

## DRAFT Background Paper for Working Group 1:

### HUMAN AGGRESSIVENESS AND WAR

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“HOWEVER unpalatable the fact, the real reason why we have wars is that men like fighting, and women like those men who are prepared to fight on their behalf.” So wrote van Creveld in 1991, implying that wars depend on the aggressiveness of individuals. The main purpose of this workshop is to examine the truth of this assertion, to pinpoint the sources of violence within and between societies, and thereby to point the way towards their elimination. This introductory paper, intended to stimulate and focus discussion, will argue that the role of individual aggressiveness depends on the sort of aggression that is under discussion, and that it is not an important factor in the genesis of major wars.

People are capable of perpetrating the most terrible acts of violence on their fellows. From before recorded history humans have killed humans, and violence is potentially present in every society. There is no escaping the fact that the *capacity* to develop a propensity for violence is part of human nature. But that does not mean that aggression is inevitable: temporary anger need not give rise to persistent hostility, and hostility need not give rise to acts of aggression. And people also have the capacity to care for the needs of others, and are capable of acts of great altruism and self-sacrifice. A subsidiary aim of this workshop is to identify the factors that make aggressive tendencies predominate over the cooperative and compassionate ones. Some degree of conflict of interest is often present in relationships between individuals, in the relations between groups of individuals within states, and in the relations between states: we are concerned with the factors that make such conflicts escalate into violence.

The answer to that question depends critically on the context. While there may be some factors in common, the bases of individual aggressiveness are very different from those involved in mob violence, and they differ yet again from the factors influencing the bomb-aimer pressing the button in a large scale international war. In considering whether acts which harm others are a consequence of the aggressive motivation of individuals, it is essential to recognise the diversity of such acts, which include interactions between individuals, violence between groups, and wars of the WW2 type. We shall see that, with increasing social complexity, individual

aggressiveness becomes progressively less important, but other aspects of human nature come to contribute to group phenomena. Although research on human violence has focussed too often on the importance of one factor or another, it is essential to remember that violence always has multiple causes, and the interactions between the causal factors remain largely unexplored.

Although we are concerned ultimately, but not exclusively, with violence between groups and states, a short summary of work on the bases of individual aggressiveness is first necessary.

## **AGGRESSION BETWEEN INDIVIDUALS**

### **Genetic and other biological factors**

WHAT does it mean to say that the capacity for violence is intrinsic to human nature? Classical genetics relies on the measurement and analysis of the inheritance of *differences* between individuals. Animal studies show that inbred lines reared in similar environments often differ in aggressiveness, and that the differences can be enhanced by selective breeding (e.g. Lagerspetz & Lagerspetz, 1971; Manning, 1989). Modern techniques can enable the genes involved to be identified (Maxson, 1996). In our own species, twin studies have shown that genetic factors are important for differences in anti-social behaviour, including aggression, especially when it is associated with early-onset and pervasive hyperactivity, though the genetic influence on violent crime seems to be less than that on petty-property crime (Rutter, Giller & Hagell, 1998).

But it cannot be assumed, from a relation between a genetic *difference* and the incidence of aggression, that the genetic difference affects aggression directly: overt aggression is a long way from gene action. The genes determine the structure of the proteins in the cells of our body, and a long sequence of developmental processes intervenes between the proteins and behaviour. These processes are influenced also by experiential and contextual factors, so that any attempt to measure the relative importance of genetic and environmental factors is liable to lack generality. Furthermore, genetic differences may affect some other propensity which affects the incidence of experiences likely to induce aggressiveness<sup>1</sup>: for instance irritable babies may induce parenting of a type which enhances the likelihood that they will develop an aggressive temperament (see below). Or genetic differences may affect some other propensity which affects the likelihood of aggressive behaviour - for instance power motivation or self-assertiveness<sup>2</sup>. In any case, childhood aggressiveness is not necessarily associated with adult anti-social behaviour, but only when it is pronounced and associated with other symptoms, such as hyperactivity and peer rejection (Pulkkinen, 1998).

There are, of course, other biological factors which affect aggressiveness. In at least the great majority of countries, males are more physically aggressive than females. The incidence of violent acts tends to increase with age, reaching a peak in the late teens or early twenties, and then to decline (e.g. Blumstein et al., 1988). And such factors as hypoglycaemia, stress, drugs, and some forms of psychopathology, may be associated with aggressiveness (Segall, 1989).

### **Experiential factors**

A host of studies testify to the importance of experiential factors in the development of aggressiveness in the individual (Loeb & Hay, 1997). Much research has focussed on the family concomitants of aggression. In the West, where two-parent nuclear families are the norm, disruption in parenting is strongly associated with subsequent aggressiveness. Particular aspects of child-rearing strategies are related to aggression in the child - for instance insecure and especially disorganised attachment, parental coldness and permissiveness, inconsistent punishment and power-assertive disciplinary practices (Coie & Dodge, 1998; Martin, 1975; McCord, 1988; Rothbart & Bates, 1998). Baumrind (1971) found that children of authoritarian (high parental control and low warmth) and permissive (low control) parents were more aggressive than those of authoritative (sensitive control and moderate-high warmth) (see also Hinde, Tamplin & Barrett, 1993)<sup>3</sup>. The effects of punishment are complex: the child learns that aggression can have negative consequences, but also suffers pain that induces aggression and observes that the parent is behaving aggressively.

Other studies have examined the processes whereby family interaction patterns influence the development of aggressiveness. Classical conditioning, operant conditioning and observational learning have all been implicated. The learning processes may involve cognitive intermediaries including the decoding of cues, their interpretation, and the attribution of motives (Berkowitz, 1993; Dodge, 1982). The dynamics must differ between two- and one-parent families, and between nuclear and extended families.

In addition, individuals outside the family may serve as role models, and the peer group may be an important source of influence - peer-rejection is also predictive of aggressiveness. Aggressive individuals often hold generally positive views about aggression and believe it is socially normative: this may be a post hoc rationalisation of their own conduct (Coie & Dodge, 1998).

In turn, the role of family members and outsiders is influenced by the nature, values and norms of the society in which they live. In some cultures aggressive behaviour is encouraged, in others harmonious relationships are valued, and in yet others harmonious relations with the in-group, but hostility to outsiders, is the norm. Such norms may differ between boys and girls, firstborns and laterborns, between social classes, and so on. Where individuals or groups see themselves to

be in danger of being exploited, they tend to cultivate an image of toughness and irritability. Such a situation was found in the frontier regions of the United States of America in the nineteenth century, and in many modern cities (Pruitt, 1989; Archer & Gartner, 1984)<sup>4</sup>. Poverty, and especially income differential, is strongly related to aggressiveness within and across societies and probably operates through disruption of parenting and fear of exploitation (Gartner, 1977; see workshop 4). Aggression can also arise from a need for a sense of self-efficacy: when aggression is associated with enhanced self-efficacy, the aggression becomes self-reinforcing.

