Introduction

All of us know what aggression is. But it is very difficult to define it. The Encyclopaedia Britannica (1979), Vol. 8, however, suggests a working definition: “Aggression is defined as an action that inflicts pain, anxiety, or distress on another, and is in the service of hostile motive or of the emotion of anger”. This definition has the advantage that it includes the actions which unintentionally hurt others and includes those which appear to be culturally valued but intentionally cause distress to others. However, this definition is not all inclusive. So we think, the best remedy of the puzzle of definition is to list the patterns of aggressive behaviour. That is, description, not definition, is appropriate for a scientific investigation into aggression.

Aggression is as old as the creation itself. History of man can be studied from the point of view of manifestation of aggressive act and its counter activity. On newspapers, journals and cinema screens, in literature and even in election posters of today we find the display of aggression. Aggression is a major subject matter of arts and literature of the world, not only of today, but also it had been so in ancient times - in myths and epics. Perhaps man has displayed more aggression in his life style than any other creature. In our present time Hitler’s role in history and his utterances in his ‘Main Kampf’ testifies it very well. He says: The very first essential for success is a perpeuntually constant and regular employment of violence (Pocket Book of Quotations, 1955).

On analysis we come to realise that the role of aggression in evolution and in the survival of the human species was enormous. Intelligence with the help of aggression gave man a supremacy over other creatures. Aggression generated and still has been generating in man courage, patriotism, group feeling, adventure, discipline, endurance, tolerance, unselfishness and many other higher qualities (Gregg, 1949). But the tragedy of the fact is this that man today has created such lethal weapons with massive effect as his own survival is at stake. Physical strength and individual valour are not required today for the enactment of violence as it was required by our ancient ancestors. Only the pressing of a button (even in cold blood) is sufficient to bring a holocaust. Therefore the urge to control aggression. With this aim in view and with the help of the counter activity of aggressive behaviour man has established and organised the UNO, peace movements and other similar things in socio-political field. To control aggression is a burning problem of today. We the psychiatrists, as citizens of a democratic system, cannot lag behind in this respect. Moreover we have close experience through our profession, of the destructive tendency that are found in pathological states, which men from other walks of life have not. In this specified area we know aggression better than others. Even we are in a privileged position to assess properly the activities which come closer to those of psychopaths, who are frequently disturbing our peace. So let us come forward and join the march for peace and contribute our knowledge to others. Now let us proceed to a scientific investigation into aggression.
Types of Aggression

Though scientific studies on the types of aggression are numerous, there is more of confusion and less of clarity in the concept of this phenomenon. For many years it was considered as a unitary phenomenon and conclusions drawn from it were ill-founded. Recent studies made by Kenneth Moyer (1971) have brought some systematic insight into this area. He has proposed that on the basis of specificity of stimulus and physiological mechanism, aggressive behaviour can be classified into eight distinct categories. They are (i) predatory (ii) fear-induced, (iii) irritable, (iv) territorial, (v) maternal, (vi) sex-related, (vii) inter-male and (viii) instrumental.

(i) Predatory: It is evoked by the presence of an object of prey and the probability of attack is enhanced if the target is moving. Unlike other forms of aggression, it is essentially independent of the environment in which the stimulus is located. The physiological evidence for predatory behaviour as a distinct class of aggression is extensive and rapidly growing.

(ii) Fear-induced: This form of aggression occurs in presence of a threatening situation and when the flight response is blocked. It is, therefore, an aggression in self-defence. The physiological basis of this type of aggression has been linked with specific parts of the brain. Septal lesions may facilitate fear-induced aggression, while fear itself can be reproduced by lesion in the temporal lobe and amygdala. Some studies have shown that stimulation of dorsal part of the medial hypothalamus in cats produced escape reaction, whereas stimulation of the ventral part produced aggressive behaviour.

(iii) Irritable: This type of aggression may be invoked by any type of stimulus -- animate or inanimate -- and not confined to a particular environment. The most characteristic factor is anger or rage and situations associated with fatigue, lack of sleep, crowding, pain and other forms of aversive stimuli. This is possibly synonymous with what others have classified as frustration-aggression. There is evidence to show that ventro-medial hypothalamus and medial nucleus of the amygdala are involved in this type of aggression. Adrenal function and irritable aggression are interlinked. Individual variation in response to irritating or aversive stimuli is said to be associated with androgenic hormones, but their exact role is still unclear.

(iv) Territorial: Ethologists have collected sufficient evidence to show that territorial aggression is a distinct form of animal behaviour. It may overlap with intermale aggression at times but both these forms are separate entities in their own right. The exclusive stimulus to this form of aggression is the intrusion of an animal into an area in which another animal has established itself. This has a great survival value in animal kingdom as it helps in balancing resources against population size. The exact physiological basis of this form of aggression is, however, not yet clearly enunciated.

(v) Maternal: Though called maternal, it is not necessarily confined to the female members of all species. Often males share this type of aggression with the females.
The stimulus situation is the presence of a threat to the young ones. Territorial defence may be a part of this type of aggression but this is not always an integral part. Hormonal changes associated with lactation is an essential biochemical facilitator in the females of at least some species (St John and Corning 1973). The physiological correlates in males have not been fully investigated so far.

