Intergroup Conflict and Cooperation: The Robbers Cave Experiment


[p. 151] CHAPTER 7

Intergroup Relations: Reducing Friction (Stage 3)

A. Approach to Reducing Friction

At this stage of the experiment, the main objective of our study could be undertaken, namely the reduction of intergroup friction. There are now two distinct groups in an unmistakable state of friction with one another. The groups exhibited in word and deed repeated hostility toward one another; they standardized unflattering attitudes and stereotypes toward one another.

The derogatory attitudes toward one another are not the consequence of pre-existing feelings or attitudes which the subjects had when they came to the experimental site. They are not the consequence of ethnic, religious, educational or other background differentiation among the subjects. Nor are they the result of any extraordinary personal frustration in the particular life histories of the subjects, or of marked differentiation in physical, intellectual or other psychological abilities or characteristics of the subjects. Possible effects of such differences were carefully ruled out in the laborious procedures used in subject selection (Chapter 3).

The state of friction was produced systematically through the introduction of conditions of rivalry and frustration perceived by the subjects as stemming from the other group. By the end of Stage 2, as we have seen, the intergroup friction was crystallized in some unfavorable stereotypes and in the repeatedly expressed desire to have nothing more to do with the other group. To be sure, the words and deeds of hostility, the unflattering stereotypes towards the out-group, the self-righteousness of the in-group were not expressed with the same determination, the same vehemence, the same degree of feeling by any two group members. But, whatever the differentiating degree or intensity in the unique personal manifestation of hostility, the general trend of negative attitude toward the out-group was a common property of all group members. The intergroup hostility was prevalent despite the occurrence of occasional interpersonal rivalry, bickering and friction in the relations within each group. Two boys who engaged in some interpersonal exchange of unfavorable reactions toward one another, at a given time, would join hands a few minutes later in a concerted, common front in carrying out the developing intergroup trend in relation to the out-group. It should also be remembered that the in-group identification and solidarity in in-group and intergroup relations exhibited by in-group members did not stem from pre-existing interpersonal ties. The boys were not even personally acquainted with one another prior to the study. The two in-groups themselves were experimentally produced from scratch in the manner reported in Chapter 4.

It would have been a relatively easy task to bring about positive relations or harmony between groups right after the formation of the two in-groups. We deliberately postponed this positive step in intergroup relations until after the unpleasant task of producing a state of friction, because the vital issue of intergroup relations in the present-day world is the reduction of existing intergroup friction.

The general character of the alternative chosen in our attempt at reducing friction was stated in Chapter 2. In short, the alternative of appeal to a common enemy, which was effectively used in our 1949 study because of expediency at the time, was not used. The unification of groups against a "common enemy" necessarily implies widening the
area of conflict.

The alternative of reducing tension by disintegrating the groups as units through devices which make individual "shining" and rivalry supreme without concern for the other fellow was rejected. By following such an approach, we would be destroying the property of intergroup relations which makes its study so crucial today, namely, the relations between group units.

Likewise, the alternative which emphasizes exclusively the role of leaders in change misses the mark, because the effectiveness of leaders, even though weighty, is not unlimited. Leaders are not immune to influences coming from the rank-and-file, once a group trend starts rolling, even though initially the leaders might have been largely responsible for starting the trend.

With such considerations in mind we chose the alternative of introducing common, superordinate goals of sufficient appeal value. But before doing this, we studied the possible effect of mere intergroup contact situations as equals, because there are adherents of this approach both in academic and practitioner circles.

[p. 153] At this point a word of clarification concerning the concept "contact" will be helpful. The word "contact" has flexible denotations which allow it to become a blanket term. It could be used to refer to any kind of interpersonal or intergroup interaction which is within the actual perceptual range. In customary usage, the word "contact" in intergroup relations refers to having individuals from different social, ethnic, or national backgrounds come together on some specific occasion, such as a tea party, lecture, dinner, or dancing party. We are using the term "contact" in this customary sense and reserving the concept "interaction" for broader generic reference.

We shall report the intergroup contact situations and their results in the next section. The common superordinate goal situations and their products are presented in section C.

B. Intergroup Relations: Contacts Introduced to Reduce Friction

The first part of Stage 3 was devoted to a series of contact situations varying in duration from about 15 minutes to an hour or so, and differing in the character, such as (a) participating together in a psychological experiment with opportunity to interact before and after the experiment, (b) attending a movie together, (c) having meals together in the same mess hall with utmost freedom to choose seats and interact with anyone in any way desired.

Essentially the same general procedure was followed in each of the contact situations. The two groups were taken to the place of contact (for example, the recreation hall or mess hall), both groups arriving at the same time or one shortly after the other, and then they were left to their own devices. Once the groups were in the contact situation, the staff walked away from the immediate contact range and pretended to be engaged in some activity, such as sitting under a tree in conversation. In no contact situations did the Eagle and Rattler staff members associate with one another during the period while the contact situations were being initiated and carried out.

The first contact situation was during the second part of the "bean toss" experiment, in which the subjects were to estimate individually the projected number of beans supposedly picked up by each of the subjects in both groups. The first part of the experiment consisted of picking up as many beans as possible in a [p. 154] unit of time. (See description of this experiment at the end of Chapter 6). Each group was strongly opposed to taking part in the "bean toss" experiment because it involved association with the other group. Even a prize of $5 for the winners was not very effective at first in reducing the resistance of the groups.

Later in the day during a Rattler cookout at Lake Carlton it was announced to them that they had won the bean toss contest and they were given the prize, a $5 bill. They were told they could spend it any way they liked. Assent was unanimous to the first suggestion to the effect that they spend their $5 for the repair of one of their two boats which they had been unable to use for several days because of a leak.

The Eagles, especially, were dead set against participating in any activity which had anything whatsoever to do with the Rattlers. In an early morning swim that day, the Eagles had discovered their flag in the water, burned the previous evening by the Rattlers. Upon making this discovery, they denounced the Rattlers as "dirty bums," and accused them of having put ice in the water (because it appeared to one of them as colder than usual), and of throwing rocks in their creek (because one of them stubbed his toes a number of times during the swim).
Shortly after the beans were collected as one aspect of the experiment, both groups were instructed to come to the recreation hall to estimate the number of beans each "picked up." Two sets of four rows of benches were arranged for subjects during the experiment, only a narrow aisle of about one yard separating the two sets of benches (see pictures, last part of Chapter 6). When both groups arrived in front of the building, they were told to wait there for a short time until the apparatus was fixed. During the wait there was some bantering back and forth between the groups about who had won the tournament. During this waiting period the staff kept away from the groups. When the staff gave the signal to enter (addressed to no particular group), the Rattlers went in the building first. One of the Eagles remarked, "Ladies first." Until the last days of Stage 3, when the Rattlers went in first on such occasions, this "Ladies first" remark was made by the Eagles. The Rattlers took the front seats, leaving the back seats for the Eagles, thus producing seating arrangements strictly along group lines.

There were jeering, cat-calls and insulting remarks as the [p. 155] proceedings permitted. During the event, Mason (E) warned Simpson (R) to stay out of the Eagles' swimming hole. When the beans which were supposed to be Mills' (R leader) were projected, Everett (R) said "Whew!" and several other Rattlers whistled, presumably in respect. It will be remembered that the number of beans projected for all subjects was exactly the same (35 in each case). Toward the end of the event, a Rattler noticed that the pencils were "Eagle" brand, and dropped his, saying in a loud voice that he did not want to touch anything that had anything to do with the Eagles. Most of the other Rattlers followed suit. When the affair was over the groups parted yelling insults at each other. The outstanding among these were Eagles calling Rattlers "Dirty Bums," and Rattlers calling Eagles "Sissies" and "Babies."

The second contact situation took place about half an hour later before the first stereotype rating session. Neither group appeared to be pleased with the prospect of participating in this task in the company of the other group. The Rattlers felt positively insulted at being asked to do so. The same procedure of a short wait for both groups in front of the building was followed. When they were asked to come in, with no indication of which group was to enter first, the Rattlers again entered first, eliciting the "Ladies first" remark from the Eagles. The response to this remark was derisive. The tables for this event were arranged in a V-shape, something that had not been done before. This was done so that position habits would not determine that the groups sit separately, and in their accustomed eating positions. The seating arrangement was strictly along group lines. Again there were no signs of intermingling, but there were complaints about the Eagle pencils and derogatory remarks hurled, especially by Rattlers.

The rest of the day was spent in in-group activities. The Rattlers had their lunch at Lake Carlton, the public picnic ground about two miles south of the camp grounds. The picnic area was full of outside people. The Rattlers' dealings were almost entire within their in-group. The Eagles had lunch at the usual camp mess hall. The Eagle participant observer intentionally sat down at the Rattlers' table to see what would happen. Only Bryan came to sit beside him. Wilson shouted to him to get up because he would get all dirty sitting at that table. Bryan got up and brushed his clothes off.

The third contact situation was before supper in front of the mess hall. Both groups waited in close proximity, the pretext for the wait being that the food was not yet ready. The staff again withdrew from the scene. While waiting, an argument arose as to which group was the best, and invectives were exchanged. When a neutral party gave the signal that the food was ready, the Rattlers started in first, accompanied by the Eagles' now standardized remark: "Ladies first." The Rattlers were in the mess hall quite a while, but the Eagles were not making a move to go in as they usually did. Seeing this, the Eagle participant observer told them to go in when they wanted to. The Eagles waited until the Rattlers had all gotten food on their trays. After the Eagles entered the mess hall, the exchange of unflattering words between the two groups became louder and louder. The Rattlers lived up to their "tough" boy self-image and became somewhat vulgar.