The mass media both reflect and create societal norms, and most studies show a consistent but not necessarily strong link between televised violence and the viewers' aggressive tendencies. The data also indicate that exposure to community violence can enhance aggressiveness - implying that violence causes aggressiveness as well as aggressiveness leading to violence (Liddell, Kemp, & Moema, 1991). Especially potent instigators of aggressiveness are video games which involve active participation in simulated violence (Anderson & Ford, 1986).

Whether or not aggression actually occurs in a given situation may be influenced by a number of situational factors. For instance, the high density of individuals in cities increases the frequency of interpersonal contacts, enhances the feeling of being crowded, and raises the emotional level (Freedman, 1975; Zimbardo, 1969). A moderate degree of arousal facilitates aggression (Zillman, 1979) as well as other types of behaviour. The design of buildings may also be an issue: some high-rise buildings may diminish the feeling of community and be associated with a feeling of alienation. Even heat and humidity may increase the likelihood of violence (Anderson & Anderson, 1984).

### **Elicitation of aggression**

The factors considered so far may make resort to aggression more likely, but one must also consider the actual trigger. Here it is important to remember that violence against others is seldom motivated simply by aggressive propensities. While a very few children apparently tease others for the sake of it, and are reinforced by signs of pain in the victim (hostile aggression; Manning et al. 1978), and some adults show similar behaviour, most individual aggression is a means to an end. Often it is instrumental, intended to gain or maintain access to an object (referred to here as acquisitiveness) or to obtain or maintain status (referred to here as assertiveness). For that reason an earlier theory regarded frustration as the cause of aggression, the strength of aggressive motivation being ascribed to the number and degree of frustrations recently experienced. That, however, has proved not to be a very useful formulation because the concept of frustration is so loose that it is nearly always possible to postulate some sort of frustration to account for an aggressive act; and because of its neglect of cognitive intermediaries such as the actor's interpretation of the current situation. Power motivation may also help to trigger aggression - especially in situations in which an aggressive act will enhance

the status of the actor in the eyes of his or her peers. Aversive stimulation, pain and fear can also lead to aggressiveness, both specifically and through an effect on arousal (Ulrich, 1966).

Experimental evidence indicates that the presence of a weapon can augment aggressiveness, as well as exacerbating the consequences of an aggressive incident (Berkowitz, 1993). There is little doubt that the availability of weapons is an important factor in the high levels of homicide occurring in the USA. Of even greater importance are the large numbers of light weapons available in many Third World countries, many of which derive ultimately from local conflicts master-minded by the super-powers during the Cold War era.

Finally, aggressive acts are seldom single-minded, but occur in the presence of potentially inhibiting factors. For one thing, aggression nearly always involves fear of retaliation, and fear can act not only to augment the probability of aggression, but also as a powerful inhibitor, according to circumstances. Of more interest, by nature or nurture or both, we all have inhibitions about hurting others which must be overcome if aggressive acts are to be pressed home.

## **General**

We have seen that aggression between individuals is enhanced by diverse experiential factors. Reduction in aggressiveness must depend on reducing their effectiveness. Amongst these, the environment of early development, and especially sensitive parenting and harmonious family relationships, are critical issues. These in turn have their precursors in the wider environment and in the histories of the individuals concerned: parents are more likely to provide a loving environment if their circumstances have been and are favourable, and harmonious societies are conducive to lowered aggressiveness.

In the coming sections we shall see that aggression between groups is seldom *due directly* to the aggressive propensities of individuals, but rather that inter-group conflict can induce aggression. Motivation for aggression in those who fight is induced by leaders themselves motivated by assertiveness or acquisitiveness.

## **INTER-GROUP AGGRESSION**

### **Introduction**

**I**N this section we are concerned with a very wide range of phenomena from inter-gang wars, through organised terrorism, to civil war based on religious or ethnic differences and often involving attempted secession - in other words, with much of the violence in the second half of the twentieth century. Thus violence between

individuals, discussed in the previous section, and inter-state war, discussed subsequently, can be seen as the extremes of a (multi-dimensional) continuum containing diverse forms of inter-group conflict as an extensive middle-ground. And inter-group conflict may include acts of violence perpetrated by an individual who sees himself as representing a group, as in many acts of terrorism, or acts perpetrated by a group on an individual seen as representative of a group, as in the Apartheid violence against individuals seen as foreigners occupying jobs deserved by nationals (Minnaar, Pretorius & Wentzel, 1998; Nomoyi & Schurink, 1998). Many of the principles discussed here apply also to international war, and some of those discussed subsequently apply also here.

### **Some properties of human groups**

Aggression between groups raises a number of issues beyond those considered in the context of aggression between individuals. In the past, explanations of violence have emphasized such issues as deindividuation or mob violence, or have portrayed the conflict as resulting from disintegration of a previously existing social structure. While such factors may play a role, the crucial issues are the nature of the antagonistic groups, the ways in which the group members see themselves, and how they respond to the particular circumstances that preceded the violence (e.g. Campbell, 1992). For that reason it is first necessary to mention some properties of human groups.

In the course of human evolution, belonging to a group or community could augment the ability of an individual to survive or reproduce. It is thus reasonable to presume that natural selection acted to enhance behaviours conducive to group integration. Indeed it is argued that the development of the primate brain was driven in large measure by the advantages to be gained by coping with a complex society (Humphrey, 1976). The consequences of those selective forces still operate today. Individuals see themselves not only as unique individuals, but also as near-anonymous members of groups, with not only an individual identity but also a social identity, and individual survival may be seen as linked to group survival (Tajfel, 1981). Thus land or resources needed by the group may be seen as necessary for every individual in the group, and a threat to the group's resources may be seen by individuals as a reason for going to war. Similarly, fear for the safety of the group's resources, or for the integrity of the group's territory, as well as fear for one's own safety, may be seen as reasons for defence - with attack seen as the best form of defence.

