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and survived concerns raised by the union, middle management, and
leadership succession at the top of the organization. There is
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difficult issues within the organizations, earned more confidence
from employees and management, and improved its own functioning over
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top management, consultants, communication group members, and other
organization members whose work experiences were influenced by the
group. (Author)

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IMPROVING ORGANIZATIONAL COMMUNICATION

THROUGH LONG-TERM INTERGROUP INTERVENTION

by

Clayton P. Alderfer

Technical Report No. 8

School of Organization and Management
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Organizations may be conceptualized as a set of interacting groups, differentiated according to task, hierarchy, and demographic characteristics of the members. Forces within individual members, role difficulties experienced by group leaders, the management of conflict within the groups, and perceived or real threats from external events influence the degree to which groups within organizations become ethnocentric. The frequency, accuracy, and utility of communication among groups within organizations affects and is affected by

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their ethnocentricism.

This study reports on the design, formulation, modification, and evaluation of a relatively new type of intergroup intervention--the creation of a "microcosm group" of 12 members from an organization of 250 members. Charged with improving communication among work groups and hierarchical levels, the group was developed and maintained according to boundary and relationship concepts from open systems theory. It represented a microcosm of the system which it worked, addressed problems raised by both employees and management, assisted in a survey feedback intervention, survived concerns raised by the union, middle management, and leadership succession at the top of the organization. There is evidence that it substantially facilitated communication about difficult issues within the organizations, earned more confidence from employees and management, and improved its own functioning over time. At the same time, the intervention was experienced as quite stressful and conflictful for all parties participating including top management, consultants, communication group members, and other organization members whose work experiences were influenced by the group.

Organizations may be conceptualized as a series of interacting groups coordinated by some common goal(s) and differentiated by division of labor, hierarchy of authority, and the collective histories of individual members. Each person in the system contributes to the performance of certain tasks, occupies a rank in the hierarchy, and identifies with certain historically determined demographic groups. To understand the interaction among the multiple groups and how they are influenced by and, in turn, influence their individual members, it is helpful to utilize a framework based on the analysis of intergroup relations (Sherif and Sherif, 1969; Rice, 1969; Alderfer, 1975c).

Social technology from organization development includes several interventions to improve destructive intergroup conflict (Blake, Shepard, and Mouton, 1964; Burke, 1974; Brown, 1975). Many of these approaches are based upon working with two groups at a time away from the setting of their conflict for a comparatively short period of time. Blake, Shepard, and Mouton (1964) described intergroup problem-solving workshops of several days duration to resolve problems in field-headquarters, labor-management, and engineering-production relations. Brown reported a series of interventions into the relations between "haves and have-nots" in an urban setting.

The present approach differs somewhat from these other efforts. It is oriented to conflicts among several types of groups, lasts several years, and takes place largely on the work site. The objective of the intervention was to improve communications among the various groups in a 250-person division embedded in a corporation employing more than 10,000 people.

THEORY

The basic strategy for this intervention grew out of a theory about the nature of boundaries and relationships in open human systems (Alderfer, 1975a,b). Each human system--from the individual through the small group to the large organization--is separated from its external environment by physical and/or psychological boundaries which determine what is inside and what is outside. Subsystems within systems also have boundaries. Boundaries regulate the flow of matter, energy, and information inward and outward for systems and subsystems; they function to include some factors and exclude others. This regulatory property of boundaries is called permeability. Highly permeable boundaries permit extensive flows inward and outward, while comparatively impermeable boundaries restrict exchange within and among systems.

The vitality of a human system refers to its capacity to survive in a malevolent environment and to grow in a benevolent setting. The vitality of a human system is a partial function of its boundary permeability. In general, there is a curvilinear relationship between boundary permeability and system vitality. At very low levels of permeability an "overbounded" system is in danger of being closed off from necessary exchanges with its environment. At very high levels of permeability an "underbounded" system may be hard to distinguish from its environment and therefore may cease to exist entirely. "Optimal" boundary permeability occurs at some moderate level where a system is able to carry out needed interactions with its environment while retaining its own organization and identity.

Boundary permeability is also related to the quality of human relationships system members have with each other and with non-members. Mutuality--

the term used to characterize the quality of relationships among people—refers to the degree that all parties give and receive, express relevant positive and negative affect, and voice similarities and differences about matters under discussion (Alderfer, Kaplan, and Smith, 1974). Overbounded systems tend to have ethnocentric relationship patterns, where hostility and dissent tend to be suppressed within the system and disproportionately expressed toward non-members outside the system. Underbounded systems, in contrast, are characterized by highly conflictful—though less frequent—communication both internally and externally. Although both underbounded and over-bounded systems show less mutuality than optimally bounded systems, the two "pathological" cases differ in the nature of their relatively low mutuality. Members of underbounded systems seem to be at war (figuratively and/or literally) both with themselves and with others, while members of overbounded systems stay at peace with themselves as long as they are at war with others. Optimally bounded systems communicate dissent and support internally and externally and have higher mutuality than either overbounded or underbounded systems.

