

Waging experimental war: a review

Sherif *et al.*, *Intergroup Conflict and Cooperation, The Robbers Cave Experiment*

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War was declared at Robbers Cave, Oklahoma in the summer of 1954 (Sherif *et al.*, 1961). Of course, if you have seen one war you have seen them all, but this was an interesting war, as wars go, because only the observers knew what the fighting was about. How, then, did this war differ from any other war? This one was caused, conducted, and concluded by behavioral scientists. After years of religious, political, and economic wars, this was, perhaps, the first scientific war. It wasn't the kind of war that an adventurer could join just for the thrill of it. To be eligible, ideally, you had to be an eleven-year-old, middle-class, American, Protestant, well-adjusted boy who was willing to go to an experimental camp.

The war was designed to have three successive stages:

Stage No. 1. *Experimental In-Group Formation*. During the first six days, two groups of boys were brought to camp and kept isolated geographically from each other while they solidified themselves into iden-

tifiable and meaningful groups. These "boy nation-states" came to be known, respectively, as the Rattlers and the Eagles.

Stage No. 2. *Intergroup Relations-Friction Phase*. During this week, the two groups were brought into contact in a series of competitive group activities and mutually frustrating situations which produced a high level of intergroup hostility.

Stage No. 3. *Intergroup Relations-Integration Phase*. This final phase was dedicated to the experimental reduction of the intergroup enmity by means of the introduction of superordinate goals. The attainment of these desirable and compelling goals could only be achieved through the mutual, cooperative efforts of the Rattlers and the Eagles.

A preliminary experiment was conducted just prior to Stage No. 3. Simple proximity and the opportunity for contact was arranged between the groups in a series of situations such as participating in psychological experiments, attending a movie together, and eating in the same mess hall.

This exposure of hostiles to one another produced jeers, catcalls, insults, a food-throwing fight, and similar provocations and outrages. While the convinced practitioners of contact-as-a-hostility-reducer might well call "foul" and insist that this was hardly an adequate test of the theory, it at least demonstrated that the minimum conditions for the reduction of hostility must include some motivation to use such an opportunity productively. Had association been forced over a long enough period of time it is possible that the intergroup hostility might well have dissolved leaving traces only in the form of a few lingering individual animosities. There was (as there always is) unequal dedication to the joys of warfare among the individual combatants on both sides and even frenzied lectures about "what we are fighting for" might have proved insufficient to prevent the eventual appearance of peaceful overtures between members of each of the groups.

How was the concept of superordinate goals actually translated into action? The children were induced to interact in situations such as the following:

1. *The Drinking Water Problem*—A camp water shortage was elaborately staged (valves turned off 1¼ miles from camp, faucets plugged, etc.) and the help of all the children was "required" to relieve the common thirst by tracking down the trouble.

2. *The Problem of Securing a Movie*—The staff informed the children that an attractive movie could be obtained from town but the camp could not pay the whole rental fee. The Rattlers and Eagles had to overcome this financial obstacle through intergroup negotiation.

3. *The Camp-Out Problem*—The entire group was removed from the familiar camp setting and thrown together to perform the necessary tasks for an extended camp-out.

A number of planned interactions occurred during this time, i.e., a truck which "stalled" conveniently and required mass effort to restart. Throughout the trip the staff capitalized on similar, but truly spontaneous, incidents.

This Integration Phase of the experiment was successful in reducing the existing tensions between the groups and the researchers attribute the outcome to the interpersonal experiences generated by cooperation in the achievement of goals requiring mutual effort for their attainment. Hostility reduction was described as the *cumulative* effect of interaction around a series of superordinate goals since no single incident seemed to have turned the tide.

The experiment at Robbers Cave has been responded to with unusual enthusiasm by social scientists who have labelled it "brilliant," "a modern classic," "unparalleled," "ingenious," etc. Despite the praise that has been heaped upon it—praise I agree is deserved—if we wish to use their experience as an analogy for other groups we must be aware of its limitations. It is obvious that the behavior of somewhat fewer than 22 carefully selected eleven-year-old boys during a three-week session at camp can be extrapolated to the larger scene only with considerable caution. Further, it has been suggested (McNeil, 1961) that a more appropriate analogical model might be found in the study of delinquent children for whom open hostility produces less guilt, the concept of "fair play" is less cloying, the response to implicit social criticism is more contemptuous, and the drive to power is woven more tightly into the fabric of their being. With such raw material, the consequent experimental broth might resemble less the cup of friendship than the devil's brew. To explore another dimension, what if this experiment were to be repeated with children of Thailand,

China, Paraguay, or Nigeria? Would the All-American-Happy-Ending have been as predictable an outcome?

The combination of observations, judgments, and test responses the authors employed to assess the rapidly shifting in-group status relations and intergroup behavior of the combatants was necessarily less than perfect and they are fully conscious of the flaws in their research vehicle. Since the nature of the experiment was kept secret from the children, the task faced by the researchers was very much similar to that posed for spies, i.e., how to convert one's observations into systematic and trustworthy conclusions.

A "what if" more crucial than the primitive measures available to such a field study has to do with the selection of superordinate goals as the preferred means for resolving this test-tube-produced intergroup hostility. (1) What if, rather, a suitably unappetizing common enemy had been conjured up to redirect the angry energies of the boys? (2) What if our cultural need for individual achievement had been loosed from its social leash to ravage the internal cohesion of the groups? (3) What if selected members of the Rattlers and the Eagles had been inspired to launch a hunger strike for peace? (4) What if Osgood's (1959) plan of graduated reciprocation in tension reduction had been initiated? (5) What if the two groups had been prevailed upon to establish a supernational agency to regulate the intergroup tension (Stagner, 1961)? The long list of possible "what ifs" needs to be explored singly or in concert so we can judge the relative effectiveness of each and order them on some rough scale of usefulness. It ought to be noted that the concept of superordinate goals used in the Robbers Cave experiment had a particular twist to it. Since the children were unaware of the Machiavellian turn of mind of

the experimenters, they were deprived of the freedom consciously to contribute to the quality and extent of the reduction of hostility. Peace, between the Rattlers and Eagles, was an unconscious by-product of what must have seemed to them to have been only the normal ebb and flow of human relations. An experiment in which education for superordination was a part of enlisting the conscious cooperation of the antagonists might produce a cessation of hostilities differing in kind and quality from that achieved at Robbers Cave.

It is interesting that the "common enemy" approach to the reduction of intergroup hostility was attempted by these researchers in an earlier study (Sherif and Sherif, 1953). It proved to be a successful device but an expensive one since it was a solution which relied on spreading the conflict even further and involving a greater number of combatants. Something like a war to drain off the feelings that lead to war.

Janis and Katz (1959) have made it clear that the nature of the group struggle acts as a conditioning factor in the success that can be expected from various methods used to attain peace. They suggest, for example, that nonviolent means of conflict resolution may be more applicable to factions within the same institution than to contests between distant groups. It is difficult to characterize the enmity relationship between the Rattlers and the Eagles since the formal institutionalization of aggression as an integral part of the structure of each group was short-lived. If each of the groups had operated as a solid unit for an extended period of time the lure of superordinate goals might have been reduced in direct proportion to the degree of cohesion of each ingroup. They were, essentially, newborn nation states formed from the same general culture but denied even a tribal heritage.

Another alternative which was considered and abandoned was that of disrupting the ingroups by emphasizing individual achievement and accomplishment. Even had such an all-American plan succeeded it seemed to promise little in the way of practical implications for the reduction of intergroup tensions in state-sized groups. The intrusion by an outsider into the leadership pattern of the group was rejected for similar reasons. The impossibility of "getting to" a leader in the real world seemed enormous and, in actuality, the experimenters viewed leadership as a structure that both guides and is led by the total group situation.

The design of this experimental attempt to manipulate group hostility, by its very nature, rejects certain explanations of intergroup relations. Theories about national character (war-like people), deep-seated, innate instincts of aggression, the superiority or inferiority of certain human groups, the effect of individual frustration, or the character of leadership are discarded as appropriate causes of the total phenomenon of intergroup anger. In this respect, the research was designed to explore a limited and select hypothesis.

At one point during the height of the hostile excursions the groups were making against one another, the Eagles raided and wrecked the Rattlers' cabin and then returned to their own quarters where they entrenched and prepared weapons (socks filled with rocks) in anticipation of retaliation by their victims. When the Rattlers discovered this atrocity, their leader labelled the Eagles (collectively) "Communists." This spontaneous epithet no doubt evoked an adult smile but its significance may have escaped the observers of this conflict in microcosm. If, as Bronfenbrenner (1961) has so clearly indicated, Russians and Americans hold "mirror images" of one another's

motives and characteristics, we could speculate that such a scene could well have taken place in Russia with the utterance altered only to read, "Capitalistic war mongers." No research has yet tried to predict the eventual impact of two such gigantic cultures devoting themselves so assiduously to forming populations composed exclusively of adults who have known their "enemy" since childhood. The longer the struggle continues, the greater will be the proportion of such adults in each society oriented emotionally and cognitively to the "way in which one deals with enemies." It is exactly this continuous leveling of the viewpoint of generation after generation that promises to make a barren soil for negotiations in the future. It is this steady solidifying of hostility that sets an upper limit on the effectiveness of plans that seek to assure peace by a simple increase in contact or communication between the citizens of each nation. We may, shortly, reach a point of psychological no return such that the expunging of such deeply rooted mass hatred may only be possible as an aftermath of a catastrophe so fantastic that it acts to bleach out even those emotions ingrained during the formative years of youth. The task of altering such fundamental perceptions has added to it the additional burden of a race against time. How much time do we have before each culture reaches a critical saturation point? If it need happen only for one culture then it becomes a clear instance of the devil taking the hindmost.

Scott (1958) suggested the process of systematic "gentling" (petting and removal from combat) of puppies, as a device for teaching them to avoid aggressive interaction with others and he proposes that a similar program might work with children. Our children, however, have been weaned on a set of adult attitudes which would

make unaggressive behavior a chaotic contradiction in terms. Whenever we discuss the daily news with our children we convey to them some of the urgency of the ideological conflict to which we are so sensitive and to teach passivity as an accompaniment to this set of ingrained hostile attitudes may be highly unrealistic.

Research of the enterprising sort conducted by Sherif and his associates ought to serve as a model of one kind of approach that behavioral scientists of a psychological turn of mind can best accomplish. Such efforts can provide only a segment of the total answer, however. Katz (1961) frames the Robbers Cave experiment in its proper perspective by listing it as one of a series of much needed types of research. As do all really good experiments, the Sherif work raises at least as many issues as it resolves. Its experimental magic lies in the degree to which it provokes new research and a rethinking of the fundamental issues of hostility reduction. This new and detailed presentation of the research has a kind of Mendelian timeliness about it. International events have given a very practical cast to what at one time would have been considered basic theoretical research with little immediate application. Ideally, a systematic plan of experimentation ought to be undertaken to explore the effective-

ness of a variety of means for the reduction of intergroup hostility with a variety of groups having different characteristics and natural histories. We suffer from an abundance of speculation about such matters and a dearth of actual experimentation.

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