Members of the Board of Community Psychologists 1989 - 1990

Chair: Arthur Veno
Deputy Chair: Robyn Robinson
Secretary: Heather Gridley
Treasurer: Tony Love
Editor Network: Des Hatchard
Executive Members: Judith Cougle, John Farhall, Bet Roffey, Ross Williams

State Representatives: Ross Williams (Vic)
ô o F Ællerman (S. Qld)
Glen Ross (N. Qld)
John Carroll (09) eut,
Chris Williams (Tas)
Meg Smith (NSW)
# Table of Contents

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editorial</td>
<td>1</td>
</tr>
<tr>
<td>Guest Editorial - Ann Sanson</td>
<td>3</td>
</tr>
<tr>
<td>Conflict Management and the prevention of war by Connie Peck.</td>
<td>5</td>
</tr>
<tr>
<td>Growing Up in a Violent World by Ann Sanson and Margot Prior</td>
<td>16</td>
</tr>
<tr>
<td>The Relevance of Experimental Social Dilemma Research to Understanding the Arms Race by Jenni Rice</td>
<td>27</td>
</tr>
<tr>
<td>Teaching Skills to Resolve Conflict by Lyn Littlefield, Eleanor H. Wertheim and Anthony Love</td>
<td>38</td>
</tr>
<tr>
<td>Explaining the Nuclear Paradox by Michael le Grande</td>
<td>45</td>
</tr>
<tr>
<td>Book Reviews</td>
<td>53</td>
</tr>
</tbody>
</table>

Vol. 5  No. 2
December 1989
EDITORIAL

Few new editors could claim to have had such a felicitous introduction to their work as I have experienced in producing this issue of NETWORK. Thanks largely to the pioneering work of Art Veno, the newsletter of the Board of Community Psychologists already has an established national and a growing international reputation for its quality articles (and occasional humorous sallies).

This issue is devoted to the theme of Peace Psychology. It has been prepared by Ann Sanson, Convenor, Psychologists for the Prevention of War (PPOW). Her meticulous emending of the papers she commissioned has made my work as editor an easy one. My grateful thanks to Ann for fulfilling the obligations of guest editor so competently.

Pascal in his Pensees asserts: "our nature lies in movement; complete calm is death". Of central concern to PPOW is their belief that the level of violence in society is such that it engenders a threat to the survival of the human race. So before "complete calm" occurs, PPOW strive to marshal the insights of Psychology towards the resolution of violence/conflict from the intrapersonal level through to the international arena. This issue presents contributions from Australian PPOW members whose papers have been summarised by Ann Sanson in the guest editorial.

While the Executive of the Board of Community Psychology is dedicated to upgrade NETWORK to Bulletin status, only the membership can do that by producing papers related to the theory and practice of the discipline. Such papers must be refereed by members of an Editorial Board (to be established in 1990) as a necessary condition of the upgrading. Thus, the executive urges the membership, and our colleagues across the Tasman and over other seas to submit papers to NETWORK; articles, reviews, critiques and other creative efforts which will enhance Community Psychology's reputation as a harbinger of social change and social action.

Proof of burgeoning importance of Community Psychology was clearly demonstrated at the Pakatoa Island Symposium, Auckland, New Zealand in August this year. Brief reports on the key issues raised at the Conference will be presented in NETWORK next year.

Thanks again to Art and Ann for smoothing the way for me.
On behalf of the Executive, I wish you all a happy and safe Christmas and a peaceful New Year along the lines recommended in the special theme of this issue.

Des Hatchard, Editor
First let me thank Art Veno and the Board for suggesting that this issue should be devoted to Peace Psychology. The contributions here are all from members of Psychologists for the Prevention of War. Clearly PPOW and the Board share many of the same concerns and interests. I hope this issue will help to identify these and to develop a closer working relationship between the Board and PPOW in these shared areas, without of course detracting from our own particular foci. Thanks also to Des Hatchard and Art for their help and advice to me in my role as Guest Editor.

The title "Peace Psychology" is somewhat difficult because such a diverse range of issues are encompassed by the term. As readers of this issue will come to realise, the topics, methods and concerns range over a wide area, and the contributions in this issue touch on only some of them. But the work is unified by two overriding themes: first, a concern over the level of violence in society, and the very real threats this poses for the survival of the human species as a whole; and second, a conviction that, as a discipline, psychology is uniquely placed to contribute to the understanding and resolution of these problems, and that we, as psychologists, therefore have a responsibility to use our expertise towards this end.

This issue contains contributions from PPOW members throughout Australia, but it represents only a little of work going on in the area. Topics have been selected to give a flavour of this diversity, as well as to present material which we hope will be interesting and informative.

Connie Peck presents an overview of what is known about the escalation of conflict and about how this might be prevented. Focussing particularly on between-nation conflict, she makes a cogent and convincing argument that far more resources, both financial and intellectual, should be devoted to the understanding and application of the psychological principles involved. Lyn Leslie, Eleanor Wertheim and Tony Love generously share the ideas and principles underlying the workshop method developed by them and others at La Trobe University to teach the peaceful resolution of conflict. These workshops have been extremely successful. Many readers will be familiar with the "Wise Ways to Win" poster developed by PPOW which outlines the same steps, but of course in far less detail. Margot Prior and I discuss some of the influences on children which serve to perpetuate a high level of aggression in society, and make suggestions about what psychologists can offer to ameliorate this. Jenni Rice...
reviews the contribution of games theory to the understanding of conflict, adopting a social psychology perspective. Michael le Grande outlines five important factors which help explain the paradox that the overwhelming majority of the population are in favour of nuclear disarmament and are fearful of nuclear war, and yet only a small minority are involved in actively working to reduce the threat of nuclear war. An understanding of these factors can help us to focus more clearly our efforts to encourage people to overcome their "learned helplessness" and to become responsible participants in the democratic process. In this issue, there are also book reviews by Phyllis Butow (Coordinator of PPOW in N.S.W.), and Tony Jorm (Coordinator of PPOW-A.C.T.) of two recent books in the general area.

In sum, I hope that this issue will widen knowledge and awareness of the part that psychology and psychologists can play in promoting a more peaceful and viable future for the human species.

Ann Sanson
Convenor, Psychologists for the Prevention of War
Psychology Dept., Melbourne University

Note to Non Members

The cost of each issue of NETWORK, which is published three times a year, is $5.00.

Please send all correspondence to:
Dr D.B. Hatchard
La Trobe University College of Northern Victoria
PO Box 199
BENDIGO VIC 3550
The prevention of war, be it regional conflict or World War III, is largely dependent on our ability to understand conflict and to learn how to handle it constructively rather than destructively. As Boulding (1982) optimistically asserts, 'The problem of the abolition of war is essentially a problem of social learning' (p.232).

Sadly, humankind is still concentrating enormous amounts of money, as well as tremendous intellectual and creative powers on research into the development of technologies for the resolution of conflict by destructive means. It has been estimated that half of the world's scientists and engineers work on military research and that the world's armament expenditure exceeds 1400 million dollars every day (British Medical Association, 1983; Chivian, Lifton & Mack, 1982). At the same time, research into the development of methods for resolving conflict by constructive means has virtually been ignored. Mack (1985) estimates that the annual expenditure for peace research throughout the world totals less than the yearly budget for the US Government's military bands, and Pruitt (1986) has compared our understanding of conflict and conflict management to medicine and surgery in the early part of the 18th Century. He urges that resources, on the same order of magnitude as those devoted to medicine, d allocated to this problem which has been as destructive to humankind as disease.

Of the disciplines with expertise to offer, psychology, with its well developed experimental methodology, database on interpersonal and intergroup relations and experience in shaping, reinforcing and maintaining new behaviour, is in an ideal position to make a significant contribution. Indeed, a number of psychologists have already made contributions to our understanding of this area. This paper will briefly review some of their findings by outlining how and why conflicts escalate and by offering some preliminary ideas for how they might be better managed.

Understanding the content and process of conflict escalation
True conflicts occur where there is a conflict of interest between two or more parties. Deutsch (1973) has identified five issues which cause most conflicts in human relationships. They are (1) conflicts over resources, for example territory, sovereignty, power, prestige, money, sources of energy or food; (2) conflicts over values (what 'should' be), for example, what system of government, religion or ideology is best; (3) conflicts over beliefs (over what 'is'), for example, beliefs about facts or knowledge; (4) conflicts over the nature of the relationship between parties, for example, differences in the degree of desired trade or dominance; and (5) conflicts over preferences or nuances, for example, disputes over fishing limits or environmental waste. Of course, not all conflicts are waged over real issues. Conflicts can also be based on misunderstandings or be displaced, misattributed, latent or even false (see Deutsch, 1973 for more detail).

Conflicts can be studied on the basis of content or at the level of process, but much of the research has investigated the process of conflict escalation, since it is here that most of the problems seem to originate.

While not all conflicts proceed to full-blown escalation, there are many powerful intra-group and inter-group processes that push conflict in the direction of escalation (Smoke, 1986). Pruitt and Rubin (1986) confirm that it is easier to move up the escalation ladder than it is to move down and they suggest that a valley or canyon might provide a more apt metaphor for describing the process—the pull of gravity makes it easy to go into the conflict canyon, but climbing up the other side is much more difficult.

One of the factors leading to this tendency towards escalation is the widespread belief in win-lose outcomes. Game theorists use the term 'zero sum' to refer to conflicts where one side's gain is the other's loss, and data have repeatedly shown that most individuals approach conflict situations with this belief. Tetlock & McGuire (1986), who have studied the cognitive structures that influence policy decisions, suggest that this belief is also contra in its effect on the behaviour of policy makers. Unfortunately, such beliefs often preclude the search for solutions that allow both sides to win and overlook the reality that in many conflict situations (including most wars) both parties may lose. Moreover, once a conflict of interest exists, 'zero-sum' beliefs automatically lead both parties to view the other side's motives as aggressive.
Added to this problem is the tendency for parties to quickly fix on a solution without engaging in a careful analysis of the problem. According to Fisher & Ury (1981), parties typically adopt a single solution or position without considering their own or the other party's real issues or interests. As a result, the positions which each side has hastily adopted become the battle ground, as each side tries to convince the other of the validity of its arguments. But since these positions do not address the real needs, wants, fears or concerns of either party, they are often not the optimal solution for either side.