RELATION OF THEORY TO PRACTICE

In the beginning of this intervention, a group of eleven people representing a cross section of all the people in the division were established as a "Communications Group" by division management. The group was intended to be a microcosm of the entire division, simultaneously in the system and set apart from it. The initial composition of the group was determined by existing traditions within the division: three management members were appointed to the group, and eight non-management members were elected by peers from their work groups. It was understood from the outset, however, that once constituted, the group would determine its own

methods of operating, including the selection and replacement of members.
At its origin the group had at least one member from all the major work groups
in the division and reflected the demographic composition of the division as
a whole. The membership included five women and six men, two blacks and nine
whites. An internal consultant from the company's organization development
staff and an external consultant were ex-officio members.

The theory described above is useful for intervening in this situation
because it includes hypotheses about relations between structure and process
(i.e., boundary permeability and relationship mutuality) and between internal
and external properties of groups. Following are descriptions of key inter-
ventions in the life of the group. Each episode includes what happened and
explains how the theory influenced consultant behavior.

Charter Formation

After the membership was determined, consultant resources were used to
develop a "charter" for the group. One entire workday was set aside for
this purpose. In attendance were the top five members of the division
management, whose enthusiasm for the idea of the group ranged from nil
to very high, and the eleven newly selected members of the Communications
Group, whose certainty about their mission was not great. Two internal
consultants and an external consultant were present to conduct the session.
They were known to the managers from joint discussions with them about the
mission of the group and to the group members because they had interviewed
each one prior to the meeting to determine their perceptions of the division
and the potential for the group. The purpose of the day's work was to re-
examine jointly whether the idea of a Communications Group was viable and,
if it was, to determine what the charge of the group should be.

The consultants divided their labors such that the senior internal consultant conducted the meetings which had both groups present; the junior internal consultant worked with the top management group; and the external consultant aided the Communications Group. After an introduction by the senior internal consultant, the top managers and communication group members were asked to go into separate rooms to work on the same task. Each group was asked to prepare two lists in response to the following questions:

List 1

List your hopes for the Communications Group.

If the Communications Group were very successful, what would it be like?

When you think about the Communications Group, what is the best that could happen?

List 2

List your fears about the Communications Group.

If the Communications Group were a failure, what would it be like?

When you think about the Communications Group, what is the worst that could happen?

Setting up a Communications Group in this division was a major innovation. It was anticipated that most people would have mixed feelings about the undertaking. Furthermore, the consultants sensed that the two groups present at the charter formation meeting imagined that they were alone in their reservations about the group. If there were widely disparate concerns about the group before it was started, confronting these differences might lead to a decision not to have the group or to modifications in its basic structure and design. But it might also turn out that both groups had similar hopes and fears. Then such an exploration would let both parties see that

they were not alone in the nature of their mixed feelings. The intervention was oriented from the beginning toward helping the group practice what they were to preach: the Group itself had to be able to establish mutual relations among its members and between itself and the rest of the division if communications in the division were to improve.

When the two groups reconvened in the same room after separately addressing their common task, the atmosphere was electric. Sheets containing the lists made by each group were hung on the walls so that all could see the products of both groups. Coffee and pastry were provided, and people were encouraged to mill around and read the lists. As this process took place, the tension in the air changed to excitement. Much to their surprise the two groups discovered that their fears and hopes about the Communications Group were very similar. After this spontaneous realization it was relatively easy for the senior internal consultant to work with the total group to reach a consensus about a common list of hopes and fears. The hopes were:

1. The group will be an effective channel of communications upward, downward, and laterally.

2. Timely feedback and/or action will follow when an area of concern is identified.

3. The group will have the right to pursue information about issues that fall within its charter.

4. People in the division will have confidence in the group.

5. The group will regularly educate people about its mission.

6. People in the division will feel free to initiate contact with the group without fearing that they will damage their careers.

7. The group will promote problem solution through increased communication within and between groups.

8. The group will promote mutual understanding inside and outside the division.

9. The group will encourage management and non-management to contribute new ideas.

10. The group will assist in the communication of personnel policies and practices and provide feedback to reduce undesirable affects.

11. The group will help to develop administrative guide-lines for the whole division.

12. The group will determine its own mode of operating.

The fears were:

1. There will be conflict between the group and the union regarding contractual obligations.

2. The group could come between superior and subordinate inappropriately.

3. A failure by the group could increase management-nonmanagement polarization.

4. People in the division could misunderstand the purpose of the group.

5. Resources given to the group could jeopardize the division's production.

6. Negative feeling by management could keep the group from being effective.

7. Differences among group members as a result of their varying work assignments could lead to an ineffective group.

8. Good suggestions generated by the group could be lost because of lack of understanding.

9. If the group fails, disenchantment with organization development will arise.

10. Individuals will use the group inappropriately to deal with personal issues.

11. The group will try to be all things to all people.

12. The group will be too oriented toward the larger
    functional groups in the division at the expense of
    the smaller groups.

13. The group will not have sufficient resources to carry
    out its charter.

When the meeting ended, the members left feeling as though they had

experienced a day of unexpectedly good communication. The common hopes and

fears became the basis for a charter produced by the group itself and cir-

culated to the entire division. As the remainder of this report will show,

the specific strengths and potential difficulties identified in this initial

meeting turned out to be very good predictors of the kinds of experiences

group members would face.

