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Quality of Working Life and Community Development¹

Some Reflections on the Jamestown Experience

Many of those concerned with quality of working life (QWL) innovations in the late 1960s and early 1970s, including myself, were surprised at the difficulties encountered in diffusing such innovations from one organization to another. Experience suggests that such diffusion occurs largely through personal contacts between employees of both organizations. When organizations are located some distance from one another, the number of persons in one organization who can have direct contact with those in another is severely limited. In a relatively small community, however, many persons in a variety of organizations can more easily be in personal contact with one another. This led me to predict that the diffusion of innovations would be accelerated in Jamestown, New York, where the community had formed an areawide labor-management committee to promote and develop the city's industries.

In the early 1970s, however, QWL was considered novel and many were uncertain as to its outcomes, especially with respect to performance. The idea that a new paradigm of work was beginning to emerge (Emery, 1977), as suggested by extensive developments in Norway and Sweden, had scarcely taken root in the United States, even though a federally supported program had just been inaugurated by the National Commission on Productivity and Work Quality (NCPWQ). Under these conditions, QWL could not be expected to be the leading emphasis of an innovative effort in industrial and economic development at the community level. In the case of an effort that had already been initiated, though, I considered that QWL might become linked to it. To succeed, it was theorized that a local initiative must be set in a community that meets the

¹A reproduction of the original--Journal of Applied Behavioral Science, 22:223-37, 1986.

following two requirements:

- Residents sharing a common destiny, thus enabling the community to maintain social cohesion despite the presence of conflicting interest groups and values.
- The presence of a leadership cadre capable of creating an organizational medium (see Heider, 1959) to sustain the original thrust of the initiative over a long period.

Previous work in a deprived community in Edinburgh, Scotland (Burgess, Vol.III), had shown that under conditions of crisis in which established organizations had failed to address salient issues, the appearance of "an independent, innovating organization" with strong links to the main local interest groups was capable of initiating an unfolding change process of considerable robustness (Trist, 1979). This set of starting conditions is relatively rare, but I set out to scan the environment in the hope of locating such an innovative process and finding a way to link QWL to it. The development that had begun to take place in Jamestown seemed to provide such an opportunity. With a small grant from the NCPWQ, I approached the Jamestown Area Labor-Management Committee (JALMC) in April, 1973.

Following this meeting, I became involved in a long-range action-research relationship with the JALMC. From 1973 to 1978 I was in Jamestown once or twice a month for two or three days per visit, and sometimes for much longer periods. Two of the doctoral students working with me during that time, John Eldred and Robert Keidel, resided in Jamestown during these years so that socio-technical assistance could be continuously available. From 1978 to 1980, I appeared on site much less frequently in order to reduce my role in the effort. Since then my contact has been indirect although I keep informed of relevant events.

This paper offers a historical overview of the multifaceted developments that have taken place in Jamestown from the formation of the JALMC to the present. I emphasize the linkage of the committee's work to QWL and the effect of this linkage on a number of QWL concepts and methods. The process as a whole is treated as an early example of "the new localism," the first involving QWL.

I present this account as "a story" to facilitate the description of a complex and evolving change process as it occurred over a long period. Story-telling of a thematic and analytic nature, rather than a merely anecdotal kind, is a useful methodology for describing a nonlinear change process brought about by actual decision makers, in contrast to a discrete experiment designed by social scientists. Story-telling for this purpose has been advocated by Michael (1973) and Schon (1980) in the policy and planning field and by Trist (1979) and Williams (1982) in the organizational and community fields. Jamestown has become a social saga. QWL has several such sagas, including the British coal-mining studies (Trist et al., 1963, Vol.II:84-105), the Norwegian Industrial Democracy Project (Emery and Thorsrud, 1976, Vol.II:492-507), General Foods' pet food plant in Topeka, Kansas (Ketchum, 1975) and Shell Canada's new chemical plant in Sarnia, Ontario, whose design involved unions from the beginning (Halpern, 1984; Rankin, 1986; Davis and Sullivan, 1980, Vol.II:532-53). These projects may be interpreted in various ways, but they all have yielded insights that have had a major influence on the development of QWL. This paper provides my own interpretation of what has happened in Jamestown, with emphasis placed on the earlier phases, although recent developments are presented as well.

