

Chapter 11

Consulting to Underbounded Systems

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A small black girl who appeared to be no more than nine years old lay sleeping on the step of the main entryway to the Harmon School. It was 2.45 on a warm spring sunny Tuesday afternoon. School for that day had just ended. Students, teachers, and parents were talking excitedly in small groups clustered on the sidewalk in front of the school. Anyone wishing to enter the school had to step over the child or risk waking her. Someone leaving the school from inside might actually step on her because it would be practically impossible to see her without opening the door. Yet no-one seemed to notice her. A rush of thoughts and feelings surged into the consultant's awareness as he approached the school.

Harmon was an 'outer, inner-city school', located in a 'boundary region'. To the south and east were predominantly black lower income families, and to the north and west were predominantly white middle and upper middle income households. The neighbourhood immediately surrounding Harmon was populated by black and white families of middle income. One teacher in 11 at Harmon was black; about 35 per cent of the 250 children were black; and the principal was a white male noted for his openness and 'liberal' philosophy.

At the time of this event a white male external consultant was beginning to establish a working relationship with the Harmon staff. On the whole the group seemed fearful of him: 50 per cent of them were attending voluntary meetings to see whether a consulting relationship could be established. Although deeply disturbed by the sight of the sleeping child, the consultant felt that he would damage the tenuous signs of trust that were just beginning if he showed evidence of strong feelings at this moment. Catching the eye of one of the teachers with whom he sensed a firmer relationship, he asked, 'Does this happen often?' She explained that it did and that the child's family life was very stressful. 'Dorie probably didn't sleep at all last night. I tried to call her mother earlier but no one answered,' she explained. The consultant asked if

there was not a better place for Dorie to sleep while they searched for her mother. The teacher answered that there was a bed in the school nurse's office. She then gently woke Dorie and led her to the more comfortable setting. The consultant entered the building to attend a faculty meeting.

The scene changes...

An experienced internal OD consultant was called by the co-chairmen of The Area Operating Team (AOT), a high-level peer group of operating managers for a 13,000 person corporation providing electronic communication services to more than three million customers. The clients told the consultant that the high-level corporate committee was having a great deal of difficulty working together effectively. In the group's last three meetings nothing had been accomplished. Everyone on the committee was 'frosted'. At least one member was known for coming late to meetings and leaving early. [Standard operating procedure was for individual managers to make presentations to the committee, and for several side conversations to occur while the planned reports were in progress.]

From information available to him outside the client relationship, the internal consultant also knew that AOT was about to confront leadership succession. One of the co-chairmen was about to be replaced. The consultant thought this issue was known but not discussable among AOT members. Indeed, there were probably many factors, inside and outside AOT, to explain why the group's behaviour would be so chaotic, despite the crucial role it played in the corporation. The internal consultant agreed to meet with the co-chairmen to explore how he might be helpful to the group.

On the surface, these two case fragments could hardly be more dissimilar. Nevertheless this chapter proposes that they share important system properties. Interventions derived from a common conceptual framework were helpful in both cases. The case fragments were presented to illustrate the kinds of information available to a behavioural science consultant early in a client relationship. For those who know the theory, the data identify the two situations as 'underbounded' systems (Alderfer, 1976a; Brown, 1979). Normal interventions devised to aid 'overbounded' systems probably would not work in either case.

The following section presents a theory of underbounded and overbounded systems that distinguishes the organization problems found in Harmon and AOT from those to which organization development technology is more frequently applied. The next two sections give descriptive accounts of work with Harmon and AOT to show how the theory applies to them. The final section is a comparison of the two cases, including some preliminary generalizations about group and organizational consultation with underbounded systems.

CONSULTING TO UNDERBOUNDED SYSTEMS

A THEORY OF UNDERBOUNDED AND OVERBOUNDED SYSTEMS

A system is a set of units with interdependent relationships among them. All human systems are open systems with boundaries to regulate transactions between the system and its environment and to determine what is inside and outside the system. Boundaries are the defining characteristic of systems. Permeability is a crucial property of system boundaries. Because open systems depend on transactions with their environments for survival and growth, there is an 'optimal' degree of boundary permeability for each system-environment relationship (Alderfer, 1976a,b; Skynner, 1976). 'Overbounded' systems show *less* boundary permeability than is optimal for the system's relationship to its environment, and 'underbounded' systems show *more* boundary permeability than is optimal for the system's relationship to its environment. The primary threat to overbounded systems is that they become closed off to their environments and lose the capacity to respond adaptively to environmental changes and to reverse the build-up of entropy. The primary threat to underbounded systems is that they will become totally caught up in their environmental turbulence and lose a consistent sense of their own identity and coherence. (Thus, being extremely underbounded is a greater threat to a system's survival, especially in the short run, than being overbounded.)

System boundaries are both physical and psychological. In the long run, if steady states occur, physical and psychological boundaries tend to become congruent (Alderfer, 1976b). In the short run, however, the congruence may be imperfect. Psychological boundaries tell more about the 'here-and-now' of a system, but their condition is harder to detect than physical boundaries — especially for an outsider. Interdependence among parts and among the attributes of parts is characteristic of all systems. The condition of system boundaries therefore strongly influences other system properties. When a system departs from optimal boundary permeability it begins to show a variety of 'symptoms', which may be easier to identify initially than the actual boundary condition. Consulting work with a variety of underbounded and overbounded systems has led to the identification of 11 interdependent variables whose values differentiate underbounded and overbounded systems from optimally bounded systems. An applied behavioural scientist may use these indicators rather than hard-to-detect boundary relations in order to determine in which direction, if in either, a system departs from optimal boundary permeability. The variables are:

- (1) Goals
- (2) Authority relations
- (3) Economic conditions
- (4) Role definitions
- (5) Communication patterns
- (6) Human energy

- (7) Affect distribution
- (8) Intergroup dynamics
- (9) Unconscious basic assumptions
- (10) Time-span
- (11) Cognitive work

Goals

The typical definition of organizations makes reference to organizational goals (Porter *et al.*, 1975). At some level and for some purposes, organizational goals provide the major source of legitimacy for organizations. Miller and Rice (1967) define the primary task (goal) of an organization as that work the organization must do to survive in its environment. Yet the analysis of organizational goals from either a conceptual (e.g. Simon, 1964) or an empirical (e.g. Perrow, 1961) perspective is not a simple process. The goal structure of an organization refers to the clarity with which organizational goals can be stated and to the degree of organization-wide consensus on the priority of organizational goals. Underbounded and overbounded systems differ in their goal structure.

Underbounded systems have neither the clarity nor the degree of consensus in their goal structure that can be observed in overbounded systems. A sense of 'meaninglessness' is not uncommon in underbounded systems. Participants may experience their system as floundering without a sense of direction. This lack of direction may arise either because people genuinely do not know what they are doing or because the conflict about goal priority is so severe that no direction among many competing orientations can be sustained long enough to bring any genuine achievement. Overbounded systems, on the other hand, tend to show an unequivocal clarity about goals and their priority. Executives in business firms are prone to say 'We are in business to make money', or 'The ultimate test is the effect on the "bottom-line" (of the profit and loss statement)'. Increasing the clarity of organizational goals or the degree of consensus about goal priority is associated with decreasing boundary permeability, and decreasing the clarity of organizational goals or increasing the disputes about goal priority is associated with increasing boundary permeability.