Staff stayed outside, talking until supper was half-way through. The row inside increased in proportion. Both sides were throwing papers and left-overs at each other. This lasted until the Eagles finished eating and left the hall (at their observer's instructions), followed by yells and jeers.

The fourth contact situation was centered around the showing of two 15 minute films, both devoted to maritime topics. The procedure of a joint wait in front of the building (while the projector was being "fixed") and free choice of seats was followed. The Eagles passed the Rattler cabin on the way, and were yelled at by Rattlers. The staff moved away. There was again the exchange of hostile remarks, again the same "Ladies first" remark. During the movie there was practically no exchange between groups. But there was some exchange during the change of films. The seating arrangement was strikingly along group lines. When the event ended, around 9:30 P. M., the staff
The boys arose and went out, intermingling. But at the door they completely split - each group in the direction of its respective cabin.

The fifth contact situation was planned as breakfast the following morning. The positions of the tables in the mess hall had been completely changed, so that any habitual fixations on a particular table would be broken. The two tables, which had been placed across the mess hall, now ran longitudinally; and the staff table was moved to the opposite end of the hall - away from the [p. 157] boys. (At no meal during any of the three stages did any of the staff members sit at any of the subjects' tables in the mess hall.) When both groups came in front of the hall, the counselors and other authority figures withdrew on a pretext. During a short wait an argument arose as to which group had the most firecrackers. Again a person who had no authority in the eyes of the subjects announced that breakfast was ready. The same "Ladies first" ritual followed.

One of the low status Rattlers (Allen) happened to be the first one in front of the Rattler line. He picked up his food first and carried his tray to the table by the south wall of the mess hall. (The south side of the mess hall was in the general direction of the Eagle area.) Seeing one Rattler at that table (for the choice of which there was no facilitation from previous experience), all the rest of the Rattlers sat at that table. This, of course, determined that the Eagles choose the table by the north wall of the mess hall. During the meal there was razzing and yelling, but not as intense as during supper on the previous night. There were attempts at kicking each other between two different Rattler and Eagle pairs during the course of breakfast.

The sixth contact situation was planned in relation to shooting firecrackers. It was the Fourth of July. In line with the decision not to appeal to values from the larger setting in achieving reduction of intergroup friction, and in line with the subjects' preference, separate ceremonies appropriate to the national holiday were held by each group. However, the shooting of firecrackers was planned as a special contact situation. On the previous day, the Eagles went to town as a group and bought firecrackers with their staff. A similar supply of firecrackers was bought for the Rattlers. Both groups were taken in close succession to a place by the wayside outside of the State Park area to shoot their firecrackers. (It is prohibited to shoot firecrackers within the park area, and the camp is within its bounds.) Wilson of the Eagles said that he didn't want to get out of the truck if they had to shoot their firecrackers with the Rattlers. The subjects were told that they could shoot their firecrackers with anyone they wanted to. Both groups started shooting them at about the same time. At no time was there intermingling of the two groups. At one particular time, Simpson (R) and Clark (E) were closest to one another. Simpson accused Clark of shooting a rock up in the air and hitting him on the head.

The seventh contact situation: Both groups arrived at the mess hall for lunch at the same time, as planned. All staff members withdrew from the immediate area of contact. From that distance, conversation within or between groups could not be heard. Each group stayed on the side of the mess hall entrance nearest its own cabin. There was no crossing-over between groups.

When the announcement "food is ready" was made, both groups moved in. This time the Eagles rushed in first to form the line to pick up trays and food. The Rattlers followed them. McGraw (E), who was the first person through the line, sat at the same table that the Eagles had used in the morning after the new table arrangement.

After eating for a while, someone threw something, and the fight was on. The fight consisted of throwing rolls, napkins rolled in a ball, mashed potatoes, etc. accompanied by yelling the standardized unflattering words at each other. The throwing continued for about 8-10 minutes, then the cook announced that cake and ice cream were ready for them. Some members of each group went after their dessert, but most of them continued throwing things awhile longer. As soon as each gobbled his dessert, he resumed throwing. As the Eagles were leaving they shouted at the Rattlers that they would resume the fight at supper, and the Rattlers responded to this challenge with counter-challenges.

After describing the events summarized above, the Eagle participant observer added the following comment to his report written that day: "It was apparent by this time that mere contact between the groups without the introduction of superordinate goals was going to be insufficient to reduce the negative between the groups." The Rattler participant observer wrote in his daily report his opinion concerning the inadequacy of mere contact situations in reducing the intergroup friction and name-calling in much stronger terms.

The intergroup events accompanying and following the series of contact situations summarized above confirm the following hypothesis:
Hypothesis 1, Stage 3

It is predicted that contact in itself will not produce marked decrease in the existing state of tension between [p. 159] groups.

INTERGROUP RELATIONS: REDUCTION OF FRICTION

STAGE 3

Two groups shooting fireworks. Rattlers in foreground; Eagles in background.

Moss Hall after one of the "garbage fights" between groups eating together.

(Above) Two pictures of effects of intergroup contact without superordinate goals.

(Below) Intergroup interaction after the introduction of superordinate goals.

Members of both groups climb up to see if the water tank is empty.

Members of both groups cluster around and take turns trying to close the faucets.
INTERGROUP RELATIONS: REDUCTION OF FRICTION

STAGE 3

First efforts to start the truck: Some boys from both groups try to push it.

Successful effort to start the truck: Both groups have lowered their resistance.
INTERGROUP RELATIONS: REDUCTION OF FrICTION

Stage 3

Joint meals on the overnight camp-out show intergroup mingling in preparation and set:

Members from both groups asked to be photographed on attaining the Arkansas
Accordingly, it was decided to start introducing interaction situations involving common superordinate goals, instead of situations involving mere contact. In spite of the fact that the activity engaged in during contacts (such as eating, shooting firecrackers) was gratifying or pleasing for each individual member within the in-group bounds, the mere fact of contact had no positive effect toward reducing existing hostility.

C. Intergroup Interaction Involving Superordinate Goals

Thus, contacts which did not involve superordinate goals, in the sense defined at the outset (Chapter 2), were far from effective in reducing intergroup friction. If anything such contacts served as occasions for further irritation and for expressing unflattering attitudes of group against group.

At this point we turned to procedures suitable for testing the main hypothesis concerning the reduction of intergroup conflict:

When groups in a state of friction are brought into contact under conditions embodying superordinate goals, the attainment of which is compelling but which cannot be achieved by the efforts of one group
alone, they will tend to cooperate toward the common goal. (Hypothesis 2, Stage 3)

The present section will be devoted to a summary report of stimulus conditions introduced which were conducive to the emergence of superordinate goals and to reactions of the subjects obtained by various measurement techniques. Thus this section includes:

1. A brief account of stimulus conditions introduced for the arousal of superordinate goals and observational data relevant to the hypothesis stated above.
2. Sociometric choices of group members revealing their attitudes toward in-group and out-group members and a comparison of these choices with those obtained at the end of Stage 2.
3. Judgment indices of attitudes toward the respective [p. 160] in-groups and out-groups in the form of stereotype ratings and their comparison with the stereotype ratings obtained at the end of Stage 2.

1. Superordinate Goals and Interaction Episodes Related to Them

The Drinking Water Problem: The first superordinate goal to be introduced pertained to drinking-water at a time when both groups faced the prospect of thirst and became progressively thirstier with the successive steps of activities directed toward solution of the problem. In general outline, the plan consisted of having members of both groups perceive common deprivation which could be alleviated (so it appeared to them) by the cooperation of members of both groups. Thus a situation of functional interdependence involving a common goal was produced.

First, a word concerning the preparation of stimulus conditions is necessary. All of the drinking water in the camp, which is distributed to various parts of the camp (kitchen, latrines, drinking fountains located near cabins and other convenient spots), comes from a reservoir on the mountain north of the camp. It is pumped up to the large water tank higher on the mountain (about 1 1/4 miles from camp) and stored there in sufficient supply for a certain period. A valve at one end of the tank controls the flow of water and can be cut off to prevent the passage of water to the main pipe which, as it reaches the camp grounds, runs into various smaller pipes to the various outlets. (For location of the places and items mentioned above, see the map, Chapter 3.)

Several hours before the execution of the plan, the valve on the tank was cut off, leaving only the water already in the main pipe to supply the camp for the time being. After turning off the valve, two large boulders were placed over it, which had to be removed before the valve could be turned on again. In addition, the faucet at the end of the tank opposite the valve was stuffed with pieces of sacking so that no water came from the faucet when it was turned on. The latter device was planned to require a solution of the problem, since getting a drink when members of both groups were thirsty would itself have very high common appeal value.

Right after the water was cut off at the tank, the boys were [p. 161] informed by their respective participant observers that there might be a water shortage in the whole camp as there seemed to be some trouble with the water system, but that it was being investigated. They advised members of each group to fill their canteens in case the water shortage became worse. The boys were told that in the past, on occasion, vandals had tinkered with the water system, causing difficulties. This warning was given in order that the blame for their thirst not be placed on the camp staff. After this all of the remaining water was drained out through faucets which were not within sight of the subjects. (Of course, for any emergency sufficient water was stored in the small tank in the kitchen both for cooking and drinking purposes. But the subjects did not know this.)