(vi) **Sex-related**: Paradoxically this is a very obscure type of aggression. More is surmised than known about the actual physiological basis of this category of aggression. It appears that the same stimulus may, under certain circumstances, elicit aggressive behaviour as well as sexual response. The physiological mechanism, which is ill-understood, may also be same or overlapping. Depending on the species and the stimulus situation, two forms may be distinguished: (i) aroused aggressively towards the rival, heightened by the presence of a mating partner or the internal events associated with the mating season and (ii) aggressive behaviour towards the mate of the opposite sex. It has been suggested that this is a part of the mating behaviour and possibly serves some biological purpose such as ovulation.

(vii) **Intermale**: The physiological basis of this type of aggression is believed to be androgen. The stimulus situation is the presence of a male of the same species. The environment, provocation, stress or fear is not an essential factor. Establishment of dominance or submissive posture acts as a deterrent to this type of aggression. It plays a significant role in the survival or socialization of species. Intermale aggression provides a basis for allocation of scarce resources, distribution of population, assortative mating and maintaining a stable social structure. This type of aggression helps in the establishment of dominance of one male over the other and as a corollary dominance ranking can produce a stable hierarchy which leads to minimization of conflict in social groups.

(viii) **Instrumental**: This category of aggression includes those aggressive behaviour which are called into play primarily as a result of learning. The biological correlates of this type of aggression are same that contribute to preparedness for learning process. This is a theoretical postulate which has little been investigated as yet. But it must be made clear that learning may never be entirely dissociated from the aggressive behaviours classified earlier.

Next we would be considering how aggression is determined. Two factors have been isolated in this respect: (a) biological, and (b) environmental.

**Biological Determinants of Aggression**

(i) **Neuroanatomical**: In a large number of investigations, the relationship between aggressive behaviour and different areas of the brain has been studied through electrical stimulation to the brain and by production of lesion in a particular area of the brain in animals. Results of some of those investigations are mentioned here with a view to understanding the neuroanatomical basis of aggressive behaviour.
Olfactory bulb, septum, amygdala, stria terminalis and its nucleus, hypothalamus, central grey substance and tegmentum of the midbrain are the areas associated with aggression.

Lesions of the olfactory bulb in the rat elicit aggressive behaviour - the caudal region has a more specific role in this respect than the rostral portion. Thus the olfactory bulb seems to have an inhibitory influence on aggressive behaviour in rat. The role of the septum is also inhibitory on aggression. Experimental electrical stimulation of this area in monkeys causes inhibition of aggression but lesion of this area causes facilitation of aggression in rats.

The amygdala, in rats and cats, seems to play a positive role in the display of aggressive behaviour. The stria terminalis and its nucleus in cats and rats also have a functionally positive role in eliciting aggressive behaviour. Experiments producing lesions and electrical stimulation of these structures have repeatedly confirmed these inferences. The hypothalamus plays a dual role, inhibitory as well as facilitatory, in the aggressive behaviour of animals. The preoptic area, the anterior, lateral and posterior hypothalamus have a facilitatory role, while the medial hypothalamus (especially the VMH nucleus) is inhibitory on aggression. The medial and lateral parts of the hypothalamus are functionally interrelated, since a transection between these parts causes increased irritability in the rat.

The ventromedial portion of the central gray and the medial tegmentum of the midbrain appear to have a positive role on aggressive behaviour, while the lateral tegmentum plays a negative role. Experiments on both rats and cats have led many workers to come to this conclusion.

Among the cortical structures, the prepyriform cortex in the rat and the genu of the cingulate cortex in the dog play an inhibitory role. Their lesions elicit aggressive behaviour.

The hypothalamus (especially the medial and the lateral parts) receives inputs directly or indirectly from all the structures discussed above. The inputs are then integrated and conveyed caudally to the brain-stem and spinal cord via median forebrain bundle and dorsal longitudinal fasciculus for manifestation of the aggressive behaviour. The input of the hypothalamus may be further influenced on its way caudally by the midbrain central grey substance, the medial tegmentum and the lateral midbrain tegmentum. It is hardly necessary to mention that all animal models are not identical and human models may not be comparable with animal models in all respects. Hence, inferences drawn from animal experiments should be applied cautiously for the explanation of human behaviour.

The quest for the identification of parts of the human brain associated with aggressive behaviour in spite of its inherent difficulties is gaining momentum. Ingenious workers like Delgado (1969) have been able to switch violence on and off through the stimulation of selected brain sites. New knowledge is being gathered by the work of psycho-sur-
geons who have succeeded in pacifying uncontrollable violence by the removal or destruction of one or more areas of the brain. Stereotactic surgery developed by Mark and Ervin (1970) is a modern addition to this line of activity.

Our clinical acumen suggests that brain abnormality of some sort is directly involved in at least a portion of the cases of pathological violence, certain known brain diseases - brain tumour, temporal lobe epilepsy, viral encephalitis - are associated with violent behaviour. Abnormal EEG is commoner among persons who show motiveless violence and those who are labelled as severe psychopaths. It is by a careful study of these persons that we may obtain new information on the neuroanatomical basis of aggression.