The next task undertaken by the group was to revise the hopes

and fears list into a formal charter and to add to that a set of operating

procedures for the group. This work commenced shortly after the

"hopes-and-fears" day. It actualized the twelfth hope while it also plunged

the group into the first of several struggles arising from relations among

the members and between the group and the rest of the division.

It was a time-consuming experience for the group to do this work.

Several weeks passed while the group revised and edited the documents.

During that time, frustration mounted. Group members themselves were

battered by the long discussions needed to agree upon wording of their

documents. Top management was upset because they felt that the material

generated during the hopes and fears day was very close to being a completed

charter. And, finally, the rest of the division was disturbed because it

seemed as though the group which offered so much promise for the division

was preoccupied with its own internal affairs.

Eventually, however, the group did complete the work needed to present a charter plus election procedures to the division as a whole. In the final phases of deliberation the group faced an important decision: whether to include the "fears" material in the public version of their charter. Initially everyone was opposed to this idea. Only the external consultant supported the idea of publishing the problematic concerns. After considerable discussion, the group voted to attach a "charter supplement" which contained an account of the major fears about the group to the main charter which was based on the list of hopes about the group.

The charter and election procedures specified the major intergroups which the group would attempt to integrate. Representation was divided according to the four major functional groups in the division, where the numbers were roughly proportional to size, and between labor and management, where there were to be eight labor and three management members. The group decided to have three officers: chairperson, vice-chairperson, and secretary. After that decision, the consultant asked the group to think out loud about the qualities they wished to have in the people chosen for these offices. This discussion, though somewhat uncomfortable for the group, evoked a wide range of characteristics which included personal traits (e.g., competence to conduct meetings, trust of people) and group identifications (e.g., better to have a non-management person as chairperson). The first set of officers chosen for the group consisted of a white male non-management person from the largest functional group as chairperson, a black male manager from one of the smaller functional groups as vice-chairperson, and a white female from one of the larger functional groups as secretary. The officers as a subgroup could hardly have been a more representative cross-section of the division.

The group decided that the normal term of membership on the group would be eighteen months. Elections were to be held every six months. One third of the membership was subject to change at each election. The group decided that all members, both management and non-management, should be elected, and the first phase in each election was to call for interested volunteers among those categories of people who needed a representative. The group also determined that its meetings would have "open chairs" which could be filled by non-members of the group who wished to participate with the group on certain subjects or who simply wanted to observe the group in action.

When the group had completed the work of developing documents about its own operation, it then had the task of communicating this information to the rest of the division. Members recognized that this would be a stressful activity. Not all were prepared to manage the complex dynamics of small group meetings. Discussion among the group produced an alternative comfortable for all. They decided to form pairs to conduct meetings in each functional area. Each session was led by the Communications Group member from that functional area. He/she was assisted by a member from another section of the division.

As anticipated, these sessions turned out to be lively and sometimes conflictful events. They had two classes of agenda: (a) reporting and discussing the charter and operating procedures for the group, and (b) soliciting items for Communications Group business from division members. Consultants attended a selected sample of these meetings at the invitation of Communications Group members. The quality and process of these meetings varied greatly with the functional groups. In some cases the Communications

Group members faced an enthusiastic and supportive audience. In other settings their efforts were actively resisted--even to the point of being undermined--by members of management.

A most poignant example of the latter came from one manager who asserted at the beginning of a meeting that he had not been informed about the meeting until that morning. How, he challenged, could this group improve communications within the division when their own communication was so poor? After that meeting the Communications Group member from that area informed the consultant that she had been rebuffed for three consecutive days in her efforts to see the manager in order to invite his participation in the meeting.

When the group reconvened after the meetings throughout the division, they had a rich set of stories to share. They also had an extensive list of issues on which members wished more information. A subcommittee of the group was established to determine which issues were of greatest interest to the whole division. After reviewing the notes of all members, they selected four issues of common concern and high priority.

1. New employees were not being properly oriented in the eyes of many people. Newcomers to the division were not being fully informed about their fringe benefits, given a tour of the division, or introduced to their co-workers on the floor. The group asked that this matter be explored more fully.

2. Group meetings were a regular practice among some work groups but virtually unknown in others. Employees who had frequent meetings to discuss work procedures and personnel policies liked this practice. Those who did not meet periodically wished to start the practice. The group wanted to encourage more general use of group meetings between supervisors and their subordinates throughout the division.

3. Throughout the division it was common practice for
    employees to have their jobs rotated without the
    involved individual being consulted until the decision
    was made. Often the person affected was the last one
    to know that his/her assignment had been changed. The
    group asked that the individual involved be told
    promptly when a job change was being contemplated,
    and whenever possible be given choices about whether
    and where to move.

4. Employees wished to be better informed about job
    openings within the division and outside. The group
    suggested that a list of open jobs be established and
    passed from work group to work group to let people
    know what was available. Individuals who wished to
    apply for new positions (either vertically or laterally)
    would then have more opportunity to do so.

As it turned out these four issues cover the complete life cycle of

an employee's experience with a job in the division. From the first issue

to the fourth, the concerns follow a person from his/her entry into the

division, through day-to-day work activities, to exit through promotion

or lateral transfer. The press for mobility evidenced by this initial

list was to be a major topic for the group throughout its history.

