RESISTANCE TO SHOP CHANGES

BY BENJAMIN M. SELEKMAN

EVERY shop administrator knows from experience the stubbornness of disputes that rise from the introduction of new methods of work. The appearance of something new, whether in the form of a new labor-saving device, a new incentive system, a new kind of supervision, or a new process, seems to sound an alert among men at work; they mount guard, as it were, suspicious in advance that the change bodes them no good. The problem that emerges becomes particularly baffling when time and time again it appears immaterial whether an innovation affects the workers adversely or not. Indeed, even when it promises them substantial benefit, they still may pull and haul and balk.

Here is a problem for which unions, no less than managements, have as yet found no answer. A new process or policy may be instituted even with the consent of union officials, and nevertheless run into stiff opposition among the ranks of workers. Union policy toward technological innovations has of course varied. It has varied with the nature of the changes and their potentialities for employment, with the conditions surrounding their introduction and the general climate of opinion, with the traditions of the union and the quality of collective relations. For some time now, however, most union leaders have accepted high productivity as a national goal and thus, also, the right of management to introduce improvements to increase efficiency. Yet generalized affirmations to that effect by union leaders often have a hollow ring; specific shop experience appears to tell a different story. Why the discrepancy? A closer view discloses that union officials are not actually leading their members in a resistance they know must ultimately prove futile, but rather that often they fail to carry their members with them in accepting a given change.[1] Predominantly opposition stems from the men at work; union affiliation affects only the form, not the fact, of resistance.

A Persistent Problem

From the earliest days of our history this problem has been with us. On the one hand, the dynamic nature of modern industry with its incessant incidence of change has been widely accepted and even acclaimed; on the other hand, specific changes have always met resistance. We have avidly embraced the unending succession of comforts, services, and masteries that industry has brought to everyday living. We have also fiercely resisted the innovations that threatened our own individual stakes in the current economy of the nation. Both the owners and the drivers of the wagon teams on the early turnpikes, for instance, fought against the canals, and then with the canalmen against the railroads. Every industrial advance has had to be made against the understandably bitter opposition of those whose occupations it rendered

[1] Cf., for instance, Sumner H. Slichter, *Union Policies and Industrial Management* (Washington, Brookings Institution, 1941), pp. 216–223.

obsolete. This much we now generally recognize and accept.

But we have still to probe the reflex in daily work behavior. Manifestly the impact of advancing technology upon the individuals immediately concerned helps explain a good part of the anxious suspicions with which every shop innovation is viewed. Again and again the emergence of improved methods of production has brought the gravest kind of personal trouble. Displacement from jobs, dilution of skills, decay of home communities – the record of progress has had its black pages for the workers concerned. Painful memories linger to be passed down in family histories, to be circulated among friends and neighbors. Perhaps less poignant but just as vivid have been the experiences with early abuses of time studies and rate setting. The stop watch has become literally a hostile symbol, crystallizing all the resentments cumulated against the effort to introduce more efficient methods into the work situation.

Management's Double Standard

And so it is that at the most pivotal point of industrial management we confront a major block: changes are inevitable and necessary, yet they are also almost invariably resisted at the work level. But management has yet to recognize, let alone try to cope with, the true nature of this block. The leadership group of business – the administrators, engineers, and technicians who have contributed so much to making American industry the miracle of productivity it has become – have concentrated upon *what* improvements, *what* changes, must be introduced to lower costs and increase output. But in their preoccupation with the *what* they have given little or no attention to the *how*. In ceaseless search for improvements, they study production processes and methods; they experiment with new materials and new forms of organization; they analyze techniques and equipment. Their findings become facts of unimpeachable authority, injunctions for necessary action. If material or technical difficulties arise to impede efficiency, they too are studied as facts until they are resolved. But only if the impediments are nonhuman.

As soon as an administrator confronts barriers that rise in human resistance, he resorts to a curious alchemy by which human behavior is transmuted into something different from fact, or at least from fact in the simon-pure, fourteen-carat essence that alone can be accepted as subject for study. Technical staffs then are no longer technical or scientific; they become instead hortatory and moralistic. They decry the inability of men to recognize "facts"; they deplore the "unreasonableness" of emotionally conditioned behavior in their employees; they denounce "irresponsible" leaders; they demand "discipline" to force acquiescence. In contrast to the procedures they themselves follow in all other production problems, they do not track human difficulties to their scources in an effort to gain understanding of the nature of the problem involved and of the interrelated factors which must go into its solution.