Authority relations

The crucial place of boundaries in the survival and growth of human systems has led a number of theorists to link boundary management with authority (Miller and Rice, 1967; Astrachan, 1970). According to this view, the major work of system leaders and managers is to define and adjust key organizational boundaries in order to promote the work of the system.

In being a leader, teaching leadership or consulting to leadership it is useful to conceptualize leadership, in part, as boundary management. But causality in human systems is rarely unidirectional; associations between variables are usually based on mutual causality (Buckley, 1967). Therefore, the condition of system boundaries influences the nature of authority relations within the system as well as *vice versa*. The nature of the authority available to leaders and/or the effort they must expend to increase their authority depends on boundary permeability.

Authority relations in overbounded systems are typically highly centralized and monolithic. Most resources are controlled from a single locus of authority, usually at the top of the organization. There is a unity of purpose, of direction, and of control that forms the basis of the traditional pyramidal organization (Gulick and Urwick, 1937). Much of the early work in organizational behaviour identified the dysfunctions of the traditional pyramidal form (Argyris, 1957; March and Simon, 1958; McGregor, 1960); and the first organizational development interventions were also designed to improve systems of this kind (Jaques, 1952; Argyris, 1962). The problems of overbounded systems are now reasonably well known, and there is increasing evidence that behavioural science interventions have been designed to deal with the pathologies of such systems (Friedlander and Brown, 1974; Alderfer, 1977b).

Authority relations in underbounded systems are typically fragmented and unclear. Instead of a single authority source to whom all must ultimately answer, there are multiple authorities and/or none to whom some people intermittently report. Responsibility for work may rest with several individuals and groups or with no-one. There is less systematic research on underbounded systems (e.g. Brown and Brown, 1973) and far less consensus on how to conceptualize and evaluate the phenomena (Weick, 1976). Within the organization development literature there is a growing list of 'failures', which may be understood, in part, as the result of applying interventions designed for overbounded systems to underbounded problems (cf. Brown *et al.*, 1974; Firestone, 1977; Berg, 1977).

Economic conditions

Changes in the territory or technology of open systems, often brought on by economic changes, have effects on psychological boundaries (Trist *et al.*, 1963.) If the economic condition of a system significantly worsens, its territory and technology will be threatened. It may be less able to attract people, or it may have to eliminate people from the system in order to survive. Conversely, if the economic position of a system improves it has the potential for improving its territory and technology and for heightening its attractiveness to members and potential members.

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As a result of these dynamics, underbounded systems are more likely to be facing economic difficulties than overbounded systems. Underboundedness may 'cause' financial problems, or *vice versa*. A system unable to organize itself for sustained work is likely to miss opportunities for economic gain or to waste resources it already has. A system confronted with economic hardship from outside will find its psychological boundaries threatened as it struggles for survival. The effects of a poor financial condition make it increasingly difficult for organization members to cooperate in order to solve financial problems because they anticipate being asked to leave or they feel they must seek alternative forms of compensation and therefore choose to leave.

Role definitions

Individuals in organizations develop patterns of role behaviour based on the expectations placed upon them by the organization modified by their own personal values, beliefs, abilities, and group memberships (Levinson, 1959; Alderfer, 1977a; Katz and Kahn, 1978). The clarity and consistency of organization expectations is in part a function of boundary permeability. Role expectations in overbounded systems tend to be highly precise, detailed, and restrictive. Role expectations in underbounded systems tend to be unclear and conflicting.

Thus the psychological costs to individuals for occupying organizational positions in overbounded and underbounded systems are different. In overbounded systems people feel confined, constrained, and restricted. Incumbents experience lack of creativity and stimulation, especially at lower levels in the organization where the full force of the organizational structure affects the individual (Argyris, 1957). In underbounded systems people feel fragmented, conflicted, and isolated. Incumbents lack a clear sense of direction in their work and may seem immobilized. There may be a lack of explicit expectations from others or a great diversity of conflicting demands from multiple uncoordinated sources. The different dynamics of authority relations in underbounded and overbounded systems are directly related to the different kinds of problems with role definition in each type of system.

Communication patterns

Communication problems are ubiquitous to organizations that are functioning suboptimally. The issue common to all communication problems is that valid information is not being given and received as needed to do the organization's work. Information may be distorted by the sender or receiver, or there may simply be no exchange at all between senders and receivers.

Overbounded and underbounded organizations differ in the nature of their communication problems. The authority and role relations among individuals

and groups in overbounded systems are designed to establish communication links among parties and to make it possible for people to meet together when necessary. Typical problems in overbounded systems arise because people distort the information that is exchanged in order to present their own position in the best possible perspective. Criticism of one's own position tends to be minimized. Bad news is with-held from senior officials as much as possible.

Communication problems in underbounded systems arise from difficulties in identifying who should talk with whom, in establishing communication links among key parties, and in bringing people together to discuss issues of common concern. When it is possible to solve these problems, which then permits exchange of information to take place, the quality of exchange is also different in underbounded systems. Interaction patterns in general are more varied. Withdrawal and lack of exchange may alternate with outbreaks of simultaneous talking. Conflict is never far below the surface and may show in extreme form when elements of an underbounded system meet.

Human energy

All open systems rely on human energy for a significant portion of their work. The power of a system and of the individuals and groups within a system depends on the state of human energy in the system. System boundaries provide a means for confining or releasing human energy and/or effectively channelling or ineffectually diffusing it. In overbounded systems human energy is often confined waiting to be released into well-established channels to do organizational work. In underbounded systems human energy is more diffuse and difficult to channel towards system goals.

In overbounded systems, the effect of increasing boundary permeability is to release human energy for work, while the consequence of decreasing boundary permeability is further to restrict available energy. In underbounded systems, the effect of increasing boundary permeability is to diffuse available human resources, while the effect of decreasing boundary permeability is to harness energy for organizational objectives. The process of increasing boundary permeability usually takes less energy than the process of decreasing boundary permeability.

Affect distribution

Individuals and groups, as open human systems themselves and as subsystems within larger organizational systems, have affective lives. People have feelings about the conditions in which they find themselves, and they are influenced by the emotions of others with whom they interact. Human beings experience a variety of emotions, including anxiety, joy, fear, love, anger, contentment, despair, and so on. People may withhold or explicitly exchange their feelings.

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Whether spoken or not, signs of the feelings within a system are usually apparent to a trained observer. Although human affairs typically involve a mix of emotions — both favourable and unpleasant — there is usually a detectable balance of feeling within a system, and overbounded and underbounded systems differ in their respective affective balances.