The execution of the plan was postponed until 4 P. M. so that there would not be much, if any, water left in the subjects' canteens. Before actual efforts toward getting the water to run again the topic of the water shortage became a common topic for concern in both groups.

The experimentally planned activities may be summarized as follows: All members of both groups were present at the announcement of the complete failure of the water system, depriving the entire camp of drinking water. In order to make the situation real to the subjects, this took place at the spot where the end of the main water pipe from the tank was visible and where there were a number of faucets in a row which could be turned on. Thus subjects could see for themselves that there was not a drop of water coming through.

After the above demonstration the subjects were informed that there was something wrong with the water system
and that the trouble could not be located. They were told that the difficulty might be a leakage in the pipe between camp and the reservoir, it might be at the pump by the reservoir, or it might be at the tank. Thus the first step was to find the cause so that necessary steps could be taken to remedy the difficulty. The announcement went on to say that the help of about 25 people was needed.

Upon hearing the announcement, members of both groups volunteered to help. The area between the camp and the reservoir, it was announced, was to be divided into four segments to be inspected by four different searching details. One staff member would accompany each detail. It was announced that five boys [p. 162] were needed for the area around the reservoir. This was the detail to go farthest, and it would be accompanied by an Eagle staff member. The volunteers that stepped forward for this detail were all Eagles. The detail for the segment adjacent to the reservoir area up to the tank was to be accompanied by a Rattler staff member. Volunteers for that detail were all Rattlers. The same alternation was followed for the remaining two segments with an Eagle staff member and Rattler staff member accompanying the two details, respectively. Without any exception, each detail consisted of volunteers from the same group as the staff member accompanying the detail. (A detail of 2 boys and a staff member was to stay by the faucets in camp for an hour, and then go to report at the tank area.) The details at the end segments were to move toward the tank area, reporting on the way to the adjacent detail if they found any difficulty. All groups would congregate at the tank to investigate it if nothing was found along the way. Thus, the division of the area into segments and alternation of adjacent segments between Rattlers and Eagles produced a situation of interdependence in a coordinated activity.

In a little over an hour, all the details from both sides of the tank congregated at the tank, of course having found nothing wrong on the way. Thus the tank was the only alternative left for locating the trouble.

The first object to attract attention of everyone in both groups was the faucet at the north end of the tank, since most of them were thirsty. Some of the Rattlers still had a little water in their canteens, but the Eagles did not even have their canteens with them. The appeal of water was great and urgent, especially for the Eagles. (Both groups had come to this faucet for drinking water during their camp-outs at the reservoir during Stage 1.) Of course, no water came out of the faucet. The next problem was immediate and compelling: to secure drinking water then and there. The fact that no water came out of the faucet led to a discussion within and between groups as to whether there was any water in the tank. During this discussion, there was pounding of the sides of the tank. Then some Rattlers discovered a ladder about 30 feet from the tank (where it had been moved in the morning when the faucet was stopped up and the valve turned off). There was rejoicing over this discovery. Immediately some of the Rattlers brought the ladder to the side of the tank and climbed to the top, followed by the Eagles. The boys took turns taking off the lid to inspect the inside of the tank (see [p. 163] picture in this chapter). There were several exclamations that the tank was three-fourths full.

The discovery of a practically full tank turned attention of both groups to the faucet again. In investigating the outlet, Mills (R leader) found the sack stuffed in the faucet. Almost all the boys gathered around the faucet to try to clear it. Suggestions from members of both groups concerning effective ways to do it were thrown in from all sides simultaneously with actual efforts at the work itself. Especially Craig (E) gave continual advice to whoever was trying to get the material out, no matter which group that boy belonged to.

In the actual extraction of the sack, various improvised tools (knives) belonging to different individuals were used. Mills worked for a time; Clark (E) was one of the first to work, making suggestions at the same time. First one and then another boy tried to get the sacking out: Simpson (R), Clark (E), Mills (R), McGraw (E), Brown (R), Mason (E), Allen (R), Swift (R) all taking turns. The work on the faucet lasted over 45 minutes, during the first 30 minutes being the focus of interest for most members of both groups. During this first period, there were continually from 15 to 19 boys standing in a tight bunch watching the work. A few drops of water aroused enthusiasm, but completion of the task was not in view. Interest started lagging toward the end. At this point Everett (R) suggested that the Eagle participant observer (calling him by his first name) was a big guy, and how about letting him try it. (This same Everett had been very vociferous in denouncing this same Eagle staff member when he had come near the Rattler cabin on some occasion.) Everett's suggestion was taken up by other boys, and the staff took over, eventually completing the job with the use of wrenches.

When the water finally came through, there was common rejoicing. The Rattlers did not object to having the Eagles get ahead of them when they all got a drink, since the Eagles did not have can teens with them and were thirstier. No protests or "Ladies first" type of remarks were made.
When the first enthusiasm for the work on clearing the faucet had died down, individual drifting away from the faucet increased. Among these boys there was a noticeable increase of mingling across group lines in such activities as catching lizards and making [p. 164] wooden whistles. This good-natured mingling in several spontaneous activities took place within the framework of the common deprivation and of the interdependence that arose as a consequence of the immediate concern of everyone. This was the first striking instance in which we observed friendly interaction among members of the two groups on a general scale. For example, during the work, Everett (R) offered the use of his knife. Craig (E) told him that if it worked he would shake hands with him for supplying the tool that did the job.

After the Eagle staff member took over work on the faucet, staff called attention to the fact that there should be a valve leading to the main water pipe, which might be the cause of the water shortage at camp. Some of the Rattlers went to that side of the tank and removed the boulders, then turned on the valve. Subsequently there were contradictory claims as to who discovered the valve.

It cannot be said that the negative attitudes toward the out-groups, the standardized unfavorable stereotypes were disappearing as a consequence of the introduction of this single superordinate goal of high appeal value, even though there was cooperation and friendly mingling at the time of the activities related to it. The carry-over effects of the negative intergroup attitudes were observed at supper that very evening, and on subsequent occasions as well.

At supper time the procedure was followed again of having both groups wait for a short time before the meal while the staff members withdrew from the contact area. When announcement was made for the groups to enter, the Eagles went in first, and this time the Rattlers expressed the insinuation: "Ladies first." During the meal, members of both groups started throwing leftovers, bottle caps, and paper. Thus they did live up to the public announcement which they made to each other when leaving the mess hall after lunch that they would resume the "garbage fight," as the Eagles called it. At this supper, throwing of objects started in a rather good-natured way, but, in time, took on serious proportions. The throwing continued and had to be stopped.

On the way to breakfast the following morning, the Rattlers saw the Eagles coming and made several derisive comments. Barton (R) remarked that the Eagles had gone in the mess hall [p. 165] first the last time. When they got close to the front of the mess hall, Simpson (high status R) said "Howdy," and was answered by several Eagles. The same procedure was followed of having both groups wait for a time while staff members kept away. The Eagle entered first again. While in line the Rattlers started singing the Caisson Song and were joined by several Eagles. As the boys started putting food on their trays, the cook (who had no special authority in their eyes) asked for their attention. She told them that throwing things at each other during meals made such a mess and cleaning up was taking so much time that she would not be able to cook such good meals if it did not stop. This appeal was effective. During breakfast there was some horseplay and intermingling between groups. Someone started to throw something and McGraw (E) said, "Remember, you guys, no throwing." The groups parted peacefully after the meal.

In spite of the cessation of "garbage fights" there was tangible evidence of negative intergroup attitudes when the Rattlers were told before lunch that there was a possibility of going to a nice lake 60 miles away for an overnight camp-out. The Rattlers showed general enthusiasm until Mills (R leader) asked, "Are those damn Eagles going?" Another Rattler added, "I'm not going if they go."

Similarly, when the Eagles were told of the possibility of getting a movie to show, Craig said, "Do we have to do it with the Rattlers?" Later he said, "We want to do some things by ourselves." On the other hand, other Eagles indicated that they had no serious objection if the Rattlers were in on the movie too.

The Problem of Securing a Movie: The next superordinate goal to be introduced was a feature-length movie which has been a favorite for boys of this age level. Two films had been chosen after consulting experts on films and brought to camp along with other stimulus materials. The plan was to ascertain the appeal value of the film for the boys and then to make securing it (supposedly from the neighboring town) dependent on both groups contributing a sum of money which would appear rather prohibitive for one group to contribute alone.

In the afternoon, the boys were called together and the staff suggested the possibility of securing either "Treasure Island" or "Kidnapped": Both groups yelled approval of these films. After [p. 166] some discussion, one Rattler said, "Everyone that wants Treasure Island raise their hands." The majority of members in both groups gave enthusiastic approval to "Treasure Island" even though a few dissensions were expressed to this choice.
Then the staff announced that securing the film would cost $15 and the camp could not pay the whole sum. Members of both groups began to make all kinds of suggestions. Mills (R leader) jumped out between the two groups and suggested $5 each from the camp, Rattlers, and Eagles. Myers (E) said the camp should pay $5, the Rattlers $10, and the Eagles nothing. Harrison (R) suggested that the Eagles pay $15, and the camp and Rattlers nothing. Simpson (R) suggested that the Eagles pay $5 and the Rattlers $2. Then Myers (E) proposed that each group pay $3.50. Mills (R) took this suggestion from Myers (E) and called for a vote. He counted votes in both groups. The proposal was strongly supported. After this, there was heated discussion in both groups concerning who would do the figuring for each group to find out how much each member of the respective groups would have to pay. While the groups were figuring this out, there was a great deal of horseplay and intermixing of the groups.