(ii) Neurochemical: Many experiments have been done to correlate different types of aggression with the associated neurochemical changes. Further investigations on the neurochemical correlates of aggression have been extensively made by using pharmacological agents as experimental tools. These agents modify the metabolism and effects of different neurotransmitters by acting at different stages of synthesis, storage, etc and alter the behavioural responses. The results of these investigations show that central noradrenergic, dopaminergic, cholinergic and serotonergic mechanisms are involved in the manifestation of aggressive behaviour.

(iii) Genetic: According to Darwin (1969) all the individuals of the same species are not cast in the very same mould. McClearn (1969) concluded that individual differences in aggressiveness within a number of species are influenced by genetic factors. Researchers are yet to explore the mechanisms through which the genes may influence behaviour. A great deal of work has been done on the relationship between XYY chromosomal abnormality and crime of violence. Some studies have shown a definite association between the XYY genotype and criminally violent behaviour. But the nature and extent of this association has not yet been determined. Hook (1973) believes that increased impulsiveness rather than aggressivity per se may be the more relevant behavioural factor associated with XYY chromosome. Though the role of genetic factor is not clear, hormonal factors are strongly suspected to have a definite role in the aggressivity of animals and human beings.

(iv) Neuroendocrinological: The presence or absence of androgens seems to be a critical variable in aggressiveness. Several experimental studies on animals have shown that removal of the hormone producing gonads in young males renders them relatively mild and less aggressive. Experiments with castrated mice show that normal aggressive (sex-related) behaviour can be restored by injection of missing androgen. Female animals exposed to androgens early in development engage in same rough-and-tumble play and in same sexual behaviour as males.

Yalom et al (1973) examined the effects of intrauterine estrogen and progesterone on psychosexual development in human
males - at 16 years of age boys were found less assertive and less aggressive than the controls. There is considerable evidence to support the view that the hormonal differences between male and female are implicated in the observed differences between the two sexes in their aggressive behaviour. Observations on the aggressive behaviour in human female have shown that violent acts are fewer among the females than among the males and these few outbreaks are clustered during the premenstrual week, when the levels of progesterone and estrogen are at their lowest. The general conclusion to be drawn from these and other similar experiments is that the male hormones increase the likelihood of aggressive behaviour and that the female hormones have the opposite effect both in human beings and in other animals studied.

But it must be pointed out that these hormones do not act in isolation. They have a neurological substrate with which they act in mason. Sufficient experimental evidence can be adduced to show that the action of the hormones is mediated by the brain and that brain development is influenced by the presence or absence of the normal male hormones at an early age. Genetically male mice that were deprived of gonadal hormones during the crucial period of sex differentiation in utero failed to develop masculinized brain responses to the administration of testosterone in adult life. The reverse is true in the case of female mice. It is well known that human species at times exhibits aggressive behaviour which can classified into predatory, fear-induced, irritable, territorial, maternal, sex-related, intermale and instrumental exactly as in the case of other animals. But it is still ill-understood whether physiological correlates exist for each of these different manifestations of aggression in human beings. Predatory and maternal types of aggression are the most-difficult ones to explain on neuro-endocrinological terms.

In fine, it should be noted that our knowledge regarding neuroendocrinological basis of aggression is suggestive rather than conclusive.

**Heightened physiological arousals and aggression**

Experimental studies have been devised to determine the relationship between aggression and heightened physiological arousal in man. Zillmann et al (1974) and Zillman (1979) have demonstrated that heightened physiological arousal (as in previously angered subjects) facilitates aggressive behaviour.

The relationship between sexual arousal and aggressive behaviour has been studied by many workers. Baron (1977), Zillman and Sapalsky (1977) have established a definite relationship between sexual arousal and aggression, but the exact nature of this relationship is yet to be elucidated.

**Effect of drugs on aggression**

A number of drugs are used to control aggressive behaviour of psychiatrically ill patients: some of these drugs are major and minor tranquilizers, lithium carbonate, etc. Antidepressive drugs when used for therapeutic purposes may induce aggressive behaviour as side effect. However there are
substances, which are not used in therapeutic purposes but used by people more or less in uncontrolled fashion, often induce violent behaviour causing social concern. Two agents are very important in this respect - alcohol and cannabis. It has been observed that alcohol in smaller doses often inhibits aggression whereas in large doses it may facilitate aggressive behaviour. In the case of cannabis, small doses show no effect on aggression but a large dose is likely to inhibit aggressive behaviour.

Environmental determinants of aggression

Aggression has long been known to be provoked by social and physical environmental factors. In the recent past experimental studies have corroborated this relationship between aggression and social factors. Frustration, provocation by physical and verbal means and exposure to aggressive model are the factors which have received more attention of the research workers.

Berkowitz (1974) has shown the frustration is one of the many factors that give rise to aggression. His experiments have led to the revision of frustration aggression hypothesis propounded by Dollard et al (1939) which held that frustration always led to aggression and aggression was always caused by frustration. Laboratory experiments on man have repeatedly shown that physical and verbal provocations elicit aggressive behaviour (Green, 1968; Wilson and Rogers 1975).

It is generally believed that exposure to aggressive models through audio-visual means is a potent cause of aggressive behaviour in people particularly in adolescents. There are some experimental evidences which suggest that repeated exposure in early years to aggressive models in films or in television is responsible for the appearance of aggressive behaviour in subsequent periods of life. But it is yet to be conclusively established.