Management, in a word, predicates shop policy upon what we may term a double standard of fact: "true" facts contained in technical and material things and "false" facts presented by human behavior. Yet we know, not only from experience in the daily conduct of business but also from studies of various human societies, that men invariably tend to regard with suspicion and discomfort anything new, strange,

unfamiliar; that they close ranks against the alien and unknown. Why, then, should not apprehension in the face of shop change receive study and treatment as a "true" fact quite as much as a faulty design in a machine tool, an illogical factory layout, or any other technical obstacle to efficiency?

The answer of course is unmistakably that it should be so studied and treated. No task, indeed, looms more crucial for management than discovering methods that will neutralize the spontaneous, natural anxieties evoked by change and that will gain for each innovation the fullest possible measure of acceptance. It is not too much to say that we face here one of the most difficult and, as yet, unexplored areas of human relations. Certainly no one has the answer. What we need now is nothing more nor less than to recognize the problem, to approach it with humility, to pool experience, and to probe for helpful clues.

Characteristic Emotions in Resistance

We need first of all to understand the constellation of emotions and sentiments that are stimulated by managerial innovations. Central to the total response are the emotions of fear and anger. It is the fundamental nature of emotions to generate action. Indeed the response in terms of behavior appropriate to the situation constitutes the intrinsic or biologic purpose of all emotions. Thus fear prepares the threatened organism for flight or a better defense, and anger prepares it for fight.[2] In the shop these typical responses take on, of course, specific modifications adapted to the modern work environment.

Fear. The prospect of injury or harm typically evokes fear. And because the new in the shop is also the unknown, it rouses in the employee anxious uncertainties lest in some way it may injure or harm him. "What will this mean to me?" expresses succinctly the disturbance usually felt. Some of these anxieties, as already pointed out, are fed by memories of tales of shop experience in which comparable changes have resulted in very real and grave trouble; others may represent mere worries and suspicions. But whether well grounded or not, the fear of possible harm, of prospective injury, underlies the basic reaction to change.

In addition, a subtle social disturbance is precipitated. In the shop, as in any community, a given change is introduced not into a vacuum but into a going, complex structure of relationships. This structure of relationships yields to its individuals comfortably customary patterns of working and living together. Accordingly, at whatever point the change is effected — in technical processes, in plant layout, in formal supervisory organization, or in some other feature of shop life — the disruption of wonted ways becomes always more than an individual experience. The unsettlement is communicated through all the interrelated components of the structure. This in turn creates certain forms of group-wide resistance, the most familiar being that of inertia — reluctance to move or be moved out of familiar daily grooves.

The pervasiveness of these resistances stemming from fear and inertia need not surprise us if we but realize that habitual behavior and familiar relationships are themselves basically a

[2] For an excellent, nontechnical discussion of emotions, and their functions, see Edward A. Strecker and Kenneth E. Appel, in collaboration with John W. Appel, "*Discovering Ourselves*" (2d edition, New York, The Macmillan Company, 1944), pp. 114–196.

form of security. Central to the whole learning process by which the individual acquires progressive mastery over his environment from infancy on is the formation of habitual patterns of reaction to daily demands. Education itself is in considerable measure a process of establishing conditioned responses in various areas of activity. Certainly if we had to give the amount of conscious thought and energy in adulthood to talking, reading, writing, spelling, counting, table manners, and so on that we did when we first acquired these skills, we should hardly ever complete the routine job of everyday living. The man at ease with himself – that is, the man who feels secure – is the man who is certain he knows how to do correctly whatever may be required of him in a given situation.

In precisely this way, the existing organization of work and the existing structure of relationships in the shop are habitual and familiar. All know-how there – complex skill, established procedures of working, or the code of behavior that wins a man's acceptance among his bench fellows – imparts a sense of personal security. The introduction of any new element threatens to disturb and at times even disrupt this know-how, which clearly represents for most of us the end product of long and laborious acquisition. Thus it is that imposed change creates a period of uncertainties pregnant with suspicion and fear.

Anger. The fears aroused by proposed or actual changes in the shop, however, can seldom find release in the typical and direct response of flight. It is true enough that a worker may wish to escape or avert the new demands made upon him, and that in times of active demand for labor he may even quit in protest against a proposed innovation. But the usual response is quite different. He strives rather to stay put in the position where he now feels threatened *and* also to avert the new threat. This calls for resistance at his post. The flight typically produced by fear is thus transformed into the fight typical of anger.