The group's decision to work on these particular issues was communi-

cated to the division as a whole by publication of an exchange of letters

between the division manager and the group chairman. The chairman's

letter outlined the above-mentioned problems, and the division manager

responded enthusiastically by agreeing to work with the group to take

action about them. The manager also used the occasion to express his public

support for the group and to answer a number of questions that had arisen

during the charter discussion meetings. The symbolic value of this exchange

was also important. It made explicit and public to all members of the

division that the highest ranking manager and the group chairman (a non-

management person) were in regular contact about group business.

The events just described occupied the first ten weeks of the group's life--the period from late July to early October of 1972. During this time the group established itself among its own members, in relation to the top management, and in communication with all people in the division. Some interventions during this period were aimed toward establishing the group's boundaries, others toward making sure those boundaries were permeable, and still others to facilitate mutual relationships among group members and between the group and the rest of the division.

Boundary establishment actions included:

(1) The selection of eleven people to be members of the group. Initially these actions were led by management. Later this boundary maintaining function was taken over by the group. Determination of membership procedures established a <u>dynamic</u> process which assured that members could be distinguished from non-members of the group.

(2) The publication of a group charter and supplement stated the objectives and hazards of the group's life in most explicit terms. These documents asserted the group's existence at the same time that they recognized that group outcomes were highly interdependent with reactions by other parts of the system.

(3) At the conclusion of this phase of group life, the division manager issued a letter that made his support for the group clear and unequivocal. He equated Communications Group work with any normal assignment in the organization, and set limits on the time available for communications work by each group member.

Interventions to promote boundary permeability were:

(1) The length of terms for group members was set explicitly. In this way each person and the group he/she represented periodically had to decide whether a new person should join the group.

(2) During the selection of officers the consultant called the group's attention to the diversity of constituencies

that were being served by the group. The constellation of three people ultimately selected contained the three major functional groups, labor and management, men and women, and racial differences.

(3) The open chair for all Communications Group meetings allowed anyone from the division to attend meetings and thereby protected the group from being closed off from its constituencies. This practice also provided a means by which members could assess the division reaction to their activities and a vehicle through which they could encourage interest. Eventually it became common practice for group members to invite people from their areas to attend meetings.

Interventions to facilitate mutuality among group members and between the group and the division were:

(1) The day devoted to a discussion of hopes and fears allowed members of the group to observe each other's initial expectations about the group and to compare these reactions with those of the chief legitimizing group within the division, top management. Perhaps the most unusual part of this exercise was legitimizing negative attitudes within and outside the group.

(2) The group's decision to publish their charter and supplement for all the division and then to meet face-to-face with all members to discuss their reactions expanded the pattern of mutuality about the group to include the entire division.

(3) At these meetings the group members not only reported fully on their work to that time, they also invited input from non-members about key issues on which the group would direct its energies. This practice meant that the committee was receiving as well as giving information to the division as a whole.

The Communications Group at Work

Over the course of the next year the group worked on a number of specific communication tasks and dealt with issues pertaining to how it related to the wider social system in which it was embedded. The four topics identified by the charter discussion sessions led to actions to

develop information on each subject for everyone in the division. In addition, the group worked with the consultants to develop, administer, and feed back a division-wide questionnaire survey of people's work experiences. As these activities were being undertaken, the group also learned that it had further work to do in working through its relations with the union and with middle managers in the division. The division manager requested each of his four immediate subordinates to take responsibility for one of the items identified for greater information exchange.

Group meetings. Among the management group, one man was especially known for using group meetings effectively. He was asked to prepare "a package" on this subject for distribution throughout the division. The product of his efforts, which included discussions with both his peers and members of the Communications Group, was hardly a neutral document. It consisted of a set of suggestions for how to conduct a group meeting and the results of a "survey" taken among people who regularly used group meetings. The survey reported twelve benefits a work group could obtain as a result of meeting regularly. A cover note gave the group's support for the concept.

The group's first product, therefore, was a document advocating the use of regular group meetings between supervisors and subordinates throughout the division. The first point in the survey supporting the rise of group meetings identified their value in developing "teams" among peers and between supervisor and subordinates. Other reasons offered for using meetings included their value in promoting exchange of information, discussion of common problems, provision of support by team members for each other, and opportunities for personal growth for all participants.

Establishment of a regular practice of group meetings was an intervention to strengthen the boundaries of work teams. The description of the kinds of discussion that could occur in effectively functioning meetings expressed a preference for high mutuality among members of a team.

Job postings. The second item addressed by the group was the subject of posting job openings. In contrast to the preceding item, however, decisions about what to do with this item were not easily reached. Difficulties within the group about how to proceed reflected a conflict with how to relate to the union. For some time the company and union had been negotiating about the subject of job posting, but an agreement had not been reached. Some members of the Communications Group felt the group should proceed with developing posting procedures for the division, while others thought that the group should leave this matter solely in the hands of the union. This split in the group in part reflected degrees of identification non-management members felt with the union. Those highly committed to the union wanted the group to do nothing that might appear as though it could get things for employees quicker than the union. Those less central in union affairs felt that the group's work referred to the division, while union activities pertained to the company as a whole. Consultant interventions during this dispute were aimed toward promoting mutuality between the disputing subgroups by encouraging both sides to listen to the other as well as speak for their own point of view. Management views were also sought, and the charter supplement which cautioned against the group's coming into conflict with the union was invoked. In the end, the group decided not to act on the matter. Their report to the division on this subject included the words, "In view of the fact that the transfer and upgrade policies are currently

being reviewed by both the company and the union, the [group] felt it would
be best to curtail any further action on this subject at this time."