The Jamestown Setting

Jamestown is a small manufacturing city in western New York State. The city itself has 40,000 inhabitants, and an additional 35,000 persons live

in the surrounding area, including the neighboring New York town of Falconer and the town of Corry-Jamestown across the Pennsylvania border, which has similar industries and is represented on the JALMC. Together, these places constitute a "microregion" (Trist, 1981), a spatially linked area with residents having common interests and a common destiny, an area so compact that residents can drive to and from work in the same day. A microregion represents a type of social field in which networks play an important part in the diffusion of new ideas, values and practices (Nelson, 1986), and a high potential exists for the development of an emergent common culture.

The traditional industries of the region have been wood furniture and metal work. Industries focussing on engineered products, glass and ceramics arrived after World War II. No new industries followed until after the JALMC had been formed, and by that time the majority of the wood furniture firms had moved south.

Most Jamestown plants are small, with old buildings and maze-like layouts. Until recently, most of them had been family-owned by descendants of the Swedish families who set them up. They have been patrimonial rather than bureaucratic, with modern management techniques and organization conspicuous by their absence. The majority of the original work force was Italian, and this difference in ethnicity as well as one in class led to a tradition of low wages and widened the gulf between management and labor. This was the pre-World War I foundation of the mutual hostility that persisted until the JALMC changed the climate of labor-management relations.

Beginning in the early 1960s, several of the local firms were sold to large out-of-town companies that did not do much to upgrade the old plants, although they did introduce a degree of professional management.

Nevertheless, local firms bore the brunt of the economic decline that had been continuous for 30 years. In 1969, the largest local metal firm, Art Metal, went bankrupt after building a million-square-foot facility. This facility stood vacant until 1974. Unemployment rates grew to more than 10 percent.

The work force was highly unionized, militant and strike-prone, and relations between labor and management were among the worst in the United States.

The only sign of growth in area industry occurred in the building industry, which saw a boom in the demand by prosperous people from Buffalo and Cleveland for lake-front houses in the resort area north of the city. A labor-management committee had been formed to ensure that a large share of the work involved in house construction went to Jamestown firms. But the building industry was entirely separate from the manufacturing sector, and its labor-management committee was never mentioned by the JALMC. Its existence, however, suggested that a capacity for collaborative innovation was latent in the area.

Nevertheless, children were taught not to work in local plants and high schools prepared their best students to go away to four-year colleges and find careers elsewhere. The local community college turned its back on Jamestown industry and provided few courses relevant to its needs. The persistent emptiness of the large closed plant created a widespread consciousness that the area's future was precarious, that either decline would continue or residents must take the initiative to improve the situation.

The JALMC

Local initiative was taken in 1972 when a young and talented mayor--Stan Lundine, now [1986] a member of the U.S. House of Representatives (Lt.Gov. of New York since 1987)--who was re-elected with bipartisan support, worked with the regional director of the Federal Mediation and Conciliation Service (FMCS) and one or two other influential persons--such as Joe Mason, who was later labor co-chair of JALMC for 10 years--to bring together the company presidents from all plants employing more than 75 persons in a special meeting to confront the situation. Representatives from management and labor had never before met away from the bargaining table, but after a series of

stormy meetings in which each side blamed the other for the decline, the mayor succeeded in obtaining a commitment from both sides to collaborate to rebuild the economic prosperity of the area. The committee was then able to stop the drift of more firms to the south and to arrange for the refinancing of five others by local banks and private investors. The senior managers of these firms came from those made redundant by the collapse of Art Metal.

Representatives of 27 companies and the local branches of 10 international unions initially composed the JALMC, which has since doubled in size. The committee co-chairs are from labor and management, and the executive board consists of equal numbers of representatives from both sides. The mayor continues to fill an advisory role, as do the city ombudsman and a representative of the FMCS. The committee's objectives encompassed the improvement of labor relations, manpower training, industrial development and productivity through cooperation between labor and management. To appreciate the interdependence of these four objectives--especially the last--in a highly unionized environment was novel.

The JALMC has now existed for more than 14 years and shows every sign of persisting despite many vicissitudes. It maintains a full-time staff, without which it could not implement its decisions, and has appointed task forces to address special issues. Throughout this time, the JALMC has been the main agent of change in the Jamestown area. Moreover, the relevance of its activities to the wider society has enabled it to draw on outside resources of money and people. These essential resources have not led to dependence, but have been used to strengthen internal capability.