The balance of feeling within an overbounded system is typically positive. In part this is because the short-term future of an overbounded system tends to be favourable. The system is not facing imminent chaos; its survival is not threatened. But a positive affective balance in overbounded systems is also partially the result of repressive forces within the system. The effect of a monolithic authority structure mutes internal criticism and tends to direct negative affect outward rather than inward.

The balance of feeling within an underbounded system is typically less favourable. Chaos and disorganization are immediately observable. People usually do not have much confidence in themselves or in the system, and there is often a significant underlying feeling of futility. In general, a decided lack of observable positive feeling is characteristic of underbounded systems.

Increasing boundary permeability in overbounded systems permits the emergence of negative feelings that had been previously hidden. Depending on how this process is managed, people may feel released and euphoric or guilty and depressed (Slater, 1966). Typically, change towards a fuller balance of positive and negative emotions increases the available energy in a system. Decreasing boundary permeability in underbounded systems helps positive feelings to emerge. People learn that they share common concerns, are influenced by common processes, and can cooperate to control the chaos that previously threatened to overwhelm their system. Decreasing boundary permeability in an underbounded system, like increasing boundary permeability in an overbounded system, results in the system as a whole being one where both positive and negative emotions can be observed. Conversely, allowing negative feelings to emerge in an overbounded system will increase boundary permeability, and promoting the discovery of positive feelings in an underbounded system will decrease boundary permeability.

Intergroup dynamics

Intergroup dynamics in an organization refer to the relations among the various groups within the system, which are generally of two classes: (1) task groups, and (2) identity groups (Alderfer, 1977a). Task groups are defined by the kinds of work they perform (e.g. production, marketing, physician, teacher) and by the level in the hierarchy in which they are located (e.g. foreman, department head, dean, vice president). Identity groups refer to the group affiliations that help individuals to shape their personal identities. These groups consist of generation groups (young, middle-aged, old), gender groups

(men and women), ethnic groups (English, African, Irish, etc.), and others determined by the life experiences of members before they enter the organization. Conflict is inevitable in a system complex enough to have several well-defined sets of groups. But organizations differ in terms of whether the primary conflict is rooted in task or identity groups.

Overbounded systems tend to have their primary intergroup conflicts among task groups, and underbounded systems to have their primary conflicts among identity groups. When organizational structure can significantly shape environmental dynamics, task group boundaries are more powerful than identity group boundaries. When environmental forces overwhelm organizational boundaries, identity group conflicts dominate task group conflict. In the former situation the organization loses the richness available from cultural diversity and individuals find significant portions of their identities denied. In the latter case struggles among identity groups prevent the organization from achieving a sustained sense of direction; its task effectiveness suffers; and individuals lose the gratifications of real achievement. Thus, strengthening the boundaries of identity groups in overbounded systems provides a useful counterforce to the suppression of group identities in these organizations. Conversely, strengthening the boundaries of task groups in underbounded systems permits a clearer sense of purpose to be obtained and a greater degree of task accomplishment to be achieved. Because of the interdependence between task and identity groups in most organizations, change in the boundaries of one type of group will have implications for the boundaries of the other (Alderfer, 1977a).

Unconscious basic assumptions

Individuals in groups may be observed to be acting as if certain relationships existed among themselves or between them and the group leader (Bion, 1961). The term to conceptualize the prevailing state of a group's 'as if' life is 'basic assumption'. Basic assumptions operate outside the explicit awareness of group members and are useful in explaining why a group seems to act at variance with its stated mission. Why does a school fail to educate children? Why does an integrating group fail to come together?

The basic assumptions of groups in overbounded systems are different from the basic assumptions of groups in underbounded systems. Deriving from the authority structure, basic assumption dependence tends to be prevalent in overbounded systems. Members act as if they have come together to have their needs gratified by an all-powerful leader. Basic assumption flight-flight tends to be prominent in underbounded systems. Members act as if they must flee from the threats they represent for each other or they engage in persistent unproductive conflict. Observers can detect which basic assumption seems to be prevalent in a group by observing their own emotions. Changes in the

boundary permeability of a group are accompanied by change in the basic assumption life of the group.

Time-span

Systems vary in the span of time over which they concern themselves. Some organizations are capable of thinking and planning ahead, while others are much more short-term oriented. Overbounded and underbounded systems vary in the time perspective of their management. Because of their more certain authority relations and their more secure economic condition, overbounded systems tend to have longer time perspectives than underbounded systems. Because the threat of dissolution regularly confronts underbounded systems, they tend to have a much shorter time perspective. As the boundaries of a system become more secure, the time perspective of members tends to lengthen. But organizations whose boundaries are too secure risk difficulties from the build-up of unsolved short-term problems because members focus excessively on the future.

Cognitive work

All organization members face the problem of understanding why things happen as they do in their system. People need a set of beliefs, or a rudimentary theory, to explain what they experience in an organization, to help them interpret events that occur, and to aid them in deciding how to behave. Without such a framework they would be overwhelmed by confusion and become beset by meaninglessness. Their personal theory may come from a variety of sources and may be more or less conscious and explicit. The organization may attempt to play a major or minor role in influencing members' personal theories of how the system works. It has been demonstrated that these theories often have common themes across different types of people in a wide variety of organizations (Argyris and Schön, 1978).

Overbounded and underbounded systems differ in the nature of the cognitive work done by members. Overbounded systems are more likely to have a single coherent body of theory (or ideology) that members are expected to master and to use in their work for the system. Typically, new members are taught 'the company line' early in their careers. As people remain in the organization and move upward in the hierarchy they are expected to teach others about the organization's theory. Innovations in the organization must be worked through the existing theory or the theory must be modified to allow for the innovation. Usually both processes happen. One way to bring about change in an overbounded system is to act in new ways and later explain that the system's theory must be changed because 'we actually behave differently around here'.

Underbounded systems often have no theory at all, or else multiple theories prevail without adequate mechanisms for identifying or resolving differences among them. When there is no theory to teach new members, the system lacks an integrating framework and change may require the development of a coherent statement of mission or policy. When there are multiple theories, the system needs mechanisms for dealing with the differences in order for a greater sense of intellectual understanding to emerge. Usually the multiple theories are associated with the various warring groups whose conflict keeps the system in constant turmoil. Finding means to deal with the theoretical differences also reduces boundary permeability and aids the system to establish a greater sense of wholeness.

The 11 dimensions distinguishing overbounded and underbounded systems shown in Table 1 are conceptually distinct but dynamically interdependent. Each is directly related to the physical or psychological boundaries of human systems. Furthermore, particular dimensions are also directly related to each other. For an applied behavioural science consultant the dimensions are useful for diagnosis and for intervention (Alderfer, 1976a). During diagnosis they provide a means to determine whether a system departs from optimal boundary permeability and, if so, in which way. The more clearly the signs on several dimensions point in the direction of overbounded or underbounded conditions, the more sure a diagnostician can be that he is seeing pathology. If intervention becomes appropriate, the dimensions also provide targets or levers for change. The realities of most organizations usually provide more opportunities to change some variables than others. The list of variables provides a number of alternative routes to change. We return now to the Harmon and AOT case fragments to demonstrate how they were underbounded systems and what was done to intervene.