The emotions of fear and anger are always closely allied. Hence men working together in a shop soon reveal themselves hostile – whether sullenly and smolderingly angry or "fighting mad" – against changes in their wonted ways of work imposed upon them by authority. But once again they must usually find more or less indirect methods of fighting. The overt destructiveness resorted to by the pathetic machine wrecker of a century ago is no longer feasible. Change is now generally equated with progress. Employees hear from union spokesmen as well as from management that this progress yields the efficiency basic to rising standards of living. Instead of trying to block the threatening change directly, therefore, they turn to indirect attack. They may seek unreasonable wage increases even though the new job calls for less effort and skill. They may persist covertly in their old methods of work. They may protest suspiciously against the specific terms under which the change is introduced. They may form bench associations with their fellows for defending the group stake in customary ways – through the measures of resistance just mentioned and through many more, including unwritten codes as to what should be the standard of daily output,[8] the force of strikes and walkouts, and the sabotage

[8] F. J. Roethlisberger and William J. Dickson, *Management and The Worker* (Cambridge, Harvard University Press, 1939), pp. 409–447.

of slow-downs. Indeed, anyone who has handled shop disputes stemming from the introduction of change cannot fail to be impressed by the variety of tactics workers develop to resist innovations and also by the stubborn character of their resistance.

Threat to the Workers' Security System. The workers' resistance is so stubborn because they are each defending something far more compelling than any single vested or material interest in the job. They are each defending what amounts to the basic security system that the individual man acquires, however unconsciously, through his work; that is to say, the network of attitudes and behavior patterns by which he maintains his concept of personal worth and his feelings of safety and security in his daily environment.[4]

Obviously many diverse factors enter into the specific security system of each individual. In the working community the tests by which men judge themselves and appraise their relative positions cluster mainly around three elements: (1) technical proficiency and pride in the particular job, (2) material reward in the form of salary or wage, and (3) satisfactions derived from interpersonal relationships enjoyed with fellows, superiors, and leaders, whether spontaneously or consciously chosen.

It requires little discussion to establish the potent sentiments and valuations that emanate from these central facets to buttress men in their sense of individual worth and security. A highly skilled workman is usually a proud and self-respecting member of his community; it is not hard to discern the quiet satisfaction, the dignified conviction that he matters in his job. Even men of lesser skill develop pride in their ability and demand the respect due workmen who "know their business." Certainly from time immemorial men have derived both creative satisfactions and a respected place among their fellows from useful work well done. Indeed, the pay envelope looms so important in the individual security system because it constitutes the social measure by which a place among his fellows is accorded each man for his particular contribution to the work needed by his society. The size of its contents establishes social status within the shop and prestige outside; beyond subsistence, it accords the power to buy the goods upon which our society places high prestige values.

We are becoming increasingly aware of the extent to which a man's relationships with other men in the shop condition his sense of comfort and well-being. The quality of these relationships constitutes perhaps the largest component in what we usually term morale. He who is accepted and liked by his fellows derives assurance from their fellowship; he who is ostracized soon feels the loneliness of his isolation. Sound relationships with one's superiors also are recognizedly significant to a sense of ease with oneself and one's job. Acceptance by those over whom one exercises authority is likewise important; it constitutes an essential of effective administration.

An Illustrative Case

How all these factors express themselves in concrete behavior may be illuminated by the experience of the

[4] For a good discussion of this concept of security systems, see Abram Kardiner, *The Individual and His Society* (New York, Columbia University Press, 1939), pp. 89–91 and Chapter IV; A. H. Maslow and Bela Mittleman, *Principles of Abnormal Psychology* (New York, Harper & Brothers, 1941), pp. 131–141, 206–226; J. Plant, *Personality and the Cultural Pattern* (New York, Commonwealth Fund, 1937), pp. 83–143.

Regent Manufacturing Company in the complete change-over of its production program. During the depression of the 1930's, at the very nadir of hard times, the company decided to shift its output from the low-quality, cheaply priced consumers' goods it had been producing for almost a quarter-century to a quality product that would compare favorably with the best in the trade. From an outside point of view the success of the company was truly outstanding; and the business expanded, thus creating more jobs.