When, as in the case of the JALMC, an independent, innovating organization proves it worth, it acquires the properties of a "referent organization" (Trist, 1983, Vol.III), which one may regard as the equivalent in an interorganizational domain of a reference group for an individual. As such an organization begins to influence more individuals and organizations over whom it has no formal authority or control, it becomes endowed with

"referent power" (French and Raven, 1962), which enables the referent organization to bring about a series of substantive--as distinct from marginal--innovations (Chevalier and Burns, 1978). Thus, a referent organization can become the carrier and symbol of an emergent culture.

With respect to labor-management cooperation, the JALMC became such a carrier and symbol. Almost from the beginning, the words "labor-management," meaning labor-management cooperation, were repeated liturgically on innumerable occasions in many settings. The words' meaning was not clear at first to those using them, but they gained meaning through the actions of the committee and became the theme of the emergent culture.

The Initial Program

On my first visit to Jamestown in April, 1973, I found that the JALMC had not met for a considerable time. Having established a new climate of labor relations, prevented one or two plants from moving south and salvaged others financially, the committee seemed uncertain as to what steps to take next. That the NCPWQ should have included QWL in its program and linked it to productivity carried weight with the members. They also thought that the JALMC's being associated with the commission would better enable it to obtain funds directly from a federal agency, which the committee had so far failed to do. Within the next two months, however, they succeeded in obtaining a small grant from the Economic Development Authority (EDA) of the Department of Commerce, which, together with funds made available by the city, enabled the JALMC to appoint a full-time coordinator.

The members of the committee who had heard of QWL thought of it as a "technique" used by large organizations to reduce monotony on assembly lines. Jamestown industry did not use assembly lines; instead, industry consisted of job shops having a great variety of work and few levels of management. I told the JALMC that no one had yet attempted any QWL

interventions in plants of this type and that I would have to find out what such efforts might consist of. I offered to come back for three months in the summer with John Eldred to learn about Jamestown plants first hand, and the committee accepted my offer. Following a field study of 15 work sites across the four main industries, Eldred and I presented two proposals to the JALMC at the end of August, 1973.

Skills Development

From our study, we found that a serious skill shortage was mounting in the wood and metal working industries. Our first proposal was that the problem be addressed at the level of individual plants, and that the JALMC take immediate steps to develop a cooperative training scheme to avert an impending crisis.

The key skills in the wood and metal working industries were developed in-house. The work force was aging--in one plant the average employee age was 55 years--and many of the individuals with these key skills would soon be retiring. There were no training schemes, which could not easily be afforded by small firms. The long years in dull entry level jobs at low pay were causing high employee turnover, so the skilled work force was becoming sealed off and not being replaced.

In the past, Jamestown had a tradition of informally sharing resources for skills training between firms, but this had lapsed during the years of decline. We suggested that the JALMC seek to find ways of reviving this tradition.

The committee accepted the proposal immediately, seeing it as relevant to their condition and something that they themselves could initiate. Within a few weeks, a cooperative skills development program emerged. A senior union official, who hitherto had expressed reservations about any form of cooperation with management, took a leading role in its development. The

community college which, as noted earlier, had turned its back on local industry, provided courses to train key workers as instructors who could then carry out jointly designed skills development programs in the plants. The County Manpower Authority provided funds and several other organizations contributed as well, so the committee showed itself capable of bringing into existence a consortium of organizations pooling their resources. This demonstrated a capacity for interorganizational collaboration which created a good deal of local excitement and gave the committee an orientation toward the future. The skills shortage crisis had been anticipated and action taken before such a crisis erupted. In Ackoff's (1974, Vol.III) terms, this represented a move from a reactive toward an interactive and "proactive" posture—a major advance in social learning.

The skills development program has remained in continuous operation and has appealed to many more plants besides those inclined to use QWL projects. It had the merit of reviving something that had been lost rather than introducing something that was new, and thus did not threaten the status quo. By 1982, 942 workers had graduated from courses covering a wide array of skills in all the main industries, although the wood furniture industry had given the initial impetus.

