated in long chains, as in the courtship behavior of certain birds, or they may be combined and recombined in different sequences. Where several patterns are associated with a common function, we may speak of a behavioral system. This important basic concept implies that each behavioral system has associated with it its own peculiar physiological and emotional motivational systems which can be identified. Scott (1969) distinguishes the following behavioral systems and their principal functions: 1. ingestive (intake of solid and liquid nutrients); 2. investigative or exploratory (investigation of environment); 3. shelter- or comfort-seeking (adaptation to change in physical environment); 4. sexual or epigamic (reproduction); 5. agonistic (adaptation to conflict); 6. allelomimetic (contagious behavior for group cohesion and safety; MacLean [1990] calls this ‘isopraxis’); 7. Epimiletic (care of young and other adults); 8. Et-epimiletic (care soliciting, signalling for care or assistance); 9. Eliminative (disposal of urine and feces).

With respect to primates, Zuckermann’s (1932) original view that sexual actors almost exclusively accounted for the social coherence (the so-called ‘socio-sexual principle’) is not acceptable any more to recent investigators; emphasis is placed also on other cohesive factors, such as the attraction between the infant and, in the first place, the mother and other group members (see Wynne Edwards, 1962; Harlow, 1959; Hall, 1965; Wickler, 1967; Chance,
Plutchik (1962 et seq.) condensed these behavioral systems and their biological functions and assigned the emotions to them as follows:

<table>
<thead>
<tr>
<th>Subjective language</th>
<th>Behavioral language</th>
<th>Functional language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear, terror</td>
<td>Withdrawing, escaping</td>
<td>Protection</td>
</tr>
<tr>
<td>Anger, rage</td>
<td>Attacking</td>
<td>Destruction</td>
</tr>
<tr>
<td>Joy, ecstasy</td>
<td>Mating, possessing</td>
<td>Reproduction</td>
</tr>
<tr>
<td>Sadness, grief</td>
<td>Losing contact</td>
<td>Deprivation</td>
</tr>
<tr>
<td>Acceptance, greed</td>
<td>Eating</td>
<td>Incorporation</td>
</tr>
<tr>
<td>Expectancy, watchfulness</td>
<td>Sensing</td>
<td>Exploration</td>
</tr>
<tr>
<td>Surprise, astonishment</td>
<td>Stopping</td>
<td>Orientation</td>
</tr>
<tr>
<td>Disgust, loathing</td>
<td>Vomiting, Defecation</td>
<td>Rejection</td>
</tr>
</tbody>
</table>

Emotions may be considered to have two basic functions:

(1) Monitor function; information about the internal states; signalling to the organism that some strong motive is in operation, or rather some (conflicting) motives since most emotional states are motivationally mixed (e.g., anger and fear). The diversity of behavior shown in threat and courtship can be understood in terms of ambivalence between a relatively small number of behavioral tendencies. Lorenz (1967; see also Leyhausen, 1967) puts the case more strongly: “It is important to realize that behavior determined by only two drive components is almost as rare as that caused by the impulse of a single instinct, acting alone”. For this reason he speaks of the ‘parliament of instincts’. One major function of the emotional apparatus is thus the continuous feed-back steering of adaptational activity (Bastiaans, 1969; 1970; 1972). The second main function may be called the ‘communicative’ or ‘social signal’ function. So it may be stated that behavior is expressive at the organismic level and communicative at the social level.

Von Holst & von St.Paul (1962) have experimentally analyzed, by means of brain stimulation eliciting parts or all of instinctive acts, the types of interaction between two or more conflicting motives:

1. Superposition where both activities occur;
2. Overlapping where superposition occurs but the two acts are changed in intensity;
3. Oscillation, where equally motivated acts alternate in appearance;
4. Cancellation where equal but opposite acts result in the performance of neither;
5. Transformation where apparently opposing acts produce completely new behavior;
6. Suppression, where one of two opposing drives is dominant, the second act appearing only as an afterdischarge.

The Emotions (G.G. Thompson, 1962)

Many students of emotions have tried to identify what might be regarded as primary or original emotions which all creatures have in common and which might be regarded as providing the basis for the countless mixtures, nuances, and gradations of emotion which we identify in the language of everyday life. Lists of emotions that have been proposed as the primary emotions are of historical interest (Jersild, 1946).

Shand (1920) listed seven emotions: fear, anger, joy, sorrow, curiosity, repugnance, disgust. Ribot (1903) described the ‘primitive’ emotions as fear, anger, affection (from which later are derived the ‘social’ and ‘moral’ emotions), self-feeling or egoistic emotion, and sexual emotion. McDougall (1926) listed seven pairs of instincts and correlative emotions, including: flight-fear; repulsion-disgust; curiosity-wonder; pugnacity-anger; self-abasement (or subjection)-negative self-feeling; self-assertion (or self-display)-elation (positive self-feeling); parental instinct-tender emotion. Watson (1919) and Watson & Morgan (1917) confined the list to three: fear, rage, and love.

Emotions at birth

According to some psychoanalysts, the child is capable of profound emotional experiences at the time of birth and perhaps even before birth.

Freud (1936) implies that the unborn child is subject to feeling: “The fetus can be aware of nothing beyond a gross disturbance in the economy of its narcissistic libido. Large amounts of excitation press in upon it, giving rise to novel sensations of unpleasure”.

The event of being born, according to some writers, represents not only a drastic physical upheaval but also a traumatic psychic experience.

Rank (1932), in speaking of the trauma of birth, maintains that the newborn child is subject to anxiety, and he claims that there is a relationship between the child’s earliest phobias and the impression which the birth experience made upon him. Freud (1936) questions this conclusion, but he comments that the human infant “is sent into the world more unfinished” than the young of other animals, and that it is the “biological factor of helplessness... [which] brings into being the first situation of danger and creates the need to be loved which the human being is destined never to renounce”.

In speaking of the infant, Isaacs (1936) says that “knowledge is lacking, understanding has not yet begun: but wants and wishes, fears and angers, love and hate are there from the beginning”. According to Bender (1939) “When a child comes into the world he comes in lonely, and he is afraid”.

As a result of his investigations, Sherman (1927) proposed a genetic theory of emotional development. He concluded that emotional behavior in the newborn infant is not differentiated beyond the simple feelings of ‘pleasant’ and ‘unpleasant’. The infant makes a positive-approach response to ‘pleasant’ stimulation, and a negative-withdrawal response to ‘unpleasant’ or noxious stimulation. With increasing maturation and experience the infant learns to make those responses that are most likely to attract and retain pleasant situations, and to avoid or resist unpleasant circumstances. When one kind of reaction proves to be inadequate for maintaining or acquiring a satisfactory state of affairs, another type may be tried out. “This accounts for the frequently observed changes from the aggressive or
destructive type of reactions that we classify as ‘anger’ to the avoiding reactions or flight that we describe as ‘fear’, and vice versa”. Thus we see that Sherman’s theory starts with two primary emotional states and accounts for the addition of other emotions on the basis of learning principles. Blatz & Millichamp (1935) presented a somewhat similar theory of emotional development. Also Bridges (1930; 1932) has evolved a theory of emotional growth very similar to Sherman’s. Bridges’ theory is more complete, although somewhat more speculative, than the explanation offered by Sherman.

Bridges arrived at her theory as a result of three years’ study of emotional behavior in nursery-school children and extensive observations of emotional responses among the infants in the Montreal Foundling and Baby Hospital.

Bridges starts with an undifferentiated emotion of ‘excitement’ during early infancy. This state consists of uncoordinated skeletal and visceral reactions in response to any intense stimulation – internal or external in origin. “Some of the visceral reactions become differentiated from the rest, conditioned to certain stimuli, and combined with particular skeletal responses as a result of experience to form the various well-known emotions”. Thus we see the joint interaction of maturation and learning in the emotional growth of children. According to Bridges the first two emotions to be differentiated from the parent trunk of excitement are delight and distress (at about three months of age). Delight is characterized by relaxation, smiling, and cooing in response to some satisfying situation. Distress in response to certain disturbing stimuli is marked by muscular tension, crying, and checked breathing. At or about six months of age distress is further differentiated into fear, disgust, and anger. The skeletal responses of aggression and avoidance combine with the skeletal-visceral reactions of distress to form the emotions of anger and fear, respectively. By approximately twelve months of age the positive emotion of delight becomes further differentiated into elation and affection, the former in response to events and objects, and the latter with regard to persons. By 18 months of age jealousy has been differentiated from the distressful stem, and affection has been further differentiated into positive responses to adults and to children. Around 24 months of age only one new emotion appears, joy, which is differentiated from the parent stem of delight.