Fisher & Brown (1988) use the term 'partisan perceptions' to discuss the egocentric nature of each side's perceptions and the poor perspective-taking that both sides typically display in conflict situations. This bias towards perceiving one's own behaviour as more benevolent and legitimate than the other side's behaviour (Deutsch, 1986) occurs because it is much easier to understand one's own interests than it is to understand those of the other party. White (1986) points out the additional problem that each side often assumes that the other sees its behaviour in the same favourable light as it sees itself.

Smoke (1986) in his study of policy failures reports that a number of mistakes are caused by 'failures to comprehend how the world looks to others'. More formally, they consisted in inattentiveness to, or outright unawareness of, the basic assumptions and presuppositions of decisionmakers in other capitals and their overall perspectives on the situation; their underlying goals and their full range of options as they appeared in the context of their presuppositions, perspectives and goals. 'Such lapses', he notes, 'can be regarded as failures of imagination, failures of empathy, or failures of conceptualisation and analysis'.

In the absence of real information about the other side's motives and in the presence of zero-sum beliefs, worst case thinking and fear often occur on both sides (White, 1984). Bronfenbrenner (1961) uses the term 'mirror-image' to describe how this phenomenon can become a self-fulfilling prophecy--noting that if A expects B to be hostile and acts accordingly, B will be likely to respond unfavourably, which will in turn, make A more likely to respond in kind.

Intra-group processes, such as 'groupthink' (Janis, 1982), exacerbate the situation by creating internal pressure towards uniformity and concurrence-seeking and this process often exaggerates misperception.
Symptoms of 'groupthink' include an illusion of invulnerability, an unquestioned belief in the group's inherent morality, collective efforts to discount warnings, stereotyped views of the enemy as evil, self-censorship for deviations from the group's beliefs, a shared illusion of unanimity, suppression of dissent, and the emergence of self-appointed mind-guards who screen the group from dissent.

Such emotional and perceptual distortions are the nutrients of conflict spirals. Deutsch (1973) has pointed out that in the destructive-competitive process of conflict, each side reacts to the other side's behaviour as an escalation of the conflict. Because each party defines the other as having started it, each feels that its own behaviour is justified and is merely a reaction to the other's behaviour. Each response from the other side is viewed as provoking or escalating the situation and each side views its own behaviour as merely a response to this provocation. Typically, each reaction is more intense than the action it follows, causing the conflict to grow in size and importance.

Once a conflict spiral has developed, contentious behaviour may lead to gains and losses for each side. Intuitively it would seem that gains would be likely to reinforce contentious behaviour and that losses would be likely to suppress it. Indeed, this belief in the punishing or suppressing effect of aggressive behaviour appears to lead many parties caught in a conflict spiral to escalate the conflict in an attempt to punish or suppress the other side's behaviour. Recently, however, it has been shown that, in some cases, loss and injury can perpetuate conflict. 'Entrapment' is a term which has been used to describe situations (such as World War I and the Vietnam War) in which further involvement is justified on the basis of past investment and loss (Pruitt & Rubin, 1986; Brockner & Rubins, 1985, Teger, 1980). Smoke (1986) explains the traps as follows: "As the stakes rise, the costs one is willing to pay and the risks one is willing to run also tend to rise. So do the objectives one wants to set as an appropriate reward for incurring these costs and risks... For example, after the death or maiming of millions of young men and after the colossal economic costs, neither side in World War I was able to settle for the model objects with which it had begun" (p. 437).

Several authors have suggested that losses may also lead to an additional structural change in motivation. As each party experiences losses or injury at (what it perceives to be) the instigation of the other side, each becomes increasingly angry and a new goal begins to come into play--the desire to hurt or punish the other side and to right the
wrong which has been done. As this shift in motivation occurs, the conflict spiral seems to move from a defensive spiral to a retaliatory one (Pruitt & Rubin, 1986). Conflicts such as those in Northern Ireland or the Middle East are exemplars. At this point, the parties become 'actual enemies', as both now end up with truly hostile intentions towards the other, making the peace process ever more difficult to introduce. Such hostility causes 'saliences' (Schelling, 190866) to be crossed. A salience is a set of limits that both sides have implicitly agreed upon through their previous behaviour, for example, holding one's actions within a geographic boundary or limiting the weapon systems employed. The crossing of these saliences by one party may further escalate or widen the conflict and this behaviour tends to redefine the rules of warfare, much as the large-scale bombing of civilian centres in World War II seems to have crossed a previously established salience (i.e. that civilian populations were not appropriate targets).

In summary, these are but some of the major factors that contribute to the self-perpetuating process of conflict. As can be seen from this brief discussion, many of these involve psychological phenomenon--beliefs, perceptions, images, communication, perspective-taking, empathy, small group dynamics, social traps, self-fulfilling prophecies and attributional errors--to mention a few.

If conflict escalation is largely psychological, what suggestions can our discipline offer to enable policy makers and the public to learn how to manage conflict without the inevitable occurrence of escalation?

**Understanding the processes of conflict deescalation**

At the level of intra-group rationality within a nation's own decision-making processes. Tetlock (1986) has reviewed some of the decisional aids and organisational reforms needed to overcome the cognitive limitations and the tendency for 'groupthink'. These include Axelrod's proposal (1976) that policymakers use cognitive mapping to 'externalise their implicit and explicit beliefs about causal relations' (see Axelrod for more detail). Another proposal suggests that complex problems should be decomposed into their constituent parts with attention to (a) the variety of possible courses of action open to them, (b) the variety of possible consequences of each option and the likelihood of each consequence, and (c) the placing of each consequence on a common utility metric. Tetlock's proposal for 'multiple advocacy'
is similar to the suggestions made by Janis (1982; 1986) to overcome 'groupthink'. The proposal suggests that when groups are charged with a policy planning mission: the leader should refrain from expressing a preference and should encourage the group to critically evaluate proposals and air objections; one or more members should be assigned the role of devil's advocate, outside experts should be invited to meetings to challenge view of the core members, each member should be asked to consult trusted colleagues and bring back their reactions; and several independent policy planning groups should be set up as yet another method for canvassing different points of view.

At the intergroup level, processes such as negotiation, conciliation, mediation and arbitration have existed for a long time. In the last few years, however, they have become the subject of intense study and as a consequence, a science of dispute resolution is beginning to develop.

Progress has already been made in understanding how parties achieve negotiated agreements which have integrative or win-win outcomes. Negotiating on the basis of interests rather than positions appears to be important in getting to a satisfactory resolution of the real issues for each side and requires each party to understand the other side's interests (Fisher & Ury, 1981; Pruitt & Rubin, 1986). To facilitate this, LeBow (1986) has suggested that policymakers could be trained to conceptualise conflicts as they are experienced by their adversaries. Deutsch (1986) proposes that one way to accomplish this might be to promote informal contacts among military specialists and foreign policymakers on both sides, including the use of 'role reversal enactments' in which each side would be asked to state the interests of the other side to its satisfaction. Presentation of each side's perspective in the mass media of the other side is another suggestion offered by Deutsch (1986) as a means of informing the public about the interests of adversaries. At a less official level, Burton (1968), Doob (1973) and Kelman (1976) have conducted 'problem solving workshops' to introduce each side to the perspectives of the other party. Kelman, for example, has held these workshops with influential members of the Arab and Israeli communities.

Gradually such principles are being used in some international negotiations. Fisher & Ury (1981) cite Egypt and Israel's agreement over the Sinai, as set out in the Camp David Accords, as one instance of successful negotiation on the basis of interests. President Carter was able to suggest an integrative solution by looking behind each side's position (both wanted to retain the Sinai but for different reasons). He
discovered that Egypt's interest was in national sovereignty while Israel's real interest was security. His proposal that the Sinai be returned to Egypt to meet its sovereignty interests but that it be demilitarised with UN peacekeeping troops to meet Israel's security interests provided an integrative agreement that has led to a stable peace.

Sohn (1987) has suggested that joint commissions with a permanent staff of professionals trained in negotiation should be set up so that conflicts might be approached for joint problem solving by the parties involved.

Third party intervention can also be useful in managing conflict. Third parties can help the conflicting parties define their issues and interests; generate creative alternatives; identify standards of fairness; facilitate communication; allow each side to vent its frustrations in private caucuses; request concessions from both sides to build mutual trust; control the environmental contingencies which impact on the parties through the choice of neutral sites, and offer incentives for cooperation (Pruitt & Rubin, 1986).

Although third party intervention frequently takes place at the international level, it is often ad hoc and carried out by self-appointed third parties, who often do not have the necessary skills. Ury (1987) has called for the establishment of an international mediation service. Such a service could monitor emerging conflicts and catch them before they heat up, identify potential third parties, provide support staff to third parties, help map out the interests of the parties, monitor agreements, and assist parties with disputes over compliance.

Finally, some effort has been given to the study of the development of 'working relationships' whose norms promote cooperative rather than competitive interactions. Fisher & Brown (1988) suggest that the greater the difference between two parties, the more important it is to have a good relationship, and they attempt to define behaviours that are 'unconditionally constructive' and can be used by either party to establish a good working relationship. Brown (1986) recommends adoption of a two track approach, involving the simultaneous use of unconditionally constructive behaviours at the process level while actively pursuing one's own substantive interests at the content level.

Osgood's (1962) famous GRIT (Graduated Reciprocation in Tension-reduction) proposal also suggested the use of unilateral initiatives as
through the choice of neutral sites, and offer incentives for cooperation (Pruitt & Rubin, 1986).

Although third party intervention frequently takes place at the international level, it is often ad hoc and carried out by self-appointed third parties, who often do not have the necessary skills. Ury (1987) has called for the establishment of an international mediation service. Such a service could monitor emerging conflicts and catch them before they heat up, identify potential third parties, provide support staff to third parties, help map out the interests of the parties, monitor agreements, and assist parties with disputes over compliance.

Finally, some effort has been given to the study of the development of 'working relationships' whose norms promote cooperative rather than competitive interactions. Fisher & Brown (1988) suggest that the greater the difference between two parties, the more important it is to have a good relationship, and they attempt to define behaviours that are 'unconditionally constructive' and can be used by either party to establish a good working relationship. Brown (1986) recommends adoption of a two track approach, involving the simultaneous use of unconditionally constructive behaviours at the process level while actively pursuing one's own substantive interests at the content level.

Osgood's (1962) famous GRIT (Graduated Reciprocation in Tension-reduction) proposal also suggested the use of unilateral initiatives as part of a deliberate policy for reducing and controlling tension. Kennedy's 1963 announcement of a unilateral ban on atmospheric testing of nuclear weapons. Sadat's historic flight to Jerusalem in 1977 and Gorbachev's recent arms control initiatives provide successful instances of unilateral conciliatory gestures (Etzioni, 1986; Pruitt & Rubin, 1986).

Another important strategy for promoting working relationships and overcoming conflict involves the two parties joining together to work on a 'superordinate goal', i.e. a goal which is important to both sides. Indeed, experimental work on this strategy (Sherif et al., 1961) has shown it to be one of the more powerful interventions. In our present situation, there are many superordinate goals (for example, prevention of environmental disaster, provision of basic human needs, and many others) which could be tackled if some portion of the $1400 million...
an incredibly difficult and complex task. But societies sophisticated enough to broadcast sporting events simultaneously around the world and capable of erecting permanent space stations should be able to learn how to give up the destructive, irrational and anachronistic habit of war.

Indeed, only a few of the many possibilities for both formal and informal mechanism for conflict management have been tried at the international level. In devising structures to help manage international conflict, it would seem important to ensure that policymakers draw on scientific theory and knowledge in the field of negotiation and dispute resolution. Tetlock suggests that a new professional role, which he terms 'policy liaison specialist', is needed to help policymakers translate the theoretical and empirical work of researchers and scholars into practical proposals. Moreover, practitioners with highly developed negotiation and mediation skills will be needed to implement these ideas. In summary, the need for psychology to put this topic high on its agenda and for community psychologists to be involved in this effort is obvious.

Boulding offers the following prescription for achieving this goal: 'If I were to nominate the activity which is now open to mankind and which would increase most dramatically the probability of his survival, I would nominate a massive intellectual effort in peace research—that is, in the application of the social sciences to the study of conflict systems and especially of conflict systems in their international aspect' (p. 238).

References


GROWING UP IN A VIOLENT WORLD

by
Ann Sanson (Dept. of Psychology, Melbourne University)
and
Margot Prior (Psychology Dept, La Trobe University)

As the world gets to be a progressively more threatened place, tomorrow's adults are going to need to have a much clearer understanding of the inappropriateness of violent solutions to problems than the current generation has. We have the potential to destroy ourselves in a variety of ways: through the final catastrophe of nuclear war, through the greedy exploitation of the environment, and through the violent resolution of conflict induced by the growing inequalities between the rich and the poor, to name a few. It is no longer possible to ignore or avoid the fact that the world is a violent place, because the consequences of doing so may mean the destruction of civilisation as we know it. It is vital that we equip our children with the skills to handle such problems in a more adaptive way than have preceding generations.

Violence is a significant part of our lives at whatever level we choose to focus. At an international level the world is full of wars, some small and local, others large and crossing many borders. At this moment the levels of conflict in the world are having disastrous consequences for the development of young children, millions of whom grow up orphaned, homeless, scavenging for inadequate food, with no security in any aspect of their lives. The threat of nuclear war and subsequent annihilation is also very real to children, as we will discuss below, and is having largely unknown but potentially serious consequences on psychosocial development. At a national level, racial and religious bigotry are a widespread cause of violence, and violent crime is a part of life. More locally, aggressive encounters are often common and accepted in the school ground and the sporting field. Even that mythical sanctum, 'the home', is a place of violence for many children. Such violence can range from mild physical punishment, which has widespread social acceptance, to brutal physical and/or sexual abuse, with women and children as the principal recipients. Thus, wherever we look, violence appears to have the status of a normal part of life.

However, at a local and personal level there appears to be a general raising of consciousness about problems of violence, at least amongst some sections of the population. Family violence is deplored in the media; there is public pressure to protect children from physical and
sexual abuse, to provide more effective services for victims, and to educate children in school about ways of protecting themselves from abuse (Fogt & Prior, 1989). Horrendous events such as the Heddie Street and Queen Street massacres have served to increase public awareness of the escalating level of violence in what we used to believe was a safe society. There is a belief that "something needs to be done". It is clear that the social climate is moving to a state where it is willing to look for change, for new solutions to public and private conflict, for protection of vulnerable groups in society such as children. Thus, as a society, we do seem to be beginning to appraise the current situation as threatening, which is a necessary first step to action (Peck, 1984). Given this, the nature of that action needs to be addressed. Clearly, intervention should be multilevel and multidimensional. One particularly important focus for such efforts should be on children, since they will be the problem-solvers and decision-makers of tomorrow. If they are to learn more adaptive approaches to the resolution of conflict, at least two conditions must be met.

A first necessary condition must be viewing violent solutions as dangerous and unacceptable anachronisms, which are absolutely maladaptive in the long run. A second necessary condition is knowing alternative ways to behave in situations of conflict. Contemporary society does not encourage either of these conditions. Indeed the picture most often presented is that violence is acceptable, approved, valued and even jolly good fun! Two of the clearest examples of this are the diet of television we provide for our children, and the toys which we give them. The literature on the influence of TV on behaviour is vast, and has been an area of healed controversy (Freedman, 1984; Friedrich-Cofer & Huston, 1986). Since most of the research is correlational, it is difficult to be certain about cause and effect relationships. However, the great majority of both field and laboratory-based research supports the notion that exposure to TV violence is related to increases in aggressive behaviour (Huesmann & Eron, 1986). There appears to be a strong, consistent and long-term relationship, at least among a vulnerable group of children, between watching violence on TV and becoming an aggressive adult. Perhaps the most satisfactory explanation for the relationship between TV violence viewing and subsequent aggressive behaviour is the information processing model put forward by Huesmann (1988). He builds on and extends social learning theory by incorporating more cognitive aspects of.
functioning. He suggests that TV provides a medium in which individuals learn cognitive scripts, or internal models of appropriate ways of behaving. These scripts are first encoded, e.g. through exposure to models on TV demonstrating them, then rehearsed, e.g. through re-exposure, and then retrieved in situations which resemble the encoding situation in some way. Yet despite this vast body of research, and a theoretical explanation which makes sense of the findings, we continue to feed our children a TV diet filled with violence. Even the news broadcasts watched by most families every night are full of accounts of violent and tragic incidents, often graphically illustrated with images of man's inhumanity to man/woman. Early evening programmes which are supposed to be monitored to reduce the exposure of children to media violence contain programmes in which conflict is approached and resolved via aggressive means, frequently with the most violent protagonist becoming "the winner". Cartoons, specifically designed for children, are often among the most violent forms of TV entertainment (McCann & Sheehan, 1985).

A second aspect of the environment which we create for our children which can serve to increase both aggressive behaviour and the acceptance of aggression are some of the toys currently manufactured and energetically promoted. The idealistic image of a toyshop as a place of creative fantasy and fun, stocked with toys to encourage children's thinking and cooperation and creativity, often has another side to it. The typical toyshop will also stock a vast array of guns of every shape and size, and an equally vast array of other machines of war, all designed wreak death and destruction (but only, of course, in play!). Toy soldiers and hero figures such as 'Rambo' and G.I.Joe offer models of approved war-like characters. Besides these "war toys", the toyshop may also stock what have become known as "victim toys" and "toy nasties". For example, the range known as the "Skate-Board Smack-Ups" portray children who have suffered some form of gruesome accident while skate-boarding (Betty Bumpers has a car bumper wrapped around her, and Patty Plate-Glass has shards of glass protruding from her). The "Garbage-Pail Kids" emerge from a rubbish bin when a button is pressed; they include Unstitched Mitch, who is disembowelled; Cracked Jack whose head is broken open; and many other examples of babies and children with a variety of grotesque injuries and deformities. Many other examples could be cited of playthings which present violence, suffering, deformity and mutilation as sources of fun.
There has been remarkably little research on the influence of particular types of toys on children's behaviour. There seems to have been a reluctance to believe that mere playthings can affect behaviour, although as Suuon-Smith (1985) points out, it would be remarkable if many hours of assiduously playing with toys with particular characteristics did not have an influence on children's developing skills, attitudes and behaviour. However, what research there is supports the notion that antisocial toys promote antisocial behaviour.

Some like to argue that playing (e.g.) Cowboys and Indians is cathartic, and provides a release and harmless outlet for aggressive impulses. However, all the evidence suggests that this is not so - aggression simply leads to more aggression (Feshbach, 1956). Recent research demonstrates that violent toys produce an increase in violent behaviour in at least some children. A study in the La Trobe University Psychology Department (Prior, 1988) attempted to replicate the American study by Turner and Goldsmith (1976) which showed that giving toy guns to children resulted in an increase in verbal and physical antisocial behaviour in a free play situation. In the La Trobe study, 5-6 year old children were observed during and after exposure to two types of toys - Lego building bricks, and male and female G.I. Joe figures. The latter are dolls resembling guerilla soldiers, and accompanied by various accessories for playing war games. Instances of verbal and physical aggression were recorded by small groups of students observing the children before, during and after exposure to these two types of toys. The rate of antisocial behaviour after G.I. Joe play increased more than five times the rate for Lego. This was particularly apparent for children from "working class" backgrounds. Not only did aggressive behaviour increase dramatically amongst a number of boys in the sample during play with G.I. Joe (including two boys who attacked each other with knives), but this increase in aggression was sustained and carried over into their play after the toys were removed and they were observed again in their normal free play situation.

Further recent research has investigated the behavioural consequences of exposure to a combination of violent TV and antisocial toys. There are several American cartoon series (e.g. Masters of the Universe, Voltron) developed along with toys portraying the characters in the cartoons, so that the cartoons actually operate as unpaid advertisements for the toys. These all focus on death and destruction themes. Arguing from Huesmann's information processing model of how TV affects behaviour, one might expect that the combination of TV and toy in this manner would facilitate all 3 phases of the acquisition, rehearsal -
and retrieval of violent cognitive scripts. The cartoon series, often screened daily, provides a situation in which the violent resolution of conflict is seen as appropriate, normal, and is rewarded - and so a violent script is encoded. During the cartoon, the toys are heavily promoted. The child who then is given the toys is given unlimited opportunities to rehearse the violent scripts s/he has encoded, to make them more firmly entrenched in his/her behavioural repertoire, and the toys provide cues, or reminders, to facilitate the recall or retrieval of the violent scripts. Recent research at Melbourne University (Di Muccio, 1989) suggests that these processes are indeed at work. Six groups of children (5 children per group) from a middle-class childcare centre, and six groups from a working-class kindergarten, were first observed in a free-play baseline session, and then following viewing one of two cartoons - either 'Voltron', a programme high in violence in which robotic humanoid characters constantly engage in battle; or 'Gummi-Bears', which portrays the harmless adventures of a group of little bears. After viewing the cartoon, children played separately with toys representing Voltron characters and Gummi-Bears characters - the order of presentation of these was counterbalanced across groups. Although the nature of the effects of cartoon programme and toy type differed to some extent between samples, a clear trend was evident for both the Voltron cartoon and the Voltron toys to be associated with increased aggressive, antisocial behaviour and decreased prosocial, cooperative behaviour; the Gummi-Bears cartoon and toys were associated with the opposite effects. For both samples the combined effects of viewing the Voltron cartoon and playing with the Voltron toys were the strongest of all, with a sevenfold increase over baseline in antisocial behaviour in the middle-class sample, and a 16-fold increase in the working-class sample; and a tenfold decrease in prosocial behaviour in the middle-class sample and no change in the working class sample. Thus even after only brief exposures to cartoons, and during only brief play sessions with toys, the effects of violent materials seem to be clearly evident. The findings lend support to the notion that antisocial toys can act as retrieval cues for violent scripts learnt through exposure to televised violence; and suggest that the development of these 'packages' of violent cartoons plus toys might be a particularly worrying phenomenon.

There is another mechanism through which toys might be expected to exert significant effects on attitudes, values and behaviour in the long term. 'War' and 'victim' toys are frequently given to children by their closest and most powerful models, their parents, who thereby transmit covert messages to their children. Sutton-Smith (1985) notes the odd
and contradictory messages sometimes involved in adults' giving of toys to their children. For example, noting that the majority of toys are designed to be played with alone, he points out that we seem to be saying, "I'm giving you this toy because I love you and like to be close to you; now go away and play with it by yourself." Similarly, but more serious, hidden messages are involved in parents giving of antisocial toys to their children. While parents might wish to inculcate the values of gentleness, caring, sympathy, sensitivity to others' suffering and peaceful resolution of conflict, the gift of a toy gun can imply that the parent believes that it is fun to pretend to hurt others; giving a mutilated doll implies that the parent condones treating deformities and injuries as objects of fun; and the toy soldiers and hero characters imply that the violent resolution of conflict is accepted and approved by the parent. Children's attitudes and values are known to be powerfully shaped by parental attitudes and values. They are more likely to be influenced by the attitudes and values implied by their parents' actions, such as giving or condoning certain toys, than by what their parents say. Once again, aggression, lack of sensitivity to suffering, acceptance of violence as a way to solve problems, desensitisation to violence, all become subtly reinforced - the child learns that these are acceptable and appropriate ways to behave and think (Sanson, 1989).

As we have indicated earlier, the problem of violence clearly needs to be tackled at a variety of levels, and psychologists can probably make a contribution at all of these. As psychologists, we are supposed to be experts in knowledge and understanding of human behaviour and of ways of inducing behaviour change. Psychologists can, and have made a significant contribution to understanding the pressures that maintain the arms race and international conflict (e.g. Thompson, 1985), as well as proposing methods of building confidence and trust between nations and reducing conflict (e.g. Osgood, 1962). At a broader level, research in social psychology has enhanced our understanding of racial, class and religious violence (e.g. Silvennan, 1974). Similarly, the psychological underpinnings of domestic violence and violent crime are in need of explication. However, as we argued earlier, effective reductions in the level of violence in society must also address ways of encouraging prosocial behaviour and reducing aggression among children.

One of the most important reasons for focussing on children is because an aggressive style of behaviour appears to be learnt early in life. Aggression appears to be one of the most stable attributes of an
individual (Huesmann, Eron, Lefkowitz & Walder, 1984) - i.e. the child who learns to be aggressive early in life is likely to remain so. The ethological view of humankind suggests that aggression is inevitable, that it is part of our make-up, that it is socially adaptive to be territorial and aggressive, that it is part of our inheritance (e.g. Lorenz, 1966). The psychological or social learning theory view of aggression (e.g. Bandura, 1973), on the other hand, emphasises its learned nature. "Whatever we are genetically, how we develop socially depends on how we were brought up; on our environment. We can choose how we bring up our children. If we want to we can make them violent by setting them examples of violence, by treating them violently, by systematic training. Or we can do the opposite" (Barnett, 1987). If tomorrow's adults are going to be capable of more adaptive, non-violent problem-solving, we need to be discouraging aggression and promoting more pro-social behaviours from early childhood.

As advocates for behaviour change, in what ways can psychologists act to lessen the acceptance of aggression in young people? An obvious approach is to replace the teaching of antisocial behaviour to children via media, toy and human models with the teaching of prosocial alternative behaviour (to the behaviourist, differential reinforcement of other behaviour). The Children's Peace Literature Award initiated and organised by PPOW (S.A.) is a successful effort to promote the presentation of prosocial models to children via books. Similarly, psychologists can work towards having antisocial TV programming replaced by pro-social TV. The implicit assumption of producers and programmers that violence is inherently appealing needs to be questioned. Huston-Stein, Fox, Greer, Watkins and Whitaker (1981) and Diener and Woody (1981) have produced data which indicate that it is the level of action in a programme which appeals to audiences and maintains their attention, not the level of violence. Further, preferences are not unchangeable: we learn to prefer the diet we are given, and changing our diet will change our preferences. The psychological basis for this process needs to be communicated to those who control our media diet and who clearly have a responsibility here. As behaviour change agents, we need to be applying our skills to the media owners, programmers and producers who have such an influence over our diet. Representatives of the Australian Psychological Society, and several other psychologists, have had an input into the Australian Broadcasting Tribunal's current Inquiry into Violence on Television, and this sort of involvement into areas of social responsibility should be maintained and extended. There are many other ways in which we can apply the powerful behavioural
principles of shaping and reward. The establishment of awards for the most prosocial programmer, for the TV series which contributes most to peaceful conflict resolution, for the actor who provides the best model of altruistic behaviour are all possibilities and are among those strategies which psychologists could energetically promote.

A second area of potential influence for psychologists is in the education of the public, including parents, teachers and toy importers, manufacturers and retailers, on the effects of antisocial toys such as "war" and "victim" toys. "War" toys are already banned or restricted in some countries, e.g. Sweden, Greece, Norway and Malta (see Sanson, 1989). Psychologists played an important part in two recent government enquiries in Australia on these toys, both of which concluded that the toys do have the potential to cause psychological harm, for instance by increasing aggression and desensitisation to suffering (Report of the Victorian Inquiry into Antisocial Toys, 1988; see Sanson, 1989). This conclusion led to the recommendation that the availability of such toys should be restricted either by industry self-regulation or through legislation. Following the enquiries, several retailers have voluntarily removed "war" toys from their shelves, and some of the worst examples of "victim" toys are no longer available. However, significant and long-lasting changes in this area are predicated upon strong public pressure and concern being maintained on governments, and on the manufacturers, importers and retailers of toys. This in turn requires dissemination of relevant psychological theory and facts to the general public. This is clearly a responsibility which psychologists can take on. As Sheehan (1987) has noted, psychologists will need to take a stand on social issues which they believe are important.

At another level, children need to believe that change is possible in those aspects of the world which currently are clearly characterised by violence and threat. There has been a recent rise in public awareness about the environmental threats facing the world, but how children are responding to this is still largely unknown. What is known is that images of war and destruction impact powerfully on children (Prior, 1989). Studies from many countries including Australia are consistent in finding a high level of concern about world conflict and particularly the nuclear threat in children from the age of 10 upwards. Young people express themes of fear, anger, outrage, and powerlessness (Goodman, Mack, Beardslee & Snow, 1983). Empowering children with knowledge, skills and options for working towards peace and a non-violent future should thus be a high priority. The 'Letters to
Leaders' and 'Letters to Change the World' projects, first proposed by PPOW and run jointly by PPOW and the Victorian Ministry of Education in 1986 and 1987 respectively, aimed to make some progress towards these goals. In total, over 70,000 Victorian school children participated in these projects by writing to world leaders about their hopes and fears about the future, and their suggestions about how a more peaceful world could be achieved. Besides providing children with the basic skills, experience and confidence to communicate with politicians, the projects also served to open up communication between children and their parents and teachers, who were often unaware of the depth of the children's concerns. They also stimulated discussion about attributions of responsibility for the nuclear threat (Do “ordinary” individuals, young and old, have a responsibility to take action?); about the efficacy of doing so (How individuals and groups can make a difference); and about strategies for reducing global violence. Community projects of this sort can thus go some way towards empowering children to believe that change is possible, and that there are alternatives to violent conflict.

These “Letters” projects formed one aspect of Peace Education in the school system. However, Peace Education encompasses much more than this. In its widest sense, it can involve all aspects of the school curriculum. Specific content on the causes, technology, morality and effects of violent conflict can be covered in History, Geography, Physics, English, Drama, Religious Instruction, etc. More broadly, Peace Education can incorporate teaching negotiation skills, anger management and conflict management alternatives. Cooperative rather than competitive classroom structures can be established. An important role for psychologists is thus to promote Peace Education in schools, and to provide expert guidance which will enable the principles expounded in Peace Education to be translated into practice by teachers and administrators in the classroom and in the school grounds.

In conclusion, then, violence is clearly a major dimension of human life at present, but one which is becoming less and less tolerable and tenable. There is a real possibility that continuing on this path will lead to the destruction of life on earth; we thus have a responsibility to equip tomorrow's decision-makers with the capacity for more adaptive behaviour. This article has addressed some of the factors which are shaping our children to follow in previous generations' footsteps in accepting violent solutions to problems wherever they arise. The potential for psychologists, as experts in behaviour change, to break...
this pattern has also been stressed. We would strongly support Sheehan's (1987) argument that psychologists need to be more active advocates of what they believe. It can be argued that what the world needs most, and what psychology can most effectively provide, is not only more information, awareness and communication concerning the problems facing us; but, more saliently, help in changing the maladaptive aspects of the behaviour of the human species so that future generations - and the ecosystem as a whole - can survive.

References


THE RELEVANCE OF EXPERIMENTAL SOCIAL DILEMMA RESEARCH IN UNDERSTANDING THE ARMS RACE

by

Jenni Rice

Swinburne Institute of Technology

Some of the most pressing social, environmental and political problems faced by humanity today may be profitably conceptualised as social dilemmas (Dawes, 1980). Social dilemmas are situations in which individuals rationally pursue or defend their own self-interest but do so, ironically, at their own collective expense. The purpose of this paper is to review game theoretical analyses which model the nuclear arms race between the USA and the USSR as a social dilemma, and to examine some recent applied work in the field.

Thompson (1988) proposes that "the arms race can be viewed as an example of limited rationality, in which sane people, working to maximise their immediate benefits within the bounded confines of a problem, unwittingly create larger problems for themselves when their activities are viewed in a wider context and in the longer term ... In this sense, nuclear weapons are the dangerous solution to a political dilemma. These armaments apparently maintain the status and safety of the nation, and protect it from other nations. Yet the actions which each nation takes to protect itself contribute to the sense of threat felt by the other nation, leading to a social trap in which real security is diminished for both." (p. 71).

Described in this way, the arms race has the characteristics of a 2-person game that has been widely studied in experimental game research - the Prisoner's Dilemma Game (PDG). The PDG was derived from an anecdote involving two suspects who are questioned separately by a district attorney (DA). The DA does not have enough evidence to convict them, so he offers each a chance to confess privately. The DA explains that if one confesses and the other does not, the confessor will be considered to have turned evidence and will be granted immunity, while the confession will be used to convict the other of a major offence. If both confess, each will receive a medium sentence for a lesser offence. If neither confesses, each will receive a light sentence (Rapoport, 1960). The matrix describing the possible outcomes faced by each prisoner are shown in figure 1.
Figure 1. The Prisoner's Dilemma. In each cell of the matrix, the first entry represents Prisoner 1's outcome and the second entry represents Prisoner 2's outcome, in terms of years of imprisonment.

When this game is analysed in an attempt to specify which choice is best for each prisoner, it can be noted that no matter what either of them decides to do, the other is always better off by choosing to confess. So the best strategy for both of them, individually, is to choose to confess. Yet if they both do this, they bring about the worst outcome that, jointly, they could achieve. Hence the dilemma. The pernicious aspect of the PDG is that if the prisoners were prepared to trust each other, they would be advised to keep quiet so that they might both get away with a light sentence. However, in the absence of trust, the temptation of each is to inform on the other in an endeavour to be released, and to defend against the possibility of being informed upon. Each of the prisoners is behaving rationally as far as each individually is concerned, but viewed in context, they are also making the situation difficult for one another.

As Thompson (1988) notes, the logic underlying the Prisoner's Dilemma may help explain why the USA and the USSR persist in the arms race. He points out that they both may be seen to be playing "safe" in opting for the cost and danger of armaments, rather than making an act of trust which the other nation may then exploit. However, in global terms, "they are stoking up a danger which may consume them both in an act of mutual suicide" (p. 76). Myers (1988) expands on this perspective when he states "it may be true that maintaining a 'balance of terror' helps prevent wars that might occur if one nation believed it could exploit the other's weakness. But surely
the peoples of both nations would be more secure if there were no weapons threat, and if their billion-dollar-per-day military spending were made available for productive rather than destructive purposes" (p. 574).

There is a long history of applying the Prisoner's Dilemma model to the nuclear arms race. Plous (1985) observes that research on the Prisoner's Dilemma has been sponsored by the United States Arms Control and Disarmament Agency, the United States Air Force and the Office of Naval Research. It has also involved members of the International Peace Research Institute, the British Ministry of Defence and the Department of Atomic Energy. Indeed, the model is compelling. If "arming" is used to denote the status quo, namely the continued testing, production and deployment of nuclear weapons systems, and "disarming" is used to refer to significant reductions in nuclear weapons, the United States and the Soviet Union can be seen at this level of abstraction to be playing a $2 \times 2$ game with four possible outcomes: mutual disarmament, mutual armament, American armament and Soviet disarmament, or Soviet armament and American disarmament. If, furthermore, the preferences of the superpowers for the four outcomes are assumed to be in the following order: military superiority of own nation (i.e. own nation arms while the other disarms) is most preferred, mutual disarmament is next most preferred, mutual armament is next most preferred, and military superiority of the other nation is least preferred, the arms race can be seen to have a PDG structure.

<table>
<thead>
<tr>
<th></th>
<th>USSR disarms</th>
<th>USSR arms</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA disarms</td>
<td>2,2</td>
<td>4,1</td>
</tr>
<tr>
<td>USA arms</td>
<td>1,4</td>
<td>3,3</td>
</tr>
</tbody>
</table>

Figure 2. Prisoner's Dilemma involving the superpowers. The first number in each cell corresponds to American utility, the second number to Soviet utility. The most preferred outcome is represented by "1" while "4" represents the least preferred outcome.
Figure 2 illustrates this correspondence. In the matrix, the game theoretical convention of using numbers ("payoffs") to represent preference orderings, or utilities, has been adopted. It is apparent from Figure 2 that the dilemma described there seems to reflect some of the essential tensions of the arms race. Pious (1985) notes that "each side will always do better if it arms, but if both sides arm, neither will do as well as if both sides disarm. If one side sees the problem and moves to disarm, not only must it endure its worst payoff until the other side reciprocates, it actually removes the incentive for the other side to disarm because the other side is now receiving its highest payoff" (p. 365). It follows that if the superpowers are actually playing a PDG, neither side can be expected unilaterally to move toward disarmament because of the risk of exploitation thereby entailed. Alas, the situation seems intractable.

But is the arms race a PDG? Plous (1987) suggests that the model has a certain historical appeal and seems a plausible model for the "early stages" of the nuclear arms race. Myrdal (1982, cited in Plous, 1987) has stated that for the first two decades following World War II, the United states was not prepared to relinquish its margin of military superiority over the Soviet Union, although it is less clear whether the Soviet arming response reflected a preference for unilateral armament over mutual disarmament or only an attempt to defend against American domination. Contemporarily however, as Plous asserts, it is conceivable that for political leaders from both nations the utility of mutual disarmament may now exceed the utility of unilateral armament. This seems reasonable in view of the enormous excess of nuclear weapons presently stockpiled, and the renewed economic pressures on both the USA and the USSR. Plous (1985) has proposed that the nuclear arms race may not be a PDG but rather may instead be a game he has called a Perceptual Dilemma (PD).

Most traditional models of the arms race, including the PDG, have assumed that each side most prefers unilateral armament over all other outcomes. In contrast, a PD assumes that each side most prefers mutual disarmament, but is prevented from disarming by the perception that the other side most favours unilateral armament. Plous (1985, 1987) describes the conditions underlying a PD to be that both the United States and the Soviet Union: (1) prefer mutual disarmament to all other outcomes; (2) want above all to avoid disarming while the other side arms; and (3) perceive the other side as preferring unilateral armament to all other outcomes. In effect, he
proposes that the preference orderings over the arms race outcomes are not those of a PDG for either side, but that each side imputes to the other just such a utility structure. The game played by each side is therefore a "one-sided PDG" (Rapoport, Guyer and Gordon, 1976), but these are two separate representations and not a single game, since each side perceives itself to be unique in preferring mutual disarmament.

Figure 3 shows a one-sided PDG with the USA in the position of favouring mutual disarmament but attributing a preference for unilateral armament to the USSR. The full Perceptual Dilemma model requires a complementary matrix to Figure 3 to be constructed for the USSR as well, whereby it also imputes PDG preferences to the USA. This can be done simply by interchanging the row and column figures in Figure 3.

<table>
<thead>
<tr>
<th></th>
<th>USSR disarms</th>
<th>USSR arms</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA disarms</td>
<td>2,2</td>
<td>4,1</td>
</tr>
<tr>
<td>USA arms</td>
<td>1,4</td>
<td>3,3</td>
</tr>
</tbody>
</table>

Figure 3. A One-Sided Prisoner's Dilemma involving the superpowers. The first number in each cell corresponds to American utility, the second number to Soviet utility. The most preferred outcome is represented by "1", while "4" represents the least preferred outcome.

As Plous (1985) explains, in the PD situation neither side has a choice which is unconditionally optimal. Disarmament may lead to the best outcome or it may lead to the worst outcome. Because each side believes that its own disarmament is an invitation for the other side to arm, even though both in fact prefer mutual disarmament, an arms race appears inevitable.

In order to test his hypothesis that the arms race is better modelled as a PD than a PDG, Plous (1985) sent questionnaires to 102 American
and 24 Soviet political leaders, asking them to give their own utilities or evaluative ratings for the four arms race outcomes, and to estimate the utilities which would be held by the leaders of the other nation. The critical test of the hypothesis is to compare the preferences that each nation's leaders have for mutual nuclear disarmament with their preferences for the unilateral armament of their own nation. Replies were received from 32 American senators only. Based on their average utility judgements over the outcomes, Plous found American preferences to be higher for mutual disarmament than for US unilateral armament, while the average utilities attributed to the Soviet leaders were consistent with a perception of the USSR as preferring its own unilateral armament over mutual disarmament. Plous concluded that these data clearly conformed to the American half of a PD. Unfortunately, the data are silent regarding the Soviet half, although Plous (1985) presents a supplemental review of American and Soviet political declarations which provides some evidence for the suggestion that the USSR also values mutual disarmament more highly than its own unilateral armament, but it, too, attributes the reverse utility structure to the USA.

Although more research is required to establish the preference structures of the USA and USSR with any certainty, Plous' work is encouraging because it suggests that there are "ways out" of the arms race which, at least on the face of it, do not readily present themselves if the situation is structured as a PDG. As Plous (1985) points out, players are bound in conflict by the structure of a PDG, whereas a PD may be solved by persuading each side that the other side sincerely desires mutual disarmament more than alternative outcomes. If the PD is a better model of the arms race than the PDG, the main problem for conflict resolution research is then one of finding the most effective method for convincing each side that moves toward disarmament will best satisfy their own and the other's actual preferences. Plous (1987) also notes that disarmament initiatives may also assist in establishing whether, in fact, the PD model is a more appropriate one than the PDG for the arms race. He suggests that if participants in a PD are acting to maximise individual utility, they have every reason to reciprocate any disarmament initiatives made by the other party. He writes:

"If a Perceptual Dilemma underlies the nuclear arms race, then an unambiguous, unconditional, time-limited succession of disarmament initiatives will lead to mutual disarmament. If disarmament is not reciprocated under these conditions, a Perceptual Dilemma cannot
account for the nuclear arms race. With present levels of redundancy in
the nuclear arsenals of both superpowers, such a test would leave the
strategic balance unaffected, and there is some evidence that
disarmament initiatives, even if discontinued, may have a salutary
effect on superpower relations. One thing is certain: in the absence of
disarmament, each side can know only the utilities that govern mutual
armament" (p. 31).

Considered from this perspective, disarmament initiatives could serve
an effective communicative function for the superpowers about the
nature of their international relationship, if they are locked in a
Perceptual Dilemma. A basic aspect of the PD model is the
assumption that the two parties misunderstand each other's
motivations and preferences. Plous explains that "the problem is that
although both sides have declared mutual disarmament as their goal,
neither believes the other wants anything short of nuclear superiority,
however unattainable" (p. 381). Plous (1985) likens this to the
"mirror-image" phenomenon discussed by Bronfenbrenner (1986),
which describes the USA and the USSR as locked into a vicious circle
whereby one side expects the other to be hostile and behaves
accordingly, the other then responds negatively, which in turn invites
further unfavourable reactions from the first side, and so on.
Bronfenbrenner notes that the danger of such images is that they are
self-confirming so that "each party, often against its own wishes, is
increasingly driven to fulfil the expectations of the other..." (p. 79).

Disarmament initiatives, implemented as Plous suggests, may begin
to reverse the mirror image cycle. Given that the problem, as Plous
and Bronfenbrenner describe it, is the mutual fear of the other's
exploitative intentions, together with a mutual lack of awareness that
the other side perceives the situation similarly, concessions made by
both sides with a clear expectation of reciprocation may permit each to
communicate their preference for mutual disarmament to the other, and
facilitate their recognition of the parallel misunderstandings they hold.
This strategy, as Pious' analysis of the PD suggests, could lead the
United States and the Soviet Union to establish a stable, disarmed,
secure relationship, free from the threat of mutual destruction.

Encouragingly too, it appears that the superpowers may now be
seriously embarked on just such a process. Bold unilateral initiatives
by the Soviet leader, Mr Gorbachev, over the past three years appear to
have demonstrated to the United States that there is value in beginning
to cooperate with the Soviet Union over arms control. The successful
negotiation of the recent INF treaty is an example of this. A changed perception of the Soviet Union also seems to be emerging in commentary about this process from the West. Journalists in the conservative Australian press have recently reported that "few observers doubt that the Soviet Union is, on balance, sincere about reducing its military burden through unilateral cuts and the pursuit of arms control treaties" (Barrett, 1989) and that "from the United States point of view ... the Soviet Union no longer seems the suspicious, hostile adversary it did at the start of the decade" (Stephens, 1989a).

It could be that the apparent preparedness of both superpowers presently to take significant steps in arms control may constitute support for Plous' model of the arms race as a Perceptual Dilemma. As would be expected in a PD, there is evidence that the USA and the USSR are jointly moving toward the reduction of their nuclear arsenals, and that this process is gathering momentum. Stephens (1989b) has reported that since the Wyoming talks in September this year between the American Secretary of State, Mr James Baker, and his Soviet counterpart, Mr Edouard Shevardnadze, "almost weekly, it seems, the US and the Soviet Union try to outbid each other in promising reductions". He also reports that although several significant obstacles remain, and although experts are highly sceptical that any meaningful treaty on arms cuts will be ready by the middle of 1990, "the disagreements are more about the pace of change than its direction".

These are indeed significant and encouraging developments. The question for game-theoretic analysts now must become one of whether the superpowers will continue to impute 'imperialistic' utilities to each other as their arms reductions progress or whether there will be a move in mutual perceptions away from the mirror-image misunderstandings represented in the PD model. It is important to note that the PD model itself represents an interim state which presumably cannot continue to apply relations between the superpowers if they are engaged in mutual armament reductions over any prolonged period of time. With graded and reciprocal arms reductions, both powers should become increasingly likely to recognise that they share a preference for mutual disarmament, based upon their awareness of each other's actions. Therefore, it is reasonable to expect that each may begin to attribute to the other utilities which no longer describe a one-sided PDG, but rather resemble more closely the actual pattern of preferences for outcomes which is the basis of a PD, but is misperceived. This is a utility structure where both sides have mutual
disarmament as their most-preferred outcome, their own unilateral armament as their next most-preferred outcome, mutual armament as the next most-preferred outcome and other's unilateral armament as the least preferred outcome. Such a matrix structure is shown in Figure 4.

<table>
<thead>
<tr>
<th></th>
<th>USSR disarms</th>
<th>USSR arms</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA disarms</td>
<td>2,2</td>
<td>4,1</td>
</tr>
<tr>
<td>USA arms</td>
<td>1,4</td>
<td>ε:εζ</td>
</tr>
</tbody>
</table>

Figure 4. Stag Hunt Game involving the superpowers. The first number in each cell corresponds to American utility, the second number to Soviet utility. The most preferred outcome is represented by "1", while "4" represents the least preferred outcome.

Rapoport et al. (1976) refer to this game as the "Stag Hunt", a name derived from describing the game as one of cooperation between two players to catch a stag. In the game both players share the same goal of catching the stag, but if one player diverts from the task to pursue a separate objective, the stag gets away and the other player is left with nothing. The Stag Hunt is a game of no conflict, since both parties prefer to cooperate with each other more than take any other course of action. Translated to apply to the superpowers, the Stag Hunt structure represents a stable situation of mutual disarmament, at least to the extent that both parties are able to rely on each other to continue with such international cooperation. On the face of it such a utility structure appears to be consistent with continued arms reduction measures by both sides. However, it is likely to describe an enduring relationship only in the presence of supplementary measures designed to build trust and confidence in both parties regarding the continued commitment of each other to the disarmed state. This is because any lack of faith in the cooperation of the other side is likely to lead to defensive armament (or "defection") based on fear that the other may defect. Indeed, some recent laboratory work (Brown, 1986) indicates that without adequate communication behaviour in the Stag Hunt
game quite commonly degenerates into mutual defection. Hence, ongoing and effective communication based upon open discussion of interests and concerns would appear vital to the maintenance of a stable disarmament process even given the Stag Hunt pattern of utilities.

In conclusion, this paper has shown that there are a number of game-theoretical models that may be used to gain insights into the psychological dynamics underlying the nuclear arms race. The work of Plous (1985, 1987) has suggested that the recent arms control achievements of the superpowers may be consistent with a transitional phase in international relations, whereby the superpowers are re-defining their utilities for disarmament, and moving away from an intractable situation of mutual suspicion and hostility where significant de-escalation of the arms race would be unattainable. Further analysis of the outcome of this transitional state suggests that while disarmament initiatives will, in large measure, continue to improve the situation, there is a very great need to support this process by promoting and facilitating effective communication between the United States and the Soviet Union. The role of psychologists in mediating this endeavour is potentially quite critical, and the contribution that the profession could make in this area, as part of an international community of concerned scientists, should not be underestimated.

References


---

**The Robin Winkler Award**

By the time you receive this issue, the inaugural award in honour of the late Professor Robin Winkler's pioneering work in Community Psychology will have been awarded. The winner of this prestigious award will be announced in the next issue of NETWORK.
Teaching Skills to Resolve Conflict

Conflict has the potential to be very destructive on an interpersonal, organisational or international level. However, when handled effectively, conflict can also provide opportunities for growth, change and collaborative development. We believe that community psychologists can play an important role in promoting positive conflict resolution.

This paper describes a method of teaching conflict resolution skills to others. The basic model being taught was originally derived from Getting to Yes by Roger Fisher and William Ury (1981). The central feature of their approach was aiming for a 'win/win' solution, in which both parties have most of their needs and concerns met. The authors describe guidelines which have been used to solve legal, international, organisational and interpersonal conflicts.

After reading Getting to Yes, Connie Peck assisted by Lyn Littlefield designed a graphic representation of these ideas and created a step-by-step model (see Figure 1). The model expanded on Fisher and Ury's ideas by drawing on the array of interpersonal and intervention skills developed by psychologists, such as active listening, assertiveness, problem solving and cognitive restructuring.

After development of the model, a working party at La Trobe University discussed ways of making the ideas accessible to helping professionals and the community. Since then the basic approach has been presented in workshops as well as in a lecture format. In addition, the Psychologists for the Prevention of War 1989 calendar ('Wise Ways to Win') was based upon this framework and brought the ideas to a wider group of individuals.

This paper will outline the basic model, the format of workshops we have run, and guidelines for dealing with the most frequent problems that arise. Of course, successful teaching requires training and

---

1 Working party members were: Bruce Falconer, Margarita Federico, Judy Leitch, Lyn Littlefield, Connie Peck, Eleanor Wertheim.
development of expertise in the application of the Conflict Resolution model and this is available through contacting the authors at La Trobe University.

Outline of the Stages in the Conflict Resolution Process

Figure 1: The Conflict Resolution Model
1. Understand both parties' interests.

The first step in the process is to fully understand and communicate the interests of each party to the other. Interests must be distinguished from positions, which are the parties' potential initial solutions to the conflict. Interests represent the needs and concerns of the parties that led to the adoption of their positions.

2. Identify areas of agreement and disagreement.

The needs and concerns of each party are written out so that both parties can compare them. Surprisingly, there is often substantial overlap between the two parties concerns and these can be identified quickly. Areas of disagreement can be acknowledged and explicitly addressed.

3. Brainstorm Creative Options

Next produce creative options for resolving the problem. The best approach is to use collaborative brainstorming techniques. Encourage each participant to be as productive as possible (promote lateral thinking); and to avoid criticising or evaluating suggestions prematurely.

4. Develop BATNAs

The Best Alternative to a Negotiated Agreement (BATNA) represents the yardstick against which any proposed negotiated agreement can be measured. It is not the bottom-line; that is a position from which the party will not negotiate. Rather, it is the alternative solution to the conflict, which is developed separately by each party as carefully as possible under the current circumstances.

5. Dovetail options

Participants can now actively construct from the brainstormed creative options a package of ideas and suggestions that fulfills as many of each side's needs as possible. This is called a win-win solution and is the main aim of the model.
6. Evaluate the agreement

If there are still areas of disagreement, recycle by redefining the problems and breaking them down into smaller components. The areas of disagreement then become the targets of further brainstorming. If agreement has been reached then both sides can openly acknowledge the achievement!

7. Handle emotions

Throughout the whole process, the affective dimensions inevitably play a central role. Excessive negative emotions usually have a destructive effect on empathic understanding, effective communication and clear thinking. Careful handling of the emotional aspects is therefore essential at every stage in the process.

Format of conflict resolution workshops

These workshops are designed to enhance the participants' conflict resolution skills. These skills are developed initially in the interpersonal context and then applied to organisational and international situations. The workshops have been offered through the Human Resource Centre and the Institute for Peace Research at La Trobe University, and have attracted participants from a number of spheres including business, administration, government departments, banks, the hospital system and police force as well as the helping profession.

The format of the workshop consists of didactic input followed by small group discussion and practice of skills through role-play of conflict situations, starting with the interpersonal context and extending to the organisational and possibly international levels. Conflict examples for the small group work are selected from participants' experiences and these segments are interwoven with theoretical and applied lectures. The workshops always being with a detailed presentation of the Conflict Resolution model and include lectures on dealing with emotions and dirty tricks and other factors affecting the success of the principled negotiation approach as well as conflict management in organisations and at the international level.

In a workshop, the total number of participants is often around 40, which is divided into small groups of ten for the experiential segments, each group being facilitated by two leaders. The full
workshop program is conducted over three days, two being consecutive, and the third, one week later to enable practice of the skills taught. The full three day program can be shortened either by omitting the more complex applications or by reducing the amount of small group discussion. In fact, quite large workshops have been successfully conducted over one day, although the treatment is more structured and participants' practice, and hence integration of skills, is more limited.

A few guidelines for dealing with the most frequent problems that arise in teaching the model

1. Help trainees develop realistic expectations of the model

At the start, it is usually useful to encourage the audience to develop realistic expectations for what the model will and will not help them to do. Specifically, it is not claimed that the model will result in successful resolutions to all conflicts; rather that by using the model, one can maximise the chances that a solution will be reached that is acceptable to all.

2. Tell trainees: 'Don't expect instant solutions'

When people see the whole model for the first time, they sometimes feel overwhelmed by the large number of steps included. We often respond that they need to compare the length of time for which the conflict has been a problem to how long it will take to use the model. In fact, the model is usually a very efficient method of solving the problem, by comparison.

3. Select good examples to demonstrate the model

In the first attempts to demonstrate how to use the model, carefully select among the examples that individuals offer, starting with simple and working up to harder examples. So at first: (1) avoid examples where the individual involved has a great deal of emotion invested; (2) usually start with an interpersonal (two person) conflict and work up to conflicts between groups and between nations; and (3) avoid conflicts that involve constituencies or large power differentials between the parties.
4. Watch out for trainees offering solutions when trying to identify interests

People often state positions and solutions when describing their own or the other party's interests. Be alert for this and when it happens point it out and then ask what is behind the solution; what need does the solution aim to fulfill, in order to uncover the interest.

5. Spend enough time identifying interests

Often people give lip service to identifying interests and try to move quickly to brainstorming solutions. Make sure that enough time and thought is spent on this stage, as it is the basis upon which the success of brainstorming rests. Keep getting behind the interests until new possibilities for solutions start opening up.

6. Look out for trainees judging the ideas that emerge during the brainstorming phase

Immediately point out any evaluating or criticising that occurs during brainstorming and tell the person to hold off on this until later so that ideas keep flowing.

7. Carefully plan the time needed to run the workshop

Helping professionals, who are already trained in active listening, empathy skills, brainstorming, and dealing with emotions, can learn the basics of this model in as little as an hour or two. On the other hand, others may take much longer and we have run three day workshops after which some participants were still requesting more input from us.

8. Emphasise the relationship aspect of conflict resolution

Remember to emphasise that the model works best in the context of an ongoing positive relationship between the two parties. The idea is to create an appropriate interpersonal emotional environment which can foster win/win solutions.

A final message

Through running these workshops the trainers have reconfirmed their belief in the usefulness of this approach to conflict resolution. All of
We need to recognise that within personal relationships, organisations and in the international context, we are interdependent; hence cooperative resolution of conflict is essential for our future well-being. We encourage you to practice the principles in your own work and to share the skills with others.

References


The 22nd Congress of Applied Psychology, Osaka University Japan, July 1990

Dr. [Name] - [Affiliation] of [University], [City], [Country]: [Title or Session].

O. [Name] - [Affiliation] of [University], [City], [Country]: [Title or Session].

The 22nd Congress of Applied Psychology, Osaka University Japan, July 1990
EXPLAINING THE NUCLEAR PARADOX

by Michael le Grande

Psychology Dept, La Trobe University

The threat posed by the possibility of nuclear war may be regarded as a puzzling dilemma. On the one hand public opinion throughout the world is largely opposed to the continuing production of nuclear arms and reflects awareness of the consequences that such a nuclear war would bring about (Clark, Trahair, Powell, & Walker, 1985; de Boer, 1985; Klineberg, 1984; Smith, 1988). It is also clear that large numbers of people believe that a nuclear war will occur in their lifetime (Schofield & Pavelchak, 1989; Silverman & Kumka, 1987; Smith, 1988; Tyler & McGraw, 1983; Yankelovich & Doble, 1984).

On the other hand, only a relatively small number of individuals appear to be actively involved in opposing the arms race (Clark et al., 1985; Fuld & Nevin, 1988). For the vast majority of people life goes on as normal.

It may be acknowledged that the nuclear threat is only one of many problems about which individuals express concern but do not take corresponding action (Fiske, 1987). However, psychologists such as Fox & Schofield, (1989) assert that the horrifying consequences of a nuclear war set this issue apart from other problems and makes the lack of behavioural response even more difficult to explain. It is the purpose of this paper to review briefly evidence relating to five major variables which have been used to predict anti-nuclear activism: the salience of the issue; perception of individual effectiveness in helping to prevent nuclear war; competing activities; moral responsibility; gender and sex-role differences.

1. Salience of the Issue

The finding that individuals are more likely to act on their existing attitudes when these attitudes are held in conscious awareness (Kiester, Nisbett, & Zanna, 1969) has led some researchers to suggest that salience of the nuclear issue, or the degree to which an individual holds the nuclear disarmament attitude in awareness (Fox & Schofield, 1989), is an important factor in predicting activism. The issue of nuclear war tends to lack salience since it is largely an abstract possibility which few people have experienced (Gilbert, 1988).

1.65
A number of correlational studies have demonstrated the existence of a relationship between perceived salience and anti-nuclear activity (Fiske, Pratto, & Pavelchak, 1983; Hamilton, Chavez, & Keilin, 1986). However, only one study has attempted to manipulate salience directly in order to confirm the directionality of the relationship. Fox and Schofield (1989) asked college students to read a mock newspaper front page which varied in the prominence of a story on the likely effects of a nuclear explosion. It was found that the high salience condition was more likely to result in subjects indicating behavioral intentions to engage in preventive actions and to sign a petition favoring disarmament.

Peck (1988) has argued that professionals such as psychologists can make an important contribution to making nuclear issues more salient in the eye of the public. She points out that professional groups can use the media through newspaper articles and radio interviews to express their views and research findings. These groups can also use their expertise to deliver public talks and lectures and in producing a variety of brochures and posters which are of interest to the public. However, there is a strong argument that any efforts to educate the public about the consequences of nuclear war must be accompanied by programs that establish the effectiveness of individual action (Fuld & Nevin, 1988).

2. Perceived Efficacy of Responding to the Threat of Nuclear War

A number of studies have demonstrated a relationship between anti-nuclear activism and the perceived efficacy of anti-nuclear activities (Fox & Schofield, 1989; Hamilton, Knox, Keilin, & Chavez, 1981; Locatelli & Holt, 1986; Tyler & McGraw, 1983; Watanabe & Milburn, 1988). In an Australian study, Sanson, McMurray, Wertheim, and Peck (1988) found that at least 50% of respondents selected by random telephone sampling, reported that the items "I don't have helpful ideas/skills" and "I don't know what to do" prevented the respondent from doing more to work for disarmament. At least 60% of the respondents reported that they would do more if they "had a better idea of what to do".

Wolf, Gregory, and Stephan (1986) incorporated Bandura's (1977) self-efficacy theory into a model predicting behavioral intentions. In a study of undergraduate students they found that response efficacy interacted significantly with self-efficacy. It was concluded that having
the time and resources to engage in a behavioural response is likely to be of little consequence if the same individual also decides that the response is likely to be ineffective.

Haste (1989) has labelled these efficacy variables as "agency". She argues that for those people who score low in agency, images depicting the devastation of a nuclear war are likely to trigger despair, fatalism, or a "live now" response. In contrast, those who score high on agency are more likely to be stimulated into action by such images. However, even if a person perceives the nuclear issue to be very salient and has a high sense of personal efficacy it does not necessarily mean that action will be taken - there are other factors such as moral responsibility and personal costs (e.g. time, resources, competing activities) which may ultimately influence the decision to become involved.

3. Competing Activities

Gilbert (1988) has proposed that two major factors inhibiting activism are the restrictions on free time and the competition from other activities that the individual carries out in daily living. Indeed, Sanson and her colleagues (Sanson et al., 1988) reported that 33% of respondents to their survey indicated "competing activities" as stopping them from doing more in working for nuclear disarmament. "Lack of time" was also indicated by 27% of respondents.

It is also possible that some people who were active in promoting disarmament are currently redirecting their energies toward the environmental issue which is receiving widespread media attention and publicity. The "availability heuristic" (Tversky & Kahneman, 1973), or the belief that an highly-publicised event is more probable than less publicised events (Slovic, Fischoff & Lichtenstein, 1981), may be an influential factor in this regard.

4. Moral Responsibility

Many writers and religious groups have reasoned that the threat of nuclear war is basically a moral issue (e.g. Schell, 1982; Universal House of Justice, 1985). Paradoxically, the extent to which moral responsibility influences anti-nuclear activism has been little researched.
From interviews with peace activists a number of researchers have reported that anger or "moral outrage" is an important prerequisite for engaging in preventive behaviours (Adams, 1986; Frank & Nash, 1965; Locatelli & Holt, 1986; Thearle & Weinreich-Haste, 1986). Adams (1986) also analysed the autobiographies of famous peace activists to find that moral issues featured prominently in their thinking, before these individuals became activists.

In an exploratory study Tyler and McGraw (1983), investigated the role of moral responsibility in predicting self-reported activism. Judgements of moral attributions to citizens were compared with judgements of causal attributions to the public. In other words, the belief that citizens have a moral responsibility to help prevent nuclear war were compared with the belief that citizens can influence whether or not nuclear war occurs. It was found that moral attributions to citizens correlated more strongly with a scale assessing four types of self-reported preventive behaviour, than did causal attributions to citizens (r = .40 compared to r = .26).

Furthermore, it was found that self-reported anti-nuclear behaviour was unrelated to judgements about whether past preventive behaviour had been effective. This would seem to indicate that the decision to engage in behaviour is influenced by something more than just a rational judgement concerning efficacy responding. These findings led Tyler and McGraw to conclude that activism is more strongly related to a feeling of moral responsibility to try to prevent war than to a belief that one has causal control over events.

From another research angle, van lijzenedoorn (1985, cited in Thearle & Weinrich-Haste, 1986) has reported that concern about nuclear war and participation in anti-nuclear protest were associated with higher scores of sophistication in socio-moral reasoning as measured by the Kohlberg moral reasoning scale. Clearly, more research is required to fully explain the influence of moral responsibility on anti-nuclear activism. Of particular interest is the interaction of feelings of moral responsibility with perceived efficacy of responding and salience of the issue. From an intervention view point it would be of interest to see if a sense of moral responsibility can be induced in people, and if so, what are the most effective means of doing so.

5. Gender and Sex-Role

A number of studies have reported that women are more worried and concerned about the possibility of nuclear war than men and are more...
favourable towards nuclear disarmament than men (Fox & Schofield, 1989; Hamilton, Knox, Keilin, & Chavez, 1987; Newcomb, 1986; Polyson, Stein, & Sholley, 1988; Silverman & Kumka, 1987; Smith, 1984). In addition, Peterson, Lawrence, Dawes and Jennings (1988) found that feminine sex-role scores predicted anti-nuclear views in both male and female university students. Other studies investigating sex-roles have reported that nuclear denial (i.e. lack of worry about nuclear war and belief that nuclear war is survivable) is significantly associated with subjects who score high in masculinity and low in femininity (Newcomb, 1986, 1988). A possible explanation for these gender differences may be that “the more empathic, nurturant, qualities of women ... might manifest themselves in a more concrete form - concern for their daughters, sons, grandchildren, and the lives of millions of innocent people” (Silverman & Kumka, 1987, p. 191).

Conclusion

It was not the purpose of this paper to provide an exhaustive review of all the possible variables that could predict anti-nuclear activism. A number of variables such as affect, perception of personal risk, age, world view, persistence of activism, and others have not been discussed. It should also be acknowledged that the synthesis of research findings in this area is particularly difficult considering the differences in data collection strategies, respondent characteristics, and scale differences that have been employed (Mayton, 1988). In addition, there is an obvious need for more cross-cultural research in this area, since most studies have been confined to middle-class, American college students. Despite these methodological limitations it is encouraging to see some consistent findings emerging with the variables described in this paper. This could lead to the development of a robust model which could be used by professionals to encourage people to act in accord with their anti-nuclear beliefs. In any event, the variables described in this paper have contributed towards explaining what may be regarded as “the central enigma of anti-nuclear activism ... why everyone is not working to prevent nuclear war” (Sandman & Valenti, 1986, p. 12).

References


BOOK REVIEWS


_Professions in the Nuclear Age_ is a collection of papers written by Australian people from 25 different backgrounds, on the subject of what they and their colleagues can do to forward the cause of peace. The 'professions' included in this book range from Psychology, Teaching, Medicine and Law to Political Science, Poetry, Seamanship, Entertainment and the Clergy. As such, there is a wide diversity in the views expressed, which makes for fascinating reading.

In their letter of invitation to participants, the editors described their vision of the book as follows:

- that it be a source of encouragement for people in a wide variety of professions to take action for peace;
- that it connect the marginalised peace movement with mainstream political activities;
- that it stimulate dialogue within and between professions about constructive peace work.

The contributors have interpreted these guidelines in a variety of ways. Some writers have discussed their personal attempts to construct non-violent cooperative personal and work relationships. Others have reviewed from their professional perspective the theories and known facts pertinent to war and peace, and described the work undertaken by their professional peace organisations. A particularly good example of this approach was the section written by Connie Peck, the founder of Psychologists for the Prevention Of War (PPOW). Dr Peck described four major areas where psychologists might be able to contribute to a peaceful future, gave examples of activities undertaken by PPOW and discussed the implications for all peace workers of psychological approaches.

Some writers, such as Ian Maddocks, national president of the Medical Association for the Prevention of War (MAPW), focused on the danger of nuclear weapons and the necessity for professionals to accept public, political responsibility for employing their status, influence, infrastructure and knowledge towards elimination. Others talked more generally about ways in which they and their colleagues could bring about the social change required to eliminate destructive conflict. The
The lauer approach was surprisingly exemplified in the contribution of a mathematician, Nancy Shirley, who suggested that the structure and teaching of mathematics itself were imbued with alienating, destructive and power-based modes of thinking, and emphasised the importance of encouraging people to value, affirm and act on their own diverse knowledge and experiences.

The pessimistic, confused and ambivalent arc also represented in this book. Overall, however, I found it a constructive and varied account of how some people are struggling with their desire to contribute to a peaceful future within the constraints and possibilities of their work environments. In a world where nuclear disarmament is clearly an imperative, it would be a valuable addition to any professional reading list.

Reviewer: Phillis Bulow, Dept. of Medicine, University of Sydney, (Coordinator, PPOW, NSW)

In 1982, the council of the American Psychological Association (APA) voted to support a bilateral nuclear freeze and other initiatives likely to reduce the threat of nuclear war. As a ripple effect of this stand, APA's Board of Social and Ethical Responsibility organized a meeting of psychologists active in peace-related research. The meeting proposed that a book of readings be prepared to gather together current knowledge about the prevention of nuclear war from a psychological perspective. The book was eventually prepared under the sponsorship of the Society for the Psychological Study of Social Issues, a division of APA, under the editorship of Ralph White.

The book consists largely of readings taken from other sources, with a small number of contributions being specifically written for the volume to cover gaps. The editor has worked hard to integrate the readings, but inevitably the style and level of detail vary considerably. Some chapters are highly readable contributions which would be comprehensible to the lay person, while others are rather heavy-going academic papers. Overall, the latter predominate. The book contains 35 chapters organised into five parts. It is impossible to touch on every chapter, so I will only mention what were the highlights for me in each part. The book begins with chapters describing "The Present Situation". There is the inevitable chapter dealing with the psychological effects on children. This chapter illustrates various reactions using quotations from interviews, but it appears to pre-date the systematic surveys of the issue which are now available from many countries. There is also an interesting review of American public opinion polls which shows that, in some crucial areas of nuclear weapons policy, the majority of Americans not only have opinions which differ from official policy, but even believe their country's policy to be different from what it really is.

Part 2 is titled "Major Alternatives". A recurring theme is the contrast between those who see wars as occurring through spiralling tensions (using a World War I model) versus those who believe that strong deterrence is necessary to check aggression (using a World War II model). An alternative to a spiralling arms race is put forward in Osgood's chapter on "Graduated and Reciprocated Initiatives in Tension Reduction (GRIT)". Osgood's proposal involves an attempt to initiate a spiral in the other direction, towards disarmament. With process of this
sort seems to have gone on between Kennedy and Khrushchev in 1963. Perhaps we are seeing a similar process going on between the superpowers today.

In Part 3 on "Basic Psychological Processes Related to War", pride and fear are identified as two major motives leading to war. Other chapters deal with cognitive factors leading to misperceptions in conflict situations and the influence of the personalities of national leaders.

Part 4, entitled "Interactive Processes Related to War", moves beyond the individual psychological perspective to consider interactions among nations. History and political science become more relevant disciplines here and, perhaps as a consequence, I found this the least interesting part of the book. The major topics covered are deterrence, government decision making and crisis management, and escalation.

Part 5 deals with "Prevention". I found it to be the most interesting and useful section and would recommend it as the place to start for most readers. There are excellent chapters on negotiation and mediation which are relevant to conflict between individuals as well as between nations. Two chapters deal with attitude change and make the point that, if strong appeals to fear are used, they should be followed by discussion of preventive actions and reasons why these actions are likely to be effective. Part 5 ends with chapters on peace education which, unfortunately, are not as useful as the other chapters in this section.

Some overall observations can be made about the approach taken in this book. Although the book deals with the prevention of nuclear war from a psychological perspective, the chapters have a far greater disciplinary spread than the title would suggest. Around half of the contributors are neither psychologists nor psychiatrists, so that to a fair extent the perspective is a social science one rather than a specifically psychological one. However, the perspective is very much restricted to being an American one. All of the contributors are American and the issue of preventing nuclear war is seen almost totally as a matter of U.S.-Soviet relations. Although a book on this topic might be suspected as having a bias toward unilateral disarmament, this is not the case. As White writes in the concluding chapter: "... no chapter in this book has challenged the desirability of a healthy fear of the consequences of committing aggression or of some prudent forms of strength and resolve as ways of discouraging..."
aggression by others. There is not a pacifist sentence in this volume, nor is there a sentence recommending military weakness” (p.533).

In some senses, this book might be seen as the American counterpart of James Thompson's Psychological Aspects of Nuclear War which was published in 1985 by the British Psychological Society. However, the two books are very different in their approach. Thompson’s is a short single-authored work which is easily read from cover to cover. The White book is long, multi-authored, more academic in focus, and not a book that many would want to read in its entirety. Thompson's book would definitely be my recommendation for any psychologist wishing to find out about our discipline's possible contribution to reducing the nuclear threat. However, the White book has a considerably broader scope, covering many topics not considered by Thompson's, and giving a more detailed and academic treatment of the issues. Most readers of White's book would probably want to select out chapters according to their particular interests.

I found this book rather difficult to obtain. There is no distributor for the book in Australia and it does not seem to be commonly held in academic libraries. My copy was obtained on inter-library loan from interstate. The University Co-op Bookshop told me that to have a copy imported would cost around A$50 for the paperback version and over A$100 for the hardcover. Although an expensive book to buy for personal use, it certainly merits being more widely held in Australian libraries. Here is a case for action for those who can recommend purchase for their institutional libraries.

Tony Jorm
PPOW Coordinator
Canberra, ACT.
NETWORK ADVERTISING

Advertisements are available for this Newsletter. Contact should be made with the Editor prior to placing an advertisement, so that required details are noted. The advertisement should be typed and accompanied by a cheque payable to the Board of Community Psychologists.

Current rates are as follows:

- Full page $40.00
- Half page $20.00
- Quarter page $10.00
- Per line for Classified Advertisement $1.00

The publications of an advertisement by NETWORK is not an endorsement of the advertiser nor of the products, services and the like advertised. NETWORK reserves the right to cancel or reject advertising which it judges is not in keeping with the scientific and/or professional aims of A.P.S. in general and the Board of Community Psychologists in particular.

INFORMATION FOR AUTHORS

Network is published quarterly (April, August and December). Contributors should submit their manuscripts to the Editor no later than one month prior to the publication date. Manuscripts should be typed or submitted on a computer disk using WordPerfect (5.0) or Macwrite. The format to be used is the general style described in the Publication Manual of the American Psychological Association (3rd ed., 1983), except that spelling should conform to the Shorter Oxford Dictionary.

Please send all correspondence to:
Dr D.B. Hatchard
Bendigo College of Advanced Education
PO Box 199
BENDIGO VIC 3550