In-Plant Labor-Management Committees

We also found that none of the plants offered a legitimate forum outside the contract negotiating machinery to promote cooperation between management and labor in developing concrete projects to increase organizational performance and make jobs more worthwhile. We felt that without such a forum an endeavor at the community level would not likely be sustained and that only the establishment of in-plant labor-management committees (LMCs) would make possible the reaffirmation of the JALMC's mandate at the local level. We therefore suggested that LMCs be started

simultaneously in three to five different places to show that a general movement forward was intended, and to avoid the damage to the concept that might result if any single attempt failed. We stressed that all projects should be proposed by the LMCs themselves, not imposed on plants by anyone outside them. To secure the plants' active participation was of primary importance. Emphasis on QWL could come later.

The committee accepted this proposal, but with dubiety. The proposal broke new ground. Moreover, the JALMC could only affect the outcome indirectly, as the plants would have to volunteer for the effort. The prestige of the JALMC was sufficient, however, to enable five rather fragile LMCs to be set up during the fall of 1973.

A bonus scheme was successfully introduced in one of the refinanced plants. In another, the workers helped inspect their own finished products, but after several successful months a costly mistake occurred that caused this project to be terminated summarily. The long-established local branch of an out-of-town firm involved shop stewards in production scheduling, a project that began bravely but ended when changes occurred both in management and in union leadership. A more recently established branch plant attempted to improve communications on the basis of attitude surveys; eventually this had the reverse effect. In a local family firm, the LMC set up a task force to reduce breakdowns in a key department and a modest degree of success was achieved.

These projects were a manifestation of the issues with which the first LMCs were prepared to engage. Coaxing them into existence was heavy work for the convener and myself, as on site the level of suspicion toward the LMCs remained high, despite the respect for the JALMC.

The Institution of an Annual Conference

In November, 1973, the JALMC held its first annual conference

which was attended by more than 100 persons, including outsiders. The keynote speakers were the personnel director and the union president from Kaiser Steel's plant in Fontana, California, in which productivity improvements resulting from labor-management cooperation had averted plant closure in the face of Japanese competition. This story increased local confidence in the five Jamestown teams far enough along to make presentations about their own initial efforts. A presentation about the skills development program was also made, as was the announcement that the region had experienced no strikes for two years and that unemployment had dropped from 10.2 to 4 percent. In his closing address, Richard Walton (Professor of Business Administration, Harvard University) presented an overview of the QWL field, which was the first opportunity many of those present had had to learn about QWL.

At subsequent conferences attendance grew to between 300 and 400 specially invited individuals, including distinguished outsiders from overseas as well as the United States. National figures from management and labor gave supporting addresses, as did one or two members of Congress and the governor of the State of New York. The duration of the conference was extended from one to one-and-a-half days to allow for a series of concurrent sessions in which LMC projects were shown on videotape, with the team members present to answer questions in open discussion. Almost all the area labor-management committees initiated in the next five years were started by individuals who had attended these project demonstrations.

The annual conference, in which the JALMC presented itself both to Jamestown and to the outside world, became an important ritual in the evolution of the new work culture of the region. Conferences enable the JALMC to remain in contact with its growing support base on both the local and national levels.

To prevent isolation, a referent organization such as the JALMC must remain in contact with what the Emerys (Vol.III) have called "the extended social field" of those who constitute its following. This larger

group must be made part of the appreciation/learning process, which entails its members convening at important times and participating in appropriate events providing an opportunity for renewing commitment.

Resource Mobilization for Development

Further development of the LMCs met with difficulties. By 1974, I could visit Jamestown only once or twice a month, yet the LMCs required continuous attention. The coordinator was too busy to give this attention; moreover, despite a strong background in labor relations, he was not knowledgeable about QWL. My exploratory grant was running out and the NCPWQ refused to support further work at the community level. At that time, therefore, little could be done to prevent the demise of the LMCs just as they were becoming of central importance for the next phase of the JALMC's development.

The initial phase had shown the necessity for continuous assistance over a long period, which projects limited to single organizations did not usually need. As economist Peter Wiles (1967) has observed, innovation is costly. So far, everything had been done on a "shoe string." Further development depended on a major effort to mobilize resources.

During 1974, Jamestown's relations with the wider environment underwent a major change. The JALMC's accomplishments were sufficient to elicit two important responses: first, Cummins Engine, a firm at the leading edge of QWL, announced its decision to locate a new diesel plant in Jamestown and take over the empty million-square-foot facility, eventually employing 1,500 persons; second, the Municipal League declared Jamestown an All-American City. The symbolic value of these two events changed the negative identity associated with the city for so long into a positive one.