When the company's product acquired a reputation for high quality, the management decided to launch an active promotional campaign. Press stories were given the new product. Buyers and invited citizens thronged the company's showrooms. But within the shop community things were not going so well. There, frictions of all sorts followed one upon the other, frictions hot and continuous. Stoppages, slow-downs, sit-downs became at times veritably epidemic.

Almost every one of these occurrences seemed generated by some proposed shop change. Quite understandably the shift from low-quality to high-quality production entailed many changes in the methods and organization of work. Employees had to unlearn old skills and acquire new and often more painstaking ones. The pressure seemed unremitting. "Always," workers would complain, "the boss wants something different, something new; always he wants more quality." And all this happened despite the fact that the officials of the union with whom the firm had been dealing for over two decades had cooperated from the beginning in the new production program. Having been consulted before the change-over and realizing jobs would be made available to hundreds of their members if the program proved successful, they had given their approval.

Yet by and large changes in method *had* to run up against stubborn resistances. For even though the shift in production overcame a grave danger to jobs during the depression, the rate of change was so rapid as to threaten continually the security system of these workers: one time their ways of working, next their earnings, again their group associations, and most of the time all three simultaneously.

An established process of work which had been paid on an hourly basis, for instance, was subdivided into specialized operations to be paid on a piecework basis. The workers who were affected not only felt discomfort in the changes forced upon their customary operations but also feared that the different requirements henceforth demanded of each of them might threaten their group solidarity by resulting at piece rates in varying weekly earnings. So, also, every new method of work urged upon a worker or a group of workers seemed to project possibilities of losses in the pay envelopes. The workers were impatient in their demand that wage rates on new operations be determined even before the operation itself had been adequately tested. Demands for rate increases constituted almost an unfailing response to a proposal for change in methods of work, whatever its nature. Time and again groups refused to go on until new rates were set.

New foremen appeared in the shops, as management sought out supervisors experienced in quality production. To the workers each new foreman promised more of that unwelcome pressure for "doing it different." They chafed, not only because this pressure disturbed their familiar ways of work, but

also because it seemed to belittle their craftsmanship. Holding intransigently to their habitual methods, they expressed their resentful pride to the arbitrator: "We've been in this work a long time and we know our business." The new foremen, with their quality experience and their insistence on quality work, almost invariably found that the balky employees made their first months very rough going.

The workers resisted inroads against their structures of interpersonal relationships. Thus they were more sympathetic with the "old-timers" among their foremen, who, as they put it, could "also get a call-down now and then." Among themselves the employees coalesced into tight little bench cliques, which became their instruments of defense against the steady bombardment of change. Management was vividly aware of the presence and activities of these groups, without realizing the forces that generated and maintained them. "If we have twenty operations in a room," the manager complained, "we'll have twenty little groups, each with its own leader."

These groups developed a remarkable cohesiveness. Their watchword for action, as they expressed it and their supervisors echoed it, was always "one for all and all for one." They adapted their tactics to the nature of the change they were asked to absorb. Periodically — or, to put it perhaps more accurately, recurrently — they "simply put on their hats and went home." Management insisted time and time again that "some way would simply have to be found to stop these illegal walkouts." The union officials and the permanent arbitrator for the industry were compelled to give considerable time to getting such strikers back to their tools.

Recurrent unauthorized stoppages constituted the most extreme weapon in the workers' arsenal of resistance, but by no means the only one. The craftsmen, now doing one subdivided operation in the process each had formerly performed as a whole, spontaneously applied to themselves the principle of equality in order to safeguard their fellowship; even though under piece rates some naturally earned more than others, they pooled their pay envelopes at the end of each week and divided the aggregate contents equally. In the same cause of fellowship another group, composed of women workers on piece rates, equalized not earnings but the opportunity to earn; none would begin work on her materials until and unless all were supplied. Many bench cliques likewise adopted an attitude toward supervisory criticism that reflected this "one for all and all for one" sentiment; if a member of such a bench clique was taken to task for not following new methods, his fellows joined in angry protests and ostentatious adherence to the old ways of working. And all groups jealously protected their identity; their members either refused outright to work with new assignees, or subjected them to such ostracism that these newcomers themselves soon requested transfer.