Groups vary from unstructured, anonymous crowds, whose members may share a common goal but mostly lack personal relationships with each other, to structured groups. In structured groups the members define themselves and are defined as a group, they see themselves as in some degree interdependent, and their social interactions are influenced by rules and norms characteristic of the group. There is no clear agreement as to which of these characteristics is primary. Some suggest

that the perception of similarity with others leads to the perception of common membership of a group (Tajfel & Turner, 1986), others emphasize the feeling of interdependence (Rabbie, 1991). It is also known that familiarity tends to enhance the attractiveness of another individual, and there are strong reasons for believing that natural selection has acted to promote behaviour conducive to group solidarity (Krebs & Davies, 1981; Zajonc, 1968). In any case, perceived similarity, perceived interdependence, in-group bias and in-group cooperation are mutually facilitatory, and positive feedback operates. Individuals therefore tend to identify with groups that they perceive positively, and to perceive favourably the groups to which they belong, even in the absence of objective evidence. Favourable perception of the in-group leads individuals to identify more closely with it, and the more closely they identify with it, the more they can enhance their own self-image by enhancing its characteristics or their perceptions of it. In parallel with this, individuals tend to see members of their own group as different from members of out-groups, and in-group cooperation is facilitated. Belonging to a group contributes to an individual's social identity and helps to define his or her position in society. Acceptance of group membership may provide a sense of security, confirmation of unverifiable (e.g. religious) beliefs, and justification for social actions (Tajfel, l.c.; Rabbie, l.c.). Individuals receive 'reflected glory' from the achievements of their fellow group members, even though not contributing themselves (Tesser, 1988).

These properties of psychological groups have important effects on the relations between groups. At a microcosmic level, such processes have been studied in the attitudes of the inhabitants of a Cumbrian (UK) village to outsiders who buy properties, infiltrate the village council, and generally upset village life (Rapport, 1997). More importantly, they play a critical role in inter-group aggression (Struch & Schwartz, 1989). It will be apparent that groups whose members believe in their own values and reject those of outsiders, and who believe their own members to be preferable to outsiders, are likely to succeed in competition with other groups which do not have these characteristics.

Aggression between two groups requires cooperation between the members of each group. Here, then, is an immediate difference from inter-individual aggression, where factors conducive to cooperation mitigate against violence: in inter-group situations cooperation within each group can exacerbate the conflict.

### **Aggression between groups**

Many of the factors conducive to aggression between individuals may operate also here: thus individuals who are especially prone to behave aggressively towards another individual may also be especially aggressive in a group situation, and the situational and eliciting factors conducive to aggression between individuals, including the availability of weapons, may also be conducive to aggression in the group situation. As with individual aggression, it is principally males who are involved, and ideals of masculinity have often been cited as exacerbating the

situation. For instance, Breckenridge (1998, p. 693) has argued that in the South African gold mines "racist violence formed a piece of a larger masculine ethic that valorised interpersonal violence underground. While this shared idea of manliness prompted some white and black workers to recognise each other as men, it also served to reproduce the endless violence of mine work". In the later decades of the Apartheid era, masculinity played a large role in the violence. Gangs formed in established but deprived communities which already had strong traditions of masculinity, and inter-gang territorial rivalry followed naturally from the current notions of masculine dignity (Glazer, 1998). Of course, the desiderata of masculinity differ between societies, and there have been interesting exceptions: the 'youth' in South Africa sometimes included women, and Hutu women encouraged their menfolk to rape and kill Tutsis in Rwanda (Goldblatt & Meintjes, 1998; Jamieson, 1999).

Of special interest, however, are the additional factors conducive to violence between groups - issues which, though they depend on human nature, are emergent at the group level. While these are often discussed as alternative theories of group violence, they are not incompatible, and all may contribute to a given outbreak of violence (cf. Foster & Durrheim, 1998).

In unstructured groups, and to a lesser extent in structured ones, the relative anonymity of the individual, the arousal produced by the group situation, and the psychological support provided by like-minded individuals, may reduce the potency of inhibitions against violence. More important, however, is conformity to social pressures or to group norms. The social identity of individuals comes to predominate over their individual identity, and the violence is 'rational' given the socialisation, circumstances and norms of the perpetrators. The shared values of the group are thus critical. While individuals may fight each other in defence of their values, in the group situation the values are more potent just because they are shared. A perceived threat to the values of the in-group can be seen as legitimate instigation.

Solidarity is encouraged by images of the evils of the out-group. Because the in-group is seen as superior to the out-group, it is seen as proper to behave aggressively to others in defence of the values of the in-group. However it must be remembered that perceived reality is constantly being re-created, and values may be constructed *post hoc*: they may be manipulated by leaders to augment motivation or constructed by individuals to justify their actions. The perceived superiority of in-group members lends itself to exaggeration by propaganda - an issue discussed later. In some cases, as in the use of 'necklacing' in Apartheid South Africa, violence is perpetuated just because group members or bystanders are afraid that the violence being perpetrated on victims may be turned against them if they are seen not to support it (Nomoyi & Schurink, 1998).

Whilst to western eyes war and the associated instability are clearly evil, this is not true for everyone, and to some war may become almost an end in itself. Cilliers (pers. comm.) writes: "In Africa (and elsewhere) leaders (and those followers that benefit from the same) have found that violence has a benefit and a logic of its own.....however immoral and wrong this may appear to us. For the leaders of the MPLA and UNITA in Angola, for example, the continued instability of that country provides rich pickings for exploitation that would be reduced by peace. This is not to suggest that these leaders are necessarily uncaring criminals out to loot their country. Within a society where the levels of development are very different from those in much of what is known as the 'West', different norms and standards may apply in the acceptability of leadership behaviour that complicate easy description or comprehension. Think back, for example, to the previous centuries in Europe where kings and feudal lords could extort taxes and manpower from their subjects almost as an accepted right..." (see also Richards, 1996).

Furthermore, in intergroup situations instrumental aggression is often coupled with perceived deprivation, unemployment or suffering in comparison with the out-group. However, this does not imply that group violence is merely reactive to relative deprivation: it is likely to be directed, with clear political aims. Escalation to violence is especially likely if group members feel highly frustrated and see the out-group as responsible for their frustration, if efforts at negotiation have repeatedly failed and communication with the other group is perceived to be poor, if the other group is seen to be using power that is illegitimate, and if the ingroup is beginning to feel that it can muster the power to control its own destiny (Kock & Schutte, 1998).

Just because the individuals of each group share a common goal, kudos attaches to him or her who takes steps to achieve that goal. When two groups confront each other, individuals may want to attack but be held back by fear of reprisals or for moral reasons. In such a situation the individual who acts first, who first throws a brick at the police or whatever, gains status amongst his or her peers: individuals assert themselves by behaving aggressively. Thus assertiveness may be potent in augmenting aggressiveness. This is especially the case if aggression is valued highly by the group.

In many cases ethnic or religious differences are used to justify or exacerbate tensions whose roots lie in the more immediate issues of poverty and unemployment. According to Kock & Schutte (1998), this can occur "by mistake": an attack on an individual for some other reason may be ascribed by the victim or the victim's friends to ethnicity, and lead to reprisals against those of the same ethnicity as the attacker. More often, ethnicity or religion is used by those with influence to focus inter-group hatred (see workshop 3): it is claimed that such issues were fundamental in the unravelling of Yugoslavia, where unemployment was high, standards of living had fallen dramatically, and the situation could be exploited by ambitious leaders.