Bridges speculates that by five years of age the emotions of shame, anxiety, disappointment, and envy have been differentiated from the distressful stem, and the emotions of hope and parental affection from the positive stem. The finer nuances of emotional expression found in adult life are acquired through further maturation and learning in the subsequent years of childhood and adolescence. Bridges concluded that there appear to be no distinctive patterns of visceral response corresponding to the different emotions. The same visceral pattern may lead to flight and a verbal response of fear in one situation, and to aggression and anger in another setting. Moreover, a fearful response may change to an angry response within the same environmental situation without any detectable change in visceral activity. The overt actions of the child may vacillate between approach and withdrawal in such emotional states as fear and anger, love and hate, and other bipolar labels for the same visceral involvement. The pattern of visceral response and overt behavior is not always the same when the child is ostensibly experiencing a given emotion. In one instance of violent anger the face may become pale and drawn with distress, in another similar situation his face may be flushed and mobile. It is readily apparent that the patterns of visceral and skeletal response often differ from child to child for the same emotional state. There are, nevertheless, common elements in emotional expression among children and adults. These common elements make it possible for professional actors to portray stereotyped emotions on the stage that are easily interpreted in the same manner by the audience (G.G. Thompson, 1962).
Crying and temper tantrums are fairly frequent accompaniments of anger in young children. In a study extending over a two-year period, Ricketts (1934) studied the crying of preschool children during anger episodes. The total number of anger outbursts among these children decreased between three and four years of age. There was a parallel decrease in kicking, pushing, striking, struggling, and crying, and an increase in fussing and scolding with age. Crying occurred almost twice as often in the home as in preschool during anger outbursts. Anger episodes in the home resulted in 37 per cent of the cases from conflicts over toilet and dressing routines, as contrasted with 3 per cent in the preschool. In the preschool, conflicts over playthings caused about 64 per cent of all anger outburst, as contrasted with 21 per cent in the home. Here it can be seen that anger is very likely to appear in children when their purposes come into conflict with the purposes of other children or adults (G.G. Thompson, 1962).

Landreth (1941) has shown that the crying (anger in most instances) of nursery-school children is preceded by quite different factors in the home than in nursery school. The majority of the conflicts in nursery school were with other children, whereas in the home the conflicts arose largely with adults during health routines. Jersild & Markey (1935) in their study of conflicts (and anger outbursts) between preschool children over a two-year period recorded several hundred social conflicts. They found that children who occupied a smaller play space were more likely to be frustrated and demonstrate aggressive behavior. The children with lower socio-economic status showed far more aggression than boys and girls from higher levels, a condition that probably reflected less supervision of play situations typically found in the lower socio-economic strata. In one of the nursery groups that moved from a rather strict nursery-school teacher to a more permissive kindergarten teacher the number of overt conflicts more than doubled in frequency. No record was made of the different types of displaced aggression that probably took place during the initial nursery-school experience.

In the schema of Bridges (1932), anger is differentiated from the general matrix of emotions at about six months of age. By this time perceptual and motor development is sufficiently advanced for infants to show some forms of aggressive response. With increasing age perceptual growth opens up new goals toward which the infant can strive, multiplying the number of frustrations that may eventuate in the anger response. Simultaneously with this type of growth the small child’s social perceptions are increasing, demonstrating that anger and aggression are frowned upon and often punished by parents. In this developmental process the child is generally experiencing more frustration, but is learning to control his overt anger in order to prevent even more serious frustration and punishment (G.G. Thompson, 1962).

The manner in which children with advancing growth are able to control their anger outbursts is demonstrated in the investigation by Goodenough (1931). In this study over 1800 instances of anger outbursts were recorded by the mothers of forty-five children between the ages of seven months, and seven years and ten months. These observations were made over a one month interval of time, along with certain information about the environmental factors leading up to and following the anger episodes. The highest frequency of anger outbursts for both boys and girls occurs at one and one-half years of age. The sharp decline in anger demonstrations during the following year can probably be attributed to children’s increasing sensitivity to social demands and increasing ability to resolve their frustrations by other forms of behavior. The fairly consistent sex difference in frequency of anger episodes is concordant with the general findings. Goodenough’s observations suggest that situations leading to anger in the child are more likely to occur in his home if parents are inclined to be anxious. From everyday observation one can get the impression that the more a parent is troubled and torn by conflicts the more
occasions there will be for the child to be troubled. But even in the most serene home there are bound to be frictions and thwartings leading to anger. It would be helpful if we had a clearer conception of the phenomenon of anger as a frank and inevitable reaction to the robust realities of life as distinguished from the play or irascibility and peevishness which springs from hidden anxieties (Jersild, 1946; 1965).

As a child grows older and as his relations with people outside the home become increasingly important to him, there is an increase in frequency of annoyances pertaining to people other than his relatives (Jersild & Tasch, 1949), just as nonrelatives play an increasing role in his everyday joys and satisfactions. In a study of 250 junior high school pupils, aged 11 to 16 years, by means of interviews and other methods, Hicks & Hayes (1938) found that the following circumstances, in order of frequency, most often made the children angry: being teased; people being unfair to them; a sibling taking their property or imposing on them; people lying to them; things not going right; people being sarcastic; and people being bossy. Most of these conditions, it can be seen, relate to people and characteristics of people that infringe on the child’s comfort, his pride, or his conception of what others have the right to do to him or expect of him. One item on the list indicates that friction between siblings is still an important source of annoyance to children in their early teens (Jersild, 1946; 1965).

In a study including both junior and senior high school pupils and dealing specifically with conflicts between children and their mothers, Block (1937) found that 71 per cent of the young people checked an item to the effect that they were disturbed by having their mothers hold brothers or sisters up to them as models of behavior. Many other items pertaining to desires for independence, nagging of various kinds, restrictions of various sorts, were also checked with high frequency. Many children (half of the boys and over four-fifths of the girls) also reported that they had been disturbed because the mother insisted that they must take a brother or sister with them wherever they went. Findings such as these indicate that the child’s need to protect his pride, his independence, and his self-respect represents the most important basis for anger (Jersild, 1946; 1965).

At the adolescent level, many children are annoyed not only by specific parental practices but also by parental traits and habits (Stott, 1940).

At the college level, Gates (1926) likewise found that people more often caused anger than things. Meltzer (1933) also found that conditions arising in connection with social relationships were a frequent cause of anger at the college level. Another frequent cause was failure in activities that had been undertaken. The fact that there are many conditions in everyday life which continue to be annoying to people over a wide age range has been brought out in a study by C. Alexander (1946) who questioned people in the age range from 10 to 50 concerning their antipathies, and in a study by Conrad & Jones (1942), who obtained information concerning the annoyance encountered by a sampling of about 300 children yearly for a period of about 5 years beginning in the sixth grade.

Among the circumstances in the environment that made children more susceptible to anger in Goodenough’s (1931) study were the following: the presence of many adults or many older siblings in the family group; visitors; a tendency on the part of a child’s elders to be critical or overanxious or uncertain, or inclined to nag about small matters; a concern about the moral goodness or badness of the child’s behavior rather than its appropriateness from a developmental or situational point of view; inconsistency in discipline; past experience in gaining objectives by a show of anger.

Among the organic factors noted by Goodenough as contributing to increased irascibility were the child’s state of health as indicated by colds, bed-wetting, constipation, etc.; delays in feeding; the presence of fatigue and previous sleeplessness. The influence of factors such as fatigue and hunger on emotional susceptibility has been noted also by Gates (1926) and
Young (1937) in studies of college students. Stratton (1929) found that adults who had a history of illness during early childhood tended to be somewhat more subject to anger than persons who had no history of serious illness.

Another factor that directly or indirectly disposes a child to anger is the assignment of tasks that are very difficult or impossible for him to perform (Dembo, 1931; Keister & Updegraff, 1937); restrictions in space, both psychological and physical, or having to stay within rigid confines may increase tension that leads to aggressive feelings (Lewin, Lippitt & White, 1939).

Varieties of expression of anger and hostility

The infant’s first expressions of anger involve much diffuse, poorly coordinated behavior. The most frequent single expression of anger in early childhood is crying, but this diminishes with age. Goodenough (1931) observed that before the age of a year the child’s outbursts of anger are rather explosive in nature, not well designed to remove a thwarting obstacle or to fight off an offender. As the child grows older his behavior when angry becomes less random and more directly aimed at something or someone. At the age of 4, about half the expression of anger were found to be aimed at the object of the children’s wrath. With this change toward calculated and directed behavior there also was an increase in retaliative behavior of a sort which denoted a desire to get revenge. Goodenough found that threats began to appear between the ages of 2 and 3 and increased in frequency thereafter.

No sooner has a child acquired the ability to direct his anger at the object of his wrath than he comes under pressure to inhibit his expression of anger. For a child to give vent to his anger is uncomfortable and annoying to others and it may even be dangerous to others or to the child himself. The child is not only under strong and sometimes violent pressure from others to inhibit outward show of anger but he also discovers that if he attacks he is likely to provoke a counterattack. So in the process of development human beings learn a great variety of ways of giving vent to anger and hostility other than in open and direct attack.