It must undoubtedly appear amazing at first glance that such constant turmoil could coexist with an outstanding achievement in production. The explanation lay in the fact that the general manager actually enjoyed a basically good relationship with his employees as well as with union officials. The workers' service records ran from one year up to twenty years and over, with the majority of the force long-service employees; the very frictions which developed resembled "family" irritations exploding into protest and

rebellion against an arbitrary but well-meaning father. In their calmer moments, even after a walkout, workers admitted that "the boss really was a good sort; he just lost his temper sometimes." And impatient as the union leaders might now and again show themselves with the general manager, they realized that he was an able businessman not untypical in his failure to apply in human relations the same degree of skill he brought to production. To him his ends were good; they benefited workers as well as the company. Accordingly he not only failed to understand the consequences of his means for achieving these ends in unremitting pressure on the workers; he was even outraged that union officials — and the arbitrator, too — did not "enforce the agreement" to free him from these "constant illegal stoppages."

For his part, the arbitrator served as a sort of safety valve when crises recurrently arose. Familiar with the many factors shaping behavior in this shop, he listened, as tensions reached a breaking point, to the complaints of union officials, management executives, and employees alike. Outside the area of "family" irritations, he refused to become overly concerned or disciplinary but handled each difficulty as it arose, confident that when the individuals involved had once more "let off steam," they would return to the production of an outstanding quality article in their trade.

Thus the employees of this company revealed the disturbances that inevitably follow the threat to personal security systems, which is sensed in any innovation — that is to say, the threat to workmanship, compensation, and interpersonal relationships. Bench associations became tight little defense groups maintaining constant watchfulness and resistance within the ramparts of the security system. Yet a sound structure of over-all relationships among management, union, and men remained, so that the resulting turmoil became a kind of family friction rather than a bitter industrial conflict. Nevertheless the errors of omission and commission that accounted for this friction high-light the inadequacies in industry's approach to the human implications of change — implications, moreover, that obstruct the very production goals sought by management. For they emphasize vividly that administrators, when planning new methods of work, fail to make allowance for the emotions and sentiments that will be evoked in the workers who must accept the changes.

Suggestions for Meeting Resistance

The problem of what to do about these feelings constitutes the heart of the task in adapting the flow of shop change into the structure of shop relations. In terms of the diagnosis here offered, two areas for action suggest themselves: (1) The *negative* feelings must be brought to conscious recognition and given acceptance as normal response to a situation of change; moreover, reassurance must be provided against whatever prospect of injury or harm seems to be felt by those involved. (2) The responses stimulated by these negative feelings must be turned into *positive,* constructive channels by utilizing such affirmative values as the change may possess.

Mitigating Negative Emotions. What concrete measures, then, offer promise for mitigating negative emotions? Perhaps the first is *prior consultation.* Present-day discussion of such consulta-

tion confines itself to the pros and cons of union-management conferences on these matters. But consultation that stops with union officials, as it did in the Regent Company, can never be enough. Union and management both must consult the carriers of shop opinion and sentiment at all levels — the foremen and stewards, the bench leaders and their groups, the particular workers involved, and anybody else whom specific conditions may counsel. It is the imposed change that constitutes the feared change; consultation offers an antidote against the sense of imposition.

Talking it over, however, must be more than a logical exposition. Instead of concentrating upon talking those affected out of their fears, suspicions, or resentments by decrying them, instead of emphasizing the lack of logical basis for their fears, management must accept these emotions as entirely normal and human, the response most men give in like situations. Even when the fears have some real basis, that is, even when the change may have adverse effects, frank acceptance of this reality may prove helpful. The results may be painful, but men accept the unpalatable more readily if they are convinced that it is inherent in a situation rather than in arbitrary personal decision and if they feel that everything possible is being done to cushion its harmful impact. And certainly when fears have no real basis, when for instance a new incentive system of pay, a new process, or a job evaluation study has been carefully and fairly formulated, and no one is to suffer but rather all stand to gain, then talking things over relaxes tensions and dispels suspicions. Anxieties that are ventilated, accepted, and frankly discussed are likely to be relieved.

The proper *timing* of change constitutes a second important ingredient for reducing resistance. Too many new machines, too many new foremen, too many changes in methods or organization of work — coming all at the same time or in rapid succession — are certain to work havoc, as for instance in the Regent Company. When one innovation follows another, tensions sharpen, disturbances cumulate, protest and resistance blow up into stoppages or take on particularly stubborn forms of slowdowns. Indeed, as soon as we understand the emotional mechanisms that underlie the response to change, it is not hard to realize why the rate of change becomes an important component in conditioning response. The appearance of new demands and new threats before earlier ones have been met multiplies fears and hostilities and so intensifies resistance. Time, therefore, is of the essence for assimilation and adaptation.