At last, each group came up with its solution. The Rattlers figured that each of the 11 Rattlers would have to contribute 31¢. Each of the 9 Eagles would have to contribute 39¢ toward securing the common goal. The Rattlers asked their staff members to contribute so that their total would come to $3.50. McGraw and Myers (E's) told the Eagle staff members that they would have to pay too, and gave the reason that the staff would get to see the movie too. Both staff members agreed to do so. Martin read the list of contributions from the Rattlers, and McGraw those of the Eagles.

It is worth noting that in individual terms this scheme of contribution was not equitable. But it was an equitable solution between the two groups. The cooperation needed to secure the movie was cooperation between groups, and it was perceived as such by individual members. Therefore, the solution was seen as an equitable one by individual members of both groups.

At supper there were no objections to eating together. Some scuffling and play at sticking chewing gum around occurred between members of the two groups, but it involved fewer boys on both sides than were usually involved in such encounters. It [p. 167] looked like a fist fight might develop between Simpson (R) and Mason (E), but their tempers cooled off.

After supper, "Treasure Island" was shown in the mess hall. Five rows of benches were placed in the hall with an aisle in between. Both groups were waiting to enter, and were told to come in. There was some confusion momentarily as to where to sit. When the milling about stopped, the seating arrangement was pretty much along group lines with a few exceptions. The boys were absorbed in the film, and there was very little conversation.

In line with the main hypotheses of this stage, it was planned to have a series of situations embodying superordinate goals. However, a serious concern arose for further planning of superordinate goals. It became evident that in a camp situation like this one, isolated from a city or town and from outside influences, the facilities for daily activities were by this time acquiring decidedly routine aspects. Since the subjects had come to know the facilities afforded by the camp and in the general surroundings, it became increasingly difficult to introduce superordinate goals that would arouse high motivational appeal but were also inherent in the situations. Therefore, an attempt was made during the day to secure additional transportation facilities to take both groups to Cedar Lake, which is 60 miles southeast of the camp and affords complete detachment from the accustomed camp facilities in many respects.

Of course, this procedure does not imply that under all circumstances and for all groups one has to search for an isolated place to find situations embodying superordinate goals for functionally related groups. If there are goals of sufficient strength for both groups in question, or serious issues in which both groups are involved with high concern, these superordinate goals can be introduced even within some neighborhood of a metropolis. But in a camp situation which was by now familiar and with subjects of the age level in question, the alternatives for superordinate goals were limited in number. The immediate possibilities at the camp were fairly static, since no outside influences intervened.

[p. 168] The attempt to carry out the plan to go to Cedar Lake on the day following the showing of "Treasure Island" failed because transportation was not secured. Therefore, instead of introducing superordinate goals in an improvised way with items which might appear artificial to the subjects, the day was marked by a return to in-group areas and activities.

While waiting in line for breakfast on the day following the movie, the two groups discussed and reached an agreement that the Rattlers would go into breakfast first, and at lunch the Eagles would be first. (Such alternation
had been discussed the previous day, but no agreement reached.) Thus the notion of "taking turns" was introduced
by the boys on the intergroup level to regulate matters of mutual concern, rather than each group rushing to be first.

The Rattler group went to their hideout to look after their boat, tent, and other equipment there to take them back to
their cabin. One of the activities they engaged in there had important carry-over effects and significant implications
in the course of intergroup interaction on the following day when the joint overnight camp actually did materialize.
Before lunch, the Rattlers again started chopping on a big, dead pine tree which they had been trying to chop down
for two days in leisure moments. When the trunk was chopped through, the tree still did not fall. The standing tree
constituted both a challenge and a hazard (since it might crash down at some inopportune moment). The boys
discussed how to get it down. One suggested that they had beaten the Eagles at Tug-of-War, so let's have a
Tug-of-War against the tree. The tug-rope was tied to the tree, and they all pulled the tree down - to everyone's great
satisfaction. Thus, a means once used in conflict with the out-group was now employed to defeat a stubborn and
hazardous tree.

In the meantime, the staff was planning the overnight camp at Cedar Lake, both its introduction to the groups and its
execution. Both groups were asked to name their preferred activities for the remaining three days of camp, with the
promise that as many as possible would be carried out. The selection of activities was discussed in the two groups
separately. Camping out was on the list of preferred activities prepared by both groups. During the two previous
days, the staff had been dropping descriptions of the Cedar Lake site, 14 miles south of Heavener, [p. 169]
Oklahoma. Objectively that site is an attractive spot -- a clearwater lake surrounded by wooded hills, picnic
facilities on high flat ground with tall shady trees, a fresh water pump centrally located. The greatest advantage this
site afforded was that there were practically no people visiting there. It looked as though it were an abandoned
island. This isolation, as well as other characteristics of the site, were carefully checked beforehand on two trips to
the site by different staff members.

The "build-up" of the Cedar Lake site to the subjects became almost superfluous. While the Eagle participant
observer was trying to describe it, the boys had decided they wanted to go there, even before he finished. One of the
attractions for them was riding there in a truck. When the fact was mentioned that Cedar Lake was only about 30
miles from Arkansas, the immediate response was "Maybe we could go to Arkansas." This desire spread among the
members of both groups. However, Mason (E) asked in a displeased way if the Rattlers would be in on every thing
the Eagles wanted to do.

It will be recalled that the Rattlers had also raised some objections on the previous day to going to Cedar Lake with
the Eagles. Staff members in both groups assured the members that they could have their own trucks for the trip to
Cedar Lake.

Camp-out at Cedar Lake: The staff spent most of the night before the departure for Cedar Lake on final preparation.
A separate truck was parked near each cabin, and equipment for each group was placed near their respective truck.
A special point was made by staff to mix up the tent accessories (poles, stakes, hammers) in a way that would make
it impossible for either group to erect their tent without exchanging parts with the other group. Food was chosen for
lunch in bulk form so that the problem of dividing it between groups and then of slicing it into individual portions
would arise.

Both groups were most enthusiastic about the trip. Breakfast was eaten at 6 A. M. in short order. Especially in the
case of the Rattlers enthusiasm was so great that their insistence on an early start acquired nuisance proportions for
the staff. They had voluntarily loaded and packed the truck before breakfast, the truck being floored with mattresses,
with bedrolls around the [p. 170] sides to lean on. The trucks pulled out around 7 o'clock, the Rattlers' shortly after
the Eagles'. Except for intervals of rest, the boys sang their preferred songs during most of the trip.

On arrival at Cedar Lake each group was taken first to a level place over the concrete dock by the lake. The
swimming place was about one-fifth of a mile from the main camping area and separated from it by a little valley
and trees so that it was not visible. When the Rattlers arrived the Eagles were already in the water. The Rattlers went
in the water also. There was about a half-hour overlap when both groups were in the water together. There was some
intermingling between groups, but most conversation was directed to fellow group members.

While both groups were swimming, the trucks moved to the main camp area. The gear, tents, etc. were dumped in
two piles about 50-60 yards apart, the water pump being approximately half-way between the Eagle pile and the
Rattler pile. Beside each pile of belongings there were separate picnic tables and fireplaces, in case the Eagles and
Rattlers chose to have their meals separately. Only one truck was left at this main camp area, and this was the older-looking of the two. The tug-of-war rope was thrown on the ground about 20 feet from the truck, which was parked at a central point. The newer truck and a station wagon were removed and hidden behind trees on side paths away from the main camping area. The food was left in the station wagon; however eating utensils (paper plates, cups, flatware) and jars of pickles and mustard were stacked on a table centrally located and near the lake.

After swimming, the counselor of each group took his group to its respective tent and picnic table location. The boys were getting hungry after the early breakfast, trip, and swim. Members of both groups went to inspect the centrally located table on which utensils and accessories were piled. This set the stage for the introduction of a superordinate goal.

Tug-of-War against the Truck: The staff member who drove the truck announced, so that everyone could hear, that he would go down the road a piece to get the food. Both groups (about 15 yards apart now) watched with interest as the driver got into the truck. The driver struggled and perspired, the truck made all sorts of noises, but it just would not start (as planned). The boys became more and more interested. Several Rattlers suggested, "Let's push it," but they abandoned the idea because the truck was parked facing up-hill. The tug-of-war rope was in plain sight of both groups. Mills (R) said, "Let's get 'our' tug-of-war rope and have a tug-of-war against the truck." Someone said, "Yeah, we can't push it." Swift (R) said, "20 of us can." Several boys agreed loudly with this, Mills adding, "20 of us can pull it for sure." The idea of having a tug-of-war against the truck was repeated by several boys in both groups. Mills (R) ran over to get the rope and started to tie it to the front bumper of the truck. An Eagle said it would be too long, and suggested pulling it halfway through the bumper, thus making 2 pulling ropes. Clark (E) fed it through the bumper while Mills (R) stretched it out. Harrison (R) suggested that the Eagles pull one rope and the Rattlers the other. Barton (R) said, "It doesn't make any difference."

The line-up pulling on the two ends of the rope was Eagles on one side and Rattlers on the other, with the exception that Swift (big R) joined the Eagle side as anchor-man and Craig (E) was next to Brown (R), the anchor-man on the Rattler side.