(a) Verbal aggression

At an early age children express their resentment verbally rather than by physical violence. A shift with age toward more bickering and quarreling and less fighting appears notably in connection with children’s quarrels at the preschool level. The means of verbal attack which a child is able to learn by the time he reaches maturity are practically endless. They include direct methods, such as calling the other person bad. They include, from an early age, verbal denial of affection, which may be expressed directly (‘I don’t like you’), or indirectly by calling attention to the lovable qualities of someone else.

Verbal aggression may also take the form of assertions of superiority by the aggressor (‘I can lick you’; ‘I’ve got ten thousand marbles’) or by assertions aimed to belittle the offender. It is largely by verbal means, also, that a large variety of indirect forms of attack are carried out, ranging from simple forms of tattling to gossip and slander designed to injure another person’s name (Jersild, 1946; 1965).

(b) Teasing

Teasing is a frequent way of expressing hostility, especially in relations between children. Teasing can be developed into such a fine art that the blame is placed on the one who is teased when at last he loses his temper and continues with his fists a fight which his adversary started with words (Jersild, 1946; 1965).
(c) Swearing
The function of swearing in relieving the tension associated with aggressive feelings has been examined by Montagu (1942), who notes that social taboos have restricted women from swearing, and when not allowed to swear, women substitute the more infantile reaction of weeping. With increasing social emancipation, according to this line of thought, we may perhaps expect women more and more to renounce weeping in favor of swearing. It is a common expectation in our culture that children, like women, will not swear (or, at least, not swear as much as men). Many boys who are destined to do a great deal of swearing do not begin in earnest until they are of adolescent age. It is interesting to note that while swearing is in many respects an infantile form of response, it usually does not appear habitually until the child has ‘matured’ well beyond the infantile level (Jersild, 1946; 1965).

(d) Expressions of hostility in fantasy and play
From an early age aggressive impulses occur prominently in children’s fantasy and overt make-believe play. Hostile feelings may occur in connection with an imaginary plot or counterattack which includes imaginary scenes in which the individual is superior to the offender, or scores a triumph of wit, or calls him names, or witnesses him actually coming to grief through tripping, stumbling, or some other accident or misfortune. Imaginings of this sort are especially prevalent in connection with anger experiences in adults (Richardson, 1918), and they probably appear, in one form or another, as soon as children are able to pursue an imaginary theme in their own thoughts.

The fact that a child in his play may reveal feelings of hostility (as well as other feelings, such as anxiety and desires for recognition and approval) has made the use of play situations a very productive technique in connection both with research and with therapy with children. When provided with a suitable play setting it has been observed that a large proportion of children will show aggressive behavior of one sort or another. In a study by Baruch (1941) which used dolls representing children’s families, 32 of 46 preschool children within a period of 15 minutes showed aggression in ways such as: separating a single member of the family from others, spanking, burying a member, and calling names.

Although it is an easy matter to provide a play setting in which children will show aggressive behavior, it is not a simple matter to tell what such behavior means. There may be a clear discrepancy between the kind of aggressive behavior a child shows in play and the kind of treatment he receives from his parents. One child who is not spanked by his parents may freely spank the doll he plays with; another who is often spanked may not allow himself to spank the baby doll. There may be a discrepancy also between what the child does in a make-believe setting and what he does in actuality (on the playground with other children, or with his family at home), and what he says he does or would do (Fite, 1940).

In a study by Korner (1947), play materials, incomplete stories, and frustrating situations were used with children aged 4 to 6. Expressions of hostility which children revealed included direct expression of hostility; retaliation in kind, such as spanking if the parents spank; open spite; verbal rejection; ridicule. Other, less direct, expressions of hostility included destructiveness; hostility carried out by an external agent, such as having another child in the doll family inflict punishment on the person who causes the frustration; hostility displaced on to others, such as having the child hit other children rather than the offending father or mother; hostile acts rationalized through identification with the parents, such as having the little boy throw the child who has fought with him out explaining ‘My mother throws people out who fight!.

Although the children in Korner’s study responded rather vigorously to vicarious frustrations imposed in a story-telling situation and to the direct frustration of being kept from using a preferred toy, it was found that there was only a low correlation (.29) between the sum total of
hostility tallies in the two experiments. There was also a rather low correlation (.21) between the total of hostility tallies in the story-telling experiments (there were ten story-telling play-material situations) and hostility shown by the children in real-life situations as reported by the parents.

(e) Displaced hostility
When blocked or inhibited in his impulse to express his anger directly against an offender, a child, like an adult, will frequently center his anger against objects, as when he smashes a toy when angered by his mother whom he hesitates to attack openly. He may direct his anger against animals, as when he hurts the family cat. He may vent his anger upon other persons, as when he ‘takes it out’ on a younger sibling, or turns wrathfully against the milder of his parents when he has been angered by a parent who is stern end whom he fears. He may turn wrath that has been generated at school against his parents. Sometimes there may be a combination of direct or primary anger and projected anger, as when a child is spiteful toward a sibling who has directly annoyed him and who also serves as a scapegoat for anger induced by other frustrations (Jersild, 1946; 1965).

(f) Cruelty
The expression of hostile feelings may take the form of recurrent cruelty, as when a child hatches schemes to hurt another innocent person, or sets fire to ant hills, or goes out of his way to kill frogs, toads, and other creatures. The subject of cruelty in children is in need of study from a developmental point of view, for ‘cruel’ behavior may represent varying combinations of hostility, thoughtlessness, and exploratory interest at different developmental levels. The development of marked reactions against cruelty, in the form of irrational solicitude for animals and childish forms of antivivisectionism, also offers a significant field for study. In cases of extreme solicitude for animals it is difficult to tell to what extent it represents pity and sympathy, or an expression of the child’s anxieties, or a form of denying or reacting against his own hostile feelings (Jersild, 1946; 1965).

(g) Prejudice
Prejudice serves as a means of projecting one’s anger on someone else, although this is not its only motivation. While children may incorporate as their own, without feeling very deeply about it, the prejudices held by their elders, the phenomenon of prejudice as a form of displaced hostility sometimes appears at a relatively early age. First graders, for example, sometimes are aggressive toward innocent ‘foreigners’ (the ‘foreigner’ may be a member of a different race or religion, or a different socio-economic level, or simply a stranger or outsider to some or all of the children when he first arrives). In a study of older children, Frenkel-Brunswik (1948) found that those who were notably prejudiced tended, among other matters, to be more punitive in their attitudes than children who were relatively unprejudiced.

(h) Bullying
The aggressive motive behind bullying is usually quite obvious. If a child expresses his hostility primarily or solely by bullying, one may suspect that he not only is hostile but also is subject to anxiety or feelings of inferiority. Bullying as a form of displaced revenge may prevail for a time in children who are abused or persecuted when they first join a new group (Jersild, 1946; 1965).
In a study of camp children, Osborne (1937) describes a sequence in which the child is first the butt of bullying and teasing, and who then, as he learns to hold his own in the group, for a
time bullies others, and then, as he makes further gains in poise and self-confidence within the group, discontinues his bullying.

(i) Antisocial acts and ideals
Aggressive impulses may be expressed through various forms of resistance or rebellion against prevailing standards. The most violent forms of expression in this category occur in the forms of acts of delinquency and crime. Truancy may also be a gesture of hostility and defiance. Sexual promiscuity apparently also sometimes serves as an expression of resentment or rebellion.
A subtler form of hostile, antisocial behavior occurs when a child harbors ideas or feelings that go markedly counter to the needs or aspirations or the group. In an informal study of children’s heroes and ideals by Jersild, Markey & Jersild (1933) it was observed that a few notably rebellious children expressed their aggressive feelings by naming, as their ideals, celebrated criminals. Examples of the manner in which children may show overt sympathy with the enemy during wartime as a way of expressing their hostility toward persons in their environment are described by Escalona (1946).

(j) Self-inflicted punishment
From an early age, children occasionally ‘take out’ their anger on themselves. The violent head banging which some children display during temper tantrums is a notable example. Inselberg (1958) found that approximately 5 per cent of the emotional manifestations of two- to seven-year-old Filipino children involved physical aggression against themselves (pulling their own hair, head-banging, and tearing their own clothing). Head banging has also been observed as an expression of rage in chimpanzees (Hebb, 1945; see further ‘Temper tantrum’).
As time passes, many additional forms of self-punishment appear, such as when the child unduly blames himself or deliberately courts troubles or accidents that might injure him. This phenomenon of self-inflicted pain, and motives behind it, has been discussed more fully from the point of view of its meaning in adult life than it has been investigated from a developmental point of view (Jersild, 1946; 1965).

(k) Psychosomatic mechanisms
These are elaborated in another chapter.

(1) Externalization
In many of the expressions of hostility noted above, the hostile person is, in effect, disavowing his anger or avoiding a direct display of it. Such disavowal involves much actual or attempted self-deception.
Anger and hostility are so sharply deplored in most strata of our society that children from a rather early age develop stratagems to conceal their anger from themselves and others and techniques for evading responsibility for their rage. One mechanism is to externalize hostility. The child who has externalized his hostility toward his teacher does not see himself but the teacher as a hostile person, and by this stroke he justifies his grievances against her and is freed from the painful thought that the seat of the difficulty is in him and not in her (Jersild, 1945; 1965).