HARMON AND AOT AS UNDERBOUNDED SYSTEMS

Open systems theory assumes that each unit is both a system in its own right, containing subsystems within it, and a subsystem within a larger suprasystem (Miller, 1978). Harmon was one elementary school in the public school system of Elm Town, a New England city of over 100,000 people; AOT was one corporate committee within an organization employing more than 10,000 people. Within Harmon and AOT there were significant subsystems, both individuals and groups. Outside both systems there were also significant individuals and groups who, separately and together, made up the external environment of these systems.

The suprasystems of Harmon and AOT may also be analysed in terms of their boundary properties. Were they overbounded, underbounded or optimally bounded? Although the primary focus of the consultation with Harmon and AOT was on the school and the committee, information was

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Table 1 Properties of overbounded and underbounded systems

Overbounded systems	Variable	Underbounded Systems
goals clear; priority unequivocal	Goals	goals unclear; priorities equivocal
monolithic	Authority relations	multiple and competing
minimal short-term stress	Economic conditions	impending economic crisis
precise, detailed, restrictive	Role definitions	imprecise, incomplete, overlapping
difficulties with openness when people meet	Communication patterns	difficulties in determining who can and should meet
constrained; blocked	Human energy	diffuse, exhausting
positive inside; negative outside	Affect distribution	negative inside; negative outside
organizational groups dominate	Intergroup dynamics	identity groups dominate
dependency	Unconscious basic assumptions	flight-fight
long	Time span	short
single theory-ideology	Cognitive work	multiple or no theory-ideologies

available to form working hypotheses regarding the suprasystem properties of both clients. Indeed, it is essential for the consultant to form some working hypotheses about supersystem properties in order to work with any system by using open system concepts. The working hypotheses regarding suprasystem properties were different for Harmon and AOT. Harmon was an underbounded system within an underbounded suprasystem, and AOT was an underbounded system within an overbounded suprasystem. These differences will become apparent as more detail about the two systems is presented. They decidedly affect the consultation provided to the two systems, the results of that consultation, and the prospects for change from behavioural science intervention.

The Harmon School

Intervention with the Harmon School began when the consultant was invited to attend a meeting of the Harmon Steering Committee (HSC). The HSC was formed by John Smith, Harmon principal, when he decided to join the Davison Project, an independently funded enterprise designed to promote improved leadership by elementary school principals through more effective cooperation between parents, teachers, and administrators. The consultant had met the principal of Harmon when both men had served on the citywide task force for the Davison Project.

Prior to meeting with the HSC the consultant had received a copy of the HSC minutes defining the work they wished to undertake. The document was unusually explicit in identifying the many and diverse forms of conflict plaguing the Harmon School:

... there appears to be a power struggle between the two existing parents' organizations
....
It is difficult to build up trust among the staff, parents, and administration when communication is not functioning adequately

Impressed with the openness of the committee's document, the consultant arrived at the first steering committee meeting with a favourable attitude towards the group. Except for the principal, all members of the HSC were female, one of whom was black. Three members were Harmon teachers, and the other three were parents of Harmon children. The teachers represented grade levels from K to 5, and the parents had had associations with both Harmon parent groups.

All of the elementary schools in Elm City could potentially have had two parent organizations. PTAs were the older organizations and included state and national affiliations. During an era of urban unrest that influenced Elm City in the late 1960s, the School District had established 'school-community councils' as a major structural innovation to promote mutual influence among members of the school community and school staff. At Harmon these two organizations had different traditions and periodically engaged in rivalrous conflict with one another.

To a significant degree the two parent organizations at Harmon represented the different socioeconomic groups that lived in Harmon neighbourhoods. Members of the PTA tended to be white middle and upper middle class people who were concerned about college preparation for their children. Their values about education tended to be primarily academic. Members of the PTA were also very active in developing and maintaining after-school programmes to provide children with additional extra-curricular enrichment opportunities. Members of the Council tended to be more diverse, including black and white people of a wide range of socioeconomic backgrounds. The educational

philosophy of the Council tended to emphasize the whole child, including value and behavioural goals as well as academic performance.

Tension and conflict between the two parent organizations reflected the changing nature of Elm City. Effects of the disputes did not stop outside the school boundaries. Several years before the project began both white and black teachers had been persuaded to leave Harmon by parental pressure. More recently a white teacher had been the subject of parental protest and a classroom 'visit' because her teaching about the family was disturbing to a significant number of Harmon parents who were divorced singles living cooperatively. Overall Harmon's dynamics were the product of many diverse forces, and the school's location in a 'boundary region' of the city made it especially susceptible to conflict. Observation of the parent-school relationship over the duration of this project strongly suggested that the emotional fuel for the fire between PTA and the Council was deeply rooted and quite difficult to uncover or to change.

One effect of the various forms of parental pressure at Harmon was a divided and frightened teaching staff. After lengthy discussion, the HSC recommended that systematic intervention begin with the professional staff alone rather than with parents and teachers together. This proposal was made by a parent member of the HSC and strongly endorsed by the teachers and principal. The HSC believed that the teachers had been so frightened by parental influence at Harmon that they would be very reluctant to engage in direct parent-teacher exchanges without first developing greater confidence and trust among themselves and with the principal. In the preceding years formal teacher participation in the PTA and the Council had markedly diminished for similar reasons.

At this point in history Harmon was also facing other threats to its external boundaries. Like many cities throughout the Northeast, Elm City's population was declining. As a result Harmon's enrolment was becoming smaller, and for economic reasons the central administration decided that a teacher had to be transferred from Harmon. When community groups learned of the excess space at Harmon, they began a petition process to obtain rights to use Harmon rooms. Eventually Harmon parents went to court to prevent the school from being used by outside groups.

Working with the HSC, the consultant decided to pursue separate tracks of consultation with the school. The first would be with the professional staff and the second with the parent organizations.

Staff consultation

After the HSC agreed that formal consultation should begin with the Harmon staff there were a number of meetings to discuss the conditions of their participation. Initially as few as five staff (three of whom were the HSC)

attended these voluntary sessions.* Eventually the groups agreed that everyone who was willing would be interviewed. After completing the interviews, the consultant would provide an analysis of what people said without identifying individuals. Both the HSC and the whole of the Harmon staff participated in the design of the interview questions. Since the project was originally aimed to help principals improve their leadership style, the consultant suggested that specific questions might be asked about this topic. Feedback of these results would be to the principal on a one-on-one basis and later to the group as a whole if he wished. The principal readily agreed to this suggestion, and the interviews were begun. As the process of establishing the contract for this part of the project proceeded, attendance at staff meetings gradually increased. Eventually all of the teachers except one participated in the interviews. Feedback sessions were attended by everyone.