Environmental factors such as crowding, noise and heat have been studied to assess their possible relationship with aggression. It is believed that crowding may have both facilitatory and inhibitory effect on aggression under specific conditions. But definite experimental data are not yet available. Noise is known as a pollutant in modern metropolis. It is believed that prolonged exposure to noise may lead to permanent defect of hearing. Konecni (1975) has shown that unpleasant noise may provoke aggressive behaviour in subjects who are already annoyed due to other reasons.

Aggressiveness in psychiatric patients

1. Mania and hypomania - Attacks of temper, irritability are often associated with wickedness and sometimes aggressiveness.

2. Schizophrenia - These patients may at times show violent behaviour, specially seen in the catatonic form.

3. Encephalitis - Overactivity, irritability, mischieffulness, destructive and aggressive behaviour are often observed as post-encephalitic behaviour.

4. Trypanosomiasis - Irritability and aggressiveness may be the first sign of this illness.

5. Hyperkinetic Child - These children may be very aggressive without provocation especially to brothers and sisters.

6. Injury to the brain - Disobedience and destructive and aggressive behaviour are often observed after an injury to the brain.
7. **Temporal Lobe lesion** - Irritability and aggressiveness are very commonly seen in the cases.

8. **Alcoholic intoxication** - Violent and aggressive behaviour are common accompaniment of this state.

9. **Effects of ACTH and Cortisone** - Irritable, aggressive and labile moods are not uncommon side effects of these drugs.

10. Antisocial personality disorder in adults and juvenile delinquency in children often show violent aggressive behaviour.

11. Epileptic subjects frequently show hostile aggressive behaviour.

Any scientific enquiry culminates in the development of concepts or theories which try to explain the phenomenon under investigation. The enquiry into the phenomenon of aggression gave rise to several concepts which we will be considering now.

**Instinct theory of Aggression**

According to this theory aggression is a basic constituent of human mind. Sigmund Freud is the main architect of this theory and subsequently he was followed by another proponent of the view, Konrad Lorenz, an Austrian researcher in animal behaviour. Freud's (1922, 1923) proposition, based on speculative and clinical bases, states that all human behaviours arise out of a complex interaction between two basic instincts: an object seeking one, the eros, striving for higher unity and pleasure, and the other, the self-destructive quality of mind, the "death instinct" - which can be directed towards the outside world and become a "destructive instinct", the generator of aggression. Eros or the life instinct aims to preserve the organism and the species and thereby to bring about greater unities. The destructive instinct (Death instinct or Thanatos) is at work in creatures and strives to bring about a ruin and reduce life to its original state of inanimate object. Freud further states that these two instincts work not in isolation, but in an alloyed form each time with reciprocal contribution. Therefore the difficulty lies in isolating the two classes. He wrote (1923), "............ the mute but powerful death-instinct, which desires to be at peace and (as the pleasure principle demands) to put Eros, the intruder, to rest; .................. "

This death-instinct when thrown to the external world manifests as aggression.

Lorenz maintains the concept of innate nature of man's aggression which he inherited from his primate ancestors. He calls it militant enthusiasm. Lorenz (1966) writes in his 'On Aggression', "In reality militant enthusiasm is a specialized form of communal aggression ...... Rational considerations, criticism, and all reasonable arguments against the behaviour dictated by militant enthusiasm are silenced by an amazing reversal of all values, making them appear not only untenable but base and dishonourable". According to Lorenz (1966) innate fighting instinct is the source of aggressive energy and this energy is regularly generated at a fixed rate and accumulated only to be discharged as aggressive behaviour in response to aggression-releasing stimuli.

According to the proponents of this theory, aggression cannot be totally obliterated from human mind as it exists as an essential constituent of his psyche. Again the theory of innate aggression makes the ethical values and freedom of will to fall to the ground as in that case the blame violence, individual and social, loses its validity. But a U.S. writer, Robert Ardrey, follower of Lorenz, opposes this criticism in his book
'African Genesis' (1961). He writes “The miracle of man is not how far he has sunk but how magnificently he has risen. We are known among the stars by our poems, not our corpses”. Both Freud and Lorenz are of opinion that the aggressive energy can be directed to harmless or socially useful channels and thus considerably neutralized by love or the eros. Lorenz said (1966), “Love and friendship should embrace all humanity”. And Freud (1933) wrote: “……… the most obvious plan will be to bring Eros, its antagonist, into play against it”. However, these propositions are not easy to implement.

**Drive theory of Aggression**

This theory proposes that aggressive energy arises mainly from an externally elicited drive to inflict harm on others (Berko-witz, 1978). Dollard et al (1939) propounded that frustration is the essential condition for aggression. When a goal directed behaviour is blocked, frustration appears and this in turn arouses a drive - the aggressive drive, whose goal is to act aggressively. The great significance of this theory is that aggressiveness can be controlled by identifying and removing the external conditions which elicit aggressive drives. But this theory is not substantiated scientifically.

**Social learning theory**

This theory puts forward that aggression is a social form of behaviour (aggressive response) acquired through experiences in life. In other words the aggressive behaviour is learned, and learned through social reward system (Bandura, 1973; Baron, 1977).

Apparently it may appear very optimistic since a response or behaviour which is learned can be unlearned also. But in fact to alter a behaviour is rather a difficult task.