(m) Grievances and feeling abused
A common manifestation of externalized hostility appears in the child or adult who is full of grievances (For a discussion of the feeling of being abused, see Horney (1951)). The concept of grievance helps greatly to illuminate many childish arguments, quarrels, complaints, and
antipathies, and it is also a great help in understanding much of the recrimination and argumentation that goes on in the name of various ‘causes’ espoused by adults. The person who has managed to develop what to him is a grievance, a ‘real’ reason for feeling abused, possesses a fine device for placing full blame on others and for removing all blame or responsibility from himself. It is the others who are mean, dishonest, unfair. ‘They’ are against him. ‘They’ are the ones who will seize every opportunity to do him about. At the adult level there are many symbols and whipping boys representing grievances. We need a ‘New Deal’ because we have been abused by the Old Deal. But to those who feel abused by the New Deal, it is a Raw Deal, so we need a Square Deal, and so on.

An appeal to grievances, an effort (in a political campaign, for example) to play upon the resentments of persons who feel abused, is an especially powerful device because it is directed at something that probably is latent to some extent in all people from early childhood on. It touches upon feelings that have a basis in reality (it is likely that all children actually have experienced mean and unfair treatment from someone and to that extent have a grievance founded in reality). And it touches even more effectively on the irrational attitudes such as those that come into play when an aggrieved person feels hostile toward others and then externalizes hostility, as described above.

While a person’s feeling of being abused is directed against others, it may be tied to a person’s unrecognized attitudes of contempt and hostility toward himself. On this theory, the person who to a substantial degree predicates his behavior on irrational feelings of being abused lacks integrity in his dealings with himself, and if he plays on these irrational attitudes as a means of manipulating others he lacks integrity also in his dealings with others (Jersild, 1946; 1965).

(n) Weakness of ‘Inner Controls’

In an absorbing account of Children who Hate, Redl & Wineman (1951) have described difficulties which beset children who have been exposed to severe rejection and abuse. Such children may show a conspicuous lack of the ‘inner controls’ which we expect to find in children who in the course of their character development have had the benefit of friendly relationships with others and have been able to count on others for sympathy, example, and moral support. Among the characteristics observed in such children by Redl & Wineman were:

• low frustration tolerance;
• unconstructive stratagems for coping with insecurity, anxiety, and fear;
• low resistance to temptation;
• a tendency to become excited and to show ‘group psychological intoxication’ (as revealed, for example, by impulsivity and primitive forms of sublimation);
• ‘sublimation deafness’;
• irresponsibility with regard to property and possessions;
• a tendency toward panic when confronted with something new;
• a loss of control over the ‘traumatic onrush from the past’;
• disorganization in the face of guilt;
• lack of insight into self-contributed causal links in a sequence of happenings;
• lack of a realistic attitude toward time, including lack of a realistic concept of ‘future consequences’ or of ‘themselves in the future’;
• considerable blindness to social realities;
• loss of potentials for learning from experience;
• greater than normal difficulty in reacting rationally to failure, mistakes, and success;
• difficulty in reacting constructively to the challenge of competition.
Interplay of Anger and Fear

As Jersild (1946; 1965) explains, there is a close relationship between anger and fear. Sometimes a person vacillates between the two. Some circumstances produce both. By virtue of a change in the child, a circumstance which once produced fear (such as a threat by another child) may produce anger (if the threatened child now is older or more confident of his strength). The occurrence of one of the emotions may stimulate the arousal of the other, as when a person is frightened by the violence of his anger, or is angry at himself by reason of the restriction of freedom which his fears impose on him.

Various studies have shown that there is a correlation between susceptibility to anger and fear. In a study of a group of especially ‘aggressive’ children, Kepler (1933-34) found that about half of them also showed anxiety in their behavior. In studies of college students, Stratton (1927) and Anastasi, Cohen & Spatz (1948) found a positive correlation between the frequency of reported experiences of anger and fear. The frequency of reporting both anger and fear might be influenced by the faithfulness and by the perceptiveness of the person who is keeping the record, but it seems reasonable to assume that these emotions would be associated. A person who shows a high incidence of one of them quite likely is vulnerable or irritable or frustrated or harassed to a degree and in a manner that might readily lead to a high incidence of the other (Jersild, 1945; 1985).

At the 3-to-5-year level, Felder (1932) found that anger outburst were far more frequent than displays of fear. It appear that in a well-protected environment it is easier to shield a child from specific events that are likely to frighten him than to eliminate thwartings of the kind that lead to anger. In some instances, however, the higher incidence of anger than of fear may be more apparent than real, since there are children who express their anger quite overtly but conceal their fears or find means of avoiding direct contact with the situations that they dread. Although passing displays of temper may be more frequent than manifestations of fear, the latter are regarded quite often as constituting a ‘problem’ in behavior of young children (Foster & Anderson, 1930).

Sibling Rivalry and Jealousy

Jealousy has not usually been described as a primary emotion but has been treated as a hybrid. Ribot (1903) notes that the gradations of jealousy range from ‘mild cases up to madness and homicide’ and cites Descartes’ definition of jealousy as “a kind of fear related to the desire we have for keeping some possession”. Components of jealousy, as described by Ribot, include a pleasurable element related to something desired or possessed, an element of depressing vexation arising through the idea of dispossess or privation, and destructive tendencies, such as hatred and anger directed toward the real or imagined cause of this dispossess or privation.

Among the feelings mentioned as components of jealousy by adult subjects in an investigation by Gesell (1906) were anger (which was most frequent, and was sometimes combined with feelings of hatred and with vengeful thoughts), self-pity, grief, sadness and dejection, mortification, fear, and anxiety. The most frequent combinations were anger, self-pity, and grief. These descriptions by adults seem to conform to symptoms exhibited by jealous children, but just what are the feelings of a jealous child would be difficult to appraise, since children are not very articulate about such matters (Jersild, 1946; 1965).
Prominent among the overt symptoms of jealousy as described by Foster (1927) and others are expressions of anger, ranging from open hostility to substitute forms of attack. These may be directed toward the person whom the child looks upon as a rival for affection and attentions which he desires for himself, or they may be directed against the person whose affection is desired. The latter may also be subjected to reproaches and appeals, designed to arouse sympathy. The child who is jealous of a younger sibling may revert to infantile habits, such as demands to be fed and dressed when actually he is able to take care of himself (Sewall, 1930). As a bid for attention he may also exhibit fears that previously did not exist, show relapses in bladder and bowel control, and idiosyncrasies with regard to food.

According to Vollmer (1946), jealousy is a fairly usual emotional reaction among children to actual, supposed, or threatened loss of parental affection. The loss of affection most frequently involved is that of the mother, because of the strong possessive love demonstrated by the majority of children for their mothers. The jealousy between siblings over mother love may eventuate in less intense forms of sibling rivalry with increased age. These sibling rivalries may be accompanied by visceral components (jealousy), or they may be unemotional patterns of sibling competitiveness (G.G. Thompson, 1962).

Sewall (1930) found among thirty-nine jealous children twenty-six cases of direct bodily attack on an infant sibling, two cases of ignoring the sibling’s presence, two cases of denying having a baby brother or sister, and nine cases of definite personality changes with no overt emotional manifestation toward sibling.

Some of these differences in intensity of response have been dramatically described by Levy (1936; 1937), on the basis of data collected in doll-play situations with three- and four-year-old children. Levy found some sibling hostility in all of the children, but found an increased number of tearing, crushing, and biting movements among children who were having noticeable difficulties with their sibling. Among other expressions may appear an unwanted display of affection or helpfulness, or a tendency to lie and tattle, or varying forms of competitiveness. The child may also be very subdued in his behavior, as though he were grieving, or he may resort to vindictive make-believe and fantasies of self-glorification.

Children who are afflicted sometimes will show quite contrasting behavior at different times and in different situations, and their reactions to the same person at different times may range from attack to attempts to curry favor. The repertoire of the jealous child is likely to be that of a troubled person who tries many different techniques in meeting a problem (Jersild, 1946; 1965).

It should be noted that many of the forms of behavior described above may also be exhibited by a child who is not directly competing with a sibling but who is uncertain or troubled about his relations with his parents or teachers or other associates, and many of the struggles of a jealous child resemble those of a person who is uncertain concerning his own worth and seeks to vindicate or prove himself even though he has no visible rival (Jersild, 1946; 1965).