Just because change disrupts going habits of work, a well-understood *grievance machinery* fortifies against the sense of threat and danger. Systematic procedures represent a continuing and stable element in the midst of impending changes. The very knowledge that one can turn to such familiar procedures offers a source of security. Moreover, the grievances that stem from change, whether predominantly objective or subjective, yield clues to the type of resistance to be handled, provided the administrator has learned how to probe complaints.[5] A simple normal fear may lend itself to straightforward acceptance and reassurance; a more complex sentiment, expressed through bench organization, may require protracted treatment.

[5] See the author's article "Handling Shop Grievances," HARVARD BUSINESS REVIEW, Vol. XXIII, No. 4 (Summer, 1945), p. 469.

Evoking Positive Feelings. All the measures for handling resistance thus far discussed are aimed primarily at the negative emotions potential in change. But what about positive values which may be evoked to win actual acceptance rather than merely to mitigate resistance? Manifestly positive values, too, must be focused upon the three elements which the worker feels are threatened by innovations: earnings, skills, and interpersonal relationships.

(1) It need hardly be said that the administration of changes must be made as fair as possible. The management that finds ways of sharing gains with its workers through an opportunity for higher *earnings* and better *conditions* obtains thereby a very real incentive for the acceptance of the change. Certain changes, of course, inevitably entail drastic consequences for the workers immediately affected. In such instances it is futile to look for any positive values, but, at the least, adequate offsetting measures should be provided. Separation wages, retirement annuities, retraining for new jobs, transfers to plants where work is available, all these and more must be part of management's program. No one can be made enthusiastic for a device that may put him out of business or lower his standing, even though in the long run the community as a whole may benefit; whenever possible, therefore, workers should be helped to see a tangible, personal gain for themselves in any proposed change.

(2) How can positive sentiments concerning the securities in *skills and workmanship* be evoked? By its very nature the engineering that advances efficiency erodes craftsmanship. The whole process of reducing costs, in order to make more and more goods available at prices the masses of consumers can afford, calls for a constant breaking down of rounded, complex skills into simpler, repetitive jobs. Skilled craftsmen still hold very important places in production, but an ever-growing proportion of workers take rank as semiskilled and unskilled. There is still need for the tool maker and the pattern maker, but increasingly the machine and the assembly line dominate production. When this is admitted, how can the sense of workmanship afford a means of promoting positive support for new methods that are continually being developed? It is an old question that reaches to the very heart of a major problem in modern industry. Can workers be helped to see the significance of the seemingly detached, minor tasks they perform in turning out the final product? Can men in industry feel the emotion experienced by members of a team, who also play individual segmented roles to achieve a common goal which has social value appreciated by the whole community? We must somehow recapture for workers their feeling of identification with the whole product which their combined labor turns out.

(3) This simply means that in modern industry with its division of labor the positive satisfactions inherent in workmanship must be consciously tied in with those of good *interpersonal relationships.* The team as a whole, the working unit, alone can transmit to most workers the full creative satisfactions of work well done and of communal significance. Management must therefore give serious attention to discovering means for making each worker feel himself a part of the team.

The sense of identity with an institution — a combat unit, a school, an athletic team, or a shop — comes to fruition only when the individuals making it

up share in the knowledge of the goals and of how they are to be reached, believe them to be worth while, and participate in the satisfactions of their achievement. Consider, for instance, the failure of the Regent Company in all these respects. Management never took the workers into its confidence regarding the purpose of the shift from low-quality to high-quality production or the necessary measures in daily operation; and then finally it shut them out from the satisfactions of success, taking credit alone for the achievement through its dramatic, promotional campaign. The workers merely read press reports of the big doings; they saw visitors throng the showrooms; they noticed interviewers seeking out management representatives; they heard of various festivities. Not once were they even mentioned. Instead, while everybody else was celebrating, the ones whose labor had contributed so much to the occasion that was being celebrated were expected to go on with their daily grind, to do an ever better job. Since they were not made to feel that they were participants who also mattered, little wonder that they remained unreasonable irritants and obstructors. The lesson is clear and can be summed up in a few words: each company, each industry must somehow explore the possibilities for communicating to wage earners, both factually and emotionally, the purposes of the changes it recurrently asks them to absorb, and also the prides of worthwhile achievement through continuous improvements in production.

Importance of Good Relationship

Indeed, concrete evidence in study after study supports the group approach by demonstrating that satisfying interpersonal relationships are major determinants of employee efficiency.[6] Even the turmoil accompanying the development of a new product in the Regent shop, it will be recalled, did not prove a permanent impediment, simply because over-all relations among the general manager, union officials, and employees were fundamentally sound. The Regent management failed to realize, however, that the bench groups might have been converted into cooperative teams for advancing the new production program still further, rather than being driven to obstructive conflict as blind defenders of the old.

It would be well particularly for engineers and technicians, the men so often actually initiating new methods, to give thought to this whole problem of developing positive relationships with those affected *before* introducing a specific change. An interesting example of this problem comes from a mill in which yarn winders, confronted with no less than five major changes affecting their job, showed determined opposition to rate revisions based on time studies made by two engineers — until the good relationship developed with them by a third engineer could be used to overcome the resistance.

A national company had bought the mill in which the yarn winders had worked for years. A new management always brings uncertainty and thus an alerted, emotional watchfulness. This

[6] John B. Fox and Jerome F. Scott, *Absenteeism: Management's Problem* (Harvard Business School, Division of Research, Business Research Studies, No. 29, 1943); Elton Mayo and George F. F. Lombard, *Teamwork and Labor Turnover in the Aircraft Industry of Southern California* (Harvard Business School, Division of Research, Business Research Studies, No. 32, 1944); T. N. Whitehead, *The Industrial Worker* (Cambridge, Harvard University Press, 1938); F. J. Roethlisberger and William J. Dickson, op. cit.; Elton Mayo, *Human Problems of an Industrial Civilization* (New York, The Macmillan Company, 1933).

new management changed the production schedules by decreasing the proportion of cotton yarns and increasing that of rayon yarns, which in turn introduced various alterations in the details of work. Women who had held the same work-place for years were moved; those who had performed jobs using mixed yarns were changed to jobs using one type of yarn; some had to cover more floor space in tending their spindles; and so on.

Piece rates had always been set by the mill manager without clocked studies. It was now decided to establish rates by time study. Moreover, the winding room was to be the place where these new methods would be introduced – they would be applied later in the other departments. Thus the first time study ever conducted in the mill followed upon change in management and change in production program. The study was to be made by an outside engineer, but because of wartime conditions five months elapsed before one could be assigned to the job, and it was another three months before the studies were completed. A total of eight months had elapsed before the new rates were ready.

Meanwhile the employees had been put upon time rates, a customary practice whenever rates are to be changed or difficulties impede piece-rate earnings. The net result, however, was one more change. For eight months these pieceworkers had been earning a guaranteed weekly time wage, fixed at the approximate average earnings under the old piece rates. In other words, for all practical purposes these employees had become habituated to work done on a weekly basis instead of on a piecework basis.

As the new piece rates went into effect, the winders complained through their union that they could not earn their former take-home. Thereupon a four-week trial period was granted, during which a second engineer was assigned to the plant to check the studies of the first one. The original rates were found to be correct. Even so, allowances were made for further changes in yarns; and the requirement of machine cleaning, taking from 24 minutes to one-half hour per day, was eliminated from the winders' tasks. Nevertheless – and despite the results of a further check, in which the local union president participated, showing that the winders could earn better than former take-homes – the workers still refused to accept the new rates.

At this stage the dispute was submitted to arbitration. Study of the testimony convinced the arbitrator that the rates were sound. But by this time so many misunderstandings and suspicions had crystallized, that a decision simply reaffirming the rates would hardly prove satisfactory. So many emotional cross-purposes had developed that the winders just could not seem to grasp, for instance, that the standard time computed for their jobs made allowances for personal time and normal interferences. In addition, the very concept of average earnings, utilized to compare past and present take-home, puzzled some of them. They submitted as evidence the pay envelopes of those with the highest earnings before the time studies were made – evidence of the maximum wages rather than the average wages. At the same time, it was only human for those who had previously earned below the average, about half of the winders, to dwell upon the more recent and more favorable weekly time wage.

Currently, it was clear that the most efficient workers were slowing down to

protect the less efficient among their friends. Whereas on the old piecework a difference of some 25% to 30% in output and earnings had always separated fastest from slowest workers, under the new piece rates one and all were turning out the same production each day. As fellowship all this may have been commendable, but for production it constituted a serious threat. Moreover, the difficulty for management went beyond the winders' room; the suspicions generated by this initial study would prove a serious handicap as the engineers moved on to other departments. The winders were thoroughly aroused, and such emotions are infectious.

At the bottom of the whole difficulty lay the emotional tensions almost inevitable to such a complex combination of changes. In this small mill town the women had lived and worked for years; they were friends and neighbors as well as fellow-workers; they knew each other. But the national union representative they knew only as a man who appeared now and then from another city where he had his office. They described this dispute as "the first big thing the union has handled for us"; relationships between union members and union executives were still undeveloped. Moreover, in their long years of service together the winders had naturally formed many individual and group work habits. Although the job processes described and measured by time study were the standard ones of good winding practice, they were not necessarily those of the daily job as these winders had performed it. Under observation the girls did perform the standard routines, but alone, when the engineers left them, they reverted to "the way we always have done it." And above all, to be measured by stop watch and slide rule was in itself a confusing experience.

It seemed to the arbitrator that only a newcomer able to establish a relationship of confidence and understanding with the workers could break this circle of suspicion, resentment, misunderstanding, and habit. Accordingly he decided to send a time-study expert as his representative — a woman who happened to be a staff member of another union. She made it her business to win the confidence of the winders. She left her stop watch lying peacefully in her bag during the first visits. Not until she had won the trust of the workers, that is, established a good relationship with them, did she begin to use her watch, and then only after a thorough explanation of its application to their particular problem. She then spot-checked the new rates and confirmed their soundness. But this technical aspect of her job constituted only a minor part of her contribution. She related herself to the emotions that arise on both sides in such situations. She got the winders to speak fully and freely. She helped them to see the difference between average and maximum wages. They came to understand that the job as "they always did it" was not the standard, measured job. They also unburdened themselves of many persisting suspicions about previous incidents.

The atmosphere in the winding room almost palpably cleared. Into this improved context the arbitrator then submitted his decision. He explicitly formulated and accepted the feeling the winders had brought to the dispute, diagnosed its social genesis, and affirmed the soundness of the new rates upon the findings of his own representative. The girls were urged to give them a fair trial — confident, the arbitrator said, that they would earn at least as

much as and probably more than they formerly did. Suspicions having been cleared, the winders turned to their work with gusto. Their earnings went up almost immediately.

The Context for Policy

So much for the factors that generate resistance to shop changes and for possible measures to deal with such resistance. It remains important, however, always to remember that the most carefully formulated program must be related in its application to the specific context of the shop community into which the change is to be introduced. And each shop context will prove itself unique. The personality traits of the men initiating and the men absorbing the innovation naturally differ from shop to shop; their association into bench groups and their quality of leadership differ too. The varying organization and traditions of both the company and the union are relevant factors. The climate of community opinion shifts from time to time and with each shift alters expectancies and attitudes. The structure and maturity of shop relations exercise their specific influence. And so on. Certainly the better each administrator knows his particular shop community, and the more closely he fits general policy for promoting acceptance of change to its specific characteristics, the greater the chances for success in smoothing the integration of innovation into the existing community organization.

Concluding Remarks

Resistance to change in the shop, then, confronts management with a problem that, in all its serious import, has not yet even received recognition, let alone the willingness to experiment with measures for its treatment. Armored in the righteousness of their ultimate objectives, the men who define their goal as the production of ever more goods at ever lower costs resent the interference of other men. Resentment, of course, is itself an emotion; it makes human resistance to shop changes seem sheer human cussedness. The administrator then becomes hortatory and moralistic when he needs above all an open-minded willingness to approach human interference precisely as he does technical difficulties – as a problem to be studied and solved in terms of its causative factors. For the resistance does have its causes; it stems from individual emotions and social interrelationships. The emotions are powerful, but they also are entirely normal. They must be accepted as the typical response of men generally when faced with situations that seem to threaten their customary security systems. Yet change too must be accepted. If emotions are the dynamos of human response in social situations, change is the dynamo of technological production in industrial society.

Manifestly the resulting problem of shop relationships is complex, challenging, and inescapable. The unsettled conditions marking the period within which it must be tackled intensifies its difficulty. What may prove the most effective answer only experiment – and experience – will tell *after* responsible administrators become aware of its true nature. Awareness must come first. But given that awareness, we may hope that the men who can master the most challenging technological problems will not bow in defeat to this parallel problem of human behavior.