To me, this change made Jamestown undeniably eligible for

receiving funding from the federal government. The JALMC obtained a substantial grant from the EDA, not only for in-plant development, but also for more general purposes. Eldred and Keidel became employees of the committee, which increased their credibility locally. The committee also awarded a grant to the Wharton School so that my visits could continue.

With Eldred and Keidel continuously on site, my own role changed from that of being a visible leader to one of being in the background of the change effort. During my visits I would hold strategy meetings with Eldred, Keidel and the convener, and work at project sites in an advisory capacity, but would not take on any projects of my own.

During the next five years, about 12 active LMCs usually existed at any one time--as many as the two facilitators could manage. Each of these LMCs generally carried out more than one change activity concurrently. When Eldred and Keidel left, this pace continued as two more facilitators came to work on site: Pat McGuinty, another student of mine, who stayed for two years, and Chris Meek from Cornell University, who stayed for four. For two years Eldred was coordinator.

I will now describe these arrangements in detail, as they exemplify the level of socio-technical resources required for work at the community level in which multiple sites must be maintained for long periods.

The Variety of QWL Projects

Episodic Projects

Two types of QWL projects were conducted: the episodic and the systemic. The episodic projects were specific--that is, each had a beginning, a middle and an end. These were dramatic and had the potential to become large-scale. They constituted major innovations in QWL interventions, revealing for the first time the extent of the untapped capacity for problem-

solving existing in a work force. Because of their inherently temporary character, they were less threatening in their implications for key interest groups than were the systemic projects, which--if they persisted--would begin to alter the pattern of underlying relations throughout the organization, thus changing the balance of power substantially.

The first type of episodic project undertaken by an LMC addressed "job bidding"--that is, bidding for customer orders. Some of the companies, especially those doing metal working, had not succeeded in obtaining more than 10 percent of the contracts they sought. This failure led to cutbacks that small job shops could ill withstand. We reasoned that if workers could be involved in reducing manufacturing costs, more contracts could be won and management and workers would both benefit.

The original job-bidding project, facilitated by Eldred, was that of making a transfer-and-loading cart in a metal-working plant. An industrial engineer instructed participants as to vendor requirements, tooling methods, cost estimation and computer skills and knowledge. The team reduced manufacturing costs by \$90,000 in the first year, allowing the company to undercut the competitors' prices. The project resulted in \$1.5 million in additional business and the creation of 30 new jobs.

The second type of episodic project addressed layout redesign.

Jamestown plants were old and many process changes and additions had been made over the years with no overall planning. Operations in some plants were becoming so uneconomical that closure was threatened, as was the case with a ceramics foundry taken over by a large out-of-town corporation. An alternative layout redesign by consultants was estimated to cost \$10 million, which was more than the parent company was willing to pay. The LMC, facilitated by Eldred, formed a subcommittee to devise their own redesign suggestions. Employees made a total of 172 redesign recommendations, which were integrated into a formal plan presented to management. The subcommittee worked with company engineers and others to refine the proposals, which

included a new plant layout, construction of an 18,000-square-foot employee facility and office building, new production and air pollution control equipment, a new shipping facility, truck docks, an access road and a railroad spur.

The board of directors approved the LMC redesign proposal, which had an estimated cost of \$5.1 million--about half that of the consultants' plan. This is the best known of all the episodic projects.

A third type of episodic project addressed new product development. In a plant making architectural glass, the recession of the mid-1970s required the development of a new project for a different market. The LMC suggested a thermal-brake window. To achieve efficient production, the LMC formed an interdepartmental joint committee facilitated by Keidel. In addition to production layout, the LMC became involved in design, manufacturing, estimating and marketing, and the energy-efficient window has since become a leading product in the industry.

Eldred calls the multilevel and multifunctional task groups involved in these projects "entrepreneurial work teams" to distinguish them from work groups primarily concerned with their own performance and relationships. The entrepreneurial work teams were a Jamestown innovation.