**Ancient Indian views**

Let us have a glimpse into the thoughts, in respect of aggression, of the great Indian seers of the ancient times. Destruction or aggression was seen by them as an integral part of man and nature. That there is a close interplay between creation and destruction and that an inseparable bond exists between the two was also observed by them.

If we go chronologically, we find that as far back as in the age of Rig-Veda the Risis developed the concept of God as 'Rudra' which was vested with the idea of creation as well as destruction (Rig-Veda 14, 2, 3, 7, 8). In the Upanishadic period the idea took a clearer shape. In Sevetasvatara Upanishad (verse 2) it is said “Rudra is truly one; for the knowers of Brahman do not admit the existence of a second. He alone rules all the worlds by His powers. He dwells as the inner self of every living being. After having created all the worlds, He, their protector, takes them back into Himself at the end of time” (Nikhilananda, 1975). Rudra here refers to Brahman with whom lies the phenomena of creation, preservation and destruction.

In the Puranic age Rudra was identified with Siva. The aspects of creation, preservation and destruction in nature were combined in the personification of Lord Siva. This has been beautifully exemplified in the 8th C. Trimurti statue of Elephanta cave (Havell, 1940) and in the Nataraja statue of Chidambaram of the 13th C. The dance of Nataraja is the symbol of simultaneous creation, preservation and destruction (Coomerswami 1956; Mazumdar, 1957).

The philosophical concept of the Sankhya of Satva, Rajas and Tamas, the constituent attributes of primordial matter of Prakriti signifying the qualities of equipoise, passion (aggression is one of the passions) and inertia of ignorance respectively, was permeated
among the people through the Puranic stories. In the Markandeya Purana the Supreme Goddess, who is the personification of Prakriti, has been worshipped in the manifestation of her destructive aspects in the image of Mother Kali, an emanation from Mother Durga. Durga is also called ‘Rudra-ni’ (Bhattacharya, 1980; Basu, Beng. year 1300 & 1304). In the Tantrasara the Mother image is the combination of both aggressive and loving aspects. The Mother’s face is fearful, but at the same time it is with a smile. There is a severed head of an Asura in her lower left hand and in the upper on of the same side is the Kharga (weapon). Again in her upper right hand is the sign of hope and in the lower right hand is the pose of granting boon to the devotees. The Mantras (sacred words or sounds) for meditation on the Mother signify Her creative, preservative and destructive aspects (Basu, Beng. year 1304). In the Varaha Purana the Sakri (power) of the Mother has been described as the combination of the three kinds of energy - the Sava, the Rajas and the Tamas (Basu, Beng. year 1304).

In the Brahma-Vaibarta Purana the manifestation of the eternal power of the Great Mother has been shown in the forms of Bhairabi (Fearful) and Vaishnabi (Preserving) and etc. (Basu, Beng. year 1303). The Vedanta says that due to Maya - illusion - we forget our true nature, we think ourselves separate from each other and this sense of separateness is the cause of all evil. Therefore Maya is the root cause of aggression, hatred, violence and such others (Nikhilananda, 1975).

In the Gita we find various and more mature views regarding aggression. First, the Gita establishes the existence of aggression and violence as social needs for the preservation of the good and destruction of the wicked - paritranaya sadhunam/vinasaya ca duskrtram (IV.8). “Krishna tells Arjuna that for warriors there is no ennobling duty than a fair fight” (Radhakrishnan, 1970). Lord Krishna tries to impress upon Arjuna on the point of Svadharma or law of action and consequent reward for that righteous social duty, i.e. the acceptance of battle, if necessary, by a Kshatriya. Lord Krishna says “Further, having regard for thine own duty, thou shouldst not falter, there exists no greater good for a Kshatriya than a battle enjoined by duty” (I1.31) “Happy are the Kshatriyas, O Partha (Arjuna), for whom such a war comes of its own accord as an open door to heaven” (II.32). “Either slain thou shall go to heaven; or victorious thou shall enjoy the earth; therefore arise, O son of Kunti (Arjuna), resolved on battle” (I1.37). The Mahabharata, in the Udyoga-parva, also emphasizes the necessity of violence for the proper sustenance of society. Therefore according to the Gita, the sense of guilt that hinders one from the path of righteous social duty is unjustified. On this issue of moral dilemma the Gita urges one for action without attachment - work without concern for the result - ma phalesu kadacana - let not the fruits of action be thy motive” - But this is a difficult and higher discipline to be accomplished. Secondly, the Gita, in a point-blank manner, points out the cause of aggression in man. The Gita says that from desire comes anger and desire is the result of attachment. “When a man dwells in his mind on the objects of sense, attachment to them is produced. From attachment springs desire and from desire comes anger” (I1.62) - Kama Krodha bijayate. Desire or Kama is inherent in our mundane existence with the spontaneous result of aggression; when our desire is thwarted, our egotism is injured because of our attachment to the objective world and
we become aggressive. According to the Gita, this attachment is avidya or ignorance, which is the constituent element of this world of Maya or ajnana, divested of the Absolute Reality. In a subsequent passage of Gita explains further; Arjuna, the representative of human soul, with clouded mind, unsettled conviction, confused consciousness, like us who are drifting in this ocean of turmoil of this mundane world, but who aspire for perfection and peace, asks Lord Krishna, the teacher of the Gita, that why human beings should indulge in evil and aggressive deeds “But by what is a man impelled to commit sin, as if by force, even against his will, O Varsneya (Krishna)” (11.36). The Lord replies. “This is craving, this is wrath, born of the mode of passion, all devouring and most sinful, know this to be the enemy here” (11.37). “As fire is covered by smoke, as a mirror by dust, as an embryo is enveloped by the womb, so is this covered by that (Passion)” (11.38). Therefore, we see, as in the Sankhya Philosophy, passion is the seat of aggression (Radhakrishnan, 1970).