**Causal Factors**

Sewall (1930), in her study of thirty-nine jealous end thirty-one nonjealous children, found a number of factors that influence the development of an older child’s jealousy of a new baby. Children between eighteen and forty-two months of age appear especially susceptible to the development of jealous feelings, as two-thirds of the cases fell within this age span. This finding can be rationalized on the following basis: children below eighteen months are still pretty much in the realm of infancy and demand a certain amount of maternal attention, while children over forty-two months are runabouts in the neighborhood securing much of their attention from nonmaternal sources (G.G. Thompson, 1982).
Sewall also found that the probability of jealous responses decreased as the family size was increased. Children in large families must perforce share the attention and affection of parents. The addition of one new member makes less difference in a large family than in the case of a family with an only child. Studies of children who are conspicuously jealous (Foster, 1927; Sewall, 1930; Smalley, 1930; Ross, 1931) and of children who show rivalry (Macfarlane, 1938) do not reveal any other single, outstanding factor that distinguishes them from others. Differences in intelligence and age between two siblings may have an influence in individual cases, but more important are the complex factors involved in the relationship between parents and their children, between the father and the mother, and disturbing influences such as friction in the home, favoritism, and rejection of one child. There probably will be an exceedingly great provocation to jealousy if one of the rivals in the family is used as a foil or scapegoat in a hostile struggle between the father and mother. If, because of the resemblance in appearance or temperament or for some other reason, a child is made the object of a father’s or a mother’s resentment toward the spouse, the child obviously is in a tough spot, and being barred, as a child, from directing his hostility against the offending parent, he will be under all the more pressure to project his anger and anxiety upon the sibling who is favored by that parent (Jersild, 1946; 1985).

**Ramiﬁcations of childhood jealousy**

Many writers have maintained that the emotional drama involved in a child’s relationships with members of the family, including relationships with his siblings, may have a marked influence on attitudes toward people and toward the world as long as he lives. Many of the disorders that arise between persons and between people in the adult society have their prototype in the family scene when the adults were small. Benedict (1940) has pointed out that extreme hostility that is engendered within the family is not merely a function of high civilization as such or of the mechanization of industries or the institution of capitalism. It is a condition which may arise within a simple society or a complex one if certain social institutions prevail. Benedict makes this observation in commenting on a study by Henry (1940) which describes the hostility and quarrelsomeness of Pilaga Indian children who experience a great amount of affection and attention during their early months of life and then later are more and more ignored, until, with the coming of a new child, they are left to their own resources. Within this relatively simple culture the customs are such that the child, after having received much attention, is virtually rejected, and, according to Henry, as a consequence he becomes a “poor, hostile, little flounderer for many years”. By reason of the complexity of the factors involved in rivalry and jealousy, minor expedients for allaying jealousy such as simply announcing to a child that a new baby is coming or a policy of providing ‘two of everything’ to eliminate friction over possessions seem to be of little avail (Sewall, 1930; Macfarlane, 1938).

**The Ontogeny of Aggression**

The ontogeny of aggression is being studied with the help of a variety of theories. Research specifically on its socialization appears to be dominated, as Bronfenbrenner (1963) has noted, by three major viewpoints: (i) psychoanalytic theory, with its focus on the general affective quality of the parent-child relationships; (ii) the fusion of psychoanalytic and learning theory in the drive formulation developed by neo-Hullians (for example, Sears, Whiting and Child), who have concerned themselves with the effects of parental reward and punishment and have continued to employ the frustration-aggression hypothesis of Dollard et al. (1939); and (iii)
the modeling position so forcefully presented by Bandura & Walters (1953). A number of other approaches, though, are also being applied to the aggressive behavior of children, including the maturational, the developmental-cognitive, the genetic, and even the ethological (Zigler & Child. 1969).

As is typically the case in an area where a number of theoretical approaches are vying for ascendancy, the work on aggression is currently characterized by considerable controversy. Adding to the complexity is the fact that certain empirical findings appear amenable to a variety of theoretical interpretations. Thus, the finding that physical punishment of the child results in greater aggressiveness is consonant (i) with the psychoanalytic view that the type of parent-child relationship reflected here precipitates aggression; (ii) with the learning-theory drive formulation, inasmuch as such punishments leads to frustration which results in greater aggression; (iii) with the modeling formulation, inasmuch as the physically punishing parent provides a model emulated by the child in his own aggressive behavior; and (iv) with the genetic approach, inasmuch as much of the variance among individuals in aggressiveness, dependence, and other traits may be due to genetic factors.

Another continuing problem has been the failure to resolve the question whether aggression should be considered an innate or acquired drive, or not a drive at all. This is no trivial question for the investigator, since his answer to it determines his conception of the socialization process in relation to aggression, the type of evidence he will focus on, and the particular theoretical formulation he is likely to champion (Zigler & Child, 1969).

We shall first consider the innate component. If we adopt the usual assumption that man obeys the same biological laws of evolution as do other animals, then the universality of aggression in animal species and its obvious survival value argue strongly for an innate determinant (c.f. Lorenz 1965; Tinbergen. 1951). Intraspecies variation in aggression occurs in ways which are indicative of a genetic component.

These sources of evidence are relevant in evaluating recent efforts to view aggressive behavior as lacking in specificity by deleting ‘intentionality’ from the definition of aggression and conceptualizing aggressive acts as ‘high-magnitude’ responses (Bandura & Walters, 1963; Walters, 1966; Walters & Brown, 1964).

Roberts & Kiess (1964) found that aggression-inducing brain stimulation did not, as that view would suggest, result in a general arousal state which merely intensified any response sequence in which the animal was engaging. If the cats were eating while stimulated, they would turn to attack a nearby rat rather than consume their food with increased vigor. At the human level there is some evidence (Sears, Maccoby & Levin. 1957) that the emotional behavior exhibited by human infants when frustrated may be an unlearned rage response. In keeping with his ‘high-magnitude’ concept of aggression, Walters has preferred to interpret such infant behavior as an undifferentiated reaction to stress, which, when intense, is interpreted by adults as rage. The animal evidence may reduce the likelihood that this interpretation will prove to be appropriate.

Evidence from lower animals also shows that the aggressive act is far from being purely instinctual or mechanistic. Complex interaction between strength of the innate tendency towards aggression and particular experiences of the organism was demonstrated by King (1957). Marked influence of experience on aggression may also be seen in a series of studies on fighting behavior in fish, birds, and mammals conducted by Kuo (1960/61) and reviewed by Becker (1962). These findings have been confirmed by Bevan, Daves & Levy (1960). That early isolation increases later aggression is an especially interesting phenomenon which has also been found in mice (Vandenburgh, 1960) and monkeys (Mason, 1960). Another study which has demonstrated the importance of both genetic and experiential factors is one by Uyeno (1960).
That the genetic effects on aggression partly result from genetic effects on general activity level has recently been suggested by Patterson, Littman & Bricker (1967) and in a discussion of human rather than animal research. They note that a number of studies have consistently found a positive relation between the general activity level of the child and his aggressive output, and suggest that a more active organism should be expected to emit many kinds of social acts at higher rates. The assumption that some of the variance in aggression must result from physiological-genetic variables is then supported indirectly by a number of studies indicating that infants vary in activity level at birth and that such (temperamental) variations persist for a good number of years (c.f. Zigler & Child, 1969 and evidence therein).

Theoretical analyses of aggression and child training very often assume an interaction between genetic and environmental factors, even where there is no direct evidence immediately pertinent to the particular topic being discussed; see, for example, the review by Becker (1964). Walters (1966), on the other hand, appears to have totally rejected the importance of innate factors in aggression, although he honestly admits that this rejection is based more on faith than on evidence. Such an article of faith is of course consistent with Walters’ rejection of the frustration-aggression hypothesis, which, in its dependence on Freud’s ‘primordial reaction’ concept, involves an innate component. As Patterson, Littman & Bricker (1967) point out, the initial formulation of the frustration-aggression hypothesis did not consider the process by which learned aggressive responses come under the control of the stimuli associated with frustration; it thus assumed that an aggressive response to frustration represented an innate stimulus-response relationship. Opposing the view of Walters is that of Berkowitz (1964, 1965), who has argued that aggression does have an important innate component. Berkowitz continues to find the frustration-aggression hypothesis valid, but in a modified form: frustration arouses anger, and so predisposes a person to respond in an aggressive manner, but whether aggression occurs depends in large part on the presence or absence of appropriate stimuli.