An issue of special importance arises when national boundaries do not coincide with ethnic, religious or tribal divisions. At the time of writing, about 22 such conflicts are listed as currently active by the International Institute of Strategic Studies (*The Military Balance, 1999-2000*). This appalling fact is a legacy of history. In Africa, in the colonial era, international boundaries were established with virtually no regard for pre-existing ethnic distinctions, and in some cases inter-group rivalry was encouraged on the divide-and-rule principle. A similar situation occurred in Europe after the two World wars. Such boundaries may be of far less significance to the peoples concerned than those signified by religious or ethnic differences, making the establishment of a new national identity an almost hopeless task, and providing a basis for long-term intra-state group rivalries. Similarly, a political boundary may be insufficient to eliminate a desire for unification - as in Korea and Vietnam.

But violence seldom if ever has a single cause, and causes may beget causes. Thus perceived injustice may lead to the prominence of a particular leader who further antagonises the out-group leading to more in-group frustration, and so on. This issue has been stressed especially by Staub (1989) in the case of the persecution of sub-groups within a society. This is especially likely to happen if the society has long discriminated against the sub-group, and its members have a strong respect for authority. Relatively trivial discriminations, resented by the minority group members, produces changes in the perpetrators such that they justify their actions by de-valuing the minority group. Resulting changes in the self-concepts of the perpetrators and of their leaders allows them to inflict even greater harm and even to embrace goals of mass killing.

In certain circumstances, inter-group violence can involve hostile aggression (see above), in which the suffering of the victim enhances the aggressiveness of the aggressor. Such a situation is favoured by anonymity - the victim is faceless and the aggressor escapes personal guilt. Following independence in Mozambique the authority of the state was much eroded and inter-group violence of this type was elaborated as a cult amongst Renamo soldiers. Incredible cruelty was inflicted upon civilians, the perpetrators seeing themselves as a brotherhood socially distinct from the victims. Ritualistic elements were seen as providing power to the perpetrators and to the activity, local mediums exercising spiritual powers were recruited, and the leaders claimed magical powers and immunity in battle. The violence, while appearing to lack a rationale, was such as to terrorise the population, and it was significant that an individual who would tell the tale was nearly always allowed to escape from each massacre (Wilson, 1992).

Too often such hostile aggression is part of a planned policy to exclude and eliminate members of a rival group. The genocides in the former Yugoslavia and Rwanda were planned at the highest level, implemented locally by military and paramilitary groups, and entailed the reanimation and manipulation of old tribal

and ethnic hatreds. They involved measures to marginalise, denigrate and dehumanize the victims (Jamieson, 1999).

Finally, the genesis of inter-group violence does not stem solely from the members of the initiating group, there is always an opposition: in the long term, it is the dominant culture that creates the ghetto; and in the short term it is often the behaviour of the opposition that ignites actual violence. In South Africa during Apartheid, police violence often preceded crowd violence (Foster & Durrheim, 1998). In addition, bystanders may accept, encourage or oppose the aggression (Staub, 1989).

It must also be remembered that the group members are never homogeneous, and their differing personalities and statuses within the group result in differing roles in the instigation of aggression. Leaders may be chosen because they represent the group values, or they may shape the values of the group. Aggressiveness by the leader may be imposed upon or spread to the followers. Often leaders are supported and guided by others who have the same views as themselves, limiting their perspective. Leaders may play a critical role in legitimating violence by fostering an ideal of loyalty and by promoting an image of the in-group as soldiers of liberation or supporters of social order, and an image of the out-group as oppressors or as disruptive elements in society<sup>5</sup>. In structured groups the role of the leaders is often crucial: they can determine whether a conflict of interest or a confrontation leads to aggression. They may encourage hostility towards an out-group in order to promote the integrity of their own group, or to stabilize their own position, or in order to acquire resources for themselves (Hastings & Jenkins, 1983).

Even apart from the leaders, group members are not identical units, and their differing personalities may affect the course of a confrontation. In a study of violence in South African townships before the end of apartheid, Straker (1992) identified the following types in the groups of "youth":

- *Leaders*. Well-balanced, idealistic, dedicated, skilled, popular, with independent views.
- *Followers*. Searching for a script as warrior heroes, attempting to achieve an ego ideal. Labile. Could become leaders. Potentially reckless.
- *Conduits*. Lacked sense of self, and used group to define it. Could lead, but would not intervene or change the course of the group.
- *Conformists*. Motivated by social conformity rather than by ideals. Sought group acceptance, camaraderie, but passions not engaged.
- *Psychological causalities*. Antisocial, but might justify criminal acts as political. Perceived negatively by the group.

Such diverse personalities are integrated in group action because the group situation satisfies for each his or her particular needs, as well as by the factors

more generally conducive to group cohesion, and by the very fact that they perceive others to perceive them as members of the group. But also, of course, there is a more cognitive element - a justification in terms of past injustice, religious differences, or economic need for the group's existence and actions.

### **Peaceful societies**

Perhaps some lessons can be learned from reputedly internally peaceful societies. There have been very few of these, but some data are available on, for instance, the Zuni of the south-west USA, the Kung bushmen of the Kalahari, the Arapesh of New Guinea, the Xingo of Brazil, the Semai of Malaysia, and the Buid of Mindoro. Such societies seem to have an anti-violence value system which accepts the possibility of violence amongst its members, but stigmatizes quarrelling, boasting, anger and violence, and accords prestige for generosity, gentleness and conflict avoidance. Their cosmology, rituals and legends support the value system by beliefs in which helpful spirits are opposed by malevolent ones who prey upon men. Institutions for resolving disputes are prominent. The peacefulness of the ingroup is contrasted with the belligerence and sub-human nature of outsiders. Most of these societies tend to be egalitarian and collectivist in orientation (reviews Brown, 1987; Haas, 1990; McCauley, 1990).

### **General**

Groups differ in size, complexity, and structure, and generalisations are liable to be loose. But inter-group violence depends on group distinctiveness - on the distinctions that individuals make between others in their own group and outsiders. The making of such distinctions is probably deeply ingrained in human nature, though they need not be coupled with value judgements. But when resources are more available to one group than to the other, a conflict of interest is likely to arise. This can lead to inter-group violence.

It will be apparent from the above that, while individual aggressiveness may play a role in inter-group violence, a variety of factors resulting from the very fact that it is a group gives the violence special characteristics. Reduction in the probability of inter-group violence could be brought about by a reduction in intra-group cohesiveness and perceived group differences. Many difficulties arise because groups are often held together by strong traditions or by individuals who have a strong self-interest in the integrity of the group.