Several weeks later the union became explicitly interested in the
Communications Group activities and asked for an information meeting to
clarify the group's role. This action caused some anxiety among all members
of the group--both management and non-management--and within the top division
management. It was possible that this action could signal the start of a
formal grievance. For the most part, the information meeting was conducted
according to procedures specified by the company-union contract. These
procedures prohibited the attendance of the group chairman because he was
a member of non-management. In his place was the vice-chairman who was a
manager. Also in attendance were the division manager, one of his immediate
subordinates, and three ranking officers from the union. The external con-
sultant informed both division management and the union members of the
Communications Group that he thought it would be helpful if he could
also attend the meeting. Although there was no precedent for a third party
attending such a meeting both parties agreed to allow his presence.

Prior to the meeting the division manager provided a complete set of
the materials that had been produced by the group to that time for the union
leaders. These included the charter, the election procedures, and the
various "packages" distributed by the group. At the outset of the meeting,
the union officials thanked management for the completeness of the informa-
tion provided for them. They also indicated that they judged that manage-
ment had been sincere because the documents they had obtained "from our own
sources" perfectly matched what management had given them. With that intro-
duction, which seemed to relax some of the tension in the room, the union

leaders proceeded to raise a series of questions about the documents they had before them. In some cases the issues were easily answered; in others, the concerns provoked conflict between the parties. The consultant's role was to promote clear communication of the differences between the parties while minimizing the likelihood that the history of adversary relations between labor and management would needlessly escalate conflicts about the Communications Group. The rules of information meetings provided that the union would write the minutes of the meeting, which had to be approved by management before they were deemed official. Shortly after the meeting the consultant provided a detailed set of notes, written in complete sentences and paragraphs, to the division manager and the highest ranking labor official. The document attempted to <u>describe</u> <u>without</u> <u>interpretation</u> all the issues discussed in the meeting and portray accurately the views expressed by both parties. Both groups seemed pleased to receive the notes.

Although many specific issues were discussed in the meeting, the basic concern of the union seemed to be that the charter did not make clear enough that, "the Union is the exclusive bargaining agency for all non-management employees . . . and the company will not negotiate as to matters within the provisions of this contract with individual employees or groups of employees . . . " Within the information meeting it was agreed to ask the Communications Group to amend their charter to make this point more explicit. Minutes of the information meeting, as prepared by the union, were much shorter than the notes written by the consultant. They affirmed the union's role for non-management employees, expressed no objection to the formation of units like the Communications Group, asked the management to keep the union informed about such matters, and asked management to request the Communications Group

to make some changes in the wording of their charter. Later, when the Communications Group discussed the outcome of the information meeting, they agreed to make the changes asked for, although not without some conflict among the members.

The one specific issue that the union did press was the matter of job posting. At the time of the information meeting, the group had already discussed and decided not to enter this area, and the written records showed those results. At the time of the information meeting, the union already knew the group had drawn a limit for its activities in order not to infringe upon the contract between the union and the company. Perhaps the union asked for the meeting simply to make the point more general and to assure management and the group that they were alert to what was going on.

But there was another explanation for calling the information meeting conveyed to the consultant by both management and non-management members of the group. It was reported that a middle management member of the division had motivated a non-management employee under his supervision to start grievance procedures against the Communications Group by threatening to alter his performance evaluation if he did not. If true, this reason for the information meeting puts the real initiative for the event with management rather than with the union.

Regardless of the reasons for the challenge, the ultimate outcome was a strengthening of the group in relation to the union. The union minutes essentially approved the existence of the group while they also helped to clarify further the limits on group activities. Although this specific happening was not anticipated, the manner of working through this event was

started when the charter formation process was initiated. The charter
supplement alerted the group and all members of the division, including
the union, to potential conflicts between the group and the union. When
the group discussed the subject of job postings, they confronted within
their own membership the dispute that was later to arise between the group
and the union. Working through this issue inside the group, leading to
a decision to stay away from the subject of job posting, facilitated a
successful resolution of the conflict outside the group and in relation to
the union.

Employee orientation. The improvement of new employee orientation
proceeded relatively uneventfully. The manager asked to prepare information
on this subject found what was sought by the Communications Group in the
Personnel Handbook, a document prepared for use by all management. But
apparently many managers, especially those who did not regularly face an
influx of new employees, were unaware of the guidelines available to them.
Working with the Communications Group, the manager prepared "a package"
which called this fact to the attention of all members of the division.
A minor jurisdictional problem arose when some managers became upset on
learning that non-management members of the Communications Group were study-
ing the Personnel Handbook. In some managers' eyes the Personnel Handbook
was not a document to be seen by non-management employees.

Career and promotion concerns. Dissemination of information about career
development, evaluation, and promotion was a problematic issue from the very
outset and continues so to this day. The present organization is by no means
unique in the tension that surrounds the management of individual careers.
Secrecy, deception, ambivalence and poor communication about this topic abound.