Much of the research dealing with socialization of aggression has stemmed from views of aggression as acquired rather than innate. Even the frustration-aggression hypothesis, in the form in which it most influenced research, emphasized learned rather than innate components. Frustration was not viewed as invariably producing aggression; it was instead viewed as giving rise to a general drive which is often followed by aggression, since in the individual’s history aggression has led to reducing or removing frustration. Furthermore, since aggression has also been punished, conflict results. This conflict is viewed as producing a drive of its own whose magnitude is determined by the strength of the competing tendencies to be aggressive and to fear being aggressive (Sears et al. 1953; Whiting & Child 1953). This conflict-produced drive obviously is a resultant of learning, and its multiplicative interaction with aggressive habit is used to explain the greater aggressiveness of children who have been punished for aggression severely but not so severely that aggression is altogether inhibited. As Bandura & Walters (1963) have noted, a number of theoreticians have now expounded the view that frustration increases motivational level through the addition of conflict-produced, frustration-induced or ‘irrelevant’ drives (Amsel, 1951; 1958; 1962; Brown & Farber, 1951; Festinger, 1961; Lawson & Marx, 1958). Furthermore, since such drives are often reduced by the aggressive behavior, the aggressive behavior itself often takes on the characteristics of a secondary reinforcer, and thus aggression becomes an acquired drive (Zigler & Child, 1969). Whatever the intricacies of the mechanisms mediating the hypothesized frustration-aggression relationship, students of socialization have for many years studied whether the direct frustration of the child results in an increase of aggressive behavior. A number of early studies (summarized in brief form by Radke, 1946) dealing with general variables of parental behavior have reported relationships which might be considered favorable to the view that frustration of the child results in aggression. More recent studies,
however, have been much less consistent. Some support for a simple frustration-aggression effect is contained in a study by Goodenough (1931) which will be described in more detail later on. However, Goodenough also found, as have other investigators, that not every aggressive act is preceded by a discernible frustration. Merrill (1946), Hartup & Himeno (1959), Lesser (1952) and Wittenborn (1956) found a more or less positive relationship between measures of frustration and subsequent aggression in children (c.f. Zigler & Child, 1969). Sears et al. (1953) found no evidence of a relationship between overt aggression of nursery-school children and a measure of infantile frustration.

In a study of aggression in doll play done with the same children, Hollenberg & Sperry (1951) found some evidence that fantasy aggression is positively related to a background of home frustration. On the other hand, a number of experimental studies which directly manipulated frustration have failed to find a relation between frustration and aggression (c.f. Jegard & Walters, 1960; Mussen & Rutherford, 1961; Yarrow, 1948).

Quite clearly, these various results do not add up to uniform confirmation of a simple and direct relationship between amount or type of frustration in socialization and strength of chronic aggressive tendency. But is there any sound theoretical reason to suppose that there should be such a relationship? The expectation of such a relationship seems to have been based, according to Zigler & Child (1969), upon the conversion of a principle of momentary dynamics into a principle of learning, without adequate attention to what could be predicted from knowledge about learning.

A more adequate treatment of this problem has been provided by Sears et al. (1953), who point out that a crucial factor in determining what the child learns as a result of a given degree of frustration consists of how others respond to the way the child acts in the face of the frustration and how the child perceives their response. This view receives support from studies indicating that the relation between frustration and aggression is determined by other personality characteristics of the child, provided we view these personality characteristics as themselves at least partially the products of environmental response to the child’s aggression on earlier occasions. Thus, Otis & McCandless (1955) found that the amount of aggressiveness following a potentially frustrating event was greater in children with a dominant ‘need for power’ than in children with a dominant ‘need for love affection’ (c.f. also Block & Martin, 1955; Barker, Dembo & Lewin, 1941; Livson & Mussen, 1957).

There also appears to be a cognitive factor determining whether frustration is followed by aggression. Frustration is more likely to be followed by aggression if the frustration is seen as arbitrary rather than reasonable (c.f. Burnstein & Worcel, 1962; Kregarman & Worcel, 1962; Pastore, 1952). In sum, we have no reason to expect any simple relation between the amount of frustration and the amount of overt aggression he displays (Zigler & Child, 1969). On the other hand, as Becker (1964) has noted, there do appear to be some fairly consistent relations between certain broad dimensions of child rearing and aggression. One such useful dimension is love-oriented versus power-assertive methods of child rearing, a dimension often labeled simply as punitiveness. Power-assertive as compared to love-oriented techniques have been found to be correlated with a higher incidence of aggressive behavior at certain ages. (c.f. Sears et al. 1953; Sears, 1961; Nowlis, 1953; Hollenberg & Sperry, 1951).

That the interaction with sex can be complex is indicated by the findings of Gordon & Smith (1965) that the stricter the mother, the more aggressive her daughter (provided the mother uses physical punishment), whereas the stricter the mother, the less aggressive her son (especially if she does not use physical punishment).

Becker et al. (1962), in a study relating maternal punitiveness to teachers’ ratings of children’s aggression, obtained results completely congruent with those of Sears et al. Ratings of aggression displayed at home, however, showed positive relations to mothers’ punitiveness for both boys and girls. Similar findings with home ratings have been reported by Eron et al.
and Sears, Maccoby & Levin (1957). Lefkowitz, Walder & Eron (1963) found that ratings of aggression were highest where parents reported using physical punishment. A number of other studies reviewed by Becker (1964) are also consistent with the general finding of a positive relation between parental power assertion and child aggression (c.f. Allinsmith, 1960; Hoffman, 1960). However, Becker (1964) has warned that this relation is confounded by the considerable evidence that hostile parents frequently have aggressive children, and that such parents tend to use more physical punishment and less reasoning and praise. Thus we cannot be sure whether the relation between parental punitiveness and child aggression results from punishment, a combination of punishment and general hostility, or primarily from the general hostility of the parent. Adding to the difficulty of interpreting the punitiveness-aggression relation is the fact that we cannot be sure of the causal direction. Although preferring to view punitiveness as causing aggression, Sears, Maccoby & Levin (1957), who assume the importance of an innate component in aggression, raise the possibility that some children, by expressing their innately higher levels of aggressive impulses, bring upon themselves greater punishment for aggression. Furthermore, a circular dyadic interaction can be established between parent and child in which the parents’ punishment produces in the child more aggression which, in turn, leads to greater punishment. Systematic evidence that the child’s aggression may indeed increase parental punitiveness is provided by Hart’s (1957) finding that aggression provoked physical-punishment threats and ridicule in both authoritarian and nonauthoritarian mothers (Zigler & Child, 1969).

Another general dimension of child rearing which has been found to be related to children’s aggression is that of restrictiveness versus permissiveness, typically defined by the general level of restriction and the strictness of enforcement. However, Becker (1964) has pointed out that a major difficulty in integrating the research findings relevant to this dimension has been that its definition has varied widely. Reasonable attention to the complications that result requires extended discussion such as that offered by Becker (1964) and Bandura & Walters (1963). Considerable evidence supports the commonsense notion that restrictiveness results in more inhibited, and permissiveness in less inhibited, behavior (c.f. Radke, 1946; Symonds, 1939; Sears. Maccoby & Levin, 1957; Kagan & Moss, 1962; Bach, 1945; Hartup & Himeno, 1959; Hollenberg & Sperry, 1951; Levin & Turgeon, 1957; Pintler, 1945; Sears 1951; Yarrow, 1948).

It now appears that this dimension interacts with that of parental warmth versus hostility, permissiveness resulting in even greater aggression if the parents are themselves hostile. Discipline by such parents is a mixture of general laxity (especially on the part of the mother) and instances of extremely high punitiveness (usually on the part of the father). Much of the evidence on its nature and affects has come from studies of delinquent children (c.f. Bandura & Walters, 1959; Burt, 1929; Glueck & Glueck, 1950; Healy & Bronner, 1926; McCord. McCord & Zola, 1959). A number of studies of nondelinquent children (reviewed by Becker, 1964) have indicated that a combination of parental hostility and restrictiveness also fosters aggression in children (c.f. McCord. McCord & Howard, 1961; Meyers, 1944; Sears. 1961; Sears, Maccoby & Levin, 1957). Restrictiveness in ‘warm’ parents, on the other hand, appears to have very different effects. A number of studies indicate that the combination of restrictiveness and warmth results in low overt aggression (c.f. Maccoby, 1961; Meyers, 1944; Sears, 1961).

Bandura & Walters (1959, 1963) have eschewed dimensions of child rearing such as we have discussed, and the acquired drives that may arise from them, in favor of a modeling theory of aggression (Bandura & Walters, 1963; Walters, 1966). Drive theorists have long been aware of a modeling effect and have specifically alluded to the living example of aggression provided by parents who employ physical punishment (Sears, Maccoby & Levin, 1957). Bandura & Walters make of modeling a prime principle largely intended to replace rather
than supplement others. Stated most simply, the imitation or modeling view asserts “that observation of aggressive social models, either in real life or in fantasy productions, increases the probability that the observers will behave in an aggressive manner if the model is rewarded or does not receive punishment for aggressive behavior” (Walters, 1966). The experimental investigations of children’s aggression provide the strongest case for the modeling formulation (see Bandura & Walters, 1963, and Walters, 1966, for a complete review of this body of work). In an early study, Bandura & Huston (1961) examined the incidental imitative responses of preschool children who had witnessed an adult model make functionless incidental responses, including aggression, while performing a discrimination task. When performing later the same discrimination task, 90 percent of these children made aggressive responses, whereas none of the control children did. Another study (Bandura, Ross & Ross, 1961) indicated that the model need not be present for aggression to occur. In another study Bandura, Ross & Ross (1963) found that witnessing aggression in a real adult, in a filmed adult, and in a filmed cartoon all increased the incidence of aggression in children. Further evidence that witnessing aggressive cartoons can increase aggression in children is given by Lovaas (1961) and Mussen & Rutherford (1961).