Systemic Projects

The systemic projects were of five kinds. Three were common in QWL projects, although novel to Jamestown: gain sharing, performance development and work restructuring. The other two were administrative review of the labor contract--which reached a more advanced stage in Jamestown than elsewhere in the late 1970s--and employment maintenance, which was simultaneously and independently proposed by Eldred in Jamestown and by Rubenstein (1976) in a plant in West Virginia.

Gain sharing may be defined as any scheme in which the workers

help generate company improvements and share in any resultant financial benefits. Of several efforts tried, the most successful in Jamestown was an "improshare" plan which, in its first year (1978), resulted in a productivity improvement of 17.8 percent with an 8.6 percent increase in remuneration for the employees. This scheme represented a major advance in Jamestown gain sharing plans as it was plant-wide. Despite several years' success, however, the company returned to a more authoritarian style of management during the recession and the union subsequently withdrew from the LMC. Management suspended improshare and, although the atmosphere had improved at the time of my last inquiry, improshare had not been reinstated.

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Performance development refers to any joint undertaking to improve task performance in the expectation that this would preserve existing jobs and possibly create new ones through business expansion. Better shop floor planning and scheduling were prominent features of some of the more imaginative proposals. In one plant, a piece of equipment--never appropriate in the first place--that had become a symbol of management's unwillingness to change was removed and a suitable substitute installed. This had a farreaching effect in overcoming worker cynicism.

Administrative review refers to any joint initiative outside of normally scheduled conferences or negotiations to review noncontractual procedures (e.g., work rules), to study changes in dysfunctional aspects of the negotiated labor contract or to make contract adjustments in response to changing environmental conditions. This was delicate ground as traditional QWL practice was to keep all QWL issues strictly separate from those pertaining to the labor contract. Deepened trust between management and labor, however, had a spillover effect and administrative review provided a channel for bringing issues back to the bargaining unit. On several occasions this resulted in an "early-bird" contract.

Employment maintenance called for keeping a number of employees on the payroll whenever the market contracted so that they could carry out tasks

put aside during full production and either engage in training on new equipment or broaden their skills. In the plant that had introduced job bidding, a scheme of this kind was proposed by the LMC that would have saved 15 jobs, but the union membership turned it down because they thought it might somehow threaten seniority, an issue that for them apparently took priority over employment stability.

Work restructuring in the form of moving towards semi-autonomous or self-managing work teams was never truly implemented. In the job-bidding plant, however, a self-managing team was set up in an unpopular work area that could especially benefit from the application of QWL principles. Sixteen employees agreed to participate in the effort and became responsible for scheduling production, dividing tasks, assuring quality control and initiating supply requisitions. The department supervisor was redeployed and the employees in the department were each paid a \$10.00 weekly bonus. Although successful by productivity and QWL standards, the project was discontinued after a year. The bonus these employees had received had caused ill feelings in other departments in which workers with more seniority were working under conventional methods--even though it was understood that the experiment, if successful, would be extended to these workers. As self-managed work teams usually needed fewer people, unions in the area generally associated layoffs with such projects despite any guarantees to the contrary. Union members therefore avoided these experiments, while supervisors had no concept of an alternative role. For both groups, job security was of the highest priority with respect to the quality of their working lives.

The Creation of a "Theme Set"

Over time, it became evident that the large number of episodic and systemic projects generated by the LMCs could be grouped into broad categories which Keidel (1981) calls "themes." These themes included the eight described

above plus skills development. Although individual projects were often short lived (i.e., lasting less than a year), the volume, diversity and complexity of the projects grew in the industrial community as a whole. They did not move from one part of an organization to the whole organization, as we had expected, but from part of one organization to part of another; only recently have one or two firms begun to attain plant-wide change. The themes did not always spread through the consultant/researchers, but often sprang up spontaneously in firms with which we had had no contact.

The themes were compatible with one another and interrelated, composing what Keidel (1981) calls a "theme set." According to the extent of their influence, the themes could be classified as institutional (skills development), established (layout redesign), emergent (administrative review) and latent (work restructuring). They led to a public knowledge and value base to which all in the community had access according to their needs and wishes. A new concept therefore emerged from the field work and a cultural mechanism was discovered through which diffusion could take place more rapidly.