There was a total of four feedback meetings to deal with the data from the interviews. The sessions extended over an entire calendar year, with the first occurring at the close of the 1976-7 academic year. At the first session the consultant provided an overview of the entire Harmon School as he had learned to understand it from the interviews. The findings were grouped according to 'internal' and 'external' factors. The external factors described the forces acting on Harmon from without, and the internal factors dealt with relations among the staff and the principal's style. This initial session was designed to provide some intellectual understanding of the Harmon system, not to promote working through of the data. Material on the principal, for example, was in the form of a series of dimensions on which people chose to describe his style, not the kind of concrete quotations frequently used in team-building sessions. The dimensions were his: values, use of authority, relationship to subgroups in the school, and relationships to children. This session concluded with the faculty agreeing to meet again in the fall to decide whether they wished to pursue a more complete analysis of the data. After the group meeting the consultant met with the principal to provide him with more concrete data on his style as perceived by the Harmon staff. The form of this feedback was a series of 35 statements, edited to preserve confidentiality, taken from the staff interviews. For the most part the statements had both a positive tone to them and stimulating possibilities for growth by the principal. He found the session worthwhile and agreed to have a similar discussion with the staff in the fall if they wanted to continue to work as a group.

In the fall, the faculty did decide to work as a group and to spend the first session discussing the principal's style with him. As input to this session the consultant wrote 35 statements on newsprint and posted them. With concrete material before them, either the principal or a staff member could select an

*It was about this time that the episode described at the outset of this chapter took place.

item to explore in detail with the whole group. Beginning with substantial anxiety and discomfort, the session eventually transformed itself into an exciting and fruitful exchange. Although the principal felt stressed at various times throughout the session, he emerged with a strong conviction of having learned about his behaviour and with a sense of direction about how to be more effective.

As the session drew to a close and the fruitful outcome was clear, the principal indicated that he was interested in additional work if the staff were willing to confront some of their issues in the same manner that he had faced his. The staff agreed and an additional date was set. As it turned out, this session had to be rescheduled several times because of citywide meetings called by the central administration. When the staff session was eventually held several months later, important momentum had been lost.

Harmon teachers were organized as three 'education centres' according to groupings of grade levels. Cooperation among teachers from different grade levels provided the opportunity for children to have lessons fitting their development. For example, a child might be in an advanced reading group and a moderate maths programme. The learning centres were not as cooperative in practice as in design. One group of teachers worked especially well together, but the other two groups showed varying degrees of isolation from each other and from the other learning centres. The staff session on internal issues identified these dynamics more clearly than the interviews had done, but the teachers decided not to risk additional working through of their differences.

As the academic year drew to a close, the principal reconvened the staff to see whether they had seen changes in his behaviour based on the discussions they had had at the beginning of the year. People commented that they had noticed improvements on a variety of dimensions, and there was consensus among the staff about these changes. Moreover, the staff seemed to feel that the academic year as a whole had gone well. One year earlier, at the time of interviews, seven out of 10 staff interviewed indicated that Harmon 'was not a fun place to be, not a healthy atmosphere'. The staff atmosphere at Harmon seemed to have changed for the better from one year to the next.

Parent intervention

While work among the staff and principal was proceeding as described above, efforts to develop more effective relations with the parent organizations began with the start of the new academic year. Members of the HSC discussed ways to convene the leadership of the two organizations in order to explore the nature of the differences and difficulties between them. In addition, it became apparent that a substantial proportion of parents were untouched by either organization, and their energy and influence in the school was lost. The HSC took upon itself the further task of understanding why a substan-

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tial proportion of parents at Harmon were active in neither organization.

A series of meetings to explore these issues was scheduled during the fall and winter. Parent members of the HSC contacted the officers of the two parent organizations and unaffiliated parents who they thought would become more involved in the school if conditions changed. The first of these meetings took place in November. The session was attended by four unaffiliated parents — two black and two white — and by one officer from the PTA. Neither officer of the Council attended despite extensive efforts to encourage them. A detailed history and explanation of the Davison Project was provided for the people attending. It was not possible to explore the differences and relationships between the parent organizations when only one group was represented. All people present agreed to meet again, and it was decided to make additional efforts to attract Council officers to future sessions. At the next HSC meeting it was reported that the Council people had explicitly decided not to attend the joint meeting. While attending a subsequent Council meeting, the principal was asked to defend the HSC and its role in relation to the two parent organizations. During this same meeting the Council leaders suggested that perhaps the Council should be disbanded.

Another joint meeting of the HSC, PTA, and Council was held in January. This time there were three PTA representatives, one Council officer, the parent members of the HSC, and a city councilman from the neighbourhood. No unaffiliated parents were present. The Councilman was not a parent but apparently had been invited by one of the PTA people as a means of confronting the authority issues raised by discussing the relationship between the two parent organizations. Members of the HSC dealt explicitly with the councilman's relevance to the meeting and after a short and amicable discussion he decided to leave. At this point severe conflict among the remaining participants emerged. One of the PTA people charged the consultant with attempting to divide the group, and another PTA member attacked an HSC member who historically had been associated with the Council. The mood of the meeting eventually became more calm, and it was possible to explore the conditions under which more cooperative relations between the two parent organizations might be possible. Throughout the discussion it was clear that the two organizations were quite wary of each other and of the HSC as a mediator of the conflict. PTA members made it very clear that their state and national affiliations prevented a merger of the two organizations, but some were willing to consider the possibility of 'joint' meetings between the two groups when common concerns arose. Despite explicit agreements among all present that PTA boundaries would be respected, PTA officers continued to act as if their organization was under attack from the HSC for sometime thereafter.

A third PTA, Council, and HSC meeting was held several weeks later. This time two Council people, one PTA person, and one unaffiliated parent joined

the HSC parents to plan further steps regarding the two parent organizations. In advance of this meeting the teacher members of the HSC were invited to attend but decided not to join because 'they might become separated from other teachers'. This meeting showed evidence of greater commitment to the joint exploration by Council representatives but some pulling back by PTA people. Both PTA and Council representatives agreed to consult with their respective organizations to determine how a mechanism for planning a joint PTA-Council meeting might be established. A withdrawal period of several months by both organizations followed this commitment, and then, as the academic year was drawing to a close, a major large-scale session to explore the relationships between the two organizations was staged.

In a letter to Harmon parents, the principal characterized this meeting as an opportunity for 'open discussion on such topics as the pros and cons of each organization . . . and how the organizations separately and working together can contribute to a vital school-community relationship.' Present at the meeting were officers from the two Harmon organizations, city and statewide representatives from the Council and PTA, Harmon parents, and the parent members of the HSC. The meeting provided representatives from both organizations with the opportunity to describe the larger environments in which the parent organizations operated. The similarities and differences between both parent groups were examined, and opportunities for discussion by the parents was provided. Some question about the trustworthiness of the HSC's intentions was raised by a male associated with the PTA. It was clear from the meeting that while differences in objectives and legitimacy existed, the two organizations did have a significant tendency to share/compete for the right to do similar work. As anticipated, their struggles did tend to keep unaffiliated parents from joining either group and to cause teachers to be wary lest they be 'caught' taking sides with one organization against the other. Because of the struggle, both 'parent-teacher community' organizations tended to be primarily parent organizations, as others tended to stay away in order to avoid being hit in the crossfire. The large-scale community meeting was a success for problem identification; after this event it would be difficult for anyone to maintain that the existing relationship between the two parent organizations was not harmful to the Harmon School and its community. The meeting also indicated again that the HSC was a source of concern for the PTA and that the relationship between these two groups needed attention if the HSC was not to become part of the problem rather than a force for improvement at Harmon.