One way to counter such tendencies must be to encourage people to feel that they have simultaneously more than one loyalty, more than one social self - Orthodox Christian and Bosnian, Muslim and Indian, Black and American (Beach, pers. comm.). Another possible route lies in extending loyalties to the local community more broadly: indeed modern methods of communication provide the possibility of seeing all humans as part of the human race. Of course local values will always be

valued - no-one wants a uniform Coca-Cola world. But while the customs of others may initially seem strange, they can still be respected. Extending the boundaries of the community to which one feels that one belongs need not necessarily be coupled with the imposition of one's own values on others, or with the acquisition of new ones.

Finally where conflicts arise, solutions that maximise the gains for both parties must be sought - though again this may be obstructed by the internal structure of the groups and the ambitions of the leaders. More importantly, attempts must be made to prevent recurrence or revenge. Because suffering can be transferred across generations, perceived injustices at one time may lead to conflict between groups whose members are fairly remote descendants of the original combatants (Papadakis, 1995). The most successful route to healing seems to be some form of Truth and Reconciliation Commission.

## **MAJOR INTERNATIONAL WARS**

### **War as an institution**

It will already be apparent that the distinction between inter-individual and inter-group aggression is far from absolute, and there is similarly no clear dividing line between aggressive interactions between small groups, strife between religious or ethnic groups such as that in the former Yugoslavia and Rwanda, and international war as exemplified by World War 2. It is now reasonable to entertain some hope that conflicts of the WW2 type will not recur. With the reasonably high standard of living enjoyed in the West, we have learned that the costs of war are likely to be greater than the gains. Western societies with sophisticated weaponry tend to be well provided for in other respects. However in the world as a whole localised wars between states and wars within states occur almost constantly. In Africa alone, over 30 wars were fought between 1970 and 1998, most of them intra-state in origin (UN Secretary-General, 1998). Violent conflicts, verging on international war, have occurred in the former Yugoslavia, the former Soviet Union, Sri Lanka, Indonesia, and many other parts of the world. In such cases the potential gains may have been seen as greater than the likely costs, and in many cases modern weapons were acquired in spite of the low standard of living of the general population. To provide a picture of the flavour of the continuum from the smaller scale group conflicts discussed in the previous section, this section focuses on the extreme case of international war as exemplified by the two world wars.

International war has three distinguishing characteristics. First, it involves conflict between societies each of which is complex and consists of many overlapping groups. Any negotiations between the two sides involve political leaders who may be in only limited touch with the general population.

Second, the role of leaders is paramount. In both political and military spheres the hierarchical organisation of society requires leaders at many levels, and one of their main preoccupations must be the maintenance of the integrity of the groups in their charge and of the motivation of the individuals who compose them<sup>6</sup>. While their own aggressiveness may not be an important issue, it may lead them to encourage aggression in others - though the thesis that leaders who encourage aggression in their followers are *ipso facto* aggressive themselves is indefensible.

Third, and perhaps most importantly, international war requires a marked degree of role differentiation. War is best seen as an institution with a large variety of constituent roles, each with its own prescribed rights and duties (Nadel, 1957). This is not merely a matter of leaders and followers, but of soldiers, sailors and airmen, of munition workers and factory organisers, of civil servants and politicians, of communication engineers, of doctors and nurses. Just as marriage is an institution with husbands and wives having their prescribed rights and duties; just as the British Parliament is an institution with prescribed rights and duties for the Prime Minister, the members of Parliament, the voting public and so on, so war can be seen as an institution with specified rights and duties for the incumbents of each of its roles. The munition workers make ammunition because it is their duty to do so, the transport workers take the ammunition to where it is needed because it is their duty to do so, soldiers strive to kill their opponents primarily because it is their duty to do so. Furthermore, much of the violence in modern war is perpetrated by individuals at a distance from their enemies. It is so much easier to drop a bomb, and even to shoot a man, than to cut his throat. This issue is, of course, epitomised by the nuclear-armed inter-continental ballistic missile.

Thus in modern international war the combatants on each side try to injure those on the other side not because they are aggressive, but because it is their duty. Whereas aggressive motivation is a major issue when individuals with conflicting aims have recourse to violence, it has become at most a very secondary issue in international war, its place having been taken by artillery and aerial bombardment. Aggressiveness may be a quality to be encouraged, may play some part in short-term interactions, and may be induced by fear or revenge, but for the most part aggressive killing is not condoned - as at My Lai. This is not to deny that there have been occasions in war in which individuals have taken 'pleasure' in killing (Bourke, 1989), though the quality of that 'pleasure' is an open issue: such emotions are almost certainly constructed on the basis of narratives about war propagated in peacetime. But although the behaviour of individuals in war can be described as 'aggression' in the sense that it causes harm to others, this is a very different thing from saying that the aggressiveness of individuals causes wars. War fosters aggressive behaviour, and sometimes aggressiveness, but individual aggressive motivation does not cause wars. In no way can it be said that the human capacity for aggression is the cause of international war: rather war imposes the duty to kill on the incumbents of some of the roles in the institution of war. This is an important issue because, during the Cold War era, politicians of both sides

implied that human aggressiveness made wars inevitable, using this as a reason for increasing their stock of weapons of mass destruction.

Nor are other motivations which contribute to individual aggression of much importance. Here, however, it is important to distinguish between the leaders and those who actually do the fighting. Acquisition of power or of more tangible resources may influence leaders, especially if the leadership is highly centralised. Furthermore, control of resources may be essential for the maintenance of the war - an issue of considerable importance in Liberia and Angola. In Angola the war, originally ideologically motivated and supported by the superpowers, is now kept going by the élites of both sides who, by perpetuating the conflict, are able to amass personal fortunes from the country's wealth in oil and diamonds: many international companies also profit from the situation<sup>7</sup>. But, although looting may occur, acquisitiveness is seldom important nowadays in the motivation of individual soldiers<sup>8</sup>. Desire for power or for recognition of status may play a minor role in some cases. Fear of the enemy is certainly an issue, and can contribute to defensive aggression, but more usually it reduces military efficiency (Stouffer et al., 1949). Fear of punishment by superiors for not doing their duty can also be a powerful force<sup>9</sup>. However, especially crucial are the issues involved in the formation and maintenance of groups at every level. Loyalty to comrades is often of major significance; indeed survival often depends on loyalty to and of comrades. Shared danger enhances the bonds between individuals, while the death of comrades can contribute to psychological breakdown (Elder & Clipp, 1988a and b). Of course, group loyalty can be seen as part of the duty of the combatant, and not only that of the combatant but also that of factory workers and many other incumbents of war-time roles.