Thirdly, the Gita upholds the destructive aspects of the absolute Reality - the destructive aspect of Truth. Arjuna narrates his realisation while reviewing the Viswarupa (universal form of God) of Lord Krishna. As moths rush swiftly into a blazing fire to perish there, so do these men rush into Thy with great speed to their own destruction” (XI.29). Devouring all the worlds on every side with Thy flaming mouths, Thou lickest them up. Thy fiery rays fill this whole universe and scorch it with their fierce radiance, O Vishnu” (XI.30). In reply the Lord elaborates and makes clear His destructive aspect. “Time am I, world destroying, grown mature, engaged here in subduing the world” (XI.32). This is the image of God or Absolute as aggression per excellence and this is one of the aspects of Truth or Reality (Radhakrishnan, 1970). That aggression is basic in creation or Nature is a profound verdict of the Gita.

But, we have seen, that the Gita gives due weight to the other views also, as they have relative values when the Gita says that aggression arises from the frustration of desires we find in it the resonance of modern view of frustration-aggression theory, i.e. aggression is a reaction to the frustrating situation. Again when the Lord tries to arouse Arjuna for war reminding him of his social duty swadharma as the Kshatriya (warrior) and ask him to enjoy the Kingdom or heaven - “Better is one’s own law though imperfectly carried out than the law of another carried out perfectly. Better is death in (the fulfilment of) one’s own law for the follow another’s law is perilous” (XI.35) - Svadharma nidhanam sreyah/pa-radharm bhayabhah - it appears that aggression for right cause is a social necessity and it can be reinforced by reward. Our present day learning theory of aggression is an echo of this view. Finally we can say that, on the whole, ancient Indian views accept aggression as an integral part of reality.

Control of Aggression

Psychologists, social workers, humanists and persons from different walks of life suggest many a way for the control and prevention of aggression.

It is thought that punishment is quite a useful step in preventing aggressive behaviour. But recent studies (Donnesstein et al, 1972) show that it has very limited value in deterring aggression. The punishment is often understood as counter aggressive attack and the recipient may tend to respond with higher intensity of aggression. It has only a
temporary effect till the victim remains under the impression that the punishment giving authority is stronger than he. The victim waits for the opportunity to make a counter attack with more vigour.

Punishment, to the children, represents an aggressive model of behaviour. As a result they learn to behave aggressively with the weaker objects.

From the facts of history of man it is evident that punishment may induce the idea of revenge in the mind of the punished individual or group and therefore may generate reverse effect. The subdued Germany in the First World War attempted for a bloody vengeance on the Allied Nations in the Second World War.

In the past it was believed that if an angry person is given an opportunity to express his emotion in harmless behaviour than the anger is reduced and the chance of future aggression is lessened. However, the experimental evidence are not in agreement with the view. In the earlier writing, Freud (1916) suggested the usefulness of catharsis in releasing emotional tension, but later on he stated that its effect is very limited and does not last long. Dolland et al (1939) stressed on the efficacy of catharsis in the reduction of aggression. But others observed inconsistent effect of catharsis.

Good-will based on reasoning may also prevent violence. After the holocaust of World War I, in reply to Einstein's letter Freud (1932) wrote: “Wars will only be prevented with certainty if mankind unites in setting up a central authority to which the right of giving judgement upon all conflicts of interest shall be handed over”. With same aim in view the League of Nations was evolved. But we know from subsequent history that reasoning did not prevail. Following the thought of Plato in his Republic - that of philosopher king - Freud (1932) also suggested that “......... a community of men who had subordinated their instinctual life to the dictatorship of reason should remain at the helm of the state administration who would guide the masses. But this is not to be fulfilled in foreseeable future”.

Throughout the ages it has been observed that by inducing incompatible or discordant responses to anger or violence, it is possible to control or withhold aggression in human being. Some of the important discordant responses are empathy, humour, mild erotic stimuli, guilt feeling, absorbing cognitive task etc. It has been observed that the imagination of or the actual visualizing the distressed state of the victim brings a change in the mind of the aggressor. At the sight of horror of bloodshed and suffering in the Kalinga War, pity was roused in the mind of the Emperor Asoka through an empathetic feeling. It is said that then Chandasoka was transformed into Asoka the Great. Similarly, the ruffians Jagai and Madhai became ardent followers of Sri Chaitanya when they were embraced with compassion by Sri Chaitanya in response to their sanguinary physical assault to him. The discordant (love against hate) behaviour of Lord Chaitanya to the ruffians created wonder and new suggestions in the latters’ minds. This novel demeanour had new values and imponderable force which attracted them to the Great Master. Simultaneously sense of guilt was roused in them and as a result a complex mental activity was generated. The childhood fantasy of the desire to be loved by a benevolent powerful father, to whom security was assured, started to get unleashed and a profound urge to surrender to this fantasied father came into action. Thus the
Eros activity was set against the activity of the Thanatos - the destructive force.