The first pull did not "start" the truck, and it was allowed to roll back down the hill for another pull. (The truck was, of course in running order, but the performance was completely convincing.) On the second pull, the members of both groups were thoroughly intermixed on both ropes. Some members of both groups began chanting "Heave, heave" in rhythm, something the Eagles had started during the tug-of-wars in Stage 2. Finally the truck started, and the boys all jumped and cheered. Allen (R) shouted: "We won the tug-of-war against the truck!" Bryan (E) repeated, "Yeah! We won the tug-of-war against the truck." This cry was echoed with satisfaction by others from both groups.

Immediately following this success, there was much intermingling of groups, friendly talk, and backslapping. Four boys went to the pump and pumped water for each other: Mills (R), Hill (R), Craig (E), and Bryan (E). Thus the successful, interdependent efforts of both groups in pulling the truck, which was to get their food, had an immediate effect similar to that of superordinate goals introduced on previous days at the camp - intermingling of members of the two groups and friendly interaction between them.

Separate vs. Integrated Meal Preparation: The driver went to get the food in the truck. While waiting for it to arrive, the participant observer of each group brought up the problem of whether his group wanted to alternate preparing meals with the other group or prepare them separately for themselves. In the Rattler group, Mills (leader) suggested that the Rattlers prepare one meal that day and the Eagles the other. This was discussed at some length and agreed upon by the Rattlers. There were no derisive comments about the Eagles during this discussion, and no objections made to eating with them, although prior to the trip, several Rattlers had objected to the idea of coming to the same place the Eagles were.

The discussion on this topic in the Eagle group took a different turn: At the outset, Craig and McGraw objected to an alternating arrangement in preparing meals, saying they wanted to cook for themselves. Low status Eagles (Clark, Cutler, Lane) were in favor of alternating with the Rattlers. After some discussion the decision was crystallized by Mason (E leader) who stated his opposition to alternating food preparation, and other high status members supported his position, one after another.

These discussions and the decisions reached are particularly enlightening in view of what actually took place immediately thereafter. The lunch materials had been selected so that if the groups decided to eat separately, they would have to divide the ingredients before doing so. For example, the main item was an 8 pound can of uncut
luncheon meat. These situational factors, including the location of the food, took the upper hand in determining how the meal would be prepared. Here curtailment of effort involved in division of the supplies became dominant.

When the truck arrived with the food, both groups rushed from their respective camp areas and started carrying the food to the centrally located picnic table. At the table, they gathered around discussing across group lines whether they would alternate in meal preparation, the Rattlers favoring it and the Eagles opposing it. But in the midst of this discussion, food preparation together actually began. McGraw, the customary meat-cutter in the Eagle group, began cutting the meat. He received much advice from everyone, and Mills (R) stood at his elbow for a time and helped him. In the meantime, Simpson (R) and Craig (E) poured Kool Aid into a bucket, Harrison (R) went for water to mix it, and Myers (E) poured in what he thought was sugar. Unfortunately, it turned out to be salt; but Myers was not berated by either Eagles or Rattlers for his mistake, even though the only immediately available Kool Aid was ruined. Harrison (R) pointed out that it wasn't really Myers' fault since the salt was in a sugar sack. Low status members on both sides were particularly active after this in preparing and distributing food. At one point, Mason (E leader) and Simpson (R) were talking and Simpson said, "You never thought we'd be eating together?" The reply was laughter. (See pictures.)

The first Eagles through the line went to a centrally located picnic shed nearby and sat down at the tables. The first five or six Rattlers went to tables near their own camp area. Allen (R) asked a staff member where he should sit, and was told to sit any place he wanted. He then went to the shed and sat down with the Eagles. Neither at this time nor later was he criticized for his action. After eating, Mills (R) and Barton (R) also drifted over to the Eagle table for a short time. Shortly both groups went to their respective camp areas for a rest period.

After separate rests, the two groups were taken to swim, one shortly after the other. This time the Rattlers were in first, but got out of the water on seeing a water moccasin darting about. When the Eagles arrived, the Rattlers told them in excited tones of a snake moving around in the vicinity, describing it in detail. For about 15 minutes, all of the boys stood together at the pier and discussed this common threat coming from nature. Then they swam together at another spot for a short period, both groups mixing together in the water.

Tent-pitching: At about 4 o'clock in the afternoon, after the swim, another superordinate goal was introduced. It will be remembered that in packing the tents, the accessories were mixed so that for either group to erect a tent, some exchange of parts would be necessary. Now when each group prepared to erect their tents for the night, each noticed right away that they did not have all the complete and necessary accessories. The staff member who was regarded by the boys as the camp authority was standing between the two camp areas. The two groups started toward him carrying extra parts and arrived in front of him at about the same time. Members of the two groups began telling each other what extra parts they had, and what was needed. After exchanging very few words, the trading of necessary items was accomplished in a matter-of-fact way between the two groups - the perceptual situation was so compelling.

When the Rattlers started to erect their tent, they found they had neglected to get a stake-driving mallet in the trade. They used rocks instead, with staff assistance, finishing the job by themselves. They were aware throughout of the Eagles' progress in tent-pitching, and felt quite satisfied when their own tent was up first, since the Eagles had won the tent-pitching contest in Stage 2. Someone commented that they had won this time even using rocks; and another Rattler suggested that maybe they should have used rocks for driving stakes in the contest. The Eagles were also aware of the Rattlers' progress; but since they were having a hard time putting their tent up on uneven ground, they did not try to compete with the Rattlers.

The Truck Stalls Again: Before supper, the truck going to get food stalled again, as planned. This time, discussion was practically unnecessary. The pattern for cooperation was established. The first effort, initiated by Rattlers, was to push the truck (see picture). When the truck rolled into a hanging tree limb, Mills (R) got the tug-of-war rope again. The rope was pulled through the bumper, and two bunches of boys lined up to pull. However, these two lines on each side were not the Eagle and Rattler groups. Members of both groups were thoroughly mixed together in the pulling, which was accompanied by concerted rhythmic chants of "Heave, heave."

Again there was pride in the joint accomplishment. Thus the same tool which had served first in a competitive situation during group conflict, and which was later used by one group in their efforts to fell a tree, now became the standard means for interdependent efforts by both groups toward a common, superordinate goal (starting the truck which brought food for all).
This sequence probably points to the fact that the nature of intergroup relations - for good or evil - does not necessarily stem from the existence of tools and techniques: the same tools and techniques can be used in the service of harmony and integration as well as in the service of deadly competition and conflict.

As soon as the boys saw the truck returning with food, they rushed to the table where food was served at noon. This time the main dish was steak-meat in a big chunk, and the necessary division of labor was more elaborate. However, the cooperative pattern was now established and there was no appreciable discussion of it. As soon as the truck was unloaded, in which the boys helped both groups began to work at preparing supper. There was much intermingling - Rattlers and Eagles working side by side, taking suggestions from each other, and reaching decisions about what to do together. For example, McGraw (E) told three Rattlers to "Come on, boys, and put that Kool Aid in there," and they did. Simpson (R), Hill (R), and McGraw (E) all tried their hand in the initial stage of cutting steaks off the big chunk of meat. McGraw (E), Simpson (R), and Wilson (E) declared that they were going to cook.

After these boys declared their intention to cut meat and cook, staff members stepped in to give effective assistance in getting the meat cut and the steaks broiled. Other Eagles and Rattlers worked together in setting out utensils and other food. After the preliminary preparations, those boys who were not helping rushed to pick up paper plates and to form a line by the fire, in which no one gave a moment's thought of preserving arrangements in terms of group lines.

All of the boys ate under the shed where the Eagles had eaten lunch. Eagles and Rattlers were interspersed up and down the table on both sides. There was considerable changing and shifting back and forth in the seating arrangements throughout the meal.

After supper a good-natured water fight started at the edge of the lake, but the throwing and splashing was not along group lines. The leading parties on one side were Simpson (R), Mason (E), and Swift (R), while those leading the other side were Mills (R) and Brown (R). The boys engaged in this until they were soaking wet, then dried out by the fire. Rain clouds came up over the hill with a strong wind. The boys retired for the night to their respective group areas.

The Trip to the Border: The following morning (Day 6, Stage 3), the Rattlers awoke first and started talking about the [p. 176] trip to Arkansas, exchanging notes on the states they had visited. The Rattlers attention was concentrated on the Eagle camp. Martin (R) asked if the Eagles were going to Arkansas too. When the counsellor answered affirmatively, there was no objection or comment. Simpson, Newman, Harrison, and Alien (all R's) went to the Eagle camp to see the lizards Mason (E) had caught and frogs that Cutler (E) and Clark (E) had collected. The Rattlers were anxious to start on the trip to Arkansas before breakfast, and they kept getting in and out of their truck, which they had loaded even before breakfast. A short time later both groups were asked to come to a central location for an announcement.

It was announced that, as they well knew from experiences of the previous day, the older truck was not in good shape for the trip to Arkansas and back to the camp. (The truck referred to happened to be the Eagle truck. Of course it was in running condition. But it had been demonstrated to be liable to break down on the previous day as a part of the plans for producing problem situations embodying superordinate goals. This build-up of a poor reputation for the truck was also appropriate for the introduction of the problem situation now being described.) It was added that in view of the condition of the truck, it might be preferable to give up the idea of going to Arkansas, since there was only one truck. General disappointment was voiced, especially by the Eagles.

McGraw (E) suggested that the Rattlers go to Arkansas first, and then that the Eagles would go in the Rattler truck when they returned. But Craig (E) objected that the Eagles didn't want to wait around all morning; and when Mason (erstwhile E leader) started chanting "Let's go home, Let's go home..." (meaning camp), Craig joined him.