When the Communications Group decided to investigate this topic and manage-
ment agreed to help, the parties were only vaguely aware of the difficult
terrain they were about to enter. Of the initial four subjects undertaken
by the group, this was the last one to be completed. And the original
report was only the beginning of the exploration of this issue.

Four months in preparation, the document covering the subject of
promotions provided a carefully reasoned and humanely conceived view of
the evaluation-promotion process. It recognized the need to match employee
needs and capabilities with organization requirements, and acknowledged the
changing character of both kinds of factors. The reciprocal contribution
of supervisor and subordinate in the career development process was empha-
sized. The role of various manpower committees in the organization was
explained. Finally, some of the ways that unfairness might enter the process
were identified, and guidelines were provided to minimize the tendency for
this to happen. Although carefully prepared and well received by members of
the division, this document was not enough to satisfy employee needs for
information on this subject.

People in the group and elsewhere in the division wanted some very
concrete subjects discussed. They were especially upset when statements
about promotion policies by key managers did not correspond with events
that actually happened. As a result of actions taken with regard to some
individuals' careers, the credibility of several managers was severely
strained. At one point members of the Communications Group were ready to
resign their posts because the very day after they had prepared and circulated
a response to a request for information, with the help and consent of manage-
ment, a personnel move violated the guidelines that had been communicated.

The Communications Group members felt that their credibility with the division had been compromised because management had violated the commitments within a day after they had been made.

Fortunately, however, dialogue did not stop at this point. With some encouragement from the consultants, the Communications Group members continued to talk with upper management about their problems with how promotion decisions were handled. Eventually, conversations that occurred on a one-on-one basis or in a small group were transcribed from tape-recordings and shared with the whole division. This edited (for grammar and clarity) transcript attempted to put all the cards on the table and neither hedge nor avoid difficult issues. To make such a report took great energy and commitment from management. More than once they learned that what they thought was true was inaccurate. When this happened, they revised their position so the printed version would be correct. Some sample inter-actions follow:

Question: How firm are the rules . . . for promotion into management in this department?

Answer: . . . We have a guideline where our candidates should have gone through the . . . Assessment Center. You'll note I said "should" not must. (emphasis theirs)

Question: What's the exception to the rule for attending the . . . Assessment Center?

Answer: The exceptions will be in the area of those things necessary for the company to meet prescribed Affirmative Action . . . goals. Primarily those cases where we have females, blacks, or Spanish-surname candidates and the promotion of one of these people will be in direct response to our EEOC needs. (Probably the person will have already indicated, through perform-ance on a present job, a sufficiency in the super-visory area.)

>Question: It seems that promotions in one staff group are going mostly to people from outside this division. Would you comment on that?
>
>Answer: In our corporate department there are four divisions . . . if we were to go that way each staff group would get one promotion in our four. It doesn't very often come out that way, however, and it shouldn't . . . But if you want to look at the promotions in the last two years, there have been 30. People in this division were selected for 10 of those jobs. . . .

The response to this dialogue was quite positive throughout the division. People felt as though they were told the truth--that no punches were being pulled. For many the news conveyed by the questions and answers was not good. White males, especially those with less than a college degree, often felt that their career progress was being unfairly slowed down by the company's attention to affirmative action objectives. But regardless of whether they liked the information conveyed, people did feel that their needs to know were being satisfied. Concerns about the promotion process did not go away with the publication of the dialogues, but another significant step forward was made. In future months the effect of the recession further reduced the number of job openings available, and the psychic pain experienced by many employees was further exacerbated. The struggles about promotion primarily reflected the intergroup conflict between management and non-management. As time passed, public knowledge about the criteria by which one was evaluated for promotion into management increased substantially. The persistence of the group, the growing confidence between the group and management, and the courage of several top managers to place honesty above their customary prerogatives to keep the promotion process secret, all contributed to this change. But like several other improvements in communica-

tion the change was achieved only by confronting and working through some deep-seated conflicts.

The Division Attitude Survey

Another role for the group arose in connection with the design, administration, and feedback of a division-wide attitude survey. Members of the group played significant parts at each phase of this diagnostic process. They were interviewed to provide leads about the content of items to include in the questionnaire. They helped to develop appropriate language for questions. They took and critiqued the first draft of the instrument. When the questionnaire was administered to the whole division, Communications Group members joined the sessions attended by members of their own work groups to answer questions about the meaning of particular items and to reassure their coworkers that the study was being conducted in good faith. After the data were analyzed, the group along with top management received the first feedback. Their advice helped to determine the format of the data for feeding back to the rest of the division. A task force of several members of the Communications Group worked with the consultants to design the nature of the feedback meetings for the entire division. And, finally, Communications Group members joined all the feedback meetings from their work areas to encourage people at all levels to feel free to speak freely during the sessions.

Data obtained through the survey confirmed the validity of much of the Communication Group's efforts to increase division-wide knowledge about specific areas of organizational life. Forty-four percent of the people in the division reported that they had group meetings "often" or "very often," while 31 percent said they had meetings with their own work groups "never"

or "rarely." Yet 74 percent of the people reacted "positive" or "very positive" to the idea of such meetings. Thirty-seven percent of the people in the division disagreed with the statement that "Division training programs effectively equip people to do their jobs." And forty-seven percent of the respondents disagreed with the assertion, "The organization structure of the division has been clearly explained to me." The need for training and orientation was confirmed.