In all these studies, the aggressive behavior of the model goes unpunished and may even lead to definite reward. This variable has itself been subjected to experimental inquiry. The general outcome is to demonstrate a facilitative effect on children’s aggression when the model is rewarded and an inhibiting effect when the model is punished. An interesting experiment by Hicks (1965) suggests the variety of interacting variables that may be found at work when modeling is studied in fine detail (Zigler & Child. 1969).

Developmental Trends

The findings concerning developmental trends of aggression in children, especially preschool children, are contradictory. In children aged two to five inclusive, the frequency and variety of aggressive behaviors increase. Must & Sharpe (1947) reported a correlation of .54 between age and frequency of aggression in a preschool nursery sample. Walters et al. (1957) noted that in nursery school, three-year-olds aggress more frequently than two-year-olds, and four-year-olds show still more aggression; but the curve levels off, and there is no increase in aggression in five-year-olds. Appel (1942) found that four-year-olds tend to have aggressive episodes of longer duration than two-year-olds. Goodenough (1931) reported that the aftereffects of anger (sulkiness and resentment) increased steadily with advancing age in a sample of children from 1 to 8 years. Ammons & Ammons (1953) discovered a peak of doll play aggression at 3 years, with decreases from this maximum at 4 and 5 years.

While the above studies agree in finding that aggression increases with age, the following studies are contrary. Jersild & Markey (1935) noted that nursery school aggression declines with age, a finding that is seconded by Dawe (1934). Roff & Roff (1940) and McKee & Leader (1955) found no age differences in the aggression of preschool children. Sears (1951) reported a slight and non-significant increase in doll play aggression from 3 to 4 years but no appreciable difference between 4 and 5 years of age.

These contradictory trends suggest two possibilities. First, perhaps there are no developmental trends in aggression, no waxing or waning when children grow older. Second, perhaps there are developmental trends, but they are obscured in some fashion. The second alternative appears to be more correct (Buss, 1961). In many investigations of aggression in young children, various aggressive responses have been lumped into a single summary score, which assumes that all aggressive responses develop at the same rate. It is doubtful that this is true. Physical aggression occurs before verbal aggression simply because the child can make
striking responses before he has sufficient command of speech to use it in attack. Temper outbursts occur before coordinated attacking responses, again because the child cannot attack with any precision until he has mastered his gross musculature. The pooling of diverse aggressive responses and the lumping together of anger and aggression may well obscure developmental trends. Since the behaviors included under the heading of aggression vary from one study to the next, the presence and direction of developmental trends should also vary. If the focus is on temper tantrums, it is found that aggression decreases with advancing age; if the focus is on retaliation and counteraggression, it is found that aggression increases with advancing age. If both kinds of behavior were included in a single study, no developmental trends would emerge. Thus it seems likely that the studies mentioned above, when taken as a whole, have tended to cancel out developmental trends in aggression (Buss, 1961).

The occasions that elicit anger parallel the course of development. A child’s susceptibility to anger at any given maturity level is influenced by the limitations and by the urges, strivings and activity tendencies that are characteristic of that maturational level (Jersild, 1965). The most systematic evidence concerning anger in young children, with a comprehensive breakdown of aggression, is provided in a study by Goodenough (1931). In the case of the children who were less than one year old, one-fourth of all outbursts arose in connection with routine care such as bathing or dressing. At 2 years a large percentage of anger outbursts arose in connection with the establishment of routine physical habits, and second in frequency were conflicts with authority over matters not directly concerned with habit training. Problems of social relationship represented a third important source of difficulty. At the 2-to-3 year level, the three outstanding sources of provocation were conflicts with authority, difficulties connected with the establishment of routine practical habits, and social difficulties with playmates. Between the ages of 3 and 4 years, provocations arising in connection with social difficulties and disagreement with playmates reached their maximum, and conflicts with authority accounted for about one-third of the outbursts. At 4 years and upward, difficulties arising in connection with social relations continued to represent the most frequent sources of provocation. Goodenough observed that before the age of a year the child’s outbursts of anger are rather explosive in nature, not well designed to remove a thwarting obstacle or to fight off an offender. As the child grows older his behavior when angry becomes less random and more directly aimed at something or someone. At the age of four, about half the expressions of anger were found to be aimed at the object of the children’s wrath. With this change toward calculated and directed behavior there also was an increase in retaliative behavior of a sort which denoted a desire to get revenge. Threats began to appear between the ages of 2 and 3 and increased in frequency thereafter.

These facts are consistent with the notion that various aggressive responses develop at different times and with different rates. Thus undirected anger is most frequent in infancy and decreases in frequency thereafter, probably because of both parental punishment and improved emotional control. Physical aggression starts relatively early and increases steadily as the child (1) acquires greater control over motility, (2) acquires a greater range of attacking responses, and (3) is reinforced for the physical attacks by acquisition of reinforcers. Verbal aggression appears on the scene later, and, like physical aggression, it increases in frequency throughout childhood.

Goodenough’s data show a drop in anger outbursts as the child matures, but there is nothing in her book about aggression in the presence of strangers or in situations outside the home. One of the tasks of childhood is to learn the fine discriminations required by our civilization: when to aggress and against whom.

The child is not only under strong and sometimes violent pressure from others to inhibit outward show of anger, but he also discovers that if he attacks he is likely to provoke a
counterattack. So in the process of human development human beings learn a great variety of ways of giving vent to anger and hostility other than in open and direct attack:

a. Verbal aggression (quarreling, scolding, depreciation, invectives, gossip, slandering, threat etc.).

b. Teasing. Teasing can be developed into such a fine art that the blame is placed on the one who is teased when at last he loses his temper and continues with his fists which his adversary started with words.

c. Swearing.

d. Expressions of hostility in fantasy and play. When provided with a suitable play setting it has been observed that a large proportion of children will show aggressive behavior of one sort or another (c.f. Baruch, 1941).

e. Displaced hostility. When blocked or inhibited in his impulse to express his anger directly against an offender, a child, like an adult, will frequently center his anger against objects (smashing a toy). He may direct his anger against animals. He may vent his anger upon other persons, as when he ‘takes it out’ on a younger sibling.

f. Cruelty. The expression of hostile feelings may take the form of recurrent cruelty. The subject of infantile cruelty is in need of study from a developmental point of view, for ‘cruel’ behavior may represent varying combinations of hostility, thoughtlessness, and exploratory interest at different developmental levels (Jersild. 1965).

g. Prejudice. Prejudice serves as means of projecting one’s anger on someone else, although this is not its only motivation. While children may incorporate as their own, without feeling very deeply about it, the prejudices held by their elders, the phenomenon of prejudice as a form of displaced hostility sometimes appears at a relatively early age. First graders, for example, sometimes are aggressive toward innocent ‘foreigners’.

h. Bullying.

i. Antisocial acts and ideals. Aggressive impulses may be expressed through various forms of resistance or rebellion against prevailing standards. The most violent forms of expression in this category occur in the form of acts of delinquency and crime. Truancy may also be a gesture of hostility and defiance. Selection of celebrated criminals as ideals and idols.

j. Self-inflicted punishment. From an early age, children occasionally ‘take out’ their anger on themselves. The violent head banging which some children display during temper tantrums is a notable example. Head banging has also been observed as an expression of rage in chimpanzees (Hebb, 1945).

k. Psychosomatoses

1. Externalization (projection). Anger and hostility are so sharply deplored in most strata of our society that children from a rather early age develop stratagems to conceal their anger from themselves and others and techniques for evading responsibility for their rage. One mechanism is to externalize (project) hostility.
m. Grievances and Resentments. The concept of grievance helps greatly to illuminate many childish arguments, quarrels, complaints, and antipathies and much of the recrimination and argumentation that goes on in the name of various ‘causes’ espoused by adults (Jersild 1955).

Throughout childhood the child is called upon to enter new situations: nursery, kindergarten, grammar school, various peer groups. What is the course of aggression upon entry into a group and upon later acceptance in the group? The answer given by observational and doll play studies is clear. Initially the child’s level of aggression is low, being inhibited by at least mild anxiety in a new and unstructured situation. As the child becomes accustomed to the new setting, aggression increases. There are session to session increases in doll play; there are increases in nursery school aggression as the child learns that aggression may be necessary in order to acquire toys, to defend his use of toys, and to retaliate against aggression from others. In a peer group, aggression declines after an initial increase because the child learns his place in the pecking order; once the order is established, less aggression is required than during the process of establishing the order (Buss 1961).