In subsequent sessions the HSC acted to change its relationship to the PTA and the Council by altering its membership to include those who were liaison people from the HSC to the two parent organizations. Initially, this process seemed clumsy. At the first meeting of the reconstructed HSC neither of the new members was present. Following that there was some dispute with the

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PTA regarding whether the new members was an HSC members acting as liaison to the PTA or a PTA officer acting as liaison to the HSC. Individual members of the HSC spoke to the new member, however, and eventually the HSC was reconstituted as intended. With its recomposed structure, the HSC was in a position to take the next step in changing the Council-PTA relationship. That occurred during the fall of the subsequent academic year.

Council had been showing increasing signs of being a collapsing organization. Even the PTA insisted that before they would talk about improving relations with Council they wanted to deal with a revitalized organization. Otherwise, what would be the point of expending the energy? The HSC, with the full knowledge and support of the PTA, took on the task of reviving Council or of ascertaining that Council did not have enough support to continue to exist. Along the way, the HSC learned that municipal funding for Council had collapsed at the close of the preceding academic year. As a consequence Council's major basis for legitimacy as a link to city government also ended. This discovery did not close the matter, however, because the Harmon community might nevertheless wish to support the organization for its own purposes. Through advertising in a neighbourhood newsheet and sending notices to Harmon parents, the HSC sponsored another community meeting, this time to decide the fate of the Council. The meeting was chaired by two members of the HSC, a parent and a teacher, known for their evenhandedness and interest in Council matters. The meeting drew sparse attendance but included two PTA officers and four former Council activists, two of whom were black. In a meeting noteworthy for its orderliness and rationality, the group decided that there was not enough interest to sustain a Council at Harmon and that two key functions unique to Council would either be adopted by the PTA if they wished or be maintained independently by the principal if the PTA did not wish to take on the additional work. With the Council gone as an organization, the conflict between the two parent organizations could no longer plague the principal, the teachers, or the unaffiliated parents of Harmon School.

Conclusion to the Harmon case

This report concludes with the decision to eliminate one of the two Harmon parent organizations. Over a two-year period consultation with the Harmon School was associated with moving the school towards more optimal boundary permeability and away from severe underboundedness. Intervention targets were the authority of the principal, the small group dynamics of the Harmon staff (including the basic of assumptions of this group), and the intergroup dynamics of the parent organizations. Related to the intervention programme were a more positive feeling among the Harmon teachers, largely derived from greater openness between principal and teachers, and a more stable, less crisis-

oriented external environment, mainly achieved through the elimination of severe conflict between two parent organizations. Boundary permeability of the Harmon School was thus altered through both internally and externally oriented interventions. If the project continued there would be an expectation of further improvement in peer relations among the teachers because they would have less reason to define roles that promoted withdrawal from meaningful contact with one another in order to avoid being played off against each other by the competing parent organizations.

The project was provided with unexpected influence when the economic conditions of one parent organization severely worsened. A problematic feature of the newly structured Harmon system pertains to its impact on black families in the Harmon neighbourhood. Although the HSC and the various community meetings included the participation of strong, articulate black members, the net effect of eliminating Council was to remove an organization whose values seemed to speak more clearly to minority concerns than the PTA had. Unresolved questions are whether the PTA will expand its value base under the new structure and whether black families will become an important force in the single parent-teacher organization at the Harmon School.

The AOT executive committee

AOT was a committee of nine regular members and two quasi-members. Seven regular members held line responsibility for the corporation's major geographical regions. The co-chairman headed staff units, and the two quasi-members were also leaders of staff groups. The line managers differed from one another by the type of geographical region they served. Four of the line managers headed 'urban' regions where service was provided primarily for commercial and residential customers within medium-sized cities. The three other line managers headed 'suburban' regions where the geographic areas were larger and the distance between customers was greater. Inevitably, different managerial problems arose because of the customer conditions.

Cutting across the differences between staff and line and the differences within staff and within line managers was another important variable influencing relations among the committee members. Although all members of the committee were 'peers' by virtue of being at the same organizational level, there was an important difference between the men in terms of their mobility potential in the corporation. For some their present job was as high as they would go, while others could expect future promotions. Competition among the managers — particularly among those holding line positions — was further enhanced by a company indicator system that compared managers on a variety of performance dimensions.

Work with the AOT committee can be divided into two phases. During the

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First period the consultant attempted a series of 'one-shot' interventions. Individually these efforts varied in their effectiveness, but cumulatively they had no positive impact except to set the stage for a more comprehensive second phase. In the second period the consultant developed a clear contract with the group and executed a planned change programme that substantially reduced AOT's boundary permeability.

Phase 1: three strikes and you're in

There were three separate intervention attempts during the first phase. Each seemed to be rooted in the assumption that a minor adjustment could restore the committee to effective functioning. All were based on well-known organization development technologies. And each one was flawed to a greater or lesser extent by the consultant's becoming enmeshed in the committee's own underbounded dynamics.

The first strike was focused on helping the committee develop its own set of objectives. AOT was part of an organization that maintained its own corporatewide management-by-objectives (MBO) programme. At the time when the intervention with AOT began, it was 'fashionable' to develop committee MBOs. The internal consultant's first assignment with the committee was to help the group to develop a series of MBOs.

On the first attempt to conduct individual and group brainstorming in a meeting set aside for this purpose, the internal consultant did not even get on the group's agenda. He attended the session as planned and observed the group become diverted from its stated objective by an emergent discussion about the reorganization of a major portion of the company. As time passed in this session the chairman became increasingly concerned lest the consultant be prohibited from working with the group on their planned agenda. On three separate occasions, the committee simply refused to permit the consultant to speak after he had been introduced by the chairman. This session ended without their being able to do the work that he entered the meeting to accomplish. However, as the meeting ended, the group reaffirmed its commitment to work with the consultant, and they scheduled another meeting two weeks hence to try again.

The second strike took place as planned two weeks later. At the start of this session a new leader for AOT was announced, and a new member was added to the group. Both of these changes seemed to add stability to the group, and the consultant was able to execute a new design for group problem-solving he had planned for the group. Although the group worked efficiently and enthusiastically with the consultant, they were unable to complete their problem-solving within the time allotted. Nonetheless all responded favourably to the activity, and the consultant received many positive comments for his contribution. Reflecting on the episode some time later,

however, the consultant indicated that despite the satisfactory evaluation, he remained uncertain about the effects of the consultation. His intuition was subsequently verified when the group attempted to finish the work several weeks later. At this meeting the consultant's work was first on the agenda. But the underbounded nature of the group once again took its toll. As the consultant was beginning his work, an outside presenter who was scheduled to be sixth on the agenda arrived, and the group deferred to his wishes to speak. After this work was completed, an unscheduled request to speak by a staff member from outside the committee arrived unexpectedly and was permitted to proceed. The session continued in this manner and ended without the consultant being able to work. In reviewing the meeting, the managers acknowledged that they were decidedly unable to control their fate as a group. The consultant experienced disbelief about what had happened to him and to the group. Nonetheless, the process was still not at an end.