The concern over careers and performance evaluation also showed up in responses to the questionnaire. Only 20 percent of the division agreed with the statement that, "We have a promotion system that helps the best person rise to the top." Twenty-seven percent of the respondents agreed that, "My supervisor makes every effort to talk with me about my career aspirations." These findings assured the Communications Group, top management, and the total division that the various quests for information being led by the group were not the private agendas of a few vocal individuals but reflected a broadly based concern throughout the organization.

The survey also provided the group with an opportunity to obtain feedback about how its own work was perceived by members of the division. By this point the reader may have a sense of how difficult it was for members of the Communications Group to carry out their roles. Especially the more active members frequently encountered frustrations--sometimes from managers who resisted the idea of developing a more open organization and other times from employees who expected the group to solve personal problems for them. Facing this stress as a regular part of conducting their business, the group was not initially enthusiastic about the idea of including items about themselves in the division-wide survey. After thorough discussion of this topic with the consultants, the group agreed to include a number of items

in the instrument. Much to the surprise of many members of the group, the responses to items about the group were quite positive. Only 19 percent of the respondents agreed with the statement, "I resent the time given to Communications Group activities." Sixty-five percent of the division agreed with the view that, "The Communications Group is doing a good job responding to issues raised by division members." These data were collected after the group had been in action only three months. At the conclusion of the survey feedback sessions, when the group had been functioning for eight months, the items pertaining to the group were administered again as part of a brief questionnaire evaluating the survey feedback meetings. On the whole, division-wide reactions to the Communications Group were even more positive on the later administration than they had been on the earlier one.

But not all groups were equally positive about the group, and not all groups moved with the division-wide trend of increasing support for Communications Group activities. The subgroup that differed most notably from division-wide trends was the middle managers. On some items their responses showed no change from earlier measures, and on other items their responses to the group became more negative. After reviewing these data with both division management and the Communications Group, the consultants decided to meet with the middle management group to discuss the nature of their questionnaire responses. There were several reasons for this choice. The consultants were without formal power or permanent membership in the system. In many people's eyes, especially those not close to the group activities, they were responsible for the survey and for the Communications Group. The managers might be able to express their doubts and anger most directly to the consultants.

This hypothesis turned out to be viable. During the first of two meetings with the middle managers, the consultants asked the managers to discuss why their questionnaire responses to items about the Communications Group differed from the overall trends in the division. With much feeling the managers provided eighteen different answers. During this session the consultants dealt with the managers as a total group. The consultants made no effort to answer or refute any of the issues raised by the managers. They asked only questions of clarification and recorded the points raised by the group on newsprint for all to see.

There was no doubt that the managers were unhappy with their relationship to the Communications Group and the consultants. Some felt as though the recently completed feedback sessions had undermined their authority and influenced their performance evaluations negatively. Many felt as though their different responses were strictly a function of their unique location in the organizational hierarchy and were unhappy with the consultants for singling them out for special attention. Another view focussed directly on Communications Group behavior. The managers reported that they were uninformed about Communications Group meeting times, agenda and open chair policy. The session ended with all parties agreeing to meet again. The managers asked the consultants to prepare a "professional analysis" of what they had heard. The consultants agreed to do this at the next meeting. They indicated that their behavior in the present meeting was aimed toward being sure they understood the managers' point of view. In the next session they would present their views of the situation as well as answer the specific issues raised by the managers where that was possible.

In the next meeting the consultants presented an analysis of the situation as they saw it. This included recognition and acceptance of the sense

of powerlessness expressed by the managers in relation to the group. It
also focussed on the covert resistance that had been shown by some from the
outset of the group's life. Some managers, for example, had been specifi-
cally invited to attend the group as "open chair guests" but always managed
to be occupied with another meeting at the time of Communications Group
sessions. After the consultants presented their views, the meeting turned
to a more problem-solving orientation as the managers acknowledged that the
problems identified did not occur exclusively as a result of Communications
Group or consultant behavior. There was opportunity for all parties to
change.

A number of very constructive suggestions for improving the effective-
ness of the Communications Group emerged from the manager meetings. The
group decided to publish notices of their meetings in advance with the agenda
indicated. The division manager agreed to provide a stenographer to help
the group produce more timely and complete minutes of their meetings.
Henceforth there was no doubt about the meaning of the open chair policy.
In subsequent weeks middle managers themselves took the initiative in
attending meetings as guests. One even agreed to come to a meeting to in-
form the group in person about the deliberations that had taken place in
the sessions between the consultants and the middle managers, thus relieving
the consultants of the task of acting as "go-betweens" for relating the
managers' concerns to the Communications Group. Although we were unable
to take another survey to see if the managers' attitudes toward the group
changed, there was no doubt that their behavior did. For some time after
these sessions there was hardly a Communications Group meeting when one or
more middle managers did not attend to observe or to discuss issues of
interest with the Group. Sometime later the group decided to expand its

numbers to include a fourth member from management.