Alternate Modes of Participation

The community might have become polarized between organizations with active LMCs and those without them had not the JALMC offered additional modes of participation that kept open the channels between the JALMC and a wide group of Jamestown organizations. These modes are classified as informational (receiving regularly distributed literature form the JALMC on recent issues and activities), ceremonial (attending dinner meetings with outside speakers of national standing, participating in a summer steak fry picnic and attending the annual conference) and civic (serving on the JALMC's executive board).

As time went on modes of educational participation increased, such

as attendance at seminars, workshops and courses on QWL at the community college. Opportunities for diffusion grew as members of the JALMC and LMCs visited or hosted groups from outside Jamestown. The variety of participative options meant that all organizations in the community could become exposed to the various themes and that active LMCs could reinforce their commitment by receiving public recognition of their efforts.

Expansion into the Public Sector

Although the JALMC was originally confined to private sector manufacturing firms, in 1978 its influence spread to the public sector. That year, the committee successfully initiated projects in the locally owned public utility, despite civil service rigidity. The projects' unconventionality eventually brought them to a halt through their failure to gain the support of the New York State Authority. At one time, all 13 establishments of the public school system were involved in effecting joint improvements, which brought together academic and nonacademic personnel after a bitter strike. This project was the first occurrence of such broad participation in the educational field, not only in Jamestown but, to my knowledge, in the entire United States.

EMC. Previously separate facilities, one serving the middle class and the other the working class, the community's two hospitals created a joint system through which each covered certain fields for the whole community. A family clinic was established, as was an industrial service in which paramedics went into the plants to give immediate aid and to discover if any employees needed medical attention. A day-care center was set up for people working second shifts, which became common as prosperity returned and which created widespread problems with regard to leaving young children alone in their homes in the evenings. More recently, the JALMC's concern about mounting health

costs has led to a community-wide effort to contain costs through a preventive approach. A "wellness wagon" now visits neighborhoods and plants to assess individuals' health profiles, according to their answers to 40 questions emphasizing the importance of life style changes, and an occupational disease center has been established. Jamestown thus developed an image of itself as a "health city."

The JALMC inspired the City Development Department to review plant sites along the river and work out jointly with the companies there a number of improvements that resulted in substantial cost savings with respect to drainage and energy. Jamestown thus began to become conscious of itself as an "energy conservation city."

To the original theme of labor-management cooperation have been added themes of health and energy conservation, making the JALMC multisectorial in its role as an organizational medium and referent organization.

Recent Developments

Despite the vicissitudes of its 14 years, the JALMC has weathered several changes in its board leadership and staff. Its early success created the conditions that led to Lundine's election to Congress, and the succeeding mayor, Steve Carlson, has proved an able successor. There have been four management and two labor co-chairs, five coordinators and several changes among staff facilitators, with the last two coming from the area. A high level of competence has been maintained in all roles.

A local cadre of facilitators has been developed to work with both management and union members in their own companies. Twenty-eight facilitators have undergone comprehensive formal QWL training under a grant from the Manpower Institute and funds from the Labor-Management Cooperation Act, which Lundine piloted through Congress.

These changes suggest that community-level QWL efforts cannot survive without a wealth of leadership, and that a necessary goal of such efforts is the development of internal capacity, without which the committee would not have survived. Changes in the roles of the coordinator and technical staff show that in Jamestown internal capacity has been developed.

The recession of the mid-1970s struck hard at Jamestown but that of the early 1980s struck even harder. Two of the wood furniture firms collapsed, one in metal working, another in engineering, while still another completed the transfer of all its operatives to the south. Yet, a new company employing 600 persons has arrived and more small firms have been started. Ensuring funding for the JALMC has proven immensely difficult but the adaptive quality of resilience (Holling, 1976) which the JALMC displayed in 1973 has persisted.

As unemployment rose in 1985 to 8.2 percent, the JALMC developed a scheme for assisting "dislocated" workers in job searches and retraining. This effort has already helped 200 persons. A number of plants have become automated and require new skills. To meet this need a management training institute has been created by a consortium including the Manufacturing Association, the community college and the JALMC, thereby enabling large numbers of personnel in middle management to be better equipped to deal with a changing technological world moving at the same time into a new organizational idiom.

The number of visitors to Jamestown has grown steadily, not only from all parts of the United States, but also from abroad. Increases have also occurred in the external activities of the staff, including putting on demonstrations, conducting workshops and undertaking consulting assignments. The JALMC also realized that it could not remain the only example of a community development project that included QWL and still survive, and therefore initiated a network of Area Labor-Management Committees (ALMCs). In 1979 a national association of 23 ALMCs was formed.

A notable feature in the presentation of the Jamestown story, both to the community and to the outside world, has been the series of reports issued by the committee: Three Productive Years (1975), Commitment at Work (1978) and A Decade of Change (1982). The first two works briefly document the early phases of the change effort; the third is more elaborate and covers the whole process from the beginning to 1982. All three contain vivid pictorial records of a large number of main actors, key public events and representative scenes of LMCs at work. Their distribution has been large and widespread. Through them, the JALMC has created a written tradition that prevents concerned persons inside and outside the community from forgetting and distorting the past, and fosters social learning.

Conclusions

Meeting my original expectation, the existence of the JALMC as an independent, innovative organization in a relatively small community did succeed in bringing about a widespread diffusion of a new work culture. Starting in the manufacturing industry and spreading to other sections of the community, its value base was labor-management cooperation. Traditional adversarial attitudes were not eliminated, however, but persisted alongside the new cooperative ethos. Conflicts still occurred, but many of them were caused by infringements of the new cooperative arrangements. The JALMC took on new and complex tasks not attempted by other ALMCs at that time.

The JALMC accepted the link with QWL as being in accord with its original objectives and fostered the establishment of a large number of LMCs among its members, although only a minority of these LMCs actively engaged in QWL projects.

The meaning of QWL was extended and several new forms appeared. These displayed a greater variety than did those existing elsewhere at the time, together composing an interrelated theme set. But they differed

enormously as to the extent of their diffusion. Among them, only skills development could claim general acceptance. Product bidding, layout redesign, performance development, gain sharing and administrative review were only partially diffused, though of immense importance. Although they illustrated the base value of labor-management cooperation, they were conservative in that they did not alter the character of plants in any radical way and allowed conventional management to continue while the unions agreed only to those changes that supported their traditional concern with job security and seniority. Jamestown, capable as it was of major innovation, was a conservative place, as are most small urban communities in the United States. This contradiction was not allowed for in my original hypothesis and suggests a limit to what can be accomplished in this type of setting without intervening environmental pressures affecting survival.

In keeping with this conservatism, work redesign--which is the gateway to what is sometimes called "the new organizational paradigm"--was rejected, at least until recently. Now, in one or two places, work redesign has become plant-wide. This trend signifies the beginning of a system change that should ultimately lead to a reduction in management levels, the acceptance of self-managing work teams as a basic organizational unit and the willingness of management to share power while unions take more responsibility for the success of the enterprise. A number of large corporations have now gone further in this direction than has any plant in Jamestown, except for Cummins Engine.

The limited diffusion of most of the QWL projects--despite the sanction of the JALMC--also resulted from organizational politics. Management was reluctant to give up prerogatives; the unions often experienced factionalism of long standing and frequently saw QWL as a divisive issue undermining worker solidarity.

In my opinion, unless system change occurs in many Jamestown plants, they will not survive in the years ahead. The need for rapid

technological and market changes demands this further development. The JALMC is aware of these dangers and is likely to foster more thorough change. Without a capable independent, innovating organization such as the JALMC, small industrial communities are at a disadvantage.

The interrelated processes of QWL and community development that have evolved in Jamestown illustrate Pava's (Vol.II:644-61) concept of normative incrementalism. This refers to a nonsynoptic approach to "proactive" systems change--that is, starting a change effort with the parts or aspects of the overall system in which there is a felt need for change rather than with a design that involves the system as a whole. Such an approach requires vision and direction in setting goals, although the initial formulations of these are vague. It then proceeds in a rather disorderly, piecemeal and unpredictable way with respect to the actions taken.

One may theorize that a nonsynoptic approach is a requirement of adaptive capability at the level of complexity and uncertainty now existing in the environment (Emery and Trist, 1973, Vol.III). Whatever its contradictions, the Jamestown process reflects a gradual, cumulative, but incomplete, movement toward establishing a culture based on symbiotic relationships among organizations, groups and individuals (Perlmutter and Trist, 1986, Vol.III). In such a culture, interdependence and collaboration would qualify and constrain individualism and competition. These values are likely to become of increasing importance to the future of the United States and other Western democracies.

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