The third strike occurred in response to an intervention planned jointly by the consultant and the committee co-chairmen. As a means to achieve some common basis for discussion within the group, the three decided to ask the group to develop a common job description for the seven line manager members of the committee. These seven men had the same job title, a position of extreme importance and usual challenge within the corporation, but there was no common statement of their responsibilities. In fact, they prided themselves, not only on the concrete differences in the assignments they faced, but also on their unique styles in solving their management problems. One of the co-chairmen had recently occupied one of these line positions and during his tenure had developed his own job description. As homework for the next committee meeting, each member was asked to take this one job description and use it as a starting point for writing his own. The hope was that from the seven separate job descriptions the group could identify common themes and use them to develop a single (universal) statement of responsibilities, which in turn would help to unite the group. Once again the committee dynamics did not allow the consultant to get on the agenda. By this time it was clear to all that serious problems were preventing the consultant from being effective and that it was time either to terminate the relationship or to develop a substantially different approach. The impetus was to continue working with the group because the consultant's problems to this point, at worst, were no different than those of the individual group members. Moreover, AOT was a tremendously important corporate group, and stories about its working difficulties were a continuing embarrassment to members within the upper corporate strata.

Phase 2: three steps to coherence

The second phase of intervention with the committee was deeply rooted in an explicit acknowledgement of the difficulties — indeed failures — of the first

phase. Yet the emotional tone of this situation was not one of blaming, scapegoating or denial. Serious problems existed; all parties shared in their making; and everyone had a stake in improving the condition of AOT. In contrast to the first phase, the members of AOT no longer shared the illusion that short, quick intervention could help. They had had three painful episodes to demonstrate the contrary. Now they were ready for more sustained, intensive work; and the consultant was no longer willing to do less.

The first step in the second phase actually began outside the committee meetings. During the first phase of the AOT work, the consultant, as well as the AOT committee members, had been participating in a leadership succession experience. His own supervisor had been reassigned and became a member of AOT as a result. As a result, the consultant had been working several months without a boss until his new supervisor completed his former assignment and moved to become the consultant's full-time supervisor. The new supervisor was a former member of AOT who had stopped attending their meetings because the efforts were so unproductive.

Once on the job the consultant's new supervisor took a major role in developing the Phase 2 activities. He contacted all members of AOT individually to determine whether they wished to stop the consultation or to continue in a new mode. Receiving positive responses from all committee members, the consultant's supervisor thereby helped to set the stage for an explicit contract between the consultant and the group. The remaining step was to determine who should participate in the intensive work. AOT, after all, had several 'quasi-members' as well as their regular members. AOT members were themselves split on this issue. Because the quasi-members were staff managers, there was some tendency for the staff members of AOT to want them included. In the end, the group decided that they should not be part of Phase 2. With that decision, the group reduced the permeability of its own external boundaries and more clearly established the roles of group members in relation to one another.

Step 1 ended with an explicit contract with the consultant regarding his interviewing each regular committee member about three major topics: the committee itself, the roles of the individual managers, and the nature of staff/line relationships among committee members. These data were to be analysed and fed back to the committee in group sessions. The consultant agreed to work with the committee to make changes if the data indicated clear directions to take.

Step 2 in this process consisted of the interviews and data feedback. It took one month for the consultant to arrange appointments and to interview the nine committee members. Data from the interviews were transcribed anonymously and recorded under the three major topics of the interviews (i.e. the committee itself, the managers' jobs, and staff/line relationships). Feedback was organized around the same three topics. As it turned out, one complete day was devoted to discussing the managers' roles and staff/line

relationships. A second day was used for reviewing the data about the committee itself. In designing this feedback a decision was taken to deal with the more external (and slightly less threatening) data first and then to address the internal dynamics of the committee. This approach added further strength to the group boundary by addressing the external forces affecting the group in advance of (and as preparation for) dealing with the more disturbing internal consequences. This strategic choice in feedback follows directly from the situation, introducing the more conflict-laden material pulling the group apart initially would have only accelerated its already existing chaos. For an underbounded group to deal with internal conflict, it is necessary to strengthen the external group boundary so that, when the internal conflict arises, the group boundary is not as easily threatened. The consultant's interviews with individual managers in the data collection phase also served to bond the group together through the relationship each committee member developed with the consultant. Relationship building of this sort is essential for any group intervention. In an overbounded group, the aim of relationship building is to aid information flow, while in an underbounded group the purpose is to strengthen member ties to the group as a whole.

Step 3 in the intervention process was for the committee members to achieve agreement about a set of explicitly stated operating procedures for the committee. To aid this activity, the consultant prepared a theoretical analysis of the committee as an open system with inputs, internal processes, and outputs. The feedback data became the stimulus for committee decisions about how to structure itself in order to work more effectively. In the end the committee produced a statement about the role and operating procedure for the AOT committee that consisted of five parts: (1) functions; (2) membership; (3) leadership; (4) process; and (5) external relations. The statement of functions defined the goals of the committee. With this statement the intervention resulted in a clarified goal structure for the committee. The section on membership determined who was and was not a committee member definitively. It solidified the group's boundary. The statement on leadership legitimized the leader's role in executing and maintaining the structure agreed upon by the members. Especially significant in the section on leadership, however, was also a statement about followership, 'All members share responsibility for orderly conduct of meetings'. As might have been anticipated, the portion on group process was the most extensive and detailed of all. This section included items regarding both external processes (e.g. screening of agenda items) and internal processes (e.g. provision for 'conscientious dissent' by members in relation to majority opinions). Finally, there was a statement about the group's external relationships with superior, peer, and subordinate groups in the corporation.

Conclusion to the AOT case.

After a period of sustained chaos, order had been restored to AOT. The committee members expressed satisfaction with their own work and with the help that had been provided by the consultant. Many organization development interventions aim towards 'unfreezing' tightly controlled groups. But AOT did not suffer from conventional symptoms. Maintaining the metaphor, one would say AOT needed 'freezing', not unfreezing. The Phase 2 interventions helped to move the group from unproductive disorder to sophisticated group effectiveness. The forces for disorder and for change came from outside AOT as well as from inside, and the actions that brought about change addressed the external forces on AOT as well as the internal dynamics characteristic of the committee. The revised and consensually adopted operating procedures made an important difference by providing a greater sense of control of AOT by its members. Nonetheless, AOT was located at a point in the corporation where many important, often conflicting, issues has to be resolved. The external forces influencing AOT members did not go away because the members had learned to manage themselves more effectively. The group would continue to struggle with the 'pulls' towards being an underbounded system even after the successful intervention was completed.