The survey helped to identify problems in the relationship between
middle managers in the division and the Communications Group which ultimately
led to changes in how the group operated and in how the managers behaved in
relation to it. The survey feedback was also associated with many other
changes in the division. Several weeks after the survey had been completed
the consultants interviewed the top managers in the division to learn what
impact the feedback sessions had had for them. Seventeen specific changes
were reported. They included such simple (but important) actions as
informing a work group that they had been exceeding performance expecta-
tions for some time when the group thought they were failing continually
because unrealistic demands were being placed upon them. At the other
extreme of complexity, responsibility for a particular assignment was
finally settled between two work groups after, as one manager put it, ten
years of searching for a solution.

CONCLUDING REFLECTIONS

As a strategy for improving communications among the multiple groups
within the division where it was employed, there can be little doubt that
the Communications Group had the intended effects. It persists to this day,
having survived a change in division head and having worked through additional
conflicts similar to the ones reported here. During the last twelve months
consultant activity in relation to the group has been reduced markedly. In
part this stems from other demands on both consultants and, in part, it
arises from an explicit decision on the part of the consultants to reduce
their interventions to see whether the group had developed enough skills and

and resources to function effectively without the heavy input of professional expertise characteristic of the first eighteen months of the group's life.

About six months after their last major intervention with the group, the consultants returned to ask it to sponsor a readministration of the original survey conducted 2 1/2 years earlier. After lengthy and deliberate discussions with and without the consultants' presence, the group decided against repeating the survey for the whole division, although the group itself did take the questionnaire. Their major reasons for not repeating the survey were two-fold. First, some problems in the division had gotten worse, but there was nothing that could be done about them because the major issue arose from blocks to advancement due to economic conditions in the company. Second, communication throughout the division had improved remarkably, and it was not necessary to use a survey to discover what needed attention. Questionnaire data from the group confirmed these reasons provided by group discussion. Disappointed by the unwillingness of the group to repeat the survey, the consultants could not fault the process the group used to reach this decision or the autonomy they showed in rejecting an intervention from the people on whom they were once dependent.

The events described in the foregoing sections of this report do not chronicle all the happenings in the group's life, even during the first year. Items selected for reporting pertain especially to actions which were most immediately connected to the theoretical basis for the design of the group and to the dynamic unfolding of that pattern over time. My conclusion is that the theory "worked" in practice but at a cost to all involved parties that was significant. The stress experienced by the various chairmen of the group, by the division managers, by some group members, and by some middle

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managers was noteworthy. The account given here, if biased at all, probably
overstates the degree of conflict surrounding the group's operations. Many
straightforward actions by the group were not reported, while only one or
two major conflicts known to the writer were omitted. The detectable pattern
seems to be that the group itself and communications throughout the division
benefited by confronting and working through the various conflicts encountered
throughout the group's life. In retrospect, it is remarkable how many of
the hopes and fears about the group as they were initially identified by
the division management and the original set of group members turned out to
be true in actual operation of the group (see pages 6 - 8 of this report).

A theme that was not anticipated and which preoccupied the group
throughout its life was mobility, especially the movement of people across
"the line" from non-management into management. Perhaps this methodology
merely let a topic that more conventional approaches suppress emerge into
greater awareness. Perhaps the historical moment with its great emphasis
on equal opportunity for all Americans coupled with the restrictions on
movement induced by the economic recession heightened everyone's concerns
on these matters. Perhaps the opportunity for all people associated with
the Communications Group to associate with several levels of management
raised hopes in people who otherwise would not imagine they could rise very
far in the organization. Perhaps the group attracted non-management people
whose mobility aspirations were unusually high, although the survey data would
question the potency of that explanation.

I conclude that a Communications Group designed on the theoretical
principles described above can make a useful contribution to organization
development. The benefits of this approach accrue most to those who are

willing to confront conflict in order to learn from it and whose tolerance
for stress is reasonably high. There will probably always be a contest
between punitively oriented and secrecy prone managers and the effects of
such a group. The outcome of that contest cannot always be predicted, so
those contemplating an approach like the one described here should do so
knowing they are taking risks. A relatively open organization, with strong
permeable boundaries and mutual relationships among strong groups, is not
an altogether comfortable setting.

References

Alderfer, C. P. Boundary relations and organizational diagnosis.
In H. Meltzer and F. R. Wickert (eds.) Humanizing organizational
behavior. 1975, in press. (a)

Alderfer, C. P. Change processes in organizations. In M. D. Dunnette
(ed) Handbook of industrial and organizational psychology. Chicago:
Rand-McNally, 1975. (b)

Alderfer, C. P. Group and intergroup design. U. S. Labor Department
Monograph Series, June 1975. (c)

Alderfer, C. P., Kaplan, R. E., and Smith, K. K. The effect of
variations in relatedness need satisfaction on relatedness
desires. Administrative Science Quarterly, 1974, 19, 507-532.

Blake, R. R., Shepard, H. A., and Monton, J. S. Managing intergroup
conflict in industry. Houston: Gulf, 1964.

Brown, L. D. Haves and have-nots in dialogue: third party interventions
to promote intergroup cooperation. Unpublished manuscript, 1975.

Burke, W. W. Managing conflict between groups. In Adams, J. (ed.)
Theory and method in organization development: an evolutionary
process. Arlington: NTL, 1974.

Rice, A. K. Individual, group, and intergroup processes. Human
Relations, 1969, 22, 565-584.

Sherif, M. and Sherif, C. Social psychology. New York: Harper & Row,
1969.

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