Countless studies have investigated the causes of wars, pointing to economic, religious, ethnic, territorial and other 'causes'<sup>10</sup>: most wars having multiple causes (Levy, 1989). But such causes are only part of the problem. There is also an individual or group psychological problem as to how it can be that war is acceptable as a means of solving conflicts. War is horrible. Combatants must face the possibility, often the probability, of death or mutilation. In modern wars, civilians often face similar fates. Non-combatants face the loss of their loved ones, with long years of bereavement ahead. Of course, psychological defence mechanisms operate. Beforehand, there may be a feeling of "It won't happen to me". Afterwards memories of comradeship and purposefulness may cast, retrospectively, a golden glow over the horrors. And in any case, only a small proportion of the military machine is actually engaged in combat. However people are always aware of the horrors, and will not fight or support the war unless they perceive it as their duty in the role that they occupy in the institution of war<sup>11</sup>. The question therefore arises, what supports the institution of war? If we could undermine that institution, perhaps wars would no longer be seen as an acceptable means for solving conflicts (see also Rapoport, 1999).

## **The bases of the institution of war**

This is not the place to discuss the nature of institutions, but a few points must be made. Institutions are not something out there, tangible and immutable. Rather they are to be seen as processes which are shaped and maintained by the behaviour of individuals and at the same time influence the behaviour of individuals. Because they are the product of many individuals in diverse roles, they may persist even though they do not produce the best returns for many of the incumbents of their constituent roles. While every institution is the result of human action, their characteristics are not necessarily consciously intended by all, or even any, of the individuals involved: historical factors and the complexities of interactions between the individuals filling the constituent roles also contribute to their nature (see Powell & DiMaggio, 1991; Hall & Taylor, 1996). But institutions are not immortal: slavery, duelling, human sacrifice, and many others are now defunct.

If one is to undermine the institution of war, one must first seek to understand the forces that maintain war as an acceptable means of solving conflicts. The issues involved fall into three groups.

## **The background of everyday life**

*Discourse.* Many of the expressions used in everyday life have military origins and associations. We speak of "outflanking a rival", "putting your head above the parapet", and so on. Just as the removal of sexism has probably contributed to greater equality between the sexes, so may the rejection of warism diminish the power of the institution of war. Especially to be regretted are the use of metaphors such as "fighting for peace" and "war on want".

But it is not only a matter of common speech. It is often assumed, even by political scientists, that war is inevitable - because of man's nature, and because there will always be resources that are in short supply. The dominant discourse 'is marked by the hegemony of violence, and constitutes the world as an object of power, surveillance, force planning, disciplinary intervention, punishment, risk management, calculated escalation and, if necessary, assured destruction through nuclear annihilation' (Satha-Anand, 1991).

*Sanitisation.* Most films and books about war give the victors characters, while the defeated are merely cardboard figures; they speak of the heroics but never the gut-crunching terror; and the agony of death is not portrayed. Using 'high diction', the 'dead' become the 'fallen', 'soldiers' become 'comrades' (Fussell, 1975; Mosse, 1995; Winter, 1989, 1995). At the same time, war may be trivialised by kitsch, shell cases used as umbrella stands, board-games on militaristic themes, tin soldiers, and the like. A mythology of glory, excitement and new surroundings acts as a lure for new recruits. Of course some films and books, such as 'All quiet on the western front' and more recently a number of post-Vietnam films, have taken a

different line, attempting to portray the full horror of war, but these are honourable exceptions. But the effects of a given work of art, be it pro-war or anti-war, are difficult to predict. Even anti-war novels can engender a strange fascination with war, and for many the horrors of Vietnam, as seen on the television screen, simply numbed the senses. In any case, war and portrayals of war can never be the same thing: the latter can never capture the intensity of combat, and can tell us little about the causes of war, though it may tell us something about the consequences of war, about what war does to our shared and essential humanity.

Some writers have managed to find positive virtue in war (e.g. Mansfield, 1991, p. 161), and it has been claimed that the paintings and etchings of Otto Dix show not only the horrors of war but also reverence for war as a cosmic principle (critique by Midgley, 1994). Ehrenreich (1997) has reviewed the role of "the feelings people invest in war and often express as their motivations for fighting" (p. 3), though simultaneously emphasizing that they do not fully explain the persistence of war. In any case, accounts of the 'ecstasy' of battle, and of the profound significance of war, are often made on the basis of post hoc recollections, or even of reflections on the *post hoc* recollections of others.

*War toys.* War toys capitalise on the fascination of mechanical devices for boys, and encourage the idea of war as a harmless game. Many children have grown up with the idea that war is a normal part of life for grown-ups. Violent virtual reality is now available to children in computer games: its effects are likely to be dangerous.

*Education.* History, at least at the elementary level, is often taught as a history of wars and battles, and espouses military values. The 1974 UNESCO resolution that member states should foster education for peace has been largely disregarded: Finland, virtually alone among its signatories, sought to implement it. Links between churches and militarism are accepted. But even more important than what is taught is what is not taught. Educational programmes rarely teach the poor of the world about the roads to economic justice that do not involve violence (Kent, 1999). They teach little about the bases of common humanity, to provide a global perspective. The responsibilities of parenthood and citizenship are treated as non-essential extras to school curricula.

*Narrative construction.* We all see our past lives in the form of a narrative, or perhaps rather a series of video clips, that tends to accord with current experience but has a rather tenuous relation to historical accuracy. Defence mechanisms operate to minimize the suffering and emphasize the camaraderie, so that many veterans construct personal narratives that both justify and glorify their participation. For others the reality remains central, but is too dreadful to be spoken about.

*Male chauvinism.* Men tend to see war as an essentially masculine business: in some cultures fighting has seemed to define manhood. No doubt this makes war more likely if men are the decision makers, and makes men more willing to take part.

### **Pervasive cultural factors**

*National characteristics.* While conditions can change, some countries have a long tradition of neutrality, others of militarism and belligerence. Militarism in the society, and the very existence of armed services and the status given to them, legitimises war as a means of solving conflicts. Such traditions tend to be perpetuated and influence future decisions.

*Religions.* Most religions advocate peace, but have allowed themselves to be recruited as supporter of one side or both in time of war, religious imagery being used to justify a nationalistic cause. In the two world wars the Christian God was seen as supporting both sides. Many wars have been characterised as holy wars: in such cases religion can play a major part in fuelling the institution of war. This will be discussed in Workshop 3.

*Propaganda.* It is probable that most people, for most of the time, believe that war may sometimes be necessary to preserve national integrity or the international order. In time of war or impending war governments use a variety of types of propaganda to enhance this belief, and to persuade their citizens that the war is just. Colonial wars were often justified by an image of the local population as intrinsically violent and barbarous, while the conquerors, who had of course been the original invaders and had the more destructive weapons, were presented as intrinsically peaceful: a reciprocal image has justified the use of violence by the anti-colonialists (Beinart, 1992). Comparable myths have been used in virtually every war, including the two world wars and the recent intra-state conflicts. Often war is justified by prejudice - by hatreds passed down through successive generations so that those who actually fight have no personal contact with, and may even be ignorant of, its original cause (Papadakis, 1995; Reinharz & Mosse, 1992). Given that the war is seen as just<sup>12</sup>, it seems to follow that it is the citizens' duty to contribute to the war effort or to fight, and that victory will be achieved.