At one point, Clark (E) said, "We could all go together" but Simpson (R) said, "No" - that the Rattlers would go to Arkansas and the Eagles could go back to the camp. This discussion illustrates well the state of flux which prevailed at this time in intergroup affairs. At times, as at supper the previous evening, the group lines seemed to disappear; at others the group demarcations would re-appear. Whether or not group lines would be followed was coming to depend more and more on factors in the immediate situation (situational factors).

In this instance, the problem at hand was discussed for a short time. Then Mills (R leader) proposed that
they all go in the Rattler truck: "We can move some of the mattresses into the other truck, and then we can all get in our truck." Allen (low status R) repeated this suggestion and several Eagles expressed approval. Simpson (R) agreed that would be possible, but added, "Let's don't."

Mills (R) now moved out of his group and paced up and down between the groups, explaining his ideas to both of them. When staff asked what they were going to do, there was a general hub-bub which was resolved when Mills (R) and Clark (E) said "Let's go!" and headed for the Rattler truck. All the other boys, both Rattlers and Eagles, ran after them, piled in the truck, and yelled out to staff to "Hurry up!", "Let's go!" This is another striking instance of action taking precedence over verbal discussion, although the latter played an important part even in this decision.

While both groups were in the Rattler truck waiting to pull out, the Rattlers asked the Eagles to tell them who got homesick and went home from their group. Then as the truck started out on the trip, notes and memories were exchanged concerning the raids which had aroused so much indignation during Stage 2. Now there was mirth over some of the episodes, and some bragging over who did what. Shortly, Clark (E) began to whistle the Star Spangled Banner and was joined by several boys. Boys from both groups joined and shortly everyone was singing. Without any discussion, the members of both groups now continued signing for about half-an-hour, alternating a song which had become associated with the Eagles with one which the Rattlers had adopted. No one suggested that the songs of the two groups be alternated, but in fact they were. The arrangement of "taking turns" at an intergroup level was being extended from one activity to others.

The truck stopped in Heavener, Oklahoma to allow the boys to have cool drinks. They streamed out of the truck into a drugstore; and the seating arrangements at the tables, which seated four or five boys each, reflected little of the group demarcations.

Back in the truck and onto the highway, the Arkansas line was reached, but the road had turned from a hard-surfaced highway to a dirt road. Conversation died down during this dusty portion of the trip. When the truck finally arrived at the prearranged lunch stop, the boys felt they had "been through" something together: the fine dust was deposited over everything and everyone.

Lunch was eaten in a private dining room, secured at a restaurant, amid much laughter and boisterous conversation. Members from both groups were thoroughly intermixed at the four tables. After second servings, a paper and pencil were placed on each table, and the boys were told to list the flavors of ice cream they wanted. Then they were told to combine the lists at a side table. Myers (E) and Martin (R) both volunteered to do this. Myers was closest to the table, and therefore was able to get the pencil and paper first. But boys from both groups intervened, insisting that Myers and Martin work up the combined list together, which they did.

After lunch most of the boys wrote postcards to send home as evidence that they had been in Arkansas. Then the trip continued back to the Arkansas line, which had been crossed in the morning but not noted because there was no marker and the road was so dusty.

At a coke stop near Fort Smith, Craig (E) and Allen (R) suggested that when the camp was over everyone should return to Oklahoma City together on the same bus. This idea was approved by most boys in both groups, although some said nothing and Harrison (R) muttered, "Let's go back like we came."

The Last Evening in Camp: In order to check the influence of situational factors at this rather fluid state of intergroup relations, the staff re-arranged the camp dining room while the two groups were at their cabins cleaning up from the trip. Four tables smaller than the usual mess hall tables were brought from various parts of the camp. They were square and could conveniently seat eight people, two to a side. This change was made that the habitual spacing and size of tables in the mess hall situation would be entirely different. The influence of situational factors
has been noted previously. It was thought that if the mess hall situation were different than it had been previously, the present state of relationship between the two groups would be revealed more clearly through a new seating arrangement.

The wisdom of this plan was confirmed even outside of the mess hall. There the two groups formed two lines, just as they had done prior to the Cedar Lake camp-out, even though they had been mixing up at meals as well as in other situations during the past 24 hours. The groups began discussing who would go in first the trip away from camp having upset their "taking turns" arrangement. There was discussion on both sides as to whose "turn" it was. When Simpson (R) finally said, "O.K., let them go ahead", the Eagles entered the mess hall first without further objections by the Rattlers.

Once inside the two groups went through the line to get their food separately, but there was friendly conversation between members of the two groups. The reactions to the new table arrangement were as anticipated. In spite of the fact that the groups had lined up separately in habitual fashion to get food, the seating at the newly arranged tables cut across the in-group demarcations. The two tables in the middle were occupied by Eagles and Rattlers sitting together. The few Rattlers left over occupied one or the other of the two end tables.

During the meal several boys commented that everyone was going back to Oklahoma City on the same bus. Almost all the boys seemed to be planning on it, although one voice was heard to say, "No, we're not." There was even some talk about what they would do on the bus.

After supper the boys were asked what they wanted to do on their last night at camp. There were several suggestions, including a Rattler's that they all go to the Stone Corral. The Rattlers [p. 180] backed this idea strongly, since the Stone Corral was the site of their campfires, and was considered "theirs." Wilson (E) wanted to go to Robbers Cave, and most of the Eagles backed this idea. But the Rattlers replied that the Stone Corral was a part of Robbers Cave, and they couldn't build a fire at the Cave itself. The discussion ended when Mills (R) announced they would all meet in five minutes to go to the Stone Corral. The Eagles said they would meet at the mess hall, but Mills (R) kept insisting that they should meet at the Rattlers' cabin, because this was closer to the Stone Corral. The groups parted with that understanding.

When the Eagles arrived at the Rattler cabin, both groups went together to the Stone Corral. Simpson (R) took his ukulele with him and began to play as soon as they arrived. Everyone began singing the favorite songs of both groups, then it started to rain. The boys scattered to find cover. Some of them continued singing until the rain stopped and the campfire could be built. While waiting for the fire, a Rattler suggested that the two groups entertain each other by putting on the skits they had done for the tournament. Two or three boys thought this was a good idea, but nothing came of it until after both groups joined in roasting marshmallows.

Then Mills (R leader) started organizing the "Dragnet" skit which he had put on with several other Rattlers before his own group earlier in camp. Myers and Craig, both Eagles, were asked to help the Rattlers put the skit on. Some of the Eagles called to Myers (E), and he answered that he would be in the Eagle skit too.

After the Rattler skit, Mills (R) announced that the Eagles were next. There was some discussion on what to do, then Wilson and Myers put on an act for the Eagles. The Rattlers next started trying to persuade Brown to do his "Donald Duck" imitation. This performance was received with great enthusiasm. Then Allen (R) said, "Now it's the Eagles' turn," and the Eagles did a "spitball act."

At this point the Eagles wanted the Rattlers to be next on the evening's program; but the Rattlers replied that since the Eagles had won the singing during the tournament, they should sing for them now. After some discussion, Myers (E) announced that Simpson (R) would sing a song, which he did. Then the Eagles [p. 181] took their turn, singing "Zem Bones" (actually "Dem Bones").

Following this request performance by the Eagles, Mills (R) announced that the Rattlers would do a skit called "Murder in the Haunted House." The evening ended with both groups singing together some of their favorite songs (see pictures).

Up to the time of this joint campfire at the Stone Corral, the observations had revealed increasing reduction of intergroup friction and increasingly friendly relations between the groups as a consequence of interdependent activities embodying superordinate goals which were experimentally introduced. The Eagle observer noted that
derogatory references to the out-groups had decreased gradually, until there were none.

However, the evening campfire was a striking demonstration of the cumulative effectiveness of situations requiring interdependent activities toward common superordinate goals. Procedures for cooperative give-and-take between groups had been developed. The entire program was arranged and presented by the two groups themselves to entertain each other. The notion of "taking turns", which had started as a way of regulating activities in which a conflict of interests was involved (going in to meals), had been extended to joint singing of the two groups' favorite songs on previous occasions. Now the "taking turns" idea was spontaneously used to regulate group participation in entertaining one another, as groups and as individuals. Thus the establishment of friendly relations between groups through functional interdependence in situations involving experimentally introduced goals was carried over (transferred) to spontaneous intergroup cooperation in a situation in which no superordinate goal was formally introduced.

During the following day, which was the last day of camp, no planned stimulus conditions were introduced. It was designated as "follow-up" day. Observations were restricted to striking instances of the interaction patterns and carry-over effects of the experimentally introduced conditions. At breakfast and lunch the last day of camp, the seating arrangements were again mixed up insofar as group membership was concerned. The morning was devoted to preparations for leaving camp and to securing checks on observational findings through sociometric choices and stereotype ratings. The results of these units are reported in the following parts of this chapter.

[p. 182] The Trip Home: The majority of subjects had agreed by the last day that it would be a good thing to return to Oklahoma City all together on one bus. When they asked if this might be done and received an affirmative answer from the staff, some of them actually cheered. When the bus pulled out, the seating arrangement did not follow group lines. Many boys looked back at the camp, and Wilson (E) cried because camp was over.