The emphasis in this discussion has been on the preschool period, and less is known about aggression in later childhood and adolescence. Older children and adolescents are not readily available as subjects, and they have been less studied. The few studies available suggest the following age trends. Aggression continues at a steady frequency from the peak attained at 4 years until 6 to 8 years of age. Subsequently, aggression in school and with peers tends to increase in frequency, the increase continuing until adolescence. Aggression in the home against parents and siblings tends to decrease until adolescence, at which time it jumps markedly (Kepler, 1933). The increase in self-control that occurs between 6 and 12 years is demonstrated by Patterson’s finding (1958) that children in the 6 to 9 year range manifest significantly more uncontrolled aggression than children in the 10 to 12 year range.

**Negativism**

The one type of aggression on which there is general agreement concerning developmental trends is negativism. The period varies with the individual child, but between the ages of 1½ and 4 years there is an era of resistive behavior, involving the child’s refusal to go along, stubborn insistence on having his own way and of blocking the efforts of others. This negativism is familiar to parents, and it has been corroborated by observational studies. Ausubel (1950) has attempted to formulate a rationale for such behavior, as follows: Threatened by the complete loss of an ego status he is loath to relinquish, despite its untenability, he asserts its dominant characteristics even more aggressively and vigorously than before. In the face of greater threat, tolerance to restraint and frustration reaches a new low. Uncompromising and petulant assertiveness, frequent temper tantrums, tyrannical ordering about, and insistence upon ‘baby ways’, become familiar response patterns in the daily behavior routine, reaching a peak and then declining as the new ego organization begins to take root (Ausubel, 1950).

Ausubel’s hypothesis, which implies that negativism is inevitable, fails to give appropriate weight to the training the child is undergoing. During the second year of life the child begins the long process of learning the proper responses in his culture. The crucial adults in his life teach him the necessary responses in areas of eating, elimination, relation with siblings, etc. Most of the new learning is strange and arbitrary to the young child, who is forced to bend to the ways of his parents. If the training process is handled efficiently and with the use of
appropriate techniques for inducing new responses, the child should manifest little negativism. New learning occurs all the time; and each time the individual acquires new responses, he does not necessarily respond with obstinacy (Buss. 1961). Recently Bettelheim (1966) noted that children do not receive any help from the schools in recognizing the omnipresence of the tendency to act with violence, nor in techniques for dealing with it in constructive ways. In this paper, examples are presented on how education to learn to read, for example, could proceed much more successfully if our teachers would take cognizance of children’s fascination with thoughts of violence and aggression, and teach them both to recognize this and to deal with it.

**Insecurity, Anxiety and Aggression**

Whatever the hereditary potential, and whatever it may mean, there is an immense accumulation of evidence that in childhood aggressive patterns develop when security in some form, mostly in human relationships, is threatened, and when realistic fears shade over into anxiety of the neurotic type. This is a very complex field and only a few points can be brought out here.

Insecurity, as the term is used in psychology, certainly has a number of dimensions. One of the most important generalizations concerns the extent to which the specific patterning of reactions to insecurity, at least, is a function of the human relationships in which the child is placed rather than of its physical safety and welfare alone. One of the major human dimensions is unquestionably that of love or affection which in most social systems centers on the relationship of mother and child. The absolute level of maternal affection is undoubtedly of fundamental significance, but equally so is its consistency. The withdrawal of love to which the child has become accustomed, or ambivalence, however deeply repressed, may have devastating effects (c.f. Bateson et al., 1956).

Similarly, relative distribution of affection between siblings is important. Frustration through withdrawal, if not absolute low-level or absence, undoubtedly is normally reacted to with aggression. A common example is provided by the fantasies of children that they will die or commit suicide so the parents will be sorry for their maltreatment (Parsons, 1947).

Another major dimension of security touches expectations of achievement and of conformity with behavioral standards. Here two contexts seem to be particularly important as sources of anxiety and aggression. The first is the sense of inadequacy, of being expected to do things which one is unable to achieve, and thus incurring punishment or the loss of rewards. The second is the sense of unfairness, of being unjustly punished or denied deserved rewards. In both cases the comparative context is fundamentally important. Inadequacy is highlighted by the superior achievements of others with whom one feels himself to be in competition, and unfairness almost always involves specific examples of what is felt to be unjust favoritism toward others. Again in both cases the consistency of the standards which are held up to the child and adults in applying them is crucial. In this general content the sense of inadequacy or injustice may generate aggressive impulses, on the one hand toward those who are held to have imposed such unfair standards or applied them unfairly, and on the other hand toward more successful rivals or beneficiaries of unfair favoritism.

Two further facts about these structured patterns of aggression in childhood are particularly important. First, they are rooted in normal reactions to strain and frustration in human relations at the stages of development when the individual is particularly vulnerable, since he has not, as some psychologists say, yet attained a strong ego-development. But unless they are corrected by an adequate strengthening of security, these reactions readily embark on a
cumulative vicious circle of ‘neurotic’ fixation. The child who has reacted with anxiety and aggression to inadequate or ambivalent maternal love builds up defenses against re-exposure to such frustrating situations and becomes incapable to genuine love. The child who has felt inadequate in the face of expectations beyond his capacity to fulfill becomes neurotically resistant to stimuli toward even the achievements he is capable of and aggressive toward all attempts to make him conform. Unless re-equilibration takes place in time, these defensive patterns persist and form rigid barriers to integration in a normal system of human relationships. The result is that the individual tends either to react aggressively, without being able to control himself, in situations which do not call for it at all, or to overreact far more violently than the situation calls for (Parsons, 1947).

The second important fact is the result of the conflict of the aggressive impulses, thus generated and fixated, with the moral norms current in the family and society and the sentiments integrated with them. In childhood, the persons in relation to whom such affects are developed are primarily the members of the child’s own immediate family. But solidarity with them and affection toward them is a primary ethical imperative in the society. Indeed it is more than an ethical imperative, since these attitudes become ‘introjected’ as part of the fundamental attitude system of the child himself. The hostile impulses therefore conflict both with his own standards and sentiments and with the realistic situation, and cannot be overtly expressed except under strong emotional compulsion, or even tolerated as conscious thoughts. They tend therefore, to be dissociated from the positive, socially approved attitude system and ‘repressed’. This repressed attitude system, however, persists and seeks indirect expression especially in symbolic form. This may be purely in fantasy, but there is one particularly important phenomenon for the present context, namely displacement on a ‘scapegoat’. If the father or mother or sibling cannot be overtly hated, a symbolically appropriate object outside the circle of persons who must be loved is chosen and gratification of the impulse indirectly secured. Precisely because his aggressive impulses are repressed, the person is unaware of the fact of displacement and by rationalization is convinced that this is a reasonable reaction to what the scapegoat has done or is likely to do if given a chance. There can be no doubt but that an enormously important component of group hostility has this psychological origin and character (Parsons, 1947).

Insecurity, then, is the awareness of a threat of future frustration. An important source of gratification is related to an individual’s status within the group, which determines the privilege of expecting certain actions from others in the group, and the obligation to fulfill certain expectations on their part. Interference with group status in this way, or threatened interference, may be brought about by simply altering the number of people in the group; the arrival or departure of one person may serve as a source of hostility (Lindemann, 1949). The forces demanding the transition from one frame of reference to the other become the object of hostile regard and are often personified to become suitable targets for hostile action. Even an individual who is not frustrated to any distressing degree may become a participant in hostile group sentiment in groups which find or consider themselves the victims of arbitrarily imposed changes. A person with a large reservoir of hostile tension will contribute to channeling and expressing the development of group sentiment into group action. If insecurity widens the time pattern of frustration, a quantitative factor may be introduced by considering that an accumulation of minimal threats or provocations to angry responses may have the same effect of instigating hostile reactions as one powerful hostility-arousing event. This sort of provocation does not have to be a frustrating experience. A hostile action on the part of an individual or group may arouse counter-hostility as the immediate response to the proper stimulus. The so-called rejecting mother, and the group surrounding an individual with inimical social climates, may, by the omission of friendly acts, just as by the commission of hostile deeds, create a growing reservoir of hostile tension requiring ever more primitive
hostile acts for adequate discharge. Newcomb (1947) pointed out the vicious circle by which an individual or a group once ready for hostile response gradually reduces the channels of communication with the potential enemy, thus preventing rectification of the early impressions of hostility and redress by friendly actions. Hostile isolation is likely to make hostile tension more enduring. The dammed-up hostility from other sources will then be channeled against the enemy, and any efforts to make the enemy unsuitable as a target will only arouse renewed and increased hostility.

Hostility, like other basic impulses, carries the demand for action: the removal or destruction of the stimulus. Should the stimulus agent disappear before he can become the object of hostile action, a hostile response still requires execution against substitute targets. The powerful self-punitive response seen in certain bereaved individuals after the death of a hated person suggests such a mechanism (Lindemann. 1949).

There seems to be a great readiness for the hostile response to revert to the most primitive form when pressure of hostile tension reaches a certain maximum. The profusion of destructive fantasies in frustrated individuals, the furious self-destruction of melancholics, the arsenal of substitute reactions and more or less well-disguised defenses against hostility, need hardly be mentioned here.