The effectiveness of such myths depends on channelling national pride and traditions, religious beliefs, and the demands of the situation into nationalism by the use of images whose force depends in part on pan-cultural psychological characteristics. It is helpful here to distinguish between patriotism, involving love of one's country, and nationalism, implying a feeling of superiority and need for power over other national groups. Using questionnaires during the Cold War period, Feshbach (1995) showed that patriotism and nationalism, although correlated, can be distinguished. At that time individuals high on nationalism were more hawkish about the use of nuclear weapons, but less willing to risk their lives

for their country, than those high on patriotism. There is evidence for USA citizens that listening to a patriotic anthem augments patriotism, while listening to martial music promotes nationalism. Another study found that, amongst students, nationalism was associated with higher values placed on military power and dominance, and on economic opportunity, and lower values on political democracy, than patriotism (Feshbach, 1995). War may be seen as inevitable to safeguard national independence and values, and nationalism is fostered by politicians and individuals other than those who do the actual killing.

Clearly, both patriotism and nationalism are related to in-group/out-group discrimination, as discussed above. Studies have shown that discrimination may arise from enhanced favouritism to in-group members without any change in affect to others, or from enhanced denigration of those different from oneself, or from inter-group competition (Brewer & Brown, 1998): the first corresponds to patriotism, the second to nationalism, and the third is inevitable in a war situation.

The propaganda used in wartime exploits both tendencies. Customs such as saluting the flag and playing the national anthem, parades and ceremonies, enhance love of one's country, but may also invite comparison with and thus denigration of others. Patriotism is augmented also by perception of the country as the 'mother-country' or 'fatherland', and by the unconscious perception of fellow-countrymen as kin. It can thus be seen as parasitic on the biological propensity to help related individuals. Nationalism is augmented by categorisation of the enemy as such, and this is assisted by propaganda portraying them as evil, dangerous, and even as sub-human: such images depend for their effectiveness on group solidarity, fear of strangers, and defensiveness. Portrayal of the enemy as sub-human, evil and lacking in individuality helps to justify aggression against them, while at the same time fostering perception of the in-group as righteous and increasing self-esteem. In other cases the leader or some other prominent figure is demonised. Thus in the Gulf war, Saddam Hussein was demonised, and his soldiers seen as sharing his guilt. Nationalism is fostered also by propaganda emphasizing the superiority of the nation to which the recipients belong: this both supports the supposed inferiority of the enemy, and can be used to justify or conceal atrocities perpetrated on the enemy. Interestingly, however, attempts to make front-line soldiers hate the enemy can be counter-productive, being taken as insulting to their own intelligence and as an attempt to deprive them of their right to personal opinions (Tillyard, 1942).

### **War as an institutionalised set of institutions**

Eisenhower (1961) referred to the danger that the military-industrial complex in itself increased the danger of war, and it is perhaps even more appropriate to talk in terms of the military-industrial-scientific complex. From this point of view, war is to be seen not just as an institution, but as a nested set of institutions which individually and together form perhaps the most important plank supporting the

institution of war. The nature of the complex differs greatly between countries: those to be seen in the developed world differ in many ways from those formed by the privately run militias supported (directly or indirectly) by multinational corporations in some Third world conflicts. But for a number of reasons, which differ from case to case and can be indicated only briefly here, this set has extraordinary stability, which only powerful external forces could disturb (see e.g. Hall & Taylor, 1996).

One factor is common to all three of these sub-institutions - the career ambitions of the individuals involved. Individuals in each behave instrumentally in order to achieve their life goals. This is most obviously true of the arms industries, which are driven by the profit motive. The governments of arms-producing nations encourage their firms to sell abroad in order to reduce their own procurement costs: the resulting arms trade certainly facilitates war, the availability of weapons increasing the probability of violence at the societal as well as at the individual level, but the reverse effect also operates, war facilitating the arms trade (Brzoska, 1995; Greene, 1999; Lumpe, 1999). And in many countries defence interests become important in the economy, the industries providing both jobs and national income, and the economy coming to have a degree of dependence on them. And one must not underestimate the importance of career ambitions also for scientists, who seek recognition, or the military, where individuals seek promotion. The manufacture and sale of arms is supported by advertising campaigns some of which go so far as to claim that sophisticated weaponry saves lives (Baker, 1999).

Of special interest to Pugwash, the scientists who are involved in this complex contribute to the stability of the whole at several levels. Governments appoint scientific advisers, who are naturally prone to further scientific interests - though there have been notable exceptions. The individual scientists have reputation and career at stake and, except over weapons of mass destruction, no legal impediments. Furthermore many institutions in which the scientists do their research become dependent on governmental support, and thus promote research likely to further defence interests (see working group 6).

In addition to career ambitions, within each institution the behaviour of individuals is constrained by regulative processes intrinsic to the institution itself. These may involve individual goals associated with the roles individuals occupy, more conspicuous in industrial institutions; coercive rules, more conspicuous in the military; and norms and values, accepted by the individuals involved, which shape the meanings given to events and actions. These regulative processes are such as to give the institution legitimacy. The military operates within a series of accepted rules, empowered by a symbol system. Military procedures are such as to legitimate the institution itself, and the hierarchical nature of every army ensures that, at every level, it is in the interests of leaders to maintain the system. Loyalty and patriotism are inculcated by tradition and patriotic propaganda, and play an important role. Scientists are guided by universally accepted and largely

internalised standards as well as extrinsic rewards, while industrialists adopt a frame of reference that legitimates their activities: in both, adherence to the rules, actual or apparent, is a necessary prerequisite for individual success.

Important, also, are the relations between the military-industrial-scientific complex and society as a whole. The probability of war influences the relations of society with the military, and thus also with the defence industries and their scientific support (Moskos, 1992). At the end of the Cold War there was hope for widespread reductions in armed services. While some occurred, nuclear disarmament has proceeded only slowly.

Finally, the three components reinforce each other. This is exacerbated by the time necessary for the development of new weapons. Each nation seeks to deploy weapons superior to those of its adversaries, real or potential. Scientists are employed to devise them. Because development is a long, costly, and risky business, governments find it necessary to grant special terms to the arms firms, who compete with each other. The military must approve and accept the products. Secrecy is involved at each stage, and the accountability of governments thereby diminished (Elworthy, 1995).

### **Undermining the institution**

Much academic effort has been expended on the causes of war. Can they be found in power differentials, in the formation of power blocs, in the undue influence of the military, in internal instability within states? Such endeavours have yielded little fruit. Winter (1989 p. 198), a historian, writing about the two world wars, has commented "we cannot make sense of the outbreak of war without descending to the level of the individual. And, secondly, to understand why states go to war, we must enter into the mental world of those who lead them". To this one must add the mental world of those who are led.