Similarly Lord Buddha asked us to return good for evil. He said: “Not by hate is hate destroyed, by love alone is hate destroyed”. “Ye monks, if robbers and murderers should sever your joints and ribs with a saw, he who fell into anger threat would not be fulfilling my commands” (Radhakrishnan, 1949). Only love can conquer aggression. But how much love, what kind of love this should be? Lord Buddha analysed this: “Even as a mother watcheth O' er her child, Her only child, as long as life doth last, /So let us, for all creatures, great or small. /Develop such boundless heart and mind, /Ay, let us practise love for all the World, /Above, below, around and everywhere, /Uncramped, free from ill-will and enmity” (Radhakrishnan, 1949). Therefore Buddha preached Ahimsa - total non-violence, which can be attained by men through the eight noble paths prescribed by them.

Gandhiji, in agreement with the ancient Indian tradition, discovered the weapon of non-violent resistance or Satyagraha, which urges for a change of heart of the aggressor. It was to his credit that he used it in present day world-politics where the deafening clamour of aggression has been disturbing our peace. In South Africa - Satyagraha and Salt-Satyagraha of Dandi, which were conducted by Gandhiji himself. Gandhiji urged the volunteers to bear all sorts of violence by the Police and not to show any sign of aggression. We know that on the face of this incompatible response of the Satyagrahis the military action in the then North West Frontier Province came to a thaw (Nehru, Autobiography 1939). The effect of non-violent resistance begins to take place in the unconscious of the violent opponent in the form of conversion. There is a shifting of emotional tone and energy. As the Satyagrahis bear the onslaught with utmost love and meekness, the attacker has no other alternative but to pause and think; because the most powerful forces find it impossible to cope with the transparency of love, the love which suffers most (Bose, Gregg, 1949). This is evident in the acknowledgement of J. C. Smuts (1939), the opponent of Gandhiji in South-Africa. “It was my fate to be the antagonist of a man for whom even then I had the highest respect. That clash on the small stage of South Africa brought out certain qualities of Gandhi's character which have since become more prominently displayed in his later large-scale operation in India …… His manner and spirit even then, as well as later, contrasted markedly with the ruthless and brutal forcefulness which is the vogue in our day………… I must frankly admit that his activities at that time were very trying to me” (Smuts, 1939).

In the Mahabharata, Vana Parba, it is said “By meekness one can conquer the cruel and meek both; there is nothing impossible to meekness; hence meekness is sharper than cruelty” - mridunam darunam hanti mriduna hantyadarunim nasadhyam mriduna kineittasmatt brataram mridu. (Mahabharata V P. 28.31).

On the part of the non-violent soldier Satyagraha opens up new vista as it makes possible the displacement of aggression by elevating the conflict to a higher level. “Satyagraha is not a substitute of war, it is war itself shorn of many of its ugly features and guided by a purpose nobler than we associate with destruction. It is intensely heroic and chivalrous form of war” (Bose, 1947). Thus through Satyagraha both the non-violent soldier and his violent opponent are
unified on the plane of love and in this way it paves the way to sublimation for both. Hence Satyagraha can be taken as "a moral equivalent of war".

Experimental (Baron & Bell, 1974; Leat, 1974) as well as common observation show that exposure to humorous materials - cartoon pictures, jokes, caricature and spoken or written stories of laughter and lightheartedness, may reduce aggressive tendencies in persons. But sometimes reverse effect has also been noticed, as politicians get angry at the sight of their cartoon pictures. Mild erotic stimuli have been found very effective in abating aggression in many situations. Patting, rubbing gently on the body, soft music, words on solace from very close relations, spraying cold water on face and head are some examples of such stimuli. In this matter it is very important that the stimuli should come from dear ones, e.g. from parents to children, from one spouse to the other, from friend to friend.

Arousal of guilt feeling in the mind of the aggressor lessens or fully hinders the outbreak of anger. Feeling of guilt is the result of human social evolution. Through this evolution man attained his faculty of conscience and moral values. This was necessary for his survival. Sense of guilt acts as an automatic check to the expression of aggression. This guilt may appear in the mind of the aggressor if the aggrieved remains subdued and suffers humiliation to a great extent. In the War of Kalinga this sense might have influenced the mind of Asoka.

At the outbreak of aggression if a person can concentrate on some intellectual work his anger may diminish. Someone recommends to count, mentally, up to hundred and repeat it again and again till the emotion is subdued (Datta, 1951). It is like the religious practice of Jap and Nam. Dacoit Ratnakar by repeating the holy name of Rama was transformed into a sage. Almost all the religions recommend the practice of uttering mentally or concentrating upon the holy words or symbols to counteract evil emotions.