COMPARISON OF HARMON AND AOT AS UNDERBOUNDED SYSTEMS

The Harmon and AOT cases illustrate the special dynamics of consulting to underbounded systems. Differences between the two systems included their size, purpose, and suprasystem properties. Harmon was an organization of several hundred people and several major groups. AOT eventually became a group of nine individuals. Harmon was a school whose primary mission was to educate elementary school children. AOT was a coordinating committee whose dual purposes became to process information and to make decisions. Harmon's suprasystem was diffuse and extremely underbounded. AOT's immediate environment was a conventionally structured, overbounded business corporation. Similarities between the systems included their initial underbounded conditions on most of the 11 dimensions defined to diagnose system pathology:

Goals

Harmon seemed clear about its primary goal of educating elementary school children. AOT was without a clear goal structure.

Authority

The Harmon principal's authority was regularly in danger of being undermined by the warring parent groups. AOT had co-chairmen whose leadership was not legitimized by committee members.

Economic conditions

Harmon was facing increasingly difficult economic conditions. AOT operated within a relatively prosperous corporation.

Role definitions

Harmon teachers and parents as a whole did not have a common agreement about their roles, especially in relation to each other. AOT members were unable to meet each other's expectations with regard to running effective meetings.

Communication

Harmon teachers were reluctant to attend voluntary meetings to improve their relationships. Harmon parents who identified with the two warring organizations were extremely reluctant to appear in meetings with each other. Some AOT members were irregular attenders of committee meetings.

Energy

Harmon teachers, in particular, felt that their efforts to influence the direction of their school did not seem to make a difference. The AOT managers felt decidedly out of control of their meetings.

Affect

Both Harmon and AOT members showed primarily negative feelings about their system.

Intergroups

Harmon teachers and parents were feeling the pulls of different ethnic and social class groups in shaping the school. AOT managers were experiencing the struggles of upward mobility and competitiveness influencing their relationships with each other.

Unconscious basic assumptions

Harmon teachers and parents showed a marked tendency to vacillate between fighting and avoiding each other. AOT members attended meetings irregularly, permitted inside and outside interruptions to their planned agenda, and repeatedly demonstrated dysfunctional conflict in their meetings.

Time-span

Harmon parents and teachers reported several incidents where the school was influenced by crises rooted in the community (e.g. demands for space in the school by a local day-care group) or in the city (e.g. bussing of students from another school that had been closed for economic reasons). AOT managers saw their meetings changed by unplanned outside speakers and by emotional demands to discuss issues surrounding corporate reorganization. They literally were unable to plan ahead as much as a year in advance in terms of major objectives.

Cognitive work

Neither Harmon nor AOT seemed to have a common intellectual framework for understanding their systems.

Thus, Harmon's and AOT's underboundedness differed substantially only in goal structures and economic conditions when consultation began. Both systems were severely underbounded and seemed to benefit from organizational consultation. In each setting consultation was directed towards both external and internal dynamics. The attention to factors inside and outside the system's boundary differentiates underbounded consultation from more conventional organization development. It recognizes and utilizes the environment as an important ingredient in producing system change (Pfeffer and Salancik, 1978). Affecting the external environment requires less energy and can be more clearly focused when the suprasystem is overbounded than when the suprasystem is underbounded. In fact, consultation to underbounded systems may demand more from professionals than work with comparable overbounded systems.

NOTE

After an early draft of this chapter was completed the author received a draft of L. Dave Brown's forthcoming paper 'Planned change in underorganized systems', in T. G. Cummings (ed.), *Systems Theory for Organization Development*, Wiley, 1979. The two papers have similar conceptual roots, developed in our work together, but they focus on different case studies and

elaborate different theoretical points. We cite each other's work when it is relevant, but the papers were in fact independently developed even though they have much in common.

REFERENCES

- Alderfer, C. P. (1976a) 'Boundary relations and organizational diagnosis.' In Meltzer, H. and Wickert, F. R. (eds.) *Humanizing Organizational Behavior*. Springfield, Ill.: Thomas, pp. 109-33.
- Alderfer, C. P. (1976b) 'Change processes in organizations.' In Dunnette, M. D. (ed.) *Handbook of Industrial and Organizational Psychology*. Chicago: Rand-McNally, pp. 1591-638.
- Alderfer, C. P. (1977a) 'Group and intergroup relations.' In Hackman, J. R. and Suttle, J. L. (eds.) *Improving Life at Work*. Santa Monica, California: Goodyear, pp. 227-96.
- Alderfer, C. P. (1977b) 'Organization development', *Annual Review of Psychology*, 28, 197-225.
- Argyris, C. (1957) *Personality and Organization*. New York: Harper and Row.
- Argyris, C. (1962) *Interpersonal Competence and Organizational Effectiveness*. Homewood, Ill.: Dorsey.
- Argyris, C. and Schön, D. (1978) *Organizational Learning: A Theory of Action Perspective*. Reading, Mass.: Addison-Wesley.
- Astrachan, B. (1970) 'Towards a social systems model of therapeutic groups', *Social Psychiatry*, 5, 110-9.
- Berg, D. (1977) 'Failure at entry.' In Mirvis, P. H. and Berg, D. N. *Failures in Organization Development and Change*. New York: Wiley, pp. 33-56.
- Bion, W. R. (1961) *Experiences in Groups*. New York: Basic Books.
- Brown, L. D. (1979) 'Planned change in underorganized systems.' In Cummings, T. G. (ed.) *Systems Theory for Organization Development*. New York: Wiley.
- Brown, L. D., Aram, J. and Bachner, J. (1974) 'Interorganizational information sharing: a successful intervention that failed', *Journal of Applied Behavioral Science*, 10, 533-54.
- Brown, L. D. and Brown, J. C. (1973) 'The struggle for an alternative: a case study of a commune', *Human Organization*, 32, 257-66.
- Buckley, W. (1967) *Sociology and Modern Systems Theory*. Englewood Cliffs, N.J.: Prentice-Hall.
- Campbell, D. T., Kruskal, W. H. and Wallace, W. (1966) 'Seating aggregation as an index of attitude', *Sociometry*, 29, 1-15.
- Firestone, W. A. (1977) 'Participation and influence in the planning of educational change', *Journal of Applied Behavioral Science*, 13, 167-83.
- Friedlander, F. and Brown, L. D. (1974) 'Organization development', *Annual Review of Psychology*, 25, 313-41.
- Gulick, L. and Urwick, L. (1937) *Papers on the Science of Administration*. New York: Papers on the Science of Administration.
- Jaques, E. (1952) *The Changing Culture of a Factory*. London: Tavistock.
- Katz, D. and Kahn, L. (1978) *The Social Psychology of Organizations*, 2nd edition. New York: Wiley.
- Lett, E. E., Clark, W. and Altman, I. A. (1969) *A Propositional Inventory of Research on Interpersonal Distance*. Bethesda, Maryland: Naval Medical Research Institute.