This paper has addressed the question of the role that aggressiveness plays in the minds of both leaders and led. The evidence suggests that aggressiveness plays an important role, but not the only role, in violence between individuals; that even more factors in addition to aggressiveness are relevant in violence between groups; and that, except in so far as it influences leaders, individual aggressiveness rarely plays a part in major international wars, and when it does its influence is mostly indirect.

While reduction in the incidence of violence between individuals thus depends on reducing factors conducive to aggressiveness, reducing the incidence of war demands that we undermine the institution. This will require the use of education to neutralise the everyday factors and the effects of propaganda: the 1974 UNESCO recommendation that member states should strengthen the contributions of education to international understanding and cooperation, to the establishment

of social justice, and to the eradication of the prejudices and misconceptions that hinder these aims, must be revived. It will be necessary to try to inculcate peaceful values even in traditionally belligerent societies, and counter religious support for war.

It will also be necessary to dismember the military-industrial-scientific complex by manipulating its relations with society as a whole. There is hope already that the impact of the military is waning. In many armies there has been a trend away from authoritarianism towards consensus, officers have been recruited from wider social strata, and many serving soldiers see their roles as peace-keeping rather than war-making (Janowitz, 1971). With changes in the nature of war, the "death or glory" motive becomes of less importance.

Decreasing the impact of the arms industries poses problems of great complexity because of the economic implications. However the conversion of munitions factories to more constructive purposes is not impossible, though Government assistance may be needed for the transition. Such assistance will be forthcoming in democracies only if the world climate offers hope of more permanent peace, and will pose even greater problems in totalitarian regimes where the dictator's or government's power or prestige depends on weapons. The hope there must lie in the realisation that regimes that use resources to purchase destructive weaponry instead of improving the lot of their people are not to be tolerated. Reduction in the arms trade is of course essential: the vast number of weapons already in existence and available to buyers will, however, continue to cause problems.

The scientific wing of the complex will evaporate if the potency of the others is reduced: the everyday world poses more than enough problems to occupy scientists for a very long time.

## CONCLUSION

WE have discussed aspects of the incidence of violence at the individual, group and international levels. In each case short-term palliatives may help. Institutions can ameliorate the myriad of conflicting interests that are inherent in regionally, ethnically and/or economically diverse states by mediating differing interests within civil bounds. However the long-term solution must lie in the socialisation and education of further generations. Adults must be educated in the use of parental styles that will lead to fewer aggression-prone individuals in the next generation. Education can also help minimise the effectiveness of war propaganda, and the mis-use of religion, and to increase understanding of other cultures and other beliefs (Hinde & Parry, 1989; Lombard & van der Merwe, 1998). Special attention must be paid to de-fusing old rivalries. It must acknowledge that old attitudes to war are not only immoral but have become outmoded by the

technological advances in its destructiveness. We must invest in the teaching of tolerance, and cultural climates must be changed to glorify peace rather than war. Education must go beyond teaching and must aim to involve the succeeding generations in engaging in a process of re-cognising that, at every level, violence is no solution. Community service can engender a feeling of responsibility. The change in climate might be signalled by erecting more statues to those who have elevated the human spirit (such as Tolstoy, Gandhi and Einstein) rather than the all too prevalent admirals and generals - dedicated to their ideals as the latter may have been. Visiting dignitaries could be greeted with flowers instead of soldiers and parades of military hardware. States could follow the lead of Costa Rica and by agreement abolish their armed forces, and that of Finland and prohibit the sale of military toys to children (Bruce, personal communication). Dismantling the military-industrial-scientific complex requires action of many types. Though these will require governmental action, governments must be spurred into action. Progress is likely to be slow, but progress must be made.

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*Acknowledgements and references will be added to the final draft.*

**Notes:**

1. "Aggressiveness" is used here to refer to the motivation to cause harm to others. Harm may also arise in other ways - for instance one individual may harm another accidentally, or because it is his duty to do so. The term "aggressiveness" is sometimes used as a synonym for assertiveness (See note 2). The use of motivational terminology is a shorthand convenient for present purposes.
2. Assertiveness is usually seen as a desirable characteristic, showing social competence. However such judgments are markedly influenced by cultural norms, and excessive assertiveness, desiring to gain precedence over peers, may have a negative connotation. It is important not to confuse assertiveness with aggressiveness. Those who are assertive are not necessarily aggressive, and vice versa.
3. It has been argued that these data could be explained, at least in part, by differences between the children of the authoritative and authoritarian parents in the sort of parenting that they elicited.
4. It is perhaps in such circumstances that women are prone to like men who are willing to fight on their behalf.
5. Svetlana Slapsak, a Serb, wrote in the International Herald Tribune (27 May 1993) that the bestialities of war in what used to be Yugoslavia were triggered by words - clichés put forward by intellectuals and taken over by politicians. "To

nationalist Serbian writers Albanians were "bestial", Croats "genocidal", Slovenes "slavish". Slovenians and Croats in return called Serbs "barbaric", "Balkan" and "Byzantine". These phrases were soon re-cycled by journalists and young conscripted soldiers were sent off to war with such slogans ringing in their ears'. Beach (pers. comm.) comments 'Note that Serbs, Croats and Bosnians are all southern Slavs, speaking the same language, genetically indistinguishable, separated only by the area in which they live, their religion (Catholic, Orthodox, Muslim), and a bloodstained history'.

6. Wrangham (1998) has suggested that the incompetence of leaders sometimes results in their overestimating their own strength in relation to that of the enemy, and thus attacking inappropriately. He suggests that this tendency may usually be biologically adaptive, in that positive illusions about one's own strength promote effective bluff, and thus assists individuals or groups to win battles.

7. Independent, 11 Feb. 2000.

8. In past wars, and even today, many combatants have been mercenaries, so acquisitiveness was presumably important in their motivation. Many of the recent wars on the African continent have involved not professional armies but privately run militias supported by multinational corporations, and have concerned resources, where the local commander controlled the mines or whatever and used them to generate personal income.

9. Rapoport (pers. comm.) writes "The Prussian soldier in the time of Frederic II, knew nothing about "patriotism" (in fact many were mercenaries); moreover, as often as not, he didn't know whom he was fighting, let alone why. In czarist Russia millions of illiterate peasants were torn away from their families, their land and whipped into blind obedience. Impotence of slaves, rather than a sense of duty made them kill their fellow men, indeed often not fear of the men they were shooting at but fear of their officers."

10. "Cause", in the sense used here, may be neither necessary nor sufficient, but "contributory".

11. A detailed and important review of the psychological bases of group violence and genocide, from a perspective slightly different from this but not incompatible with it, is given by Staub (1989).

12. The "Just War" doctrine has a long history. See Collier (1991).