Just before the bus pulled into the town where a refreshment stop was planned, a Rattler inquired if they still had the five dollar reward they had won in the bean toss contest. This inquiry was repeated by others when the boys were at the refreshment stand, and Mills (R leader) suggested that their five dollars be spent on malts for all the boys in both groups. Several Rattlers nearby agreed; the others approved the idea when asked. This meant that malted milks for all 20 boys would be paid for exactly with the five dollars contributed by the Rattlers, but that each boy would have to pay for sandwiches and other treats himself.

Several Rattlers were questioned by observers while they were eating, and they were all fully aware that this sum would have paid for everything the Rattlers wanted if it had not been shared with the Eagles. Nevertheless, they were glad they had shared it. A few boys were short of money for other refreshments and other boys (several from the out-group) paid for them.

Nearing Oklahoma City, the boys at the front of the bus (mostly high status members from both groups) began to sing "Oklahoma."

Summary of Observations in Stage 3

On the basis of the above observations reported by participant observers and independent observations by other staff members, it can be concluded that:

[p. 183] When groups in a state of friction are brought into contact under conditions embodying superordinate goals the attainment of which is compelling but which cannot be achieved by the efforts of one group alone, they cooperate toward the common goal.

On the basis of the above observational data it can also be concluded that:

Cooperation between groups necessitated by a series of situations embodying superordinate goals will have a cumulative effect in the direction of reduction of existing tension between groups.
Thus, our hypotheses 2 and 2a (Stage 3) are confirmed. In the following parts of this chapter the validity of the above conclusions based on observational findings will be tested in terms of sociometric choices and also in terms of laboratory-type judgmental indices.

Verification of Observational Findings Revealing Reduction of Intergroup Friction

Evidence of reduced intergroup friction and increasingly cooperative relations during the closing days of Stage 3 was dramatic to those who had witnessed the hectic days of intergroup conflict in Stage 2 and the early contact situations without superordinate goals early in Stage 3. The intermingling among members of the previously antagonistic groups at meals, campfires and at play; their joint efforts at tasks and entertainment during the camp-out and on the return to camp; their preference to return home together - all of these and other observational data indicated unmistakable shifts in attitudes toward the out-group. If these observed alterations in behavior of the two groups in a variety of interaction situations were in fact indicative of changed attitudes toward the out-group, they would be revealed as well through more precise methods for assessing attitudes of individual members.

Accordingly, at the end of Stage 3 attitudes toward in-group and out-group were tapped, as a further check on observational [p. 184] data, through:

1. sociometric choices of in-group and out-group members, and

2. ratings of in-group and out-group in terms of the stereotypes actually used during the period of intergroup friction.

The results of both measurements could be evaluated in relation to (a) observational findings of Stage 3, and (b) the results obtained by these same methods at the end of Stage 2 when in-group solidarity and glorification, and out-group avoidance and derogation were at their height.

In line with the chief methodological concern of this experiment, findings throughout were checked by as many different methods as it was feasible to introduce without destroying the dominant trend of the on-going interaction processes. We sought to achieve the combination of methods which are frequently (though erroneously) viewed as antithetical: observation of the natural flow of interaction processes in life-like situations and more precise measurement of the effects of interaction on the perception and judgment of individual members through laboratory-like methods.

The interaction situations are "life-like" because they embody valued goals and appear to subjects as spontaneous and natural, even though they are controlled and systematically altered by experimenters. The techniques used for verification of observational data are "laboratory-like" because they are introduced with little of the artificiality of the laboratory, but with no loss in precision. When it has been necessary, we have sacrificed precision rather than cluttering or unduly interrupting the interaction process, with the conviction that the flow, events, and effects of interaction within and between groups are the basic data which cannot be easily restored if trifled with. Sociometric choices were not obtained at the end of Stage 1, but only at the close of Stages 2 and 3 on the grounds that three repetitions within such a short time might very well arouse the subjects' suspicions. Similarly, the experimental unit tapping attitudes toward in-group and out-group members through judgments of their performance executed at the end of Stage 2 was not repeated in Stage 3 because of the serious concern that its repetition would clutter the main flow of the interaction process at that time.

[p. 185] The results of the two techniques employed at the end of Stage 3 to check the validity of observational findings are summarized in the following two sections.

2. Verification of Shifts in Attitudes Toward In-group and Out-group Through Sociometric Choices

At the end of Stage 3, sociometric choices were obtained by participant observers through informal interviews with individual members of their group (see Chapter 6). Sociometric scores were again computed for each group member on the basis of total weighted choices on four criteria (see Chapter 6). Since the most general criterion permitted out-group choices as well as in-group choices, total scores were computed separately for in-group and out-group choices and also by combining in-group and out-group choices (the latter had been insignificant at the end of Stage 2). The ranks within each group were the same by either method of computing total sociometric scores (viz., including out-group choices or not including them).
Table 1 compares the ranks of members of each group in terms of sociometric scores with the status ratings by participant observers of each group. The rank order correlations for status ranking by the two methods are high and significant for both groups.

**Table 1**

Comparison of Ranks in Sociometric Scores and Status Ratings by Participant Observers of Rattler and Eagle Groups

<table>
<thead>
<tr>
<th></th>
<th>End of Stage 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rho</td>
<td>t</td>
<td>p</td>
</tr>
<tr>
<td>Rattlers</td>
<td>.853</td>
<td>4.903</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Eagles</td>
<td>.836</td>
<td>4.038</td>
<td>&lt;.003</td>
</tr>
</tbody>
</table>

For purposes of comparison with data at the end of Stage 2, the members of the Rattler and Eagle groups are listed below in terms of rank of sociometric score at the end of Stage 3. The list of boys in each group is divided in terms of score values. Those boys in the top level of the list received scores above 50; those in the second section 40-50; in the third section 20-30; and in the bottom section below 20 (see Sociograms, Chapter 6).

**Rattlers**
- Mills
- Newman
- Simpson
- Martin
- Brown
- Harrison
- Everett
- Hill
- Swift
- Barton
- Allen

**Eagles**
- Wilson
- Mason
- Myers
- Bryan
- Craig
- Clark
- Cutler
- McGraw
- Lane

In line with the hypothesis stated in general form in Stage 2, it was predicted that shifts in in-group relationships might occur concomitant with changes of consequence in relations between groups. The most significant of these (according to sociometric indices) is Mason's slip from the leadership position in the Eagles. As elaborated in Chapter 6, Mason came to the leadership position in the Eagle group in the early days of intergroup competition and rivalry in the tournament. He was intensely involved with the group effort to win and identified with its victory. It was Mason who took the lead in attempting retaliation on the Rattlers for their last raid. Perhaps this partially explains why Mason resisted the trend in his group toward increased intermingling with the Rattlers near the end of Stage 3. While he became quite friendly with individual Rattlers, he made it known that he preferred that the Eagles do things together and without the Rattlers. Although his status in the Eagle group remained high, he was followed less and less in his separatist preferences.

In-group and out-group choices: The data obtained from the most general criterion on the sociometric questionnaire, and through an item on the questionnaire tapping rejections (dislike), provide clear-cut verification of changed attitudes toward the out-group as a consequence of intergroup relationships in a series of situations embodying superordinate goals.

Table 2 gives the choices of in-group and out-group members by Rattlers and Eagles made at the end of Stage 3. As indicated in the table, friendship choices were still predominantly for in-group members.
Table 2

Friendship Choices of In-group and Out-group Members by Rattlers and Eagles

End of Stage 3

<table>
<thead>
<tr>
<th></th>
<th>Rattlers</th>
<th>Eagles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>In-group choices</td>
<td>63</td>
<td>63.6</td>
</tr>
<tr>
<td>Out-group choices</td>
<td>36</td>
<td>36.4</td>
</tr>
</tbody>
</table>

However when the choices of out-group members at the end of Stage 3 are compared with those at the end of Stage 2, a substantial and significant increase is found for both groups. This comparison is made in graphic form in the figure on the next page.

At the end of Stage 2, only 6.4 per cent of the Rattlers' choices were for Eagles; but by the end of Stage 3, 36.4 per cent of their total friendship choices were for Eagles. In the Eagle group, the proportion of choices for the out-group (Rattlers) shifted from 7.5 per cent at the end of Stage 2 to 23.2 per cent [p. 188] at the end of Stage 3.

Concomitant with the increased tendency to choose out-group members as friends there was a decreased tendency to reject members of the out-group as persons most disliked. In the Rattler group, 75 per cent of the rejections at the end of Stage 2 were of Eagles; however by the end of Stage 3, only 15 per cent of their rejections were of Eagles. Similarly, in the Eagle group, 95 per cent of their rejections at the end of Stage 2 were Rattlers, but the proportion of rejections directed at out-group members decreased to 47.1 per cent at the end of Stage 3.

Table 3 compares the changes toward increased choice of out-group members from Stage 2 to the end of Stage 3 and the changes toward decreased rejection of out-group members for both groups.

Table 3

Comparison of Differences in Friendship Choices and in Rejections of Out-group Members at the end of Stage 2 and at the end of Stage 3

<table>
<thead>
<tr>
<th>Difference between:</th>
<th>Rattlers</th>
<th>Eagles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>chi-square</td>
<td>p</td>
</tr>
<tr>
<td>Out-group choices</td>
<td>21.950</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Stage 2 and Stage 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out-group rejections</td>
<td>7.251</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Stage 2 and Stage 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the Rattler group, the increase in out-group choices from the end of Stage 2 to the end of Stage 3 is significant at less than .001 level (McNemar test). The decrease in rejection of out-group members from Stage 2 to the end of Stage 3 is significant at less than the .01 level. The observational data revealed some divergence among members of the Eagle group in attitudes toward the out-group. As might be expected, the differences between out-group choices at the end of Stage 2 and at the end of Stage 3 were slightly less than for Rattlers and significant at [p. 189]
These data obtained through sociometric techniques constitute, therefore, clear-cut verification of observational findings that when the two hostile out-groups interacted repeatedly in situations embodying goals superordinate to both, the prevailing tendency in both groups was to intermingle with the other, to have increasingly friendly associations with out-group members, and friendly attitudes toward them.

3. Verification of Effects of a Series of Superordinate Goals on Attitudes Toward the Out-group Through Stereotype

Ratings

As a result of the series of situations embodying superordinate goals in Stage 3 and the interdependent interaction between the hitherto antagonistic out-groups, the two groups engaged in a greater variety of activities together and with increasing freedom. The observations during Stage 3 revealed sharp decrease in the standardized name-calling and derogation of the out-group which had become so familiar during the closing days of Stage 2 and the contact situations without superordinate goals early in Stage 3. In addition, there was less of the blatant glorification of the in-group and bragging on its accomplishments than during the days of rivalry in Stage 2. These observational data were believed to imply changes in attitudes toward the out-group in a more favorable direction, weakening of negative stereotypes of the out-group, and shifts in conception of the in-group as well.

The validity of these observational findings was checked at the end of Stage 3 through ratings by both groups of their in-group and the out-group on the stereotypes which had been standardized in Stage 2. It is significant that when it was announced that the ratings were to be made again, several boys remarked that they were glad, because they had changed their minds since the last ratings.

At the end of Stage 3, the procedures utilized for tapping stereotypes at the end of Stage 2 (intergroup friction) were repeated (see Chapter 6). The second ratings of in-group and out-group on stereotypes which had been used by
subjects during [p. 191] Stage 2 were obtained in order to compare them with those obtained before the series of superordinate goals was introduced in Stage 3. The comparison reveals the effects of interdependence created by compelling goals superordinate to both groups and of the subsequent cooperation between groups. The data to be presented here, therefore, will constitute additional evidence for the verification of the following hypothesis:

**Hypothesis 2 a, Stage 2**

Cooperation between groups necessitated by a series of situations embodying superordinate goals will have a cumulative effect in the direction of reduction of existing tension between them.

Observational and sociometric data relevant to this hypothesis were summarized earlier in this chapter.

Table 4 shows ratings of out-group members made by Rattlers and Eagles at the end of Stage 2 (friction) and at the end of Stage 3.

### Table 4

<table>
<thead>
<tr>
<th>Category</th>
<th>Rattlers' Ratings of Eagles</th>
<th>Eagles' Ratings of Rattlers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 2</td>
<td>Stage 3</td>
</tr>
<tr>
<td>1.*</td>
<td>21.2</td>
<td>1.5</td>
</tr>
<tr>
<td>2.</td>
<td>31.8</td>
<td>3.0</td>
</tr>
<tr>
<td>3.</td>
<td>12.1</td>
<td>9.2</td>
</tr>
<tr>
<td>4.</td>
<td>19.9</td>
<td>28.7</td>
</tr>
<tr>
<td>5.**</td>
<td>15.0</td>
<td>57.6</td>
</tr>
</tbody>
</table>

Chi-square diff. 44.67 34.51
p <.001 <.001

* Most unfavorable  
** Most favorable

[p. 192] A comparison of these data obtained following intergroup friction and following cooperative interaction in situations embodying superordinate goals shows a marked shift in the nature of characteristics attributed to the out-group. At the end of the friction stage ratings of out-group members tended to be unfavorable, but by the end of the integration stage, ratings of out-group members were preponderantly favorable in both groups. At the end of Stage 2, 53 per cent of the ratings made by Rattlers of the Eagles had been unfavorable; but at the end of Stage 3 only 4.5 per cent of these ratings were unfavorable and 86.3 per cent were favorable. Most ratings of the Rattlers by the Eagles (76.9%) were unfavorable at the end of the friction stage; but by the end of Stage 3 the proportion of unfavorable ratings was reduced to 22.6, and the favorable ratings of Rattlers increased to 68 per cent.

The Eagles' ratings of the Rattlers did not change as much in the favorable direction from conditions of competition to conditions of cooperative interaction as the Rattlers' ratings of the Eagles. However, these shifts in the positive direction from Stage 2 to Stage 3 were significant for both groups (Table 4).

Table 5 presents ratings made of members of the in-group at the end of Stage 2 (friction) and Stage 3 (integration). These results suggest that changes in the functional relations between groups tend to produce changes in the conceptions of the in-group. The ratings of in-group members after cooperation with the out-group were not as favorable as the highly positive ratings of the in-group made after the intense intergroup rivalry of Stage 2 although the trend is not statistically significant. At the end of Stage 3, in-groups were still rated favorably by their own members.

For the Rattler group, the difference in proportions of ratings in the most favorable category at the end of Stage 2
and the end of Stage 3 was 9 per cent, and the proportion of ratings in the middle category increased by 4.5 per cent. In the Eagle group, the proportion of ratings in most favorable category after the cooperative activities with the out-group (Stage 3) was 25.9 per cent less than at the end of Stage 2 (intergroup friction).

The trend toward rating the in-group less favorably was more pronounced in the Eagle group. This finding is in line with

[p. 193] Table 5

A Comparison of Stereotype Ratings of In-group Members by Rattler and Eagle Groups on Six Characteristics at the Ends of Stage 2 (Friction) and Stage 3 (Integration)

<table>
<thead>
<tr>
<th>Category</th>
<th>Rattlers' Ratings of Rattlers</th>
<th>Eagles' Ratings of Eagles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 2</td>
<td>Stage 3</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>1.*</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>0</td>
<td>3.8</td>
</tr>
<tr>
<td>3.</td>
<td>0</td>
<td>4.5</td>
</tr>
<tr>
<td>4.</td>
<td>13.7</td>
<td>18.2</td>
</tr>
<tr>
<td>5.**</td>
<td>86.3</td>
<td>77.3</td>
</tr>
</tbody>
</table>

Chi-square diff. 3.546  7.501
p .30 .10-.11

* Most unfavorable
** Most favorable

observational data indicating that the Eagle group revealed shifts in status structure, during the interaction in cooperative activities with the Rattlers during Stage 3. Briefly, most of the Eagles were drawn into the compelling interdependence between groups in Stage 3 and all participated in cooperative intergroup activities. A few Eagles, including the leader during Stage 2, entered into these activities and became friendly with individual members of the Rattler group, but were more tenacious than others in preferring in-group association to contacts with the whole Rattler group. As noted earlier, this state of affairs, in turn, reduced the effectiveness of the Eagle leader, who had achieved his greatest eminence during intergroup rivalry.

The accompanying figures present a graphic summary of the stereotype ratings of in-group and out-group by the Eagles and Rattlers on the six characteristics (combined) following Stage 2 and Stage 3. At the end of Stage 3, ratings of in-group and out-group members did not differ significantly (p .10).

[p. 194]
[p. 195] Thus, at the end of Stage 3:

(a) Favorable characteristics tended to be attributed to the out-group, in contrast to the predominantly
unfavorable picture of the outgroups the end of Stage 2 (friction).

(b) Ratings of both the in-group and the out-group were favorable and did not differ significantly.

(c) The relative frequency of favorable ratings made in relation to in-group members was slightly less than at the end of Stage 2 (friction), particularly in the case of the Eagle group which was undergoing some shifts in in-group structure.

Competition and rivalry between groups in Stage 2 was accompanied by attribution of unfavorable characteristics to the out-group and favorable characteristics to the in-group (Chapter 6). This generalisation takes on added significance when viewed in terms of the backgrounds, personal and socio-cultural, of the two groups of boys. All were normal, well-adjusted boys who enjoyed high and secure status positions both at home and in school. None were problem children who had suffered unusual frustrations and privations. The results indicating the formation of negative stereotypes of the out-group during competitive intergroup relationships cannot be attributed to unusual psychological conditions brought by the boys to the experimental situation. The enthusiastic participation in intergroup competition reflects, of course, the strong emphasis on competition in the larger socio-cultural setting. However, the rise of intergroup hostility and attribution of derogatory labels to the out-group was a development opposite in direction to another important value from the larger setting, namely "good sportsmanship" on the part of participants in competitive activities.

The observance of norms of social distance between the groups and maintenance of a derogatory picture of the out-group did not decrease until the two groups had interacted in a series of situations embodying superordinate goals. The subsequent cooperation between the groups was accompanied in time by a marked change in the conception of the out-group in the favorable direction.

These results may be taken as further evidence supporting [p. 196] our hypothesis that cooperation between groups as a consequence of interaction in situations embodying superordinate goals has a cumulative effect in the direction of reducing existing tensions between them (Hypothesis 2 a, Stage 3).

The data obtained by tapping judgments concerning the character of one's in-group and of the out-group under conditions of competition and rivalry (Stage 2, see Chapter 6) and conditions leading to cooperative intergroup activity are congruent with observational findings concerning behavior in relation to the in-group and out-group. Together they are presented as a contribution to the study of the formation and change of values or social norms. Specifically, these data confirm the hypotheses concerning conditions conducive to the formation of unfavorable attitudes toward functionally related out-groups and conditions conducive to their change to attitudes of cooperation and friendship between groups.