In the aforesaid letter to Einstein, Freud (1932) suggested to set Eros against Thanatos in order to counteract violence "... the most obvious plan will be to bring Eros, its antagonist, into play against it. Anything that encourages the growth of emotional ties between men must operate against war". In this respect Freud (1932) urged to inculcate love and identification in men. There must be interaction among nations on cultural plane as that can foster and enhance universal fraternity. In the Vedantic thought of India the concept of identification with the whole universe has been given much emphasis. The inner idea of the Gayatri Mantra urges a Hindu devotee to get identified with the universe (Tagore, 1974; Woodrofe, 1913) "Om bhur-bhuvah-svah tat savitur varenyam bhargo devasya dhimahi dhiyo yo nah pracodayat - Let us contemplate the wonderous spirit of the Divine creator of the earthly, atmospheric and celestial spheres. May He direct our minds, (that is towards the attainment of dharma, artha, kama and moksa, om)" (Woodrofe, 1913).

But according to Freud (1923) complete transformation of aggression into a higher emotion is possible only through sublimation. Creative work is one of the best known channels through which aggression may get an up-lift on the way of sublimation. Literary work, scientific investigation, fight against natural calamities, work for human welfare, sports, fine arts etc. can be employed in this regard. In this connection
the story of Ratnakara may be referred to. Ratnakara the unruly dacoit and the image of violence, was changed into a compassionate sage. In the event of pathos of one of the herons of the pair hit his heart. The verse - Sloka - was created: ma nisada pratistham tvamagamh sasvati samah/yat krauncamithunadekamabadhik kamamohitam” - “O Fowler you would never be esteemed as you have killed one of the herons of the brace who were infatuated with lust”. The wrath in the form of curse was sublimated in the spontaneous expression having the beauty of poetry. Then the Ramayana was created. The aggression of Valmiki was sublimated through the artistic work of the Ramayana in which there are innumerable manifestations of violence and aggression; but those were uplifted to the realm of creativity - And for thousand of years men have been channalising their inherent aggression to the realm of art through the great work of Valmiki. Every work of art and culture paves the way for sublimation. Freud (1932) rightly says: “whatever fosters the growth of culture works at the same time against war”. Almost all the religions of the world profess love and universal brotherhood. Non-injury or Ahimsa is a fundamental tenet of many religions. Save and except the inculcation of the spirit of Ahimsa Indian seers developed a practical approach through some contemplative and physical exercises, which is called yoga, for the upliftment of the individual mind. Practice of yoga helps one to control his emotions.

Again some popular religious cults, such as Vaishnava, Baul, Alvara, Sufi, Nath etc. gave the general mass of India a way of life which eschewed violence altogether. Therefore, spread of true religious spirit and way of life may help to minimise the quantum of aggression upon the surface of earth.

Cultural activities in the form of games and sports, social gatherings, dance and drama may deplete aggression and foster love-tie. The glaring examples are Olympics and Ping Post Diplomacy. In the villages of West Bengal the cultural activities of ‘Kabir Larai’, ‘Leto’, ‘Tarza’, etc. where (two poets or groups of poets fight through verse), serve the same purpose. ‘Saila’, a form of ceremonious social gathering at a particular time of the year, gives opportunity to the villagers irrespective of religion, cast and creed, for making and renewing friendship. This system used to help foster love among people in the villages of Bengal. The author has personal experience of this festival which is no longer held at present. It would not be unwise to revive these activities.

For the control of anger some prescribe to avoid particular items of food (Datta, 1951). For the same purpose almost all the religions recommend fasting for the purification of mind.

The method of self-torture for the propitiation of God is also practised in every religion. The rituals to invoke Lord Siva (‘Gajan’ rituals in Bengal) are of this kind. They include fasting, to lie in prostate while fasting before the place of worship (i.e. Dharna), to pierce the tongue with nail, to walk on the thorns or fire, to traverse a specified distance by repeatedly prostrating the body on the ground (‘Danda Pranam’), etc. These methods are being used in other fields (for example, Dharna and hunger-strike in politics) also to combat powerful authority.

Moreover, we have been using drug to arrest the growth of aggression in individual mind when that emotion crosses the limit of normality in a particular case. Psychoanalysis, which attempts to reorient
both the rational and emotional bases of one's mind, is also resorted to in some cases of pathology.

Lastly, I am proud to mention, as we are privileged in this respect, of our democratic socio-political system. Parliamentary democracy replaces the battle of bullet by the battle of ballot. Freedom of speech has enabled us to ventilate our inherent aggression through oral battle. Our democratic system is very suitable check to the spread of aggression. But, for this we need a democratic or 'liberal' system of education through which the individuality of each citizen would be developed. Democratic system of education aspires for tolerance for others' opinion and free expression of ideas. Hence rigid nationalism and groupism is not conducive to liberal education. We have seen in the history of man that national patriotism always ignites violence and crushed the opponents - individuals or groups. Proper growth of the individual is the best safe-guard to violence. Tagore (1959) says: "With the growth of nationalism, man has become the greatest menace to man . . . . . . . ." "The spirit of national selfishness is that brain disease of a people which shows itself in red eyes and clenched fists, in violence of talk and movements, all the while shattering its natural restorative powers. But the power of self sacrifice, together with the moral faculty of sympathy and cooperation, is the guiding spirit of social vitality . . . . . . . . . What is worse, this aberration of a people, decked with the showy title of "patriotism", proudly walks abroad, passing itself off as a highly moral influence . . . . . . . . . . . . . . .

I do not put my faith any in new institution, but in the individuals all over the world who think clearly, feel nobly, and act rightly, thus becoming the channels